

DRAFT ENVIROMENTAL IMPACT REPORT

November 2022



Prepared for:

Hesperia City Hall,
Planning Department
9700 Seventh Avenue
Hesperia, California 92345

CONTACT:

Ryan Leonard,
Senior Planner



Poplar 18 Project

Prepared by:

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CA 92024
T 800.450.1818
F 760.632.0164

Draft Environmental Impact Report

Poplar 18 Project

NOVEMBER 2022

Prepared for:

CITY OF HESPERIA

9700 Seventh Avenue
Hesperia, California 92345

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024

Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	ACR-1
1 Executive Summary.....	1-1
1.1 Introduction.....	1-1
1.2 Project Location.....	1-1
1.3 Project Description	1-2
1.4 Project Objectives.....	1-2
1.5 Discretionary Actions.....	1-3
1.6 Summary of Impacts	1-4
1.7 Alternatives to the Project.....	1-25
1.8 Areas of Controversy/Issues to Be Resolved.....	1-27
2 Introduction	2-1
2.1 Purpose of the California Environmental Quality Act Process	2-1
2.2 Legal Authority and Lead Agency.....	2-2
2.3 Responsible and Trustee Agencies	2-3
2.4 Summary of Project Analyzed in this Environmental Impact Report.....	2-3
2.4.1 Requested Approvals.....	2-3
2.4.2 Project of Statewide, Regional, or Area-Wide Environmental Significance	2-4
2.5 Scope of this Environmental Impact Report	2-5
2.5.1 Notice of Preparation Scoping Process	2-5
2.5.2 Environmental Issues Determined not to Be Significant.....	2-6
2.5.3 Environmental Issues Determined to be Potentially Significant.....	2-6
2.6 Organization of this Environmental Impact Report	2-7
2.7 Documents Incorporated by Reference	2-8
2.8 Documents Prepared for the Project.....	2-9
2.9 Review of the Draft Environmental Impact Report.....	2-9
3 Project Description.....	3-1
3.1 Project Location.....	3-1
3.2 Environmental Setting.....	3-1
3.3 Project Objectives.....	3-4
3.4 Project Characteristics	3-6
3.4.1 Project Components	3-6
3.4.2 Project Construction	3-10
3.5 Standard Requirements and Conditions of Approval.....	3-12
3.6 Requested Actions	3-13
3.7 References.....	3-14

4	Environmental Analysis.....	4-1
4.1	Aesthetics	4.1-1
4.1.1	Existing Conditions.....	4.1-1
4.1.2	Relevant Plans, Policies, and Ordinances	4.1-4
4.1.3	Thresholds of Significance	4.1-11
4.1.4	Impacts Analysis	4.1-11
4.1.5	Mitigation Measures and Level of Significance After Mitigation	4.1-17
4.1.6	References Cited	4.1-18
4.2	Air Quality.....	4.2-1
4.2.1	Existing Conditions.....	4.2-1
4.2.2	Relevant Plans, Policies, and Ordinances	4.2-13
4.2.3	Thresholds of Significance	4.2-19
4.2.4	Impacts Analysis	4.2-28
4.2.5	Mitigation Measures and Level of Significance After Mitigation	4.2-37
4.2.6	References Cited	4.2-38
4.3	Biological Resources.....	4.3-1
4.3.1	Existing Conditions.....	4.3-1
4.3.2	Relevant Plans, Policies, and Ordinances	4.3-9
4.3.3	Thresholds of Significance	4.3-17
4.3.4	Impacts Analysis	4.3-17
4.3.5	Mitigation Measures and Level of Significance After Mitigation	4.3-33
4.3.6	References Cited	4.3-40
4.4	Cultural, Tribal Cultural, and Paleontological Resources.....	4.4-1
4.4.1	Existing Conditions.....	4.4-1
4.4.2	Relevant Plans, Policies, and Ordinances	4.4-22
4.4.3	Thresholds of Significance	4.4-28
4.4.4	Impact Analysis	4.4-29
4.4.5	Mitigation Measures and Level of Significance After Mitigation	4.4-33
4.4.6	References Cited	4.4-36
4.5	Energy	4.5-1
4.5.1	Existing Conditions.....	4.5-1
4.5.2	Relevant Plans, Policies, and Ordinances	4.5-2
4.5.3	Thresholds of Significance	4.5-9
4.5.4	Impacts Analysis	4.5-11
4.5.5	Mitigation Measures and Level of Significance After Mitigation	4.5-15
4.5.6	References Cited	4.5-16
4.6	Greenhouse Gas Emissions.....	4.6-1
4.6.1	Existing Conditions.....	4.6-1
4.6.2	Relevant Plans, Policies, and Ordinances	4.6-7
4.6.3	Thresholds of Significance	4.6-24
4.6.4	Impacts Analysis	4.6-28

	4.6.5	Mitigation Measures and Level of Significance After Mitigation	4.6-37
	4.6.6	References Cited	4.6-40
4.7		Hazards, Hazardous Materials, and Wildfire	4.7-1
	4.7.1	Existing Conditions.....	4.7-1
	4.7.2	Relevant Plans, Policies, and Ordinances	4.7-6
	4.7.3	Thresholds of Significance	4.7-16
	4.7.4	Impacts Analysis	4.7-16
	4.7.5	Mitigation Measures and Level of Significance After Mitigation	4.7-27
	4.7.6	References Cited	4.7-29
4.8		Hydrology and Water Quality.....	4.8-1
	4.8.1	Existing Conditions.....	4.8-1
	4.8.2	Relevant Plans, Policies, and Ordinances	4.8-6
	4.8.3	Thresholds of Significance	4.8-14
	4.8.4	Impacts Analysis	4.8-14
	4.8.5	Mitigation Measures and Level of Significance After Mitigation	4.8-23
	4.8.6	References Cited	4.8-24
4.9		Noise	4.9-1
	4.9.1	Existing Conditions.....	4.9-1
	4.9.2	Relevant Plans, Policies, and Ordinances	4.9-5
	4.9.3	Thresholds of Significance	4.9-9
	4.9.4	Impacts Analysis	4.9-10
	4.9.5	Mitigation Measures and Level of Significance After Mitigation	4.9-21
	4.9.6	References Cited	4.9-22
4.10		Transportation	4.10-1
	4.10.1	Relevant Plans, Policies, and Ordinances	4.10-1
	4.10.2	Existing Conditions.....	4.10-7
	4.10.3	Thresholds of Significance	4.10-9
	4.10.4	Impacts Analysis	4.10-11
	4.10.5	Mitigation Measures and Level of Significance After Mitigation	4.10-35
	4.10.6	References Cited	4.10-35
4.11		Utilities and Service Systems.....	4.11-1
	4.11.1	Existing Conditions.....	4.11-1
	4.11.2	Relevant Plans, Policies, and Ordinances	4.11-6
	4.11.3	Thresholds of Significance	4.11-13
	4.11.4	Impacts Analysis	4.11-14
	4.11.5	Mitigation Measures and Level of Significance After Mitigation	4.11-21
	4.11.6	References Cited	4.11-22
5		Effects Found Not To Be Significant	5-1
	5.1	Agricultural and Forestry Resources	5-1
	5.2	Geology and Soils	5-1
	5.3	Hazards and Hazardous Materials	5-4

5.4	Hydrology and Water Quality.....	5-5
5.5	Land Use and Planning.....	5-5
5.6	Mineral Resources	5-11
5.7	Population and Housing.....	5-11
5.8	Public Services	5-12
5.9	Recreation.....	5-13
5.10	References.....	5-14
6	Other CEQA Considerations	6-1
6.1	Growth-Inducing Impacts	6-1
6.2	Significant Irreversible Changes.....	6-2
6.2.1	Change in Land Use that Commits Future Generations to Similar Uses.....	6-2
6.2.2	Irreversible Damage from Environmental Accidents	6-2
6.2.3	Large Commitment of Nonrenewable Resources.....	6-3
6.3	Significant and Unavoidable Impacts.....	6-3
6.4	References Cited	6-4
7	Alternatives.....	7-1
7.1	Alternatives to the Proposed Project.....	7-1
7.2	Project Alternatives Considered and Rejected	7-2
7.3	Project Alternatives Under Further Consideration.....	7-3
7.3.1	No Project/No Development Alternative (Alternative 1).....	7-3
7.3.2	Other Development Project Alternative (Alternative 2).....	7-5
7.3.3	Reduced Development Intensity Alternative (Alternative 3)	7-6
7.4	Environmentally Superior Alternative	7-11
7.5	References Cited	7-13
8	List of Preparers.....	8-1

FIGURES

1-1	Project Overview.....	1-29
3-1	Regional Map	3-15
3-2	Project Vicinity	3-17
3-3	Project Site Aerial.....	3-19
3-4	Existing Conditions.....	3-21
3-5	Topographic Map	3-23
3-6	Existing General Plan Land Use	3-25
3-7	Existing Zoning	3-27
3-8	Main Street and Freeway Corridor Specific Plan Land Use Districts	3-29
3-9	Project Development Setting.....	3-31
3-10	Cumulative Project Locations.....	3-33
3-11	Site Plan.....	3-35

TABLE OF CONTENTS

3-12	Detailed Site Plan.....	3-37
3-13	Vehicular Circulation and Access Plan.....	3-39
3-14	Schematic Rendering.....	3-40
3-15	Architectural Elevations.....	3-42
3-16	Landscaping Plan.....	3-45
3-17	Conceptual Grading Plan.....	3-47
4.2-1	State 1-Hour and 8-Hour Ozone Concentration Trend in MDAB (ppm)	4.2-3
4.2-2	National and State 3-Year Average PM10 Statistics – Mojave Desert Air Basin	4.2-6
4.2-3	Statewide Diesel Particulate Matter Trends.....	4.2-17
4.3-1	Biological Resources.....	4.3-43
4.3-2	Jurisdictional Delineation	4.3-45
4.3-3	Impacts to Biological Resources.....	4.3-47
4.3-4	Impacts to Jurisdictional Aquatic Resources.....	4.3-49
4.7-1	Fire Hazard Severity Zones.....	4.7-31
4.7-2	Wildfire History	4.7-33
4.8-1	Hydrologic Sub-Areas.....	4.8-27
4.8-2	Major Surface Waters	4.8-29
4.10-1	Noise Measurement and Modeling Locations	4.10-37
4.10-2	City of Hesperia Non-motorized Transportation Plan.....	4.10-39
4.10-3	Existing Transit Routes	4.10-41
4.10-4	Local Truck Routes.....	4.10-43
4.10-5	Truck Turning Templates (Driveway).....	4.10-45
4.10-6	Truck Turning Templates (Internal).....	4.10-47

TABLES

1-1	Summary of Project Impacts	1-5
1-2	Summary of Initial Study/Notice of Preparation Comments	1-27
2-1	Summary of Initial Study/Notice of Preparation Comments	2-5
3-1	Cumulative Projects	3-3
3-2	Project Improvement Areas	3-6
4.1-1	Main Street and Freeway Corridor Development Standards for CIBP Zone.....	4.1-10
4.1-2	Project Consistency with Development Standards for CIBP Zone	4.1-13
4.2-1	Mojave Desert Air Basin Attainment Classification.....	4.2-9
4.2-2	Local Ambient Air Quality Data	4.2-11
4.2-3	Ambient Air Quality Standards	4.2-14
4.2-4	Mojave Desert Air Quality Management District Daily Air Quality Significance Thresholds.....	4.2-20
4.2-5	Construction Scenario Assumptions	4.2-22
4.2-6	Operational Truck Trip Distance.....	4.2-24

4.2-7	American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters	4.2-26
4.2-8	Operational Health Risk Assessment American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model Operational Principal Parameters.....	4.2-28
4.2-9	Estimated Maximum Daily Construction Criteria Air Pollutant Emissions	4.2-30
4.2-10	Estimated Maximum Daily Operation Criteria Air Pollutant Emissions.....	4.2-30
4.2-11	Construction Health Risk Assessment Results – Unmitigated.....	4.2-35
4.2-12	Operational Health Risk Assessment Results - Unmitigated.....	4.2-35
4.3-1	Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types within the BSA	4.3-2
4.3-2	Impacts to Vegetation Communities and Land Cover Types within the BSA.....	4.3-26
4.4-1	Previously Conducted Cultural Resources Studies within 1 Mile of the Project Site.....	4.4-6
4.4-2	Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site	4.4-11
4.5-1	Project Annual Operational Electricity Demand Summary	4.5-11
4.5-2	Project Annual Operational Natural Gas Demand Summary	4.5-12
4.5-3	Construction Petroleum Demand.....	4.5-13
4.5-4	Total Project-generated Transportation Annual Fuel Demand	4.5-14
4.6-1	Greenhouse Gas Emissions in California	4.6-4
4.6-2	City of Hesperia (Year 2009) Communitywide Greenhouse Gas Emissions Inventory	4.6-5
4.6-3	Estimated Annual Construction GHG Emissions.....	4.6-28
4.6-4	Estimated Annual Operational GHG Emissions.....	4.6-29
4.6-5	Consistency with 2017 Scoping Plan	4.6-30
4.6-6	Climate Action Plan Strategy Consistency Analysis.....	4.6-35
4.6-7	Estimated Annual Operational GHG Emissions– Without Regulatory Requirements and PDFs.....	4.6-35
4.6-8	Climate Action Plan Emissions Reduction Goal Consistency Analysis.....	4.6-36
4.7-1	Online Database Listings.....	4.7-2
4.7-2	Hesperia Fire Station Staffing and Apparatus.....	4.7-6
4.8-1	Existing Hydrology Summary	4.8-2
4.8-2	Proposed Hydrology Summary	4.8-17
4.9-1	Typical Sound Levels in the Environment and Industry.....	4.9-1
4.9-2	Measured Noise Levels	4.9-4
4.9-3	Measured Long-Term (LT1) Noise Levels January 5, 2021, to January 6, 2021.....	4.9-4
4.9-4	City of Hesperia/State of California Land Use Compatibility Plan	4.9-7
4.9-5	Measures of Substantial Increase for Transportation Noise Sources.....	4.9-10
4.9-6	Construction Equipment by Phase.....	4.9-11
4.9-7	On-Site Construction Noise Analysis Summary	4.9-13
4.9-8	Off-Site Construction Noise Analysis Summary.....	4.9-15
4.9-9	Summary of Off-Site Existing and Future (Year 2040) Traffic Noise Levels (dBA CNEL ¹)	4.9-17
4.9-10	Mechanical Equipment (HVAC) Noise.....	4.9-19

4.10-1	Baseline Vehicle Miles Traveled for County of San Bernardino	4.10-9
4.10-2	Summary of OD VMT Per Service Population (Automobile only)	4.10-14
4.10-3	Roadway (or Link-Level Boundary) VMT (County of San Bernardino)	4.10-15
4.10-4	Peak-Hour Queuing Summary for Existing Plus Project Conditions	4.10-21
4.10-5	Peak-Hour Queuing Summary for Opening Year (2024) Plus Project Conditions	4.10-22
4.10-6	Peak-Hour Queuing Summary for Horizon Year (2040) Plus Project Conditions	4.10-23
4.10-7	Peak-Hour Queuing Summary for Horizon Year (2040) Plus Project Conditions	4.10-24
4.10-8	Existing and Existing plus Project Peak Hour Intersection Level of Service	4.10-26
4.10-9	Opening Year (2024) and Opening Year (2024) Plus Project Peak Hour Intersection Level of Service	4.10-28
4.10-10	Horizon Year (2040) and Horizon Year (2040) plus Project Peak Hour Intersection Level of Service	4.10-30
4.10-11	Proposed Intersection Improvement Measures	4.10-32
4.11-1	Supply and Demand Comparison (Acre-Feet per Year)	4.11-2
4.11-2	Anticipated Solid Waste Generation	4.11-18
5.1	Specific Plan Consistency Analysis	5-6
5.2	Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis	5-8
7-1	Project Alternatives Environmental Impacts Comparison	7-11
7-2	Comparison of Project Alternatives and Project Objectives	7-12

APPENDICES

A	Initial Study, Notice of Preparation, and Scoping Comments
B-1	Air Quality and GHG Emission Estimates
B-2	Health Risk Assessment
B-3	South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District Full Amicus Briefs
C	Biological Technical Report
D	Cultural Resources Assessment Report
E	Geotechnical Reports
F	Phase I Environmental Site Assessment
G-1	Preliminary Drainage Report
G-2	Preliminary Water Quality Management Plan
G-3	Water Supply Assessment Report
H-1	Field Noise Data
H-2	Construction Noise Modeling Data
H-3	Traffic Noise Modeling Data
H-4	On-Site Noise Modeling Data
I	Transportation Attachments

INTENTIONALLY LEFT BLANK

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AAQS	ambient air quality standards
AB	Assembly Bill
ACC	Advanced Clean Cars
ADMRT	Air Dispersion Modeling and Risk Tool
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AFY	acre-feet per year
amsl	above mean sea level
APN	Assessor's Parcel Numbers
BAP	Base Annual Production
BenMAP	Benefits Mapping and Analysis Program
BenMAP-CE	BenMAP–Community Edition
bgs	below ground surface
BMP	best management practice
BSA	biological survey area
BUG	backlight, uplight, and glare
CAAQS	California Ambient Air Quality Standards
CAISO	California Independent System Operator
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
CALGreen Code	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CDNPA	California Desert Native Plants Act
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFC	California Fire Code
CFR	Code of Federal Regulations
CH ₄	methane
CIBP	Commercial/Industrial Business Park
CIWMB	California Integrated Waste Management Board
CNEL	community noise equivalent level
CNRA	California Natural Resources Agency

Acronym/Abbreviation	Definition
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DIF	development impact fee
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EMFAC	EMissions FACtor model
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESCP	erosion and sediment control plan
EV	electric vehicle
EVSE	electric vehicle supply equipment
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	fire hazard severity zone
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
FPA	Free Production Allowance
FRA	Federal Responsibility Area
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	geographic information system
GSA	Groundwater Sustainability Agency
GWP	global warming potential
HAP	hazardous air pollutant
HARP2	Hotspots Analysis and Reporting Program Version 2
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
HHDT	heavy heavy-duty trucks
HIA	health impact assessment
HMBP	hazardous materials business plan

Acronym/Abbreviation	Definition
HMMP	Habitat Mitigation and Monitoring Plan
hp	horsepower
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
I	Interstate
IEPR	Integrated Energy Policy Report
IESNA	Illuminating Engineering Society of North America
IFC	International Fire Code
IPCC	Intergovernmental Panel on Climate Change
ips	inches per second
IS/NOP	Initial Study/Notice of Preparation
ITE	Institute of Transportation Engineers
kBTU	thousand British thermal units
kV	kilovolt
LACM VP	Los Angeles County Museum Vertebrate Paleontology
LCFS	Low Carbon Fuel Standard
L _{dn}	day-night average noise level
L _{eq}	equivalent continuous sound level
LEV	low-emission vehicle
LHDT	light heavy-duty trucks
LID	low-impact development
L _{max}	maximum sound level during the measurement interval
L _n	statistical sound level
LOS	level of service
LRA	Local Responsibility Area
LT	long-term
LZ	lighting zone
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
mgd	million gallons per day
MHDT	medium heavy-duty trucks
MLD	most likely descendant
MM	Mitigation Measure
MMT	million metric ton
MPO	metropolitan planning organization
MS4	Municipal Separate Storm Sewer System
MSFCSP	Main Street and Freeway Corridor Specific Plan
MT CO _{2e}	metric tons of carbon dioxide equivalent
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NF ₃	nitrogen trifluoride
NHMLA	Natural History Museum of Los Angeles County
NHTSA	National Highway Traffic Safety Administration

Acronym/Abbreviation	Definition
NO	nitric oxide
NO ₂	nitrogen dioxide
NOP	Notice of Preparation
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	ozone
OD	origin–destination
OPR	California Governor’s Office of Planning and Research
PAR	Property Analysis Record
PDF	Project Design Feature
PFC	perfluorocarbon
PM	particulate matter
PM ₁₀	coarse particulate matter
PM _{2.5}	fine particulate matter
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
PSY	Production Safe Yield
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RFS	Renewable Fuel Standard
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
RWWTP	Regional Wastewater Treatment Plant
SAFE-1	Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program
SBCFD	San Bernardino County Fire Department
SBCTA	San Bernardino County Transportation Authority
SBTAM	San Bernardino Transportation Analysis Model
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO ₂	sulfur dioxide
SoCalGas	Southern California Gas Company
SPCC	spill prevention, control, and countermeasure plan
SRA	State Responsibility Area
ST	short-term
SWMP	stormwater management program

Acronym/Abbreviation	Definition
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	traffic analysis zone
TCR	Tribal Cultural Resource
TIA	Transportation Impact Analysis
TMDL	total maximum daily load
TPA	Transit Priority Area
UNFCCC	United Nations Framework Convention on Climate Change
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
VdB	vibration decibel
VMT	vehicle miles traveled
VOC	volatile organic compound
VVTA	Victor Valley Transit Authority
VVWRA	Victor Valley Wastewater Reclamation Authority
WEAP	Worker Environmental Awareness Program
WQMP	Water Quality Management Plan
WSA	Water Supply Assessment
WUI	wildland-urban interface
ZEV	zero-emission vehicle

INTENTIONALLY LEFT BLANK

1 Executive Summary

1.1 Introduction

This Environmental Impact Report (EIR) has been prepared by the City of Hesperia (City) as lead agency pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines. This EIR has been prepared to evaluate the environmental impacts associated with implementation of the Poplar 18 Project (Project).

This EIR is an informational document intended for use by the City, other public agencies, and members of the public in evaluating the potential environmental effects of the Project.

CEQA requires that local government agencies consider the environmental consequences of such projects, before taking action on projects which have discretionary approval authority. An EIR is a document designed to provide the public and local and state governmental agency decision-makers an analysis of potential environmental consequences of a project to support informed decision making.

The City prepared this EIR to provide the public and responsible agencies information about the potential adverse impacts on the local and regional environment associated with implementation of the Project. This EIR was prepared pursuant to CEQA, codified as California Public Resources Code Section 21000 et seq., and the CEQA Guidelines in the California Code of Regulations, Title 14, Section 15000 et seq.

This summary provides a brief synopsis of the Project, results of the environmental analysis contained within this environmental document, alternatives to the Project that were considered, and major areas of controversy and issues to be resolved by decision-makers. This summary does not contain the extensive background and analysis found throughout the individual chapters within the EIR. Therefore, the reader should review the entire document to fully understand the Project and its environmental effects.

1.2 Project Location

The Project site is located in the western part of the City of Hesperia (City), which is located in the Victor Valley/High Desert region in western San Bernardino County. The City is bordered by the City of Victorville to the north, City of Apple Valley to the east, unincorporated San Bernardino County land to the south, and the unincorporated community of Oak Hills to the west. Locally, the Project site is located on the southwest quadrant of I-15 and Main Street, south of Main Street, west of Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The Project site consists of two parcels: Assessor's Parcel Numbers (APNs) 3064-581-04-0000 and 3064-581-05-0000. Specifically, the Project site is located in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map (see Figure 1-1, Project Overview).

Regional access to the Project site is provided via I-15, directly east of the project site, and U.S. Highway 395, directly west of the project site. Local access to the project site is provided via Poplar Street, Lassen Road, Sultana Road or Mesa Linda Street.

1.3 Project Description

Project Summary

The Project would include construction of an industrial/warehouse building and associated improvements on 17.87 acres of vacant land. The proposed Project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area (see Figure 1-1, Project Overview).

The Project would include off-site improvements along Mesa Linda Street, Lassen Street, and Poplar Street, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project frontage's landscape setback area, as well as within the landscape areas found around the proposed industrial/warehouse buildings and throughout the Project site. Off-site improvements include possible lateral connections for utilities and other roadway and pedestrian improvements (e.g., road repaving or installation of sidewalks along building frontages).

The Project would support a variety of activities associated with the industrial/warehouse building, including the ingress and egress of passenger vehicles and trucks, the loading and unloading of trucks with designated truck courts/loading areas, and the internal and external movement of materials around the Project site via forklifts, pallet jacks, yard hostlers, and similar equipment. The Project's office and mezzanine space would support general office activities related to business operations.

At this time, no refrigeration is being proposed as part of the Project, and the Project Applicant currently has no plans to lease to any tenant needing refrigerated space. Because an end user of the building has not yet been identified, specific details regarding future operational activities on the Project site are not yet available. However, for the purposes of CEQA and to ensure full disclosure on all potential allowable uses on the Project site, this environmental impact assessment assumes development of a "blend" of industrial uses. Thus, the modeling assumptions used for the air quality, health risk assessment, greenhouse gas, energy, noise, and transportation analyses summarized in subsequent chapters of this EIR assume a blend of "high-cube" warehouse and general light industrial uses. Under this modeling scenario, approximately 269,555 square feet would be high-cube fulfillment center use and 145,145 square feet would be general light industrial land use.

Project Construction

The construction schedule used in the analysis is assumed to commence in or around January 2023 and last approximately 10 months, ending in or around October 2023. The duration of construction activity was estimated based on consultation with the Project Applicant and past project experience. This schedule represents a conservative analysis should construction occur any time after the respective dates, since emissions factors for construction decrease as the analysis year increases due to emissions regulations becoming more stringent. A development agreement was also contemplated as part of the Project approvals.

1.4 Project Objectives

Consistent with the Project's purpose and need, the primary objectives sought by the Project are as follows:

- **Objective 1:** Develop a jobs-producing and tax generating land use near transportation corridors within the housing-rich Victor Valley/High Desert region that is constructed to high standards of quality and provides diverse economic opportunities for those residing and wishing to invest within the City of Hesperia.

- **Objective 2:** Concentrate non-residential uses near existing roadways, highways, and freeways in an effort to isolate and reduce any potential environmental impacts related to truck traffic congestion, air emissions, and industrial noise to the greatest extent feasible.
- **Objective 3:** Develop a fiscally sound and employment generating land use that maximizes utilization of industrial zoned areas.
- **Objective 4:** Create a project that takes advantage of and enhances existing infrastructure, including the proximity to major regional roadways such as I-15 and U.S. Highway 395, railroad service corridors, and other similar infrastructure that will help promote the site and its use as an industrial business park development.
- **Objective 5:** Fulfill the existing and growing demand for logistics and warehouse uses in the region.

1.5 Discretionary Actions

Consistent with the City's General Plan, the Main Street and Freeway Corridor Specific Plan (MSFCSP), and Municipal Code, the Project requires certain entitlements be submitted, reviewed, and approved by the City. The requested entitlements include:

Discretionary Approvals

Development Review Committee

- **Administrative Review.** An administrative review by the Development Review Committee is held in order to review the Project. Such review will yield a recommendation and/or ruling by City administrative staff.

Planning Commission

- **Project Review.** A review by the Planning Commission is held in order to review the Project, including all requested entitlements. Such review will yield a recommendation to the City Council.
- **Recommendation Certification of EIR.** The Planning Commission will review the EIR and make a recommendation to the City Council to certify or reject this EIR, along with appropriate CEQA Findings and the mitigation monitoring and reporting program.

City Council

- **Conditional Use Permit.** Project implementation would require approval of a Conditional Use Permit (CUP21-00010) by the Planning Commission. The MSFCSP requires review and approval of a Conditional Use Permit (CUP) for warehousing and wholesale distribution centers over 200,000 square feet located in the Main Street/I-15 District of the Specific Plan. The building includes more than 200,000 square feet of total building area, and thus, a CUP would be required.
- **Parcel Merger.** Project implementation would require merging the two APNs within the project boundary into one, 17.87-acre lot.
- **Certification of EIR.** Certify or reject this EIR, along with appropriate CEQA Findings and the mitigation monitoring and reporting program.
- **Development Agreement.** The potential for the Approval of a Development Agreement between the City and the Project Applicant pursuant to Section 16.12.085 of the Hesperia Municipal Code.

Ministerial Approvals

City of Hesperia Subsequent Implementing Approvals

- Approvals for water, sewer, and storm drain infrastructure
- Remove and relocate on-site protected native desert plants
- Issue grading permits
- Issue building permits
- Issue encroachment permits

The City would use this EIR and associated documentation in its decision to approve or deny the required discretionary permits. Other responsible and/or trustee agencies can use this EIR and supporting documentation in their decision-making process to issue additional approvals. These additional approvals may include approvals such as a site-specific Stormwater Pollution Prevention Plan.

1.6 Summary of Impacts

Table 1-1 presents a summary of the Project's significant environmental impacts and mitigation measures that would reduce or avoid those effects, and the level of significance of the impact after implementation of the mitigation measures. With the exception of those specific impacts identified in Table 1-1, the Project would result in less than significant or no impacts with regard to all other resource areas evaluated.

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Biological Resources			
Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially significant impact	MM-BIO-1. Conservation of Western Joshua Tree Lands. Based on a literature review completed by the California Department of Fish and Wildlife (CDFW), CDFW indicated that western Joshua tree locations shall be buffered by 186 feet to account for the take of seed bank for western Joshua trees and their associated habitat. Therefore, a 186-foot buffer (or radius) shall be applied to each western Joshua tree location. The direct impacts to this 186-foot buffer were analyzed, and the Project would result in 10.9 acres of impacts to western Joshua trees, their seed bank, and their associated habitat. Mitigation for direct impacts to 10.9 acres of western Joshua trees and their 186-foot buffer shall be fulfilled through conservation of western Joshua trees at a 2:1 habitat replacement of equal or better functions and values to those impacted by the Project, for a total of 21.8 acres. Mitigation shall be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank and lands are conserved separately, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement(s) area in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a Project-specific Property Analysis Record (PAR) to calculate the costs of in-perpetuity land management. The PAR shall consider all the management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development. Additionally, no take of western Joshua tree shall occur without authorization from CDFW in the form of an Incidental Take Permit pursuant to California Fish and Game Code 2081. The Project applicant shall adhere to measures and conditions set forth within the Incidental Take Permit.	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		MM-BIO-2. Relocation of Desert Native Plants. Prior to the issuance of grading permits, the Project applicant shall submit an application and applicable fee paid to the City of Hesperia for removal or relocation of protected native desert plants under Hesperia Municipal Code Chapter 16.24 as required and schedule a pre-construction site inspection with the Planning Division and the Building Division. The application shall include certification from a qualified western Joshua tree and native desert plant expert(s) to determine that proposed removal or relocation of protected native desert plants are appropriate, supportive of a healthy environment, and in compliance with the City of Hesperia Municipal Code. Protected plants subject to Hesperia Municipal Code Chapter 16.24 may be relocated on site, or within an area designated as an area for species to be adopted later. The application shall include a detailed plan for removal of all protected plants on the Project site. The Joshua Tree Preservation, Protection, and Relocation Plan and Desert Native Plant Relocation Plan shall be prepared by a qualified western Joshua tree and native desert plant expert(s). The plan shall include the following measures: ▪ Salvaged plants shall be transplanted expeditiously to either their final on-site location, or to an approved off-site area. If the plants cannot be expeditiously taken to their permanent relocation area at the time of excavation, they may be transplanted in a temporary area (stockpiled) prior to being moved to their permanent relocation site(s). ▪ Western Joshua trees shall be marked on their north facing side prior to excavation. Transplanted western Joshua trees shall be planted in the same orientation as they currently occur on the Project site, with the marking on the north side of the trees facing north at the relocation site(s).	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		Transplanted plants shall be watered prior to and at the time of transplantation. The schedule of watering shall be determined by the qualified tree expert and desert native plant expert(s) to maintain plant health. Watering of the transplanted plants shall continue under the guidance of qualified tree expert and desert native plant expert(s) until it has been determined that the transplants have become established in the permanent relocation site(s) and no longer require supplemental watering. MM-BIO-3. Pre-Construction Surveys for Burrowing Owl and Avoidance. One preconstruction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the Project site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the 2012 (or current version) Staff Report on Burrowing Owl Mitigation prepared by the California Department of Fish and Game [now California Department of Fish and Wildlife (CDFW)]. If burrowing owls are detected, a Burrowing Owl Relocation Plan shall be implemented in consultation with the CDFW. As required by the Burrowing Owl Relocation Plan, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation or current version. No Project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed. Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Owls shall be excluded from burrows in the immediate Project area and within a buffer zone by installing one-way doors in burrow entrances. These doors shall be placed at least 48 hours prior to ground-disturbing activities. The Project	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Compensatory mitigation for permanent loss of owl habitat shall be provided following the guidance in the Staff Report on Burrowing Owl Mitigation (current version). Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow. MM-BIO-4. Pre-Construction Nesting Bird Surveys and Avoidance. Construction activities shall avoid the migratory bird nesting season (typically February 1 through August 31) to reduce any potential significant impact to birds that may be nesting in the survey area. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the Project site and within 500 feet of all impact areas must be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act (16 USC 703–712) and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate buffer established around the nest, which shall be determined by a biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when construction occurs in proximity to an active nest buffer. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that nestlings have fledged and the nest is no longer active.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		MM-BIO-5. Pre-Construction Survey for American Badger and Desert Kit Fox and Avoidance. A pre-construction survey for American badger and desert kit fox shall be conducted on the Project site and Off-Site Improvement Area within 10 days prior to the start of construction to determine the presence/absence of either species. If either species is discovered during the survey, an American badger/desert kit fox mitigation and monitoring plan shall be developed. The mitigation and monitoring plan shall include avoidance and minimization measures to reduce potential impacts to either species, as well as compensatory mitigation to offset direct or indirect impacts. The plan shall be developed in consultation with California Department of Fish and Wildlife. At a minimum, the plan shall contain the following: ▪ Identify pre-construction survey methods for American badger and desert kit fox ▪ Describe feasible pre-construction and construction-phase avoidance methods ▪ Describe pre-construction and construction-phase relocation methods, including the possibility for passive relocation ▪ For burrows that will not be impacted by the Project, identify an appropriate construction exclusion zones for active and natal burrows ▪ Coordinate survey findings prior to and during construction to meet the information needs of wildlife health officials in monitoring the health of kit fox populations. MM-BIO-6. Designated Biologist Authority. The Designated Biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures and/or to order any reasonable measure to avoid the unauthorized take of an individual western Joshua tree. MM-BIO-7. Compliance Monitoring. The Designated Biologist shall be on site daily when impacts occur. The Designated Biologist shall conduct compliance inspections to minimize incidental take of western Joshua trees and impacts to other sensitive biological resources; prevent	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		unlawful take of western Joshua trees; and ensure that signs, stakes, and fencing are intact, and that impacts are only occurring outside the permitted impact footprint. Weekly written observation and inspection records that summarize oversight activities and compliance inspections and monitoring activities required by the Incidental Take Permit shall be prepared. MM-BIO-8. Education Program. An education program (Worker Environmental Awareness Program [WEAP]) for all persons employed or otherwise working in the Project area shall be administered before impacts occur. The WEAP shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and status of western Joshua tree, burrowing owl, and loggerhead shrike; and other biological resources mitigation measures described in the California Environmental Quality Act document. Interpretation for non-English-speaking workers shall be provided, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project area. Upon completion of the WEAP, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees who will be conducting work in the Project area. MM-BIO-9. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on site throughout the construction period, which shall include a copy of the biological resources mitigation measures with attachments and a list of signatures of all personnel who have successfully completed the education program. The permittee shall ensure that a copy of the construction monitoring notebook is available for review at the Project site upon request by the California Department of Fish and Wildlife. MM-BIO-10. Delineation of Property Boundaries. Before beginning activities that will cause impacts, the contractor shall, in consultation with the Designated Biologist, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area. MM-BIO-11. Hazardous Waste. The Project applicant shall immediately stop work and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. MM-BIO-12. Herbicides. The Project applicant shall limit herbicide use for invasive plant species and shall use herbicides only if it has been determined that hand or mechanical efforts are infeasible. To prevent drift, the permittee shall apply herbicides only when wind speeds are less than 7 miles per hour. All herbicide application shall be performed by a licensed applicator and in accordance with all applicable federal, state, and local laws and regulations. MM-BIO-13. Lighting. Lighting for construction activities and operations within 50 feet of the outside edge of the impact footprint containing habitat for special-status wildlife shall be directed away from natural areas. MM-BIO-14. Trash and Debris. The following avoidance and minimization measures shall be implemented during Project construction: (1) Fully covered trash receptacles that are animal-proof shall be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles shall be removed at least once a week from the Project site. (2) Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter, vehicle fluids, and food waste from the Project site on a daily basis. MM-BIO-15. Invasive Plant Management. To reduce the spread of invasive plant species, landscape plants within 200 feet of native vegetation communities shall not be on the most recent version of the	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		California Invasive Plant Council's Inventory of Invasive Plants (http://www.cal-ipc.org/ip/inventory/index.php). Post-construction, the Project applicant shall continually remove invasive plant species on site by hand or mechanical methods, as feasible.	
Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially significant impact	MM-BIO-1 MM-BIO-2 MM-BIO-6 MM-BIO-7 MM-BIO-8 MM-BIO-9 MM-BIO-10 MM-BIO-11 MM-BIO-12	Less-than-significant impact with mitigation incorporated
Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially significant impact	MM-BIO-16. Aquatic Resources Mitigation. The Project site supports aquatic resources that are jurisdictional under the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW). Prior to construction activity, the Project applicant shall coordinate with the Lahontan RWQCB (Region 6) to ensure conformance with the requirements of Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Prior to activity within CDFW jurisdictional streambeds or associated riparian habitat, the applicant shall coordinate with CDFW (Inland Deserts Region 6) relative to conformance with the Lake and Streambed Alteration permit requirements. The Project shall mitigate to ensure no-net-loss of waters at a minimum of 1:1 with re-establishment credits (0.06 acres RWQCB/CDFW) for impacts to aquatic resources as part of an overall strategy to ensure no net loss. Mitigation shall be completed through the use of a mitigation bank (e.g., West Mojave Mitigation Bank) or other applicant-sponsored mitigation. Final mitigation ratios and credits shall be determined in consultation with the RWQCB and/or CDFW based on agency evaluation of current resource functions and values and through each agency's respective permitting process.	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		Should applicant-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared in accordance with State Water Resources Control Board guidelines and approved by the agencies in accordance with the applicable permits. The HMMP shall include a conceptual planting plan, including planting zones, grading, and irrigation, as applicable; a conceptual planting plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity. Best management practices shall be implemented to avoid any indirect impacts on jurisdictional waters, including the following: ▪ Vehicles and equipment shall not be operated in ponded or flowing water except as described in permits. ▪ Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows. ▪ Spoil sites shall not be located within 30 feet from the boundaries of jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources resulting from Project-related activities shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters. ▪ No equipment maintenance shall be performed within 100 feet of jurisdictional waters, including wetlands and riparian areas, where petroleum products or other pollutants from the equipment may enter these areas. Fueling of equipment shall not occur on the Project site.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially significant impact	MM-BIO-13	Less-than-significant impact with mitigation incorporated
Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially significant impact	MM-BIO-1 MM-BIO-2	Less-than-significant impact with mitigation incorporated
Would the Project have a cumulative effect on biological resources?	Potentially significant impact	MM-BIO-1 MM-BIO-2 MM-BIO-3 MM-BIO-4 MM-BIO-5 MM-BIO-6 MM-BIO-7 MM-BIO-8 MM-BIO-9 MM-BIO-10 MM-BIO-11 MM-BIO-12 MM-BIO-13 MM-BIO-14 MM-BIO-15 MM-BIO-16	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Cultural, Tribal Cultural, and Paleontological Resources			
Would the Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	Potentially significant impact	MM-CUL-1. Workers Environmental Awareness Program (WEAP) Training. All construction personnel and monitors who are not trained archaeologists should be briefed regarding unanticipated discoveries prior to the start of construction activities. A basic presentation should be prepared and presented by a qualified archaeologist to inform all personnel working on the Project about the archaeological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker should also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the on-call archaeologist and if appropriate, tribal representative. Necessity of training attendance should be stated on all construction plans. MM-CUL-2. On-Call Archaeological Construction Monitoring. In consideration of the general sensitivity of the Project site for cultural resources, a qualified archaeologist should be retained to conduct spot monitoring as well as on-call response in the case of an inadvertent discovery of archaeological resources. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, should oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits. The archaeologist should be responsible for maintaining monitoring logs. Following the completion of construction, the qualified archaeologist should provide an archaeological monitoring report to the lead agency and the South Central Coastal Information Center with the results of the archaeological monitoring program. MM-CUL-3. Inadvertent Discovery of Archaeological Resources. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the Project, all construction	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		work occurring within 100 feet of the find should immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (CEQA; 14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted. If the discovery is Native American in nature, consultation with and/or monitoring by a tribal representative may be necessary.	
Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially significant impact	MM-CUL-1 MM-CUL-2 MM-CUL-3	Less-than-significant impact with mitigation incorporated
Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?	Potentially significant impact	MM-CUL-4. Inadvertent Discovery of Human Remains. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the MLD from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The MLD would then determine, in consultation with the property owner, the disposition of the human remains.	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? AND Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is	Potentially significant impact	MM-CUL-3 MM-CUL-4 MM-CUL-5. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the discovery (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within MM-CUL-8, regarding any pre-contact and/or historic-era resources of a Native American origin and be provided information after the archaeologist makes his/her initial assessment of the nature of the discovery.t. MM-CUL-6. If significant pre-contact and/or historic-era tribal cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within MM-CUL-8. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly. MM-CUL-7. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project. MM-CUL-8. The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be notified, as detailed in MM-CUL-5, of any pre-contact and/or historic-era cultural resources discovered during project implementation and be provided information regarding the nature of the discovery, so as to provide Tribal input with regards to significance and treatment. Should the discovery be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?		with YSMN, and all subsequent discoveries shall be subject to this Plan. This Plan shall allow for a monitor to be present representing YSMN for the remainder of the project, should YSMN elect to place a monitor on-site. MM-CUL-9. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.	
Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially significant impact	MM-CUL-10. If paleontological resources are exposed during Project construction activities, all construction work occurring within 100 feet of the find shall immediately stop until a qualified paleontologist, as outlined in the Society of Vertebrate Paleontology (2010) guidelines, can evaluate the significance of the find and determine whether or not additional study is warranted. If the discovery proves significant under the California Environmental Quality Act, discovered fossils or samples of such fossils shall be collected and identified by the qualified paleontologist. Significant specimens recovered shall be properly recorded, treated, and donated to the San Bernardino County Museum, Division of Geological Sciences, or other repository with permanent retrievable paleontological storage. A final report shall be prepared and submitted to the City of Hesperia that itemizes any fossils recovered, with maps to accurately record the original location of recovered fossils and evidence that the resources were curated by an established museum repository.	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Would the Project result in a cumulatively considerable impact to cultural, tribal cultural, or paleontological resources?	Potentially significant impact	MM-CUL-1 MM-CUL-2 MM-CUL-3 MM-CUL-4 MM-CUL-5 MM-CUL-6 MM-CUL-7 MM-CUL-8 MM-CUL-9 MM-CUL-10	Less-than-significant impact with mitigation incorporated
Greenhouse Gas Emissions			
Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially significant impact	MM-GHG-1. The Project shall implement the following measures in order to reduce construction equipment GHG emissions to the extent feasible - Provide infrastructure for zero-emission off-road construction equipment if the contractors selected to construct the Project plan to use zero-emission off-road construction equipment. - Provide electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors. In applicable bid documents and contracts with contractors selected to construct the Project, include language requiring all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers, etc.) used during Project construction to be electric. - Require construction equipment to be turned off when not in use. - Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.	Significant and unavoidable impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		MM-GHG-2. The Project shall implement the following measures in order to reduce operational mobile source GHG emissions to the extent feasible: ▪ Prior to tenant occupancy, provide documentation to the City of Hesperia demonstrating that occupants/tenants of the Project site have been provided documentation that: - For occupants with more than 250 employees, require the establishment of a transportation demand management program to reduce employee commute vehicle emissions. ▪ Include contractual language in tenant lease agreements requiring that any facility operator shall: - Ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at California Air Resources Board-approved courses (such as the free, one-day Course #512); - Be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. The building manager or their designee shall be responsible for enforcing these requirements; and - Be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), and the Statewide Truck and Bus Regulation Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and (3) telephone numbers of the building facilities	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		manager and CARB to report violations. Prior to the issuance of an occupancy permit, the City of Hesperia shall conduct a site inspection to ensure that the signs are in place. ▪ Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the City of Hesperia demonstrating that occupants/tenants of the Project site have been provided documentation on funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment. ▪ In anticipation of a transition to zero emissions truck fleets during the lifetime of the Project, install at least four heavy-duty truck vehicle charging stations on-site by 2030. ▪ Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle charging stations on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) electric vehicle charging stations for 25% of the employee parking spaces required. ▪ Conduit shall be installed to tractor trailer parking areas in logical locations determined by the Project Applicant during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available. MM-GHG-3. The Project shall implement the following measure in order to reduce operational energy source GHG emissions to the extent feasible: ▪ Commit to on-site solar generation sufficient to meet at least 75% of the Project's total operational energy requirements from within the building envelope. ▪ Install Energy Star-rated heating, cooling, lighting, and appliances.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		- Provide information on energy efficiency, energy-efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future tenants of the Project. - Structures shall be equipped with outdoor electric outlets in the front and rear of the structures to facilitate use of electrical lawn and garden equipment. - Require no construction or operation of cold storage within the project facilities. - Provide documentation to the City of Hesperia demonstrating that the Project could achieve Leadership in Energy and Environmental Design (LEED) certification and meet or exceed CALGreen Tier 2 standards in effect at the time of building permit application. MM-GHG-4. The Project shall include the following language within tenant lease agreements in order to reduce operational GHG emissions to the extent feasible: - Require tenants to use the cleanest technologies available and to provide the necessary infrastructure to support zero-emission vehicles, equipment, and appliances that would be operating on site. This requirement shall apply to equipment such as handheld landscaping equipment, office appliances, etc. - Require future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans, when economically feasible. - Tenants shall be in, and monitor compliance with, all current air quality regulations for on-road trucks including the California Air Resources Board's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation.	
Would the Project have a cumulative effect on greenhouse gas emissions?	Potentially significant impact	MM-GHG-1 MM-GHG-2 MM-GHG-3 MM-GHG-4	Significant and unavoidable impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Hazards and Hazardous Materials			
Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially significant impact	MM-HAZ-1. Prior to the issuance of a grading permit, the Project Applicant shall retain a qualified environmental specialist that has documented experience in the identification, characterization, and removal of hazardous materials, such as a California licensed professional engineer, geologist, or hydrogeologist, to remove and dispose of all refuse located on the Project site, including but not limited to, the illegally dumped tires and oil containers currently found on site. The removal, transport, and disposal of refuse shall be done in accordance with all applicable local, state, and federal guidelines related to hazardous materials handling. Prior to the removal of refuse deposits from the site, the environmental specialist shall inspect each refuse pile for indications that the refuse may contain, or may have once contained, hazardous materials, including, but not limited to, motor oil, solvents, paints, and/or other petroleum products. In addition, the environmental specialist shall inspect the soils surrounding each refuse deposit for evidence of any contamination (staining) or volatilization of contaminants (odors). If contamination indicators are identified, work shall stop in the immediate proximity of the potential contamination. The Project Applicant and/or their construction contractor shall be responsible for engaging a qualified environmental specialist to design and perform an investigation to verify the presence and extent of contamination on the Project site. Subsurface investigation shall determine appropriate worker protection and hazardous material and disposal procedures appropriate for the Project site. Contaminated soil or groundwater determined to be hazardous shall be removed by personnel who have been trained through the Occupational Safety and Health Administration – recommended 40-hour safety program with an approved plan for groundwater extractions, soil excavation, control of contaminant releases to the air, and off-site transport or on-site treatment.	Less-than-significant impact with mitigation incorporated
Would the Project create a significant hazard to the public or the environment	Potentially significant impact	MM-HAZ-1	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			
Would the Project have a cumulative effect on hazards or hazardous materials?	Potentially significant impact	MM-HAZ-1	Less-than-significant impact with mitigation incorporated
Transportation			
Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Potentially significant impact	The Project could result in potentially significant impacts associated with increasing hazards due to a geometric design feature related to queuing. Improvement measures required to mitigate Project's impact would include fair-share contribution to Intersections #1, #3, #5, #6, and #7. Since the City does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy.	Significant and unavoidable impact
Would the Project have a cumulative effect with regard to transportation?	Potentially significant impact	The Project could result in potentially significant impacts with regard to cumulatively considerable transportation impacts. The Project may increase a hazardous condition due to queuing impacts at the intersections #1, #3, #5, #6, and #7 under the Horizon Year (2040) plus Project analysis scenario. Since the City does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy.	Significant and unavoidable impact

Significant and Unavoidable Impacts

As identified in Table 1-1, the Project would result in significant and unavoidable impacts with regard to air quality, greenhouse gas emissions, and transportation. These impacts are discussed in further detail below.

- **Greenhouse Gas Emissions.** Even with applicable regulatory requirements and Project Design Features, the Project would result in approximately 6,292 metric tons of carbon dioxide equivalent (MT CO₂e) per year, which would exceed the numerical greenhouse gas threshold established by the South Coast Air Quality Management District of 3,000 MT CO₂e per year. While the Project is located within the jurisdiction of the Mojave Desert Air Quality Management District, because the South Coast Air Quality Management District's thresholds are more stringent and are backed by substantial evidence from an expert agency, the South Coast Air Quality Management District's recommended thresholds have been utilized for determining the significance of the Project's greenhouse gas emission impacts. Implementation of Mitigation Measure (MM) GHG-1, MM-GHG-2, and MM-GHG-3 would also reduce operation-related GHG emissions. However, the effectiveness of the mitigation and the associated emission reductions cannot be accurately quantified at this time and GHG emissions impacts are inherently cumulative in nature. As such, impacts on the project-level and cumulatively would remain significant and unavoidable.
- **Transportation.** The Project could result in potentially significant impacts associated with increasing hazards due to a geometric design feature related to queuing. Several intersections in the vicinity of the Project site currently experience periodic queuing issues during peak hours, which can lead to potential safety concern if a significant speed differential exists between queue vehicles and vehicles proceeding beyond the queue. The Project would result in additional traffic that would exacerbate these conditions under the Existing Plus Project Conditions, Opening Year (2024) Plus Project Conditions, and Horizon Year (2040) Plus Project Conditions (queueing issues would continue to occur without Project-generated traffic for many intersections regardless of the Project). Improvement measures required to mitigate the Project's impact would include fair-share contribution to Intersections of US Hwy 395 and Phelan Road – Main Street, US Hwy 395 and Poplar Street, US Hwy 395 and Three Flags Avenue, US Hwy 395 and Joshua Street – I-15 Ramps, and I-15 SB Off-Ramp and Joshua Street. However, these intersections are not within the City's jurisdiction, but rather within the jurisdiction of other agencies, such as the California Department of Transportation. Since the City does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy, and these impacts are considered significant and unavoidable.

1.7 Alternatives to the Project

Section 15126.6(a) of the CEQA Guidelines states that an EIR shall describe “a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project,” as well as provide an evaluation of “the comparative merits of the alternatives.” Under CEQA Guidelines Section 15126.6(a), an EIR does not need to consider alternatives that are not feasible, nor does it need to address every conceivable alternative to the project. The range of alternatives “is governed by the ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice” (14 CCR 15126.6[f]).

No Project/No Development Alternative (Alternative 1)

Under Alternative 1, construction of the Project would not occur. The Project site would remain unchanged, and development activities related to construction and operation of the proposed industrial/warehouse building, associated office spaces, surface parking and loading areas, and all other proposed on- and off-site improvements would not occur.

In the short term, consistent with the existing conditions, the Project site would continue to be undeveloped. Under Alternative 1, the Project site would remain vacant, undeveloped land, although the site would presumably continue to be subject to illegal dumping, trespassing, and unpermitted off-road vehicle use, similar to the existing conditions.

Other Development Project Alternative (Alternative 2)

Under Alternative 2, the Project site would be redeveloped with other land uses, consistent with the Project site's existing Commercial/Industrial Business Park (CIBP) zoning designation. As described above, Project site has a land use and zoning designation of CIBP. Therefore, the Alternative 2 scenario involves a land use allowed under the CIBP designation.

The CIBP zone is intended to provide for service commercial, light industrial, light manufacturing and industrial support uses, mainly conducted in enclosed buildings. The MSFCSP lists several different uses that are either permitted by right or conditionally permitted in the CIBP zone. These include commercial storage facilities/mini-warehouses (i.e., self-storage facilities), offices, manufacturing, small and large equipment sales and rental, schools, vehicle rental and sales, minor and major vehicle repair, and vehicle wash facilities.

It is assumed that Alternative 2 would involve development of a land use that would be permissible either by right or by a conditional use permit, including the aforementioned land uses listed above. It is also assumed that those uses would share a similar development intensity, floor-area-ratio, and site coverage as the Project. Land uses that are expressly not allowed in the CIBP zone—specifically residential—would not be considered under Alternative 2.

Moreover, given the Project site's proximity to major regional transportation routes (e.g., I-15, U.S. Highway 395, and other local truck routes), and because of the continued demand for new industrial/warehouse operations in the Project region, it is assumed that the Project constructed under Alternative 2 would consist of warehouse, distribution, logistics, or other similar type industrial (or industrial-supporting) land use of similar size as the Project. Such an alternative could take the form of a similar square footage of industrial space, but warehouse space could be split up into many smaller buildings instead of one larger building.

Reduced Development Intensity Alternative (Alternative 3)

Presently, the only approach to reducing the Project's operational-related GHG emissions and transportation impacts would be to reduce the total number of daily trips and employees generated by the Project. As such, in an effort to reduce the Project's significant and unavoidable impacts, the City considered a Reduced Development Intensity Alternative (Alternative 3).

Under Alternative 3, the Project would be constructed and operated as planned on the Project site, with the exception that the size of the proposed development would be reduced by 15%, equating to an industrial/warehouse project consisting of approximately 352,495 square feet, compared to the Project's 414,700 square feet. Since the building footprint would be reduced by 62,205 square feet (approximately 1.4 acres), this extra

space on the Project site would remain vacant. All other on- and off-site improvements proposed as part of the Project are assumed to still be required under Alternative 3.

Environmentally Superior Alternative

Section 15126(e)(2) of the State CEQA Guidelines requires an EIR to identify an “environmentally superior alternative.” If the No Project/No Development Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other Project alternatives.

Each of the three Project alternatives considered herein would lessen at least one environmental impact relative to the Project. As previously addressed, if the No Project/No Development Alternative is the environmentally superior alternative—which is the case in this analysis—the EIR must also identify another environmentally superior alternative among the remaining alternatives.

Based on a comparison of Alternative 2 and Alternative 3, environmental impacts associated with aesthetics, air quality, energy, GHG emissions, and noise would be less under Alternative 3 compared to Alternative 2. Impacts associated with biological resources, cultural, tribal cultural, and paleontological resources, hazards and hazardous materials, hydrology and water quality, transportation, and utilities and services systems would be similar under Alternative 3 compared to Alternative 2. Overall, based on these findings, Alternative 3 would be considered the environmentally superior alternative.

1.8 Areas of Controversy/Issues to Be Resolved

The scope of this EIR includes the potential environmental impacts identified in the Initial Study/Notice of Preparation (IS/NOP) that was available for public review from August 11, 2022, through September 9, 2022, and agency and public written comment received in response to the NOP. No comments were received during the public scoping meeting held on August 24, 2022, at the Hesperia City Hall.

A summary of these written comment letters is provided in Table 2-1. The written comments and the NOP are included as Appendix A of this EIR.

Table 1-2. Summary of Initial Study/Notice of Preparation Comments

Commenter	Date	Summary of Environmental Issues Raised	EIR Chapter/Section Where Comment is Addressed
State Agency			
Native American Heritage Commission	August 24, 2022	Recommendations for tribal consultation and consulting legal counsel regarding compliance with Assembly Bill 52, Senate Bill 18, and other applicable laws.	Section 4.4, Cultural, Tribal Cultural, and Paleontological Resources

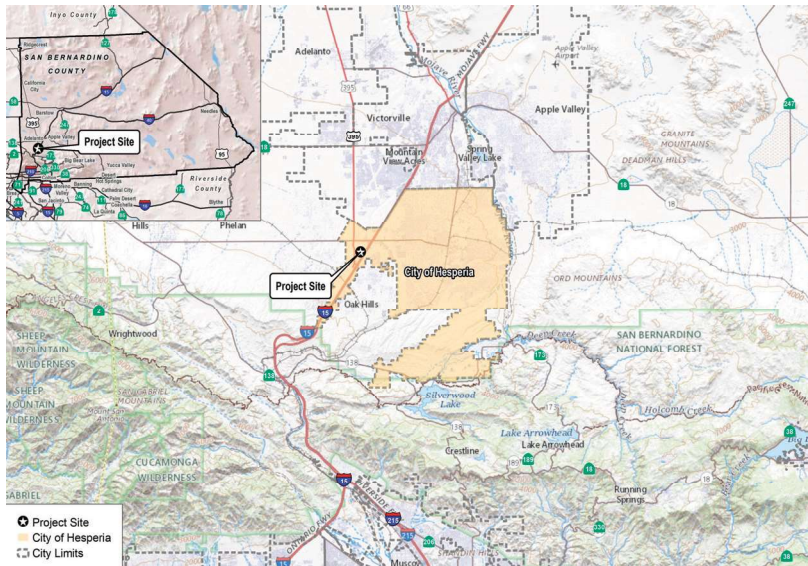
Table 1-2. Summary of Initial Study/Notice of Preparation Comments

Commenter	Date	Summary of Environmental Issues Raised	EIR Chapter/Section Where Comment is Addressed
State Agency			
Mojave Desert Air Quality Management District	August 17, 2022	▪ Recommendations for mitigation measures to be implemented during Project construction, such as a dust control plan, routine watering, perimeter fencing, and maintenance of dirt access roads. ▪ Requests analysis of Project's potential impacts to sensitive receptors and inclusion of mitigation measures, if necessary.	Section 4.2, Air Quality
Private Organizations and Members of the Public			
Center for Biological Diversity	August 23, 2022	▪ Potential impacts relating to western Joshua trees, and recommendations for what should be included within any relocation plan prepared for Joshua trees.	Section 4.3, Biological Resources

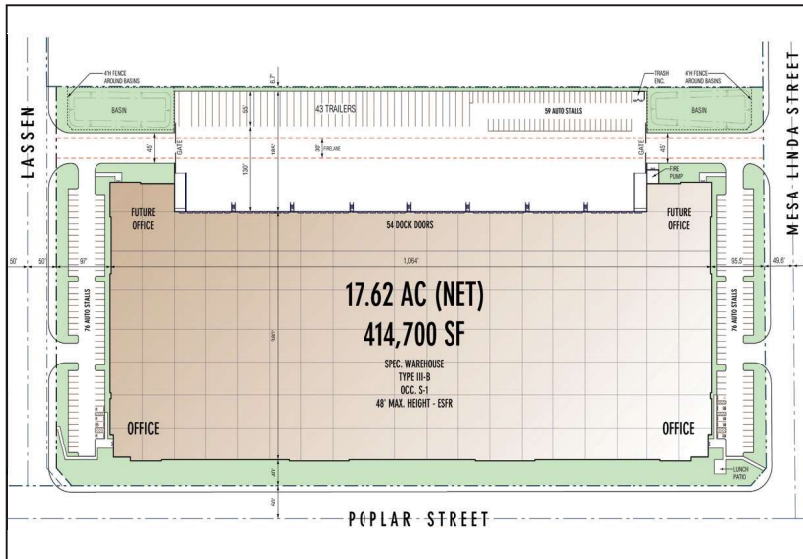
Issues to be Resolved by Lead Agency

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain a discussion of issues to be resolved. With respect to the proposed project, the key issues to be resolved include decisions by the City, as lead agency, as to the following:

- Whether this environmental document adequately describes the environmental impacts of the Project.
- Whether the recommended mitigation measures should be modified and/or adopted.
- Whether there are other mitigation measures or alternatives that should be considered for the Project besides those identified in the Draft EIR.



Panel A - Project Location Map. The Project is located within the eastern portion of the City of Hesperia, in the southwestern portion of San Bernardino County. See Figure 3-1 in Chapter 3.



Panel C - Site Plan. The Project would include construction of one industrial/warehouse building totaling 414,700 square feet of industrial/warehouse space and associated improvements, including loading docks, tractor-trailers, passenger vehicle parking spaces, and landscape area. See Figure 3-11 in Chapter 3.



Panel B - Representative Photo of Project Site. Ground cover consists of moderate native brush and scrub cover with occasional juniper and Joshua trees. Photo taken from Poplar Street looking northward at the project site. See Figure 3-4 in Chapter 3.



Panel D - Conceptual Rendering. The Project would feature a contemporary design with a variety of building materials, a neutral color palette, and drought-tolerant landscaping. See Figure 3-15 in Chapter 3.

INTENTIONALLY LEFT BLANK

2 Introduction

2.1 Purpose of the California Environmental Quality Act Process

This Environmental Impact Report (EIR) was prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental effects associated with implementation of the Poplar 18 Project (Project). It was prepared in accordance with Title 14, Section 15000 et seq. of the California Code of Regulations (CEQA Guidelines), and the rules, regulations, and procedures for implementing CEQA as adopted by the City of Hesperia (City). Consistent with CEQA Guidelines Section 15161, this document is a project-level EIR and evaluates the potential environmental impacts associated with a specific project. As the lead agency for the Project, the City must complete an environmental review to determine if the Project could potentially result in significant adverse environmental effects. A detailed description of the Project is provided in Chapter 3, Project Description.

CEQA Guidelines Section 15002 states that the basic purposes of CEQA are to:

- Inform governmental decision makers and the public about the potential significant environmental effects of proposed government actions (including the discretionary approval of development projects);
- Identify the ways that environmental damage can be avoided or significantly reduced; and
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

If a project will be approved involving significant environmental effects, the lead agency must also disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose.

This EIR provides project-level analysis of the potential environmental effects related to implementation of the Project. The level of impact analysis in this EIR corresponds to the degree of specificity deemed appropriate in accordance with CEQA Guidelines Section 15146. This EIR addresses the potentially significant environmental impacts that could occur as a result of construction and operation of the Project. This document also identifies appropriate and feasible mitigation measures, where necessary, and includes Project alternatives that could be adopted to reduce or avoid potential significant environmental effects.

This EIR provides project-level analysis of the potential environmental effects related to implementation of the Project. The level of impact analysis in this EIR corresponds to the degree of specificity deemed appropriate in accordance with CEQA Guidelines Section 15146. This EIR addresses the potentially significant environmental impacts that could occur as a result of construction and operation of the Project. This document also identifies appropriate and feasible mitigation measures, where necessary, and includes Project alternatives that could be adopted to reduce or avoid potential significant environmental effects.

This EIR is an informational document for public agencies and members of the public, allowing informed decisions to be made regarding the purpose, objectives, and components of the Project. This EIR is the primary reference document for the formulation and implementation of a mitigation monitoring and reporting program for the Project, in compliance with California Public Resources Code (PRC), Section 21081.6.

2.2 Legal Authority and Lead Agency

This EIR was prepared in accordance with all criteria, standards, and procedures of CEQA (PRC Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.).

Pursuant to CEQA Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City is the lead agency under whose authority this EIR has been prepared. “Lead agency” refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the lead agency and before taking action to approve the Project, the City has the obligation to (1) ensure that this EIR was completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision-making process; (3) make a statement that this EIR reflects the City’s independent judgment; (4) ensure that all significant impacts on the environment are eliminated or substantially lessened, where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or Project alternatives identified in this EIR are infeasible and citing the specific benefits of the Project that outweigh its unavoidable adverse effects (14 CCR 15090–15093).

Pursuant to CEQA Guidelines Sections 15040 through 15043, and upon completion of the CEQA review process, the City will have the legal authority to do any of the following:

- Approve the Project;
- Require feasible changes in any or all activities involved in the Project to substantially lessen or avoid significant effects on the environment;
- Disapprove the Project, if necessary, to avoid one or more significant effects on the environment that would occur if the Project was approved as proposed; or
- Approve the Project even though the Project will cause a significant effect on the environment if the City makes a fully informed and publicly disclosed decision that (1) there is no feasible way to lessen the effect or avoid the significant effect, and (2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This EIR fulfills the CEQA environmental review requirements for the proposed Conditional Use Permits (CUP21-00004 and CUP21-00005), Tentative Parcel Map (TPM 20315), Specific Plan Amendment (SPLA 21-00001), Development Agreement, and all other governmental discretionary and ministerial actions related to the Project.

This EIR is an informational document intended for use by City decision makers, trustee, and responsible agencies, and members of the general public in evaluating the physical environmental impacts of the Project. This EIR is the primary reference document for the formulation and implementation of a mitigation monitoring and reporting program for the Project, in compliance with PRC Section 21081.6. Environmental impacts cannot always be mitigated to a level considered less than significant. In accordance with Section 15093(b) of the CEQA Guidelines, if a lead agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the Project, based on the final CEQA documents and any other information in the public record. This is defined in Section 15093 of the CEQA Guidelines as “a statement of overriding considerations.”

2.3 Responsible and Trustee Agencies

Responsible and Trustee Agencies

PRC Section 21104 requires that all EIRs be reviewed by state responsible and trustee agencies (see also 14 CCR 15082 and 15086[a]). As defined by CEQA Guidelines Section 15381, “the term ‘Responsible Agency’ includes all public agencies other than the Lead Agency which have discretionary approval power over the project.” A trustee agency is defined in CEQA Guidelines Section 15386 as “a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California.”

For this Project, the California Department of Fish and Wildlife is a trustee agency, because the Project has the potential to impact plant and wildlife species that are managed and protected by the state.

Other Agencies from Whom Ministerial Approvals May Be Required

An encroachment permit from the California Department of Transportation would be required to accommodate off-site roadway improvements within U.S. Highway 395.

2.4 Summary of Project Analyzed in this Environmental Impact Report

The proposed Project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area. It is anticipated that the facilities would be operated 24 hours a day, 7 days a week. At this time, the project applicant does not anticipate leasing any portion of the buildings to a tenant that would require refrigerated space. The Project would include off-site improvements along Mesa Linda Street, Lassen Street, and Poplar Street, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project frontage’s landscape setback area, as well as within the landscape areas found around the proposed industrial/warehouse buildings and throughout the Project site.

2.4.1 Requested Approvals

The following discretionary and ministerial actions under the jurisdiction of the City would be required. This EIR covers all state and local government, and quasi-government approvals that may be needed to implement the Project, whether or not they are explicitly listed in this section or elsewhere in this EIR (14 CCR 15124[d]). Details regarding each of these approvals is provided in Chapter 3, Project Description.

Discretionary Approvals

Development Review Committee

- **Administrative Review.** An administrative review by the Development Review Committee is held in order to review the Project. Such review will yield a recommendation and/or ruling by City administrative staff.

Planning Commission

- **Project Review.** A review by the Planning Commission is held in order to review the Project, including all requested entitlements. Such review will yield a recommendation to the City Council.
- **Recommendation Certification of EIR.** The Planning Commission will review the EIR and make a recommendation to the City Council to certify or reject this EIR, along with appropriate CEQA Findings and the mitigation monitoring and reporting program.

City Council

- **Conditional Use Permit.** Project implementation would require approval of a Conditional Use Permit (CUP21-00010) by the Planning Commission. The Main Street and Freeway Corridor Specific Plan (MSFCSP) requires review and approval of a Conditional Use Permit (CUP) for warehousing and wholesale distribution centers over 200,000 square feet located in the Main Street/I-15 District of the Specific Plan. The building includes more than 200,000 square feet of total building area, and thus, a CUP would be required.
- **Parcel Merger.** Project implementation would require merging the two APNs within the project boundary into one, 17.87-acre lot.
- **Certification of EIR.** Certify or reject this EIR, along with appropriate CEQA Findings and the mitigation monitoring and reporting program.
- **Development Agreement.** The potential for the Approval of a Development Agreement between the City and the Project Applicant pursuant to Section 16.12.085 of the Hesperia Municipal Code.

Ministerial Approvals

City of Hesperia Subsequent Implementing Approvals

- Approvals for water, sewer, and storm drain infrastructure
- Remove and relocate on-site protected native desert plants
- Issue grading permits
- Issue building permits
- Issue encroachment permits

2.4.2 Project of Statewide, Regional, or Area-Wide Environmental Significance

CEQA Guidelines Section 15206 identifies the types of projects considered to be of statewide, regional, or area-wide significance. When a project is so classified, its EIR must be submitted to the State Clearinghouse of the Governor's Office of Planning and Research, and the appropriate metropolitan area council of governments. This Project meets the following criteria of a project of statewide, regional, or area-wide significance:

- The Project has the potential for causing significant environmental effects extending beyond the City of Hesperia.

2.5 Scope of this Environmental Impact Report

2.5.1 Notice of Preparation Scoping Process

The purpose of this EIR is to evaluate the potential environmental impacts associated with implementation of the Project. The City concluded that the Project could potentially have direct or indirect adverse effects on the environment. Accordingly, the City determined the need for preparation of an EIR for the Project. The scope of this EIR includes the potential environmental impacts identified in the Initial Study/Notice of Preparation (IS/NOP) that was available for public review from August 11, 2022, through September 9, 2022, and agency and public written comment received in response to the NOP. No comments were received during the public scoping meeting held on August 24, 2022, at the Hesperia City Hall.

A summary of these written comment letters is provided in Table 2-1. The written comments and the NOP are included as Appendix A of this EIR.

Table 2-1. Summary of Initial Study/Notice of Preparation Comments

Commenter	Date	Summary of Environmental Issues Raised	EIR Chapter/Section Where Comment is Addressed
State Agency			
Native American Heritage Commission	August 24, 2022	Recommendations for tribal consultation and consulting legal counsel regarding compliance with Assembly Bill 52, Senate Bill 18, and other applicable laws.	Section 4.4, Cultural, Tribal Cultural, and Paleontological Resources
Mojave Desert Air Quality Management District	August 17, 2022	- Recommendations for mitigation measures to be implemented during Project construction, such as a dust control plan, routine watering, perimeter fencing, and maintenance of dirt access roads. - Requests analysis of Project's potential impacts to sensitive receptors and inclusion of mitigation measures, if necessary.	Section 4.2, Air Quality
Private Organizations and Members of the Public			
Center for Biological Diversity	August 23, 2022	Potential impacts relating to western Joshua trees, and recommendations for what should be included within any relocation plan prepared for Joshua trees.	Section 4.3, Biological Resources

2.5.2 Environmental Issues Determined not to Be Significant

Pursuant to CEQA, the discussion of potential environmental impacts is focused on those impacts that could be significant or potentially significant. CEQA allows the lead agency to limit the detail of discussion of the environmental impacts that are not considered potentially significant (PRC Section 21100; 14 CCR 15126.2[a] and 15128). CEQA requires that the discussion of any significant environmental effect be limited to substantial, or potentially substantial, adverse changes in physical conditions that exist within the affected area, as defined in PRC Section 21060.5. In accordance with CEQA Guidelines Section 15143, environmental impacts dismissed in an analysis as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the lead agency subsequently receives information inconsistent with the finding.

As part of the NOP scoping process, environmental issue areas identified in the IS prepared for the Project that were found to have no impact or a less-than-significant impact are provided in the IS (Appendix A), and Chapter 5, Effects Found Not to Be Significant of this EIR. Thus, with the exception of the impact discussion in the IS Study and Chapter 5 of this EIR, these environmental issues are not discussed at further length in this EIR:

- Agricultural and Forestry Resources
- Geology and Soils (with the exception of paleontological resources, which is discussed in Section 4.4, Cultural, Tribal Cultural, and Paleontological Resources, of this EIR)
- Hazards and Hazardous Materials (with regard to hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school; hazardous materials sites compiled pursuant to Government Code Section 65962.5; airport land use plans; and emergency response plans or emergency evacuation plans)
- Hydrology and Water Quality (with regard to flood hazard, tsunami, or seiche zones)
- Land Use and Planning
- Mineral resources
- Population and Housing
- Public Services
- Recreation

2.5.3 Environmental Issues Determined to Be Potentially Significant

Pursuant to CEQA and CEQA Guidelines Section 15064, the discussion of potentially significant environmental impacts is focused in this EIR on those impacts that the lead agency has determined could be potentially significant. A determination of those environmental impacts that would be potentially significant was made for the Project based on a review of comments received as part of the NOP scoping process and additional research and analysis of relevant information during preparation of this EIR.

The scope of this EIR includes environmental issues identified by the City during the preparation of the NOP, as well as issues raised by public agencies and members of the public in response to the NOP. The following environmental issue areas were determined to be potentially significant and are addressed at further length in this EIR:

- | | |
|------------------------|----------------------------------|
| ▪ Aesthetics | ▪ Cultural, Tribal Cultural, and |
| ▪ Air Quality | Paleontological Resources |
| ▪ Biological Resources | ▪ Energy |

- Greenhouse Gas Emissions
- Hazards, Hazardous Materials, and Wildfire
- Hydrology and Water Quality
- Noise
- Transportation
- Utilities and Service Systems

2.6 Organization of this Environmental Impact Report

This EIR contains all of the information required to be included in an EIR, as specified by the CEQA Statutes and Guidelines (PRC Section 21000 et seq.; 14 CCR 15000 et seq.). CEQA requires that an EIR contain, at a minimum, specified content. The following provides a quick reference in locating the CEQA-required sections within this document:

- **Chapter 1: Executive Summary.** The Executive Summary provides a summary of the Project and Project alternatives, including a summary of the Project and cumulative impacts, recommended mitigation measures, and the level of significance after mitigation for each environmental issue.
- **Chapter 2: Introduction.** The Introduction provides an overview of the Project and the CEQA process, and describes the purpose, scope, and components of this EIR.
- **Chapter 3: Project Description.** The Project Description provides a detailed description of the Project, including the location and Project characteristics. The intended uses of this EIR, Project background, Project objectives, and required Project approvals are also addressed.
- **Chapter 4: Environmental Analysis.** The Environmental Analysis chapter analyzes the environmental impacts of the Project. Impacts are organized into major environmental topic areas. Each topic area includes a description of the environmental setting, regulatory setting, significance criteria, individual and cumulative impacts, mitigation measures, and level of significance after mitigation. The following specific environmental areas are addressed in Chapter 4:
 - Section 4.1 – Aesthetics
 - Section 4.2 – Air Quality
 - Section 4.3 – Biological Resources
 - Section 4.4 – Cultural, Tribal Cultural, and Paleontological Resources
 - Section 4.5 – Energy
 - Section 4.6 – Greenhouse Gas Emissions
 - Section 4.7 – Hazards, Hazardous Materials, and Wildfire
 - Section 4.8 – Hydrology and Water Quality
 - Section 4.9 – Noise
 - Section 4.10 – Transportation
 - Section 4.11 – Utilities and Service Systems
- **Chapter 5: Effects Found Not to Be Significant.** The Effects Found Not to Be Significant chapter provides a summary of Project impacts that have been determined, through preparation of the IS/NOP, to result in less-than-significant or no impact, and therefore, further discussion is not warranted. A brief discussion of these Project impacts is provided in this chapter.
- **Chapter 6: Other CEQA Considerations.** The Other CEQA Considerations chapter provides a summary of significant environmental impacts, including unavoidable, irreversible, and growth-inducing impacts.
- **Chapter 7: Alternatives.** The Alternatives chapter provides a comparison between the Project impacts and three Project alternatives: (1) the No Project/No Development Alternative, (2) No Project/Other Development Project Alternative, and (3) the Reduced Development Intensity Alternative.

- **Chapter 8: List of Preparers.** The List of Preparers chapter provides a list of the organizations, persons consulted, and various individuals who contributed to the preparation of this EIR. This section also includes a list of the lead agency personnel and technical consultants used to prepare this EIR.
- **Appendices.** The technical appendices contain the NOP (including public comments) and technical studies prepared to support the analyses and conclusions in this EIR.

The Final EIR will be prepared after the public review period for this EIR has been completed. The Final EIR will include comments and recommendations received on the EIR during the public review period; a list of persons, organizations, and public agencies commenting on the EIR; written responses to significant environmental issues identified in the comments received; and any other relevant information added by the City.

2.7 Documents Incorporated by Reference

Pursuant to CEQA Guidelines Section 15150, this EIR has referenced several technical studies, analyses, and previously certified environmental documents. Information from these documents, incorporated by reference, is briefly summarized in the appropriate chapters and sections. The documents that were used to prepare this EIR include the following:

- City of Hesperia General Plan Update (2010)
- City of Hesperia Main Street and Freeway Corridor Specific Plan (2021 [Updated])
- Hesperia Municipal Code (Code of Ordinances) (2021 [Updated])
- County of San Bernardino Countywide Plan (General Plan) (2020)

These reference documents, in accordance with CEQA Guidelines Section 15150(b), are available for review at the following online locations:

City of Hesperia General Plan

<https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

City of Hesperia Main Street and Freeway Corridor Specific Plan

<https://www.cityofhesperia.us/DocumentCenter/View/15940/MSFCSP-update>

Hesperia Code of Ordinances

https://library.municode.com/ca/hesperia/codes/code_of_ordinances

County of San Bernardino Countywide Plan (General Plan)

<http://countywideplan.com/>

2.8 Documents Prepared for the Project

The following technical studies and analyses were prepared for the Project and Project site and are incorporated into the technical appendices of this EIR:

- Initial Study, Notice of Preparation, and Scoping Comments (Appendix A)
- Air Quality and GHG Emission Estimates, prepared by Dudek in October 2022 (Appendix B-1)
- Health Risk Assessment, prepared by Dudek in October 2022 (Appendix B-2)
- South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District full amicus briefs, various dates (Appendix B-3)
- Biological Technical Report, prepared by Dudek in August 2022 (Appendix C)
- Cultural Resources Assessment Report, prepared by Dudek in August 2022 (Appendix D)
- Geotechnical Reports, prepared by Southern California Geotechnical in April 2022 (Appendix E)
- Phase I Environmental Site Assessment, prepared by Consolidated Consulting Group LLC in October 2020 (Appendix F)
- Preliminary Drainage Report, prepared by WestLAND Group Inc. in September 2022 (Appendix G-1)
- Preliminary Water Quality Management Plan, prepared by WestLAND Group in May 2022 (Appendix G-2)
- Water Supply Assessment Report, prepared by KEC Engineers, Inc. in August 2022 (Appendix G-3)
- Field Noise Data, prepared by Dudek in October 2021 (Appendix H-1)
- Construction Noise Modeling Data, prepared by Dudek in October 2021 (Appendix H-2)
- Traffic Noise Modeling Data, prepared by Dudek in October 2021 (Appendix H-3)
- On-Site Noise Modeling Data, prepared by Dudek in October 2021 (Appendix H-4)
- Transportation Attachments, prepared by Dudek in October 2022 (Appendix I).

2.9 Review of the Draft Environmental Impact Report

Upon completion of this Draft EIR, the City prepared and filed a Notice of Completion with the Governor's Office of Planning and Research, State Clearinghouse to start the public review period (PRC Section 21161). Concurrent with the Notice of Completion, the City distributed a Notice of Availability in accordance with CEQA Guidelines Section 15087. The Notice of Availability was mailed to the agencies, organizations, and individuals who previously requested in writing to receive a copy. This Draft EIR was distributed to responsible and trustee agencies, other affected agencies, surrounding cities and municipalities, and all interested parties requesting a copy of this document in accordance with PRC Section 21092(b)(3). During the public review period, this Draft EIR, including the appendices, is available for review at the following locations:

In Person:

Hesperia City Hall, Planning Department
9700 Seventh Avenue
Hesperia, California 92345

Hesperia Branch Library
9650 Seventh Avenue
Hesperia, California 92345

Online:

<https://www.cityofhesperia.us/312/Planning>

Agencies, organizations, individuals, and all other interested parties not previously contacted, or who did not respond to the NOP, currently have the opportunity to comment on this Draft EIR during the public review period. Written or email comments on this Draft EIR should be addressed to:

Ryan Leonard, Senior Planner
City of Hesperia Planning Department
9700 Seventh Avenue
Hesperia, California 92345
Phone: 760.947.1651
Email: rleonard@cityofhesperia.us

Upon completion of the public review period, written responses to all substantive environmental comments are prepared and made available prior to the public hearing on the Project before the City of Hesperia's Planning Commission, at which the Project, the Final EIR, and requested entitlements are considered for recommendation to the Hesperia City Council. The comments received and the responses to those comments will be included as part of the record for consideration for the Project.

3 Project Description

This chapter describes the objectives of the Poplar 18 Project (Project) and the Environmental Impact Report (EIR) and provides a detailed description of the Project characteristics. This chapter also discusses the required development approvals and discretionary actions necessary to implement the Project.

3.1 Project Location

The approximately 17.87-acre Project site is located in the western part of the City, which is within the Victor Valley region of San Bernardino County (Figure 3-1, Regional Map; Figure 3-2, Vicinity Map; Figure 3-3, Project Site Aerial). The Project site is located on the southwest quadrant of I-15 and Main Street, south of Main Street, west of Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The Project site consists of two parcels: Assessor's Parcel Numbers (APNs) 3064-581-04-0000 and 3064-581-05-0000. Specifically, the Project site is located in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map.

Regional access to the Project site is provided via I-15, directly east of the Project site, and U.S. Highway 395, directly west of the Project site. Local access to the Project site is provided via Poplar Street, Lassen Road, Sultana Road or Mesa Linda Street.

3.2 Environmental Setting

City of Hesperia

The City is approximately 110 square miles in the Victor Valley region of San Bernardino County. The City is located within the Mojave Desert, which is a region containing desert plains, dry lakebeds, and scattered mountains. The southern portion of the City lies at the foothills of the San Bernardino Mountains and National Forest. The City contains a variety of slope conditions, with the foothill areas containing significant slopes and the majority of the City being primarily level. The central and northern portions of the City lie upon a moderate to gentle slope with elevations ranging from 2,900 feet to 4,200 feet above mean sea level. Generally, the City is an urban community with a broad mix of land uses, including housing, commercial, office, industrial, agriculture, and public-serving uses. The eastern and southern portions of the City contain generally rural residential uses. Commercial uses follow Main Street, Bear Valley Road, and Hesperia Road, and the freeway corridor. Industrial uses are generally divided into two areas: west of I-15 and east of U.S. Highway 395, and the eastern area between the BNSF railroad lines and I Avenue north of Main Street.

The City is bordered by the City of Victorville to the north, the City of Apple Valley to the east, unincorporated San Bernardino County land to the south, and the unincorporated community of Oak Hills to the west. Three highways provide direct access to the City: I-15 runs north-south on the west side of the City; U.S. Highway 395 connects to I-15 on the west side; and State Route 138 passes through the southeastern corner of the City (City of Hesperia 2010).

Existing Project Site

The Project site is comprised of two parcels, APNs 3064-581-04-0000 and 3064-581-05-0000, totaling approximately 17.87 acres. The Project site is currently vacant undeveloped property bound to the west by Lassen Road, to the east by Mesa Linda Street, and to the south by Poplar Street. It should be noted that Lassen Road has not yet been constructed but is a planned arterial road in the City's Circulation Element (City of Hesperia 2010).

Ground surface cover consists of moderate native brush and shrub growth with occasional Joshua and Juniper trees located throughout the site. The Project site is subject to disturbance as a result of illegal dumping and trespassing. These unpermitted activities have led to areas of exposed bare soils (where trails have formed) and several debris piles. Figure 3-4, Existing Conditions, provide representative photographs of the Project site.

The site's surface elevation ranges between approximately 3,590 and 3,615 feet above mean sea level. The local topographic gradient is approximately 2% downward towards the northeast (Figure 3-5, Topographic Map).

The Project site is located within the Main Street and Freeway Corridor Specific Plan (MSFCSP), which became effective October 16, 2008. According to the City's General Plan Land Use Map and the MSFCSP, the land use and zoning designations for the Project site are Commercial/Industrial Business Park (CIBP) (City of Hesperia 2020). (Figure 3-6, Existing Land Use Designation and Figure 3-7, Existing Zoning). The goals, policies, and development standards within the MSFCSP applicable to the proposed Project are detailed in the regulatory sections of each resources section.

The MSFCSP employs a district concept to guide development and shape the character of areas within the Specific Plan Area. The Project is located within the Highway 395/I-15 District (Figure 3-8, Main Street and Freeway Corridor Specific Plan Land Use Districts).

According to the Specific Plan, the Highway 395/Interstate-15 District is intended to provide enhanced vehicular, truck, and rail accessibility for commercial/industrial business park uses by taking advantage of its location along the I-15 corridor with its connection to U.S. Highway 395, and its linkage to the Southern California Logistics Airport, a major logistics hub, located approximately 11 miles north of the Project site via U.S. Highway 395 in the City of Victorville. Per the MSFCSP, the recommended district land uses build upon the presence of a major truck stop and other existing and planned light industrial uses. The purpose of this district is to create employment-generating uses in a business park setting. The kind of industrial uses envisioned in this District include light industrial, light manufacturing, and industrial support uses, mainly conducted in enclosed buildings, with minimal environmental impacts. The Project is consistent with these types of uses.

Land uses surrounding the Project site primarily consist of vacant land, along with some scattered residential, commercial, light industrial, and utility uses. Specific land uses located in the immediate vicinity of the Project site include the following:

- **North:** Sultana Road
- **East:** Mesa Linda Street and I-5
- **South:** Poplar Street
- **West:** Lassen Road and U.S. Highway 395

In the broader Project vicinity, development includes commercial uses, trucking-related uses (i.e., truck stops), lodging accommodations, big-box retail developments, and residential subdivisions. Figure 3-9, Project Development Setting, depicts existing development within the vicinity of the Project site.

As discussed in further detail below in Section 3.4.1, utility infrastructure currently exists along Phelan Road and U.S. Highway 395 to serve the Project site. Existing infrastructure in the Project vicinity includes water and sanitary sewer transmission mains, electrical transmission and distribution lines, and cable and telephone lines. The Project would require the installation of new utility infrastructure to connect to the existing infrastructure that is present adjacent to the Project site and meet the needs of the proposed Project.

Local connectivity to the Project site from the center of the City and surrounding urban communities is provided via Main Street, U.S. Highway 395, and I-15, all of which are located in the immediate vicinity of the Project site. Additionally, as discussed in Section 4.10, Transportation, the Project is currently served by the Victor Valley Transit Authority, a public transit agency serving the Victor Valley area within San Bernardino County, with bus service along Mariposa Road, Main Street, Bear Valley Road, and Escondido Avenue (City of Hesperia 2019).

Cumulative Setting

In many cases, the impact of an individual project may not be significant, but its cumulative impact may be significant when combined with impacts from other related projects. California Environmental Quality Act (CEQA) Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” CEQA Guidelines Section 15130(b) states that “the discussion [of cumulative impacts] need not provide as great detail as is provided for the effects attributable to the project alone.” Section 15130(b) further states that a cumulative impacts discussion “should be guided by standards of practicality and reasonableness.”

Cumulative impacts can also occur from the interactive effects of a single project. For example, the combination of noise and dust generated during construction activities can be additive and can have a greater impact than either noise or dust alone. However, substantial cumulative impacts more often result from the combined effect of past, present, and future projects located in proximity to a proposed project. Thus, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future projects, the impacts of which might compound or interrelate with those of the project under review.

As provided by CEQA Guidelines Section 15130(b), the following elements are necessary to an adequate discussion of cumulative impacts:

- Either: (A) a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the agency; or (B) a summary of projections contained in an adopted general plan or related planning document that is designed to evaluate regional or area wide conditions. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.
- A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available.
- A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable options for mitigating or avoiding any significant cumulative effects of the proposed projects.

For the analysis of cumulative impacts associated with the Project, a cumulative project list was developed through consultation with the City staff, including but not limited to the City’s Transportation Engineering Division staff during the traffic scoping process, as well as research and the understanding of other past, present, or reasonably foreseeable project that might be cumulative considerable for the Project. Table 3-1 provides a list of these cumulative projects and their associated land use. Cumulative project locations are shown in Figure 3-10, Cumulative Projects.

Table 3-1. Cumulative Projects

ID ¹	Project Name ²	Use	Size (square feet)
H1	CUP21-00006	Automotive Care Center	13,813
H2	U.S. Cold Storage (CUP21-00003)	High-Cube Cold Storage Warehouse	491,000
H3	CUP21-00001	Automobile Care Center	12,800

Table 3-1. Cumulative Projects

ID ¹	Project Name ²	Use	Size (square feet)
H4	CUP20-00007	Automobile Care Center	12,765
H5	Pixior Warehouse (CUP20-00006)	High-Cube Fulfillment Center Warehouse	440,000
H6	Hesperia Commerce Center II (CUP19-00010)	General Light Industrial	1,383,781
		High-Cube Fulfillment Center Warehouse	2,361,648
H7	CUP19-00006	Automobile Parts and Service Center	3,100
		General Office Building	3,100
		Automobile Care Center	6,000
		Car Wash and Detail Center	7,200
H8	CUP18-00003	Convenience Market	4,631
		Fast-food Restaurant without Drive-Through Window	1,858
		Gasoline/Service Station	5,110
		Automated Car Wash	1,343
		Food Cart Pod	2,330
H9	Hesperia Commerce Center	High-Cube Fulfillment Center Warehouse	3,500,000
H10	I-15 Industrial Park Project	High-Cube Fulfillment Center Warehouse	647,500
H11	Buddhist-Town at Holy Heavenly Lake	Recreational Community Center	—
H12	Tapestry Specific Plan	—	—
H13	CUP22-00003	High-Cube Fulfillment Center Warehouse	750,000
H14	CUP22-00004	High-Cube Fulfillment Center Warehouse	400,000
H15	CUP22-00006	RV Storage	97,250
H16	Kaiser Permanente – Hesperia	Medical Office	55,000

Source: City of Hesperia 2022.

Notes:

¹ Corresponds with Figure 3-10, Cumulative Projects.

² Common project names and conditional use permit (CUP) case numbers provided if available.

3.3 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the City in developing a reasonable range of alternatives to be evaluated in the EIR. The Project objectives also aid decision makers in preparing Findings of Fact and a Statement of Overriding Considerations, if necessary. The statement of objectives also is to include the underlying purpose of a project and may discuss a project's benefits.

Purpose and Need

The High Desert/Victor Valley region has long been identified as an area having a low jobs–housing ratio (i.e., an area that has more potential workers living in a community than there are jobs for them),¹ resulting in high numbers of residents commuting out of the region for work. The City of Hesperia has estimated that approximately 73% of workers residing in Hesperia commute out of the area to the Inland Empire cities and the broader Los Angeles region (City of Hesperia 2016). Although these conditions can be attributed to a number of factors, the most notable variable in the jobs-to-housing ratio is the lack of jobs growth in the region. From 2010 to 2015, the region’s job growth rate was 7.0% compared to a population growth rate of 25.5%. A low jobs-to-housing ratio can result in adverse environmental and economic effects on local communities. Long-distance commutes result in increased traffic and air quality and greenhouse gas emissions, and out-of-region commuters often take a share of their purchasing power with them when they make purchases away from home.

Recognizing these trends, community leaders and officials have long sought to stimulate economic development within the High Desert region and provide residents with local employment opportunities. One strategy that community leaders and planners have used is to attract development of warehousing and distribution centers, which can provide hundreds of jobs per million square feet of development. Conventional and e-commerce retailers are continuing to embrace the strategy of creating and staffing large regional fulfillment centers, with the goal of quickly responding to online consumers. Because of its available land and infrastructure for large logistics facilities, many companies are locating their regional operations to the High Desert area.

As such, the Project would help meet the needs of the growing logistics sector while producing new jobs in a region that is typically viewed as housing rich and jobs poor.

Project Objectives

Consistent with the Project’s purpose and need, the primary objectives sought by the Project are as follows:

- **Objective 1:** Develop a jobs-producing and tax generating land use near transportation corridors within the housing-rich Victor Valley/High Desert region that is constructed to high standards of quality and provides diverse economic opportunities for those residing and wishing to invest within the City of Hesperia.
- **Objective 2:** Concentrate nonresidential uses near existing roadways, highways, and freeways in an effort to isolate and reduce any potential environmental impacts related to truck traffic congestion, air emissions, industrial noise, and biological resources to the greatest extent feasible.
- **Objective 3:** Develop a fiscally sound and employment-generating land use that maximizes use of industrial zoned areas.
- **Objective 4:** Create a project that takes advantage of and enhances existing infrastructure, including the proximity to major regional roadways such as Interstate 15 and U.S. Highway 395, railroad service corridors, and other similar infrastructure that will help promote the site and its use as an industrial business park.
- **Objective 5:** Fulfill the existing and growing demand for logistics and warehouse uses in the region.

¹ A jobs–housing ratio is a commonly used economic metric used to determine whether or not a community or region provides a sufficient number of jobs for its residents. The metric is calculated by finding the relationship between where people work (“jobs”) and where they live (“housing”). As of 2016, the City had a jobs/housing ratio of 0.44, well off of regional targets ranging from 1.25–1.50 (City of Hesperia 2016).

3.4 Project Characteristics

3.4.1 Project Components

The Project would include construction of an industrial warehouse building and associated improvements on 17.87 acres of vacant land (see Figure 3-11, Site Plan and Figure 3-12, Detailed Site Plan). It should be noted the net acreage of 17.62 acres shown on Figure 3-11, Site Plan represents the total site acreage minus the required setbacks from the centerlines of the adjacent roadways. The proposed Project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area. Office space within the building would be distributed among four individual office spaces in each of the corners of the building. The building would have a maximum height of 50 feet, measured from the finished floor to the top of the building parapets and would have a gross floor area ratio of 53.3%.

The Project would include off-site improvements along Mesa Linda Street, Lassen Street, and Poplar Street, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project frontage's landscape setback area, as well as within the landscape areas found around the proposed industrial/warehouse buildings and throughout the Project site.

To account for the maximum potential disturbance associated with all on-site and off-site improvements, a maximum disturbance footprint has been developed, as shown on Figure 3-11, Site Plan. Specific, known improvements are depicted on this figure. Areas in which lateral utility connections may occur or where other roadway and pedestrian improvements may be necessary are also depicted. Together, these off-site improvements are referred to as the Off-Site Street and Utility Improvements. Table 3-2 provides a summary of these improvements.

Table 3-2. Project Improvement Areas

Improvement Area	Project Components
Project Site	Industrial warehouse building totaling 414,700 square feet and associated on-site roadways, trailer/automobile parking, and landscaping
Off-Site Street and Utility Improvements	Possible lateral connections for utilities and other roadway and pedestrian improvements (e.g., road repaving or installation of sidewalks along building frontages)

Note: See Figures 3-11, Site Plan and 3-12, Detailed Site Plan.

Site Access, Circulation, and Parking

Access to the Project site would be provided by four driveways (Figure 3-13, Vehicular Circulation and Access Plan):

- Lassen Road North Driveway – 45-foot-wide, full-access (passenger cars and trucks) driveway with stop sign
- Lassen Road South Driveway – 30-foot-wide, full-access (passenger cars only) driveway with stop sign
- Mesa Linda Street North Driveway – 45-foot-wide, full-access (passenger cars and trucks) driveway with stop sign
- Mesa Linda Street South Driveway – 30-foot-wide, full-access (passenger cars only) driveway with stop sign

Consistent with Hesperia Fire Department access requirements, all Project driveways have been designed to allow for minimum turning radii. Signage and striping would be provided to demarcate fire lanes and clear spaces

throughout the site. All gated entryways to truck courts would include rapid-access Knox boxes to provide emergency access to gated areas.

Paved passenger vehicle parking areas would be provided within areas west, northeast, and east of the building, while tractor-trailer stalls and loading docks would be located north of the building. In total, the Project would provide approximately 54 loading dock positions, approximately 54 tractor-trailer stalls, and approximately 182 passenger vehicle parking spaces (including accessible and electric vehicle [EV] charging stalls). Parking areas would include designated areas for EVs and these spaces would be equipped with automobile EV charging stations with Level 2 or faster chargers.

Off-Site Roadway Improvements

To facilitate adequate on-site circulation, sufficient site access for both passenger vehicles and trucks, and to ensure efficient off-site circulation on nearby roadway facilities, the Project would include off-site improvements that include street improvements along the frontage of the Project on Poplar Street, Lassen Road, and Mesa Linda Street.

Utility Improvements

Given the vacant, undeveloped nature of the Project site, both wet and dry utilities, including domestic water, sanitary sewer, and electricity, would need to be extended onto the Project site. These utilities are described in detail below.

Domestic Water

Domestic water service would be provided by the Hesperia Water District Company. Within the immediate vicinity of the Project site, existing water lines include water lines within Poplar Street and Mesa Linda Street.

Sanitary Sewer

Sanitary sewer service would be provided the Hesperia Water District. Within the immediate vicinity of the Project site, existing sewer lines include a gravity line starting east of Highway 395 in line with Sultana Street (to the north of the Project site) and another also going from east to west along Poplar Street.

Storm Drainage

A new engineered stormwater drainage system would be constructed on the Project site to collect and treat on-site stormwater (see Figure 3-12, Detailed Site Plan). Post-development, stormwater flows would be captured on site and treated within a series of aboveground and underground infiltration facilities. At-grade stormwater detention basins would be located in the northwest and northeast corners of the Project site. Stormwater flows would be conveyed via sheet flows away from buildings and where possible, through below-grade, landscaped areas prior to entering the nearest catch basin and subsequently being conveyed to the infiltration and retention facilities. The landscaped areas would act as the first filter for detaining suspended solids in stormwater flows. The detention basins would be planted with native grasses and erosion control vegetation along their side banks. Concrete forebays or riprap would accumulate a majority of the trash and sediment within the stormwater prior to entering the earthen basins.

The Project and its new stormwater drainage system would capture and attenuate stormwater consistent with City and County stormwater requirements, including requirements in the San Bernardino County Hydrology Manual and Mojave Watershed Technical Guidance. In addition, it would attenuate flows beyond what is required. Specifically, the

Project's stormwater system has been designed such that it would retain and infiltrate the entire volume generated from a 100-year storm event, and no stormwater runoff would be released off site during this event. For additional information, refer to Section 4.8, Hydrology and Water Quality.

Gas, Electric, and Telecommunication Facilities

Upgrades would be required with respect to electric power, natural gas, and telecommunication facilities (i.e., cable television services). These utilities would be part of a dry utility package that would be installed on site from their locations immediately fronting the Project site to provide service to the Project.

Architecture

The Project's design employs a variety of architectural strategies to create a contemporary, unified, and high-quality business park campus environment. Building facades would feature a complementary neutral color palette and a variety of building materials, similar to other industrial development located throughout the City and region (Figure 3-14, Schematic Rendering). Building elevations include vertical and horizontal elements that would break up the overall massing of the buildings (Figure 3-15, Architectural Elevations).

In an effort to ensure that current and future development within the City is designed and constructed to conform to existing visual character and quality of the surrounding built environment, the City of Hesperia Development Code (Title 16 of the City's Municipal Code) includes design standards related to building size, height, floor area ratio, and setbacks, as well as landscaping, signage, and other development standards that have an effect on visual considerations. These design standards help adjacent land uses to be visually consistent with one another and their surroundings and reduces the potential for aesthetic conflict. The design specifications of all development proposals submitted to the City are reviewed for compliance with all applicable provisions set forth by the Development Code, and in the case of the Project (because it is subject to the Specific Plan), the provisions of the Specific Plan. As part of the City's development review process, the Project's architectural plans are reviewed by City staff and the Planning Commission to determine whether Project design conforms to the Development Code and Specific Plan and promotes the visual character and quality of the surrounding area.

Landscaping and Lighting Improvements

As depicted in Figure 3-16, Landscape Plan, landscaping is proposed for the passenger vehicle parking areas, around the portions of the buildings visible from off-site areas, as well as the site's frontages with Poplar Street, Lassen Road, and Mesa Linda Street. Landscaping along the site's frontages would include a mixture of trees, shrubs, and groundcover. Proposed trees include 15-gallon Blue Palo Verde, Desert Willow, Coulter Pine, Chinese Elm, Southern Live Oak, and Chilean Mesquite. Approximately 15 western Joshua trees currently on the Project site would be incorporated into the Project's landscape plan. The planting of these trees would be done in accordance with the Joshua Tree Preservation, Protection, and Relocation Plan and Desert Native Plant Relocation Plan for the Poplar 18 Project, included as Attachment B to the Biological Resources Technical Report (Appendix C).

Joshua trees that are proposed to be removed have been transplanted or stockpiled for future transplanting wherever possible. In the instance of stockpiling the permittee has posted a bond to ensure such Joshua trees are transplanted appropriately.

The landscaping materials along the Project frontages incorporate a layering concept to provide different height trees and border or accent shrubs and low ground cover. Plant material is selected for low water and low

maintenance. Landscaping is designed to be consistent with Section 16.20.610 of the City's Municipal Code (City of Hesperia 2021b).

Project lighting would feature a mix of pole-mounted and wall-mounted lighting fixtures. Consistent with Section 16.16.415 of the City's Municipal Code, exterior lighting would be located and designed to avoid direct glare onto adjacent properties and public rights-of-way (City of Hesperia 2021b).

Rooftop Solar

At a minimum, the roofs of the Project's warehouse buildings would be designed to provide the structural capacity to accommodate roof-top solar panels. Additionally, each building would be equipped with rooftop solar panels to the extent feasible, with a capacity that matches the maximum allowed for distributed solar connections to the grid. As the capacity for solar connections increase, additional solar panels would be added to the Project.

Operational Characteristics

A tenant for the Project has not been identified and the industrial warehouse building is considered speculative. Business operations would be expected to be conducted within the enclosed building, with the exception of the ingressing and egressing of trucks and passenger vehicles accessing the site, passenger and truck parking, the loading and unloading of trailers within designated truck courts/loading areas, and the internal and external movement of materials around the Project site via forklifts, pallet jacks, yard hostlers, and similar equipment. It is anticipated that the facilities would be operated 24 hours a day, 7 days a week. Cold storage would not be permitted.

In general, the Project has been designed such that business operations would be conducted within the enclosed building, with the exception of traffic movement, passenger and truck parking, the loading and unloading of trailers within designated truck courts/loading areas, and the internal and external movement of materials around the Project site via forklifts, pallet jacks, yard hostlers, and similar equipment. The outdoor cargo handling equipment used during loading and unloading of trailers (e.g., yard trucks, hostlers, yard goats, pallet jacks, forklifts) is expected to be non-diesel powered per contemporary industry standards. Within the gated truck court area, up to 54 trailers would be in designated trailer storage stalls. The Project's office and mezzanine space would support general office activities related to business operations.

Because an end user of the building has not yet been identified, specific details regarding future operational activities on the Project site are not yet available. However, for the purposes of CEQA and to ensure full disclosure on all potential allowable uses on the Project site, this environmental impact assessment assumes development of a "blend" of industrial uses. Thus, the modeling assumptions used for the air quality, health risk assessment, greenhouse gas, energy, and traffic impact analyses summarized in subsequent chapters of this Draft EIR assume a blend of "high-cube" warehouse and general light industrial uses. Under this modeling scenario, approximately 269,555 square feet would be high-cube fulfillment center use and 145,145 square feet would be general light industrial land use.

Development Agreement

A Development Agreement is contemplated as part of the Project approvals. The Development Agreement does not contemplate any additional physical improvements, other than those already identified within the Project description, analysis, and proposed mitigation for the Project. Its effect and intent are to provide sufficient time for

the development of the Project by locking in development standards and extending applicable vesting periods for the Project's entitlements.

3.4.2 Project Construction

For the purposes of analysis, it is assumed that construction of the Project would commence in or around January 2023 and conclude in October 2023, lasting approximately 11 months. The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Site preparation: 2 weeks (January 2023)
- Grading: 1.5 months (January 2023–February 2023)
- Building construction: 6 months (February 2023–August 2023)
- Paving: 1 month (August 2023–September 2023)
- Application of architectural coatings: 1 month (September 2023–October 2023)

Construction activities would include site preparation (e.g., vegetation clearing, grubbing, tree removal, disking), grading, building construction, paving, and architectural coating.

Construction activities would generally occur across six phases: site preparation (e.g., vegetation clearing, grubbing, tree removal, disking), grading, building construction/utility installation, paving, and architectural coating. With the exception of architectural coating (which would only occur on the Project site), all phases would occur both on the Project site and within the Off-Site Street and Utility Improvements.

The five phases of construction are described in detail below.

Site Preparation

Project Site

Site Preparation generally refers to the removal of debris, organic materials, deleterious materials, and loose and unusable soils from a site prior to grading. During the site preparation phase, construction crews would use tractors/mowers, loaders, backhoes, and rubber-tired dozers to uproot and remove vegetation. Removed vegetation would be chipped/mulched and would be loaded into trucks that would transport the organic waste to an approved disposal facility. These activities would occur throughout the entirety of the Project site.

Notably, 13 western Joshua trees that have been identified as transplantable trees would be excavated from their current locations and stockpiled in a storage area that would be approved by a certified arborist. Trees would be removed from their current locations with the use of a front-end loader, hydraulic tree spade, or through the use of hand tools and manual digging. Western Joshua trees on the Project site that cannot be transplanted would be removed in the same manner as other trees and shrubs on the site.

Off-Site Street and Utility Improvements

The same site preparation activities described above would occur. It is assumed these activities would occur within the full extent of the public right-of-way. Given that the majority of these areas are already dirt roads, site preparation activities would largely be limited to removing vegetation and debris on the edges of the existing roadways, up to the edge of the public right-of-way.

Where utility lines would be installed within existing paved roadways, no site preparation activities would occur.

No take of western Joshua trees would occur within the off-site street and utility improvements areas.

Grading

Project Site

Following the site preparation phase, grading would occur. Grading generally refers to the process of using heavy machinery to alter the surface of a site to obtain a specified slope. Grading would involve the use of several pieces of heavy machinery, including bulldozers, track-hoe excavators, front-end loaders, dump trucks, motor graders, water trucks, and rollers for compaction. All grading would be done in accordance with a formal stormwater pollution prevention plan for the Project, which would employ best management practices, such as using hay bales and diversion ditches, to control stormwater runoff during construction. The site would not require the import or export of earthwork materials as on-site material will be balanced during the grading phase. A conceptual grading plan for the Project site, including the proposed depths of excavation are shown on Figure 3-17, Conceptual Grading Plan.

Off-Site Street and Utility Improvements

For the areas where off-site roadways and utilities would be constructed, the same grading activities described above for the Project site would occur directly within the footprint of proposed roadway improvements. All grading activities would occur within the footprint of areas that have already been disturbed as part of the site preparation phase.

Grading would not be necessary for the off-site utility alignments that would not be covered by a roadway.

Building Construction/Utility Installation

Project Site

After the site has been graded, underground utility lines would be installed and the buildings would be constructed. Installation of lateral utility lines would involve trenching using a backhoe, the placement of pipelines using a crane or tractors/loaders/backhoes, and the backfilling of the trenches. Subsequently, the building foundations would be poured and the buildings would be constructed. The proposed buildings would be constructed with a tilt-up construction method. With tilt-up construction, slabs of concrete, which comprise load-bearing sections of a building envelope or elevation, are cast horizontally on a concrete slab-on-ground. The slabs are then lifted (tilted) with a crane after the concrete has reached sufficient strength. The crane sets the panels, most often in a vertical orientation, on prepared foundations, thus forming the desired wall line from a series of consecutive panels standing next to each other. Roof structures and other internal features would subsequently be installed.

Off-Site Street and Utility Improvements

All off-site utilities would be installed within the footprints of existing and planned roadways. These utilities would be installed in the same manner as the utilities on the Project site.

Paving

Project Site

Following building construction, roadways and pavement surfaces would be constructed using pavers, paving equipment, and rollers. Lanes and parking spaces would be striped.

Off-Site Street and Utility Improvements

During this phase, the off-site roadway surfaces would be constructed in the same manner as those roadway surfaces on the Project site. Where paving occurred, existing roadways would be restriped.

Architectural Coating

Project Site

Architectural coatings would be applied to the Project site using paint sprayers powered by compressors. Coatings would be applied manually by construction crews.

Landscaping would also be installed during this phase, including the planting of the 13 transplantable Joshua trees. The planting of these trees would be done in accordance with Attachment B, Joshua Tree Preservation, Protection, and Poplar 18 Project, included as Attachment B to the Biological Resources Technical Report (Appendix C).

Off-Site Street and Utility Improvements

Architectural coatings would not be applied for this phase/area.

3.5 Standard Requirements and Conditions of Approval

The Project has been reviewed in detail by City staff. Various City departments and divisions are responsible for reviewing land use applications for compliance with City codes and regulations. These departments and divisions were also responsible for reviewing this EIR for technical accuracy and compliance with CEQA. The following City departments and divisions were responsible for technical review:

- City of Hesperia, Development Review Committee
- City of Hesperia, Planning Division
- City of Hesperia, Building and Safety Division
- City of Hesperia, Public Works Division
- City of Hesperia, Engineering Department
- San Bernardino County Fire Department

This review of the Project by the City departments and divisions listed above resulted in a comprehensive set of draft Conditions of Approval that will be available for public review prior to consideration of the Project by the Hesperia Planning Commission and Hesperia City Council. These conditions will be considered by the Planning Commission and City Council in conjunction with its consideration of the Project. If approved, the Project will be required to comply with all imposed Conditions of Approval.

Where applicable, Conditions of Approval and other applicable regulations, codes, and requirements to which the Project is required to comply and that result in the reduction or avoidance of an environmental impact are specified in each subsection of Chapter 4, Environmental Analysis, of this EIR. In addition, the Project is required by state law to comply with the California Building Standards Code and its California Green Building Standards (CALGreen) component (Title 24), which includes mandatory building standards aimed at reducing energy use.

3.6 Requested Actions

The City has primary approval responsibility for the Project. As such, the City is serving as the lead agency for this EIR, pursuant to CEQA Guidelines Section 15050. According to Hesperia Municipal Code Section 16.12.005, the Hesperia Development Review Committee is the reviewing body with the responsibility to review design of the Project and make a recommendation to the Planning Commission. According to Hesperia Municipal Code Section 16.12.085, the Planning Commission is authorized to approve or deny applications for design review and to impose conditions upon such approval. According to Hesperia Municipal Code Section 16.12.085, the City Council is authorized to enter into Development Agreements.

The following discretionary and ministerial actions under the jurisdiction of either the City of Hesperia or a responsible or trustee agency would be required. This EIR covers all federal, state, and local government and quasi-government approvals that may be needed to implement the Project, whether or not they are explicitly listed herein or elsewhere in this EIR (14 CCR 15124[d]).

Discretionary Approvals

Development Review Committee

- **Administrative Review.** An administrative review by the Development Review Committee is held in order to review the Project. Such review will yield a recommendation and/or ruling by City administrative staff.

Planning Commission

- **Project Review.** A review by the Planning Commission is held in order to review the Project, including all requested entitlements. Such review will yield a recommendation to the City Council.
- **Recommendation Certification of EIR.** The Planning Commission will review the EIR and make a recommendation to the City Council to certify or reject this EIR, along with appropriate CEQA Findings and the mitigation monitoring and reporting program.

City Council

- **Conditional Use Permit.** Project implementation would require approval of a Conditional Use Permit (CUP21-00010) by the Planning Commission. The MSFCSP requires review and approval of a Conditional Use Permit (CUP) for warehousing and wholesale distribution centers over 200,000 square feet located in the Main Street/I-15 District of the Specific Plan. The building includes more than 200,000 square feet of total building area, and thus, a CUP would be required.
- **Parcel Merger.** Project implementation would require merging the two APNs within the Project boundary into one 17.87-acre lot.

- **Certification of EIR.** Certify or reject this EIR, along with appropriate CEQA Findings and the mitigation monitoring and reporting program.
- **Development Agreement.** The potential for the Approval of a Development Agreement between the City and the Project Applicant pursuant to Section 16.12.085 of the Hesperia Municipal Code.

Ministerial Approvals

City of Hesperia Subsequent Implementing Approvals

- Approvals for water, sewer, and storm drain infrastructure
- Remove and relocate on-site protected native desert plants
- Issue grading permits
- Issue building permits
- Issue encroachment permits

3.7 References

City of Hesperia. 2010. *Hesperia General Plan Update*. Accessed October 18, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.

City of Hesperia. 2016. *High Desert Workforce Report*. April 4, 2016. Accessed October 11, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/13786/HD-Workforce-Report-April-2016?bidId=>.

City of Hesperia. 2020. *General Plan Land Use*. Updated February 7, 2020. Accessed: November 11, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/15727/General-Plan-Zoning-Map?bidId=>

City of Hesperia. 2021. *Hesperia Main Street & Freeway Corridor Specific Plan*. Adopted October 16, 2008. Amended July 15, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/15940/MSFCSP-update>.

City of Hesperia. 2021. *Code of Ordinances*. Updated July 23, 2021. Accessed October 2021. https://library.municode.com/ca/hesperia/codes/code_of_ordinances?nodeId=TIT16DECO_CH16.20GERE_ARTXIIILARE_16.20.610COINNSIMUMIREST

City of Hesperia, CA. *General Plan Land Use Map*. Effective February 7, 2020. Accessed on <https://www.cityofhesperia.us/DocumentCenter/View/14359/General-Plan-Zoning-Map?bidId=>

City of Hesperia, CA. *Bus Stops and Routes*. Effective February 5th, 2019. Accessed on https://www.cityofhesperia.us/DocumentCenter/View/402/Hesperia_Bus_Routes?bidId=

City of Hesperia. 2022. Email communication with City of Hesperia Planning Department. April 4.

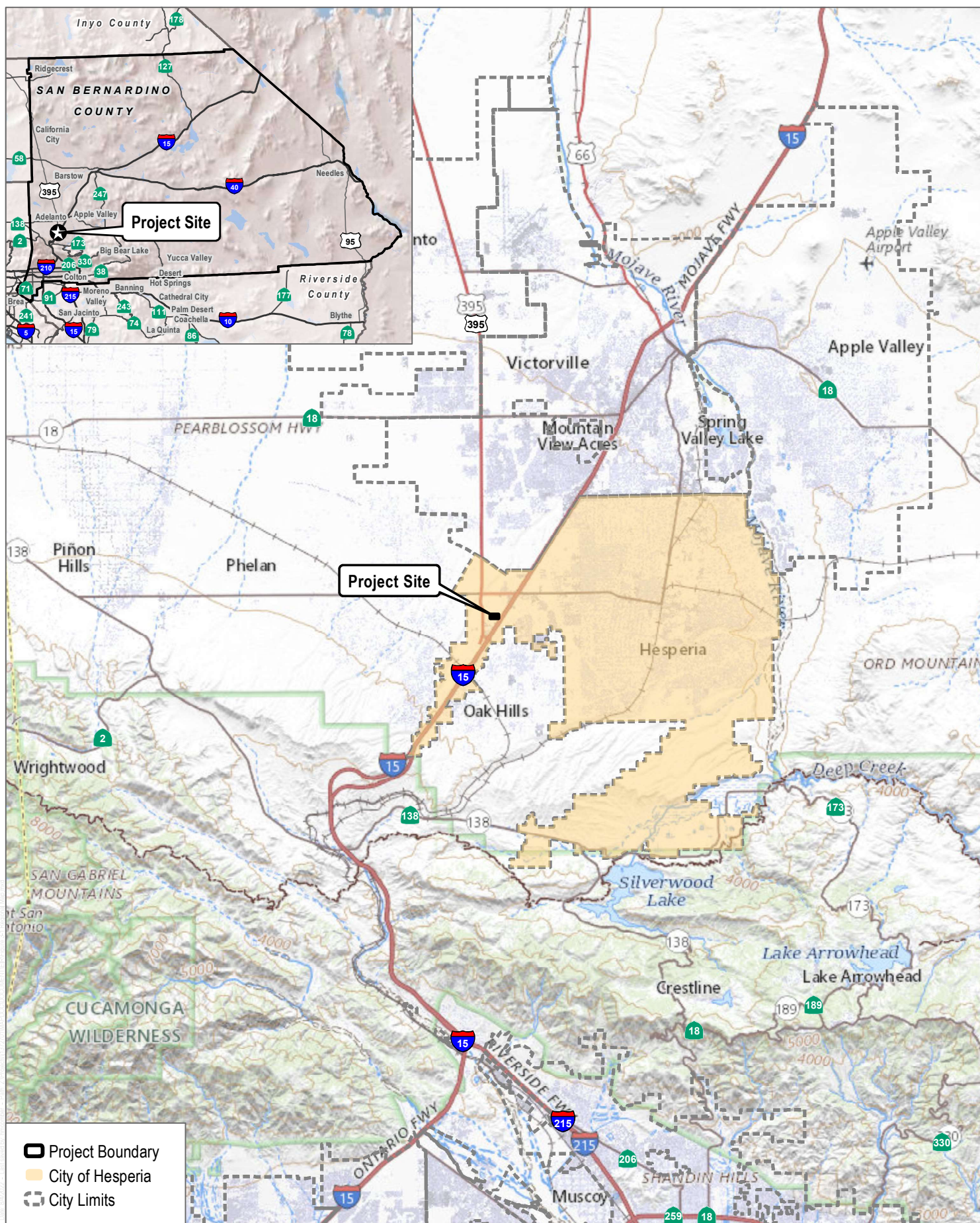


FIGURE 3-1
Regional Map
Poplar 18 Project

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps (accessed 2022); San Bernadino County 2021

FIGURE 3-2
Project Vicinity
Poplar 18 Project

INTENTIONALLY LEFT BLANK



FIGURE 3-3
Project Site Aerial
Poplar 18 Project

INTENTIONALLY LEFT BLANK

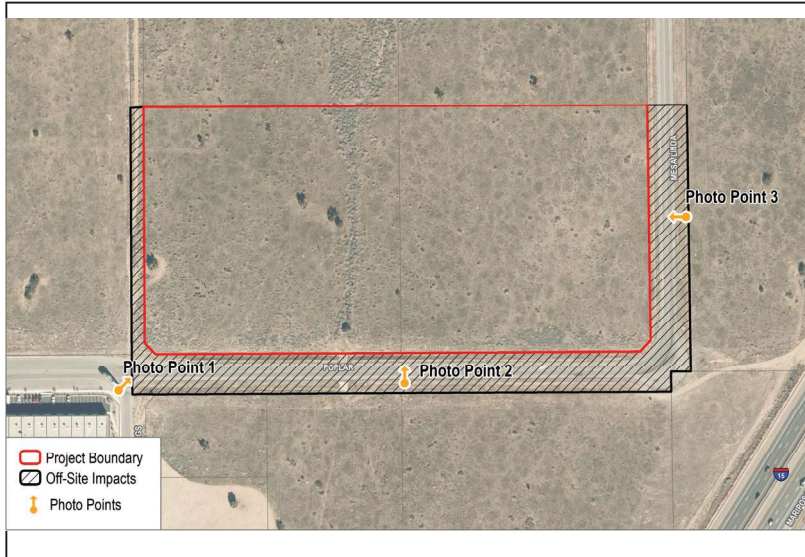


Photo Key



Photo Point 1. Northeast View from Lassen Road

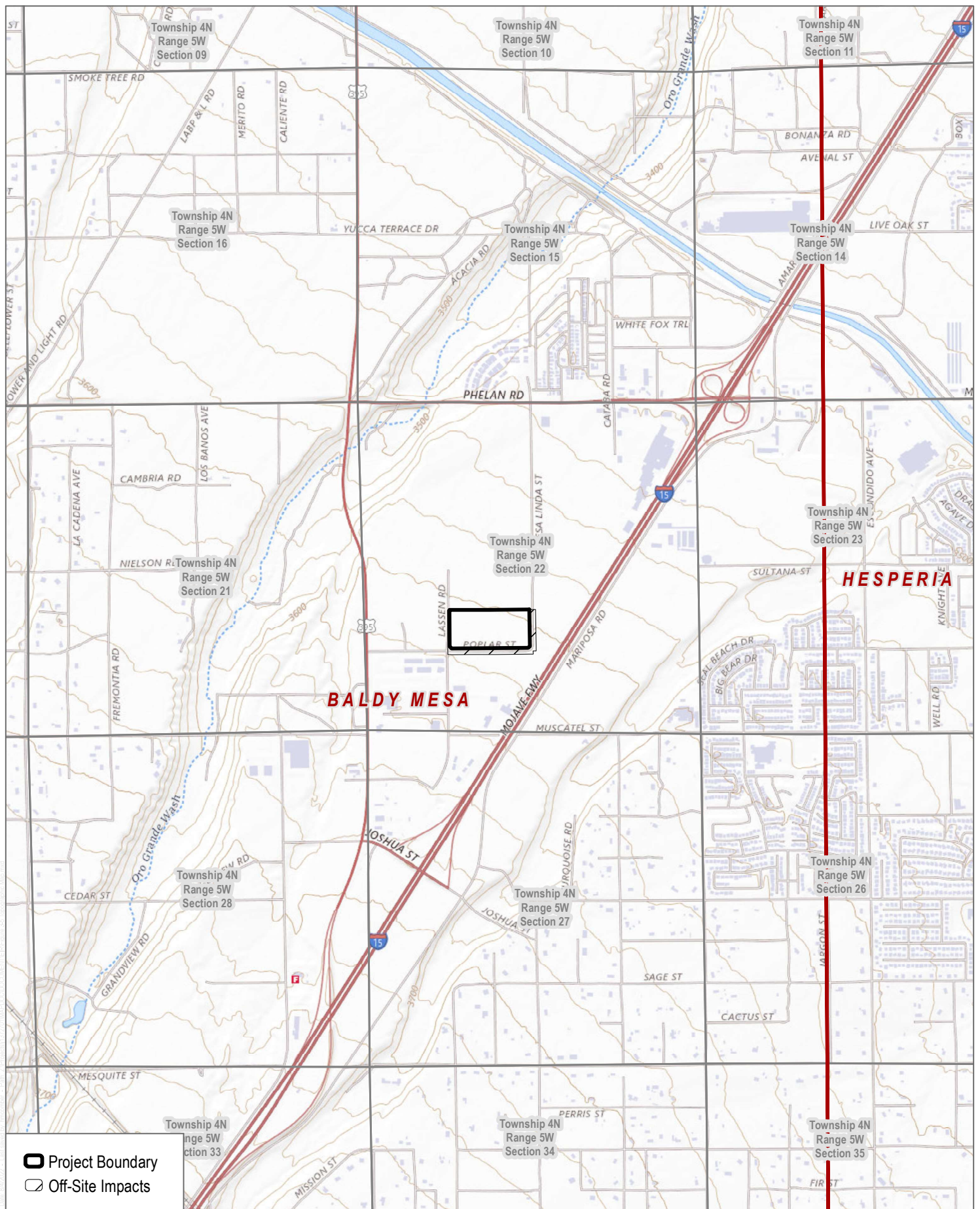


Photo Point 2. Northward View from Poplar Street.



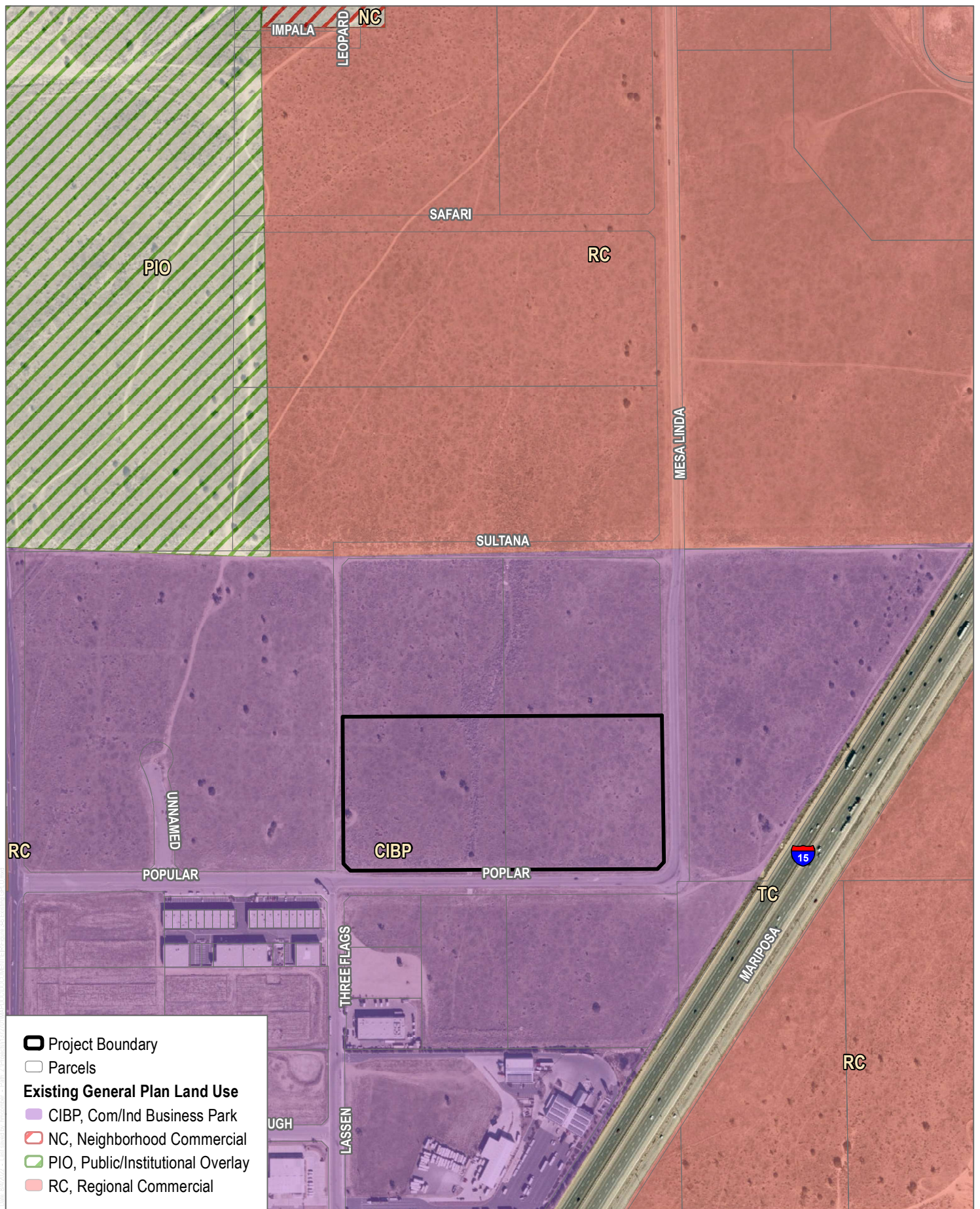
Photo Point 3. Westward View from Mesa Linda Street.

INTENTIONALLY LEFT BLANK



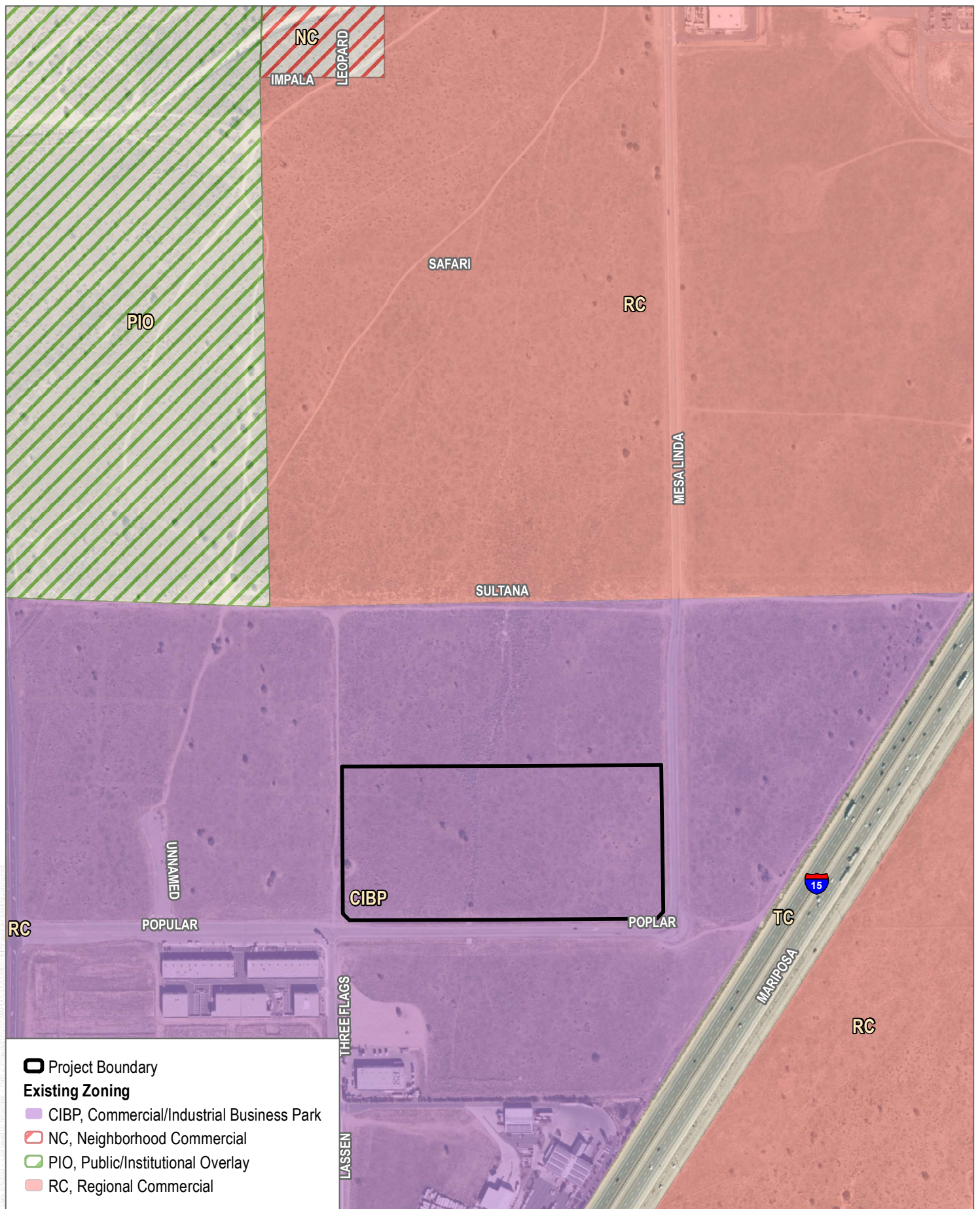
SOURCE: USGS 7.5 Minute Topo Series Baldy Mesa Quadrangle
 Township 4N; Range 5W; Section 22

INTENTIONALLY LEFT BLANK



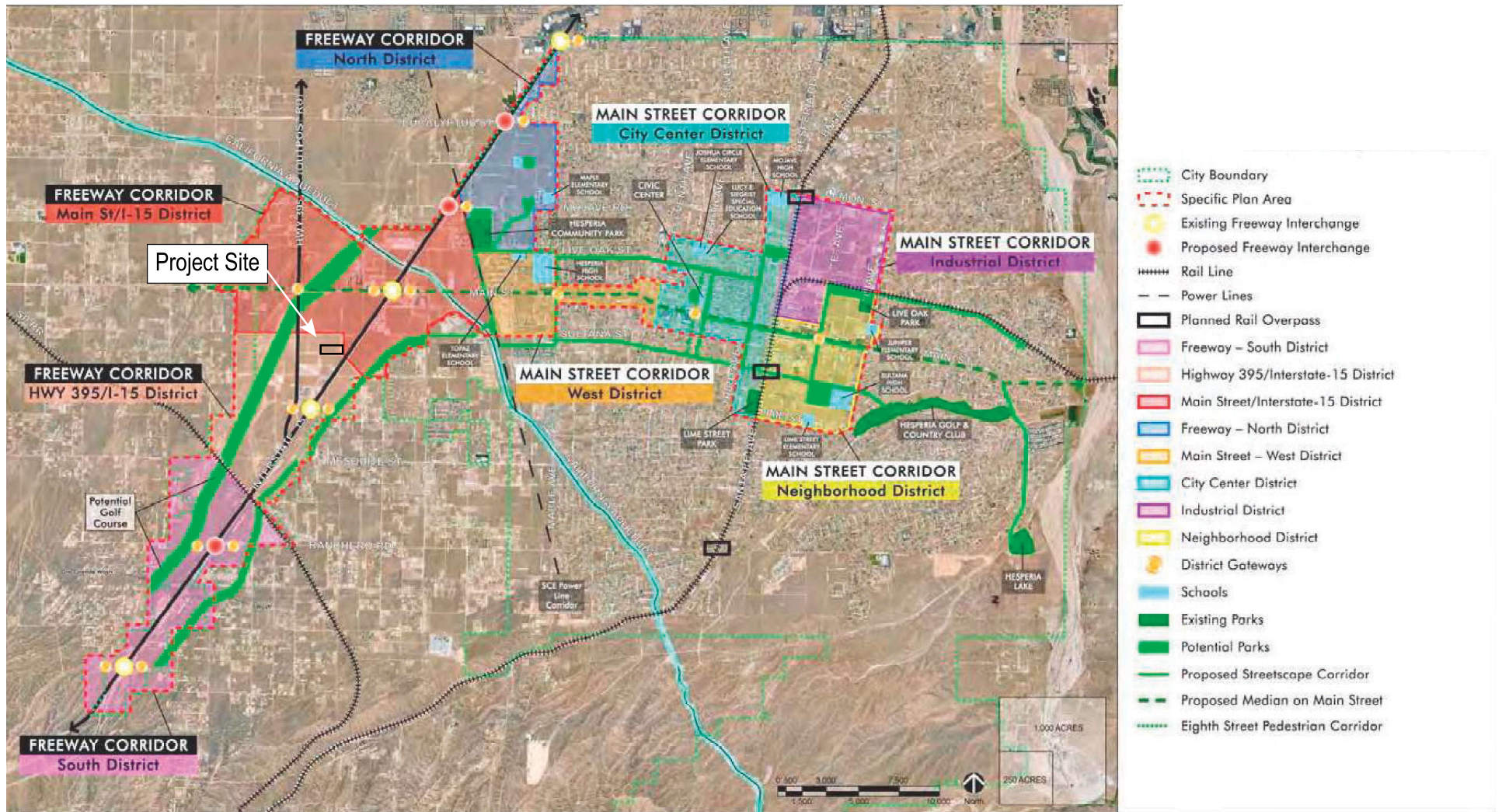
SOURCE: Esri World Imagery Basemap 2021; County of San Bernadino; City of Hesperia 2020

INTENTIONALLY LEFT BLANK



SOURCE: Esri World Imagery Basemap 2021; County of San Bernadino 2022; City of Hesperia 2020

INTENTIONALLY LEFT BLANK



SOURCE: City of Hesperia 2020

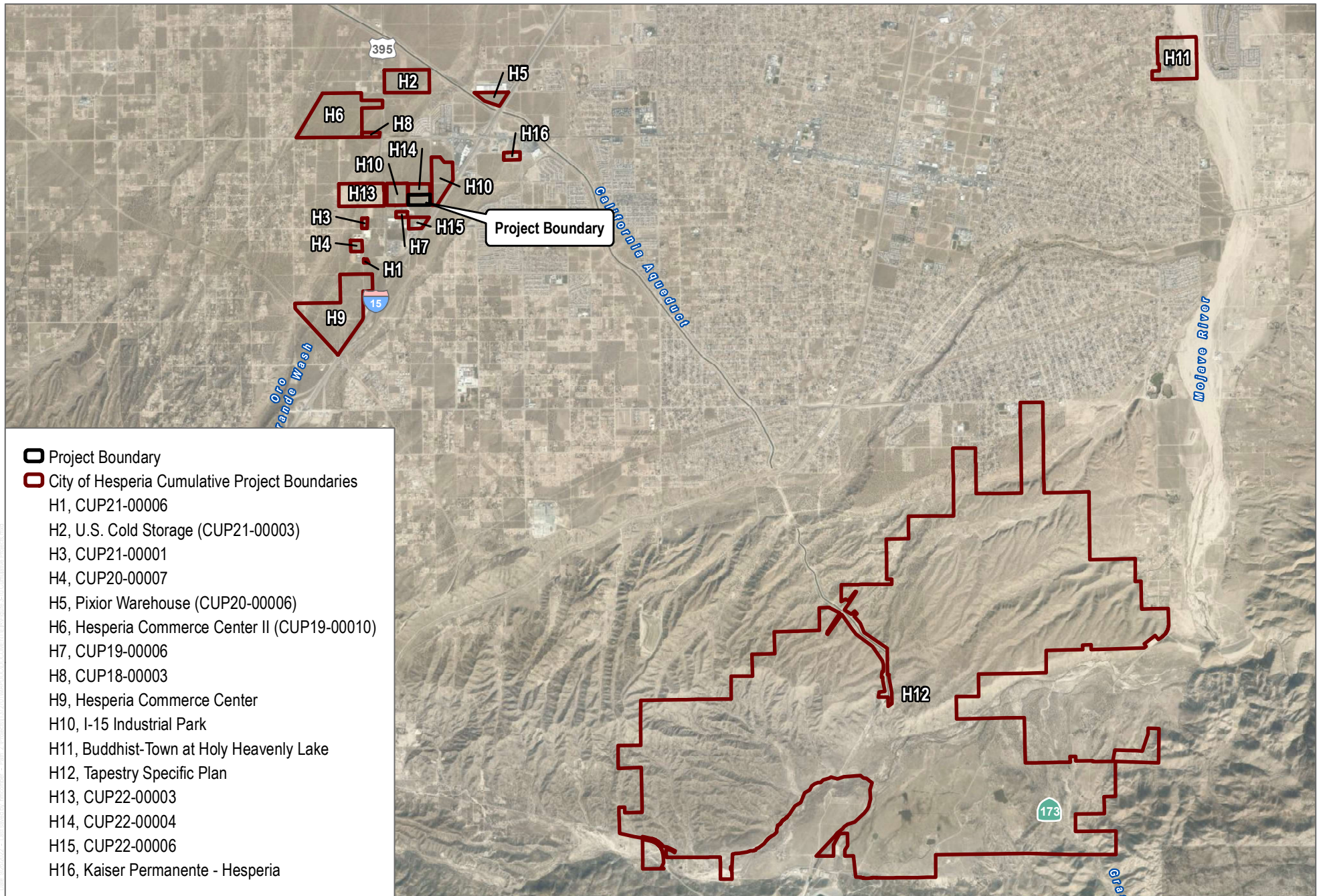
FIGURE 3-8
Main Street and Freeway Corridor Specific Plan Land Use Districts

INTENTIONALLY LEFT BLANK



FIGURE 3-9
Project Development Setting
Poplar 18 Project

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps

DUDEK



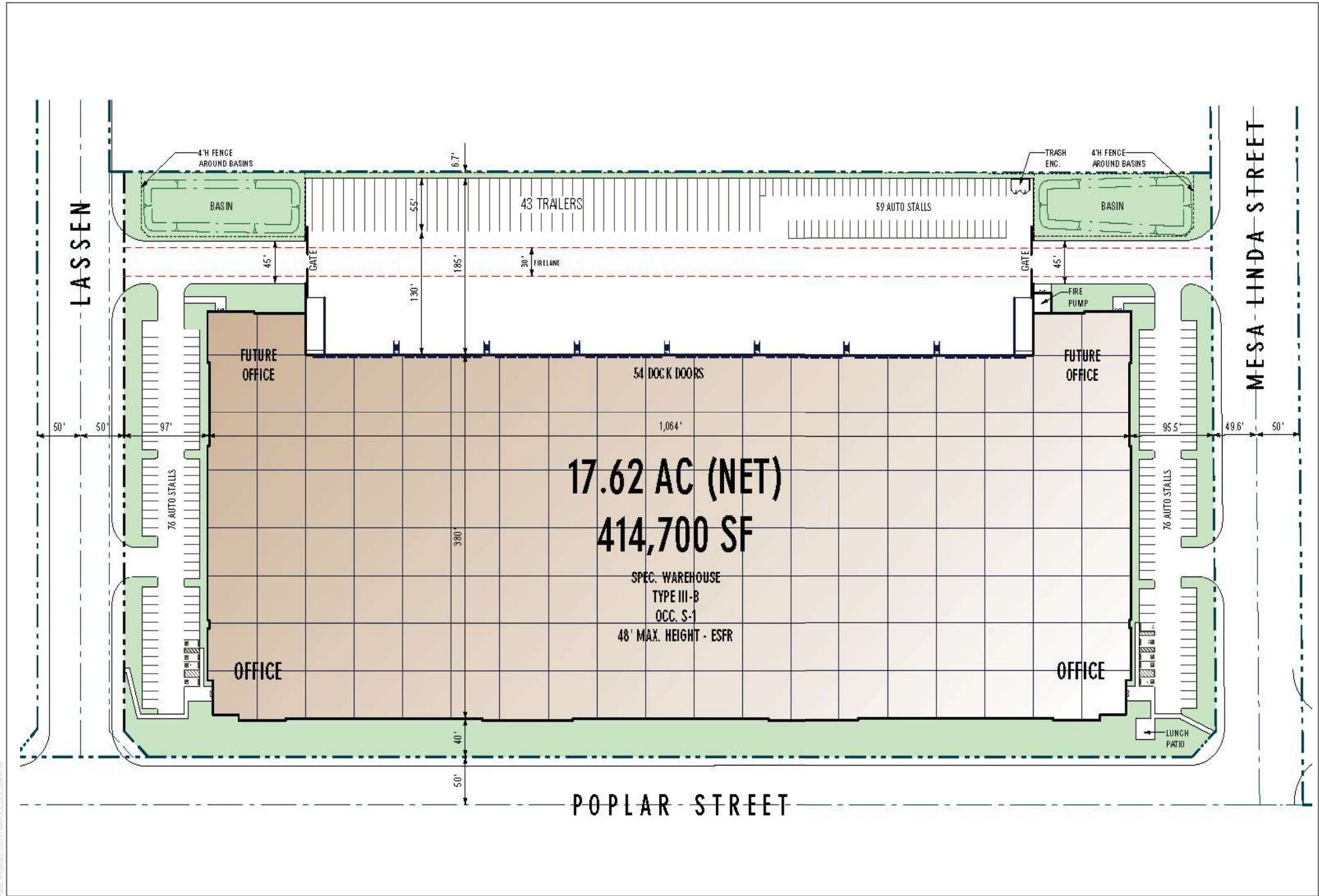
0 1 2 Miles

FIGURE 3-10

Cumulative Project Locations

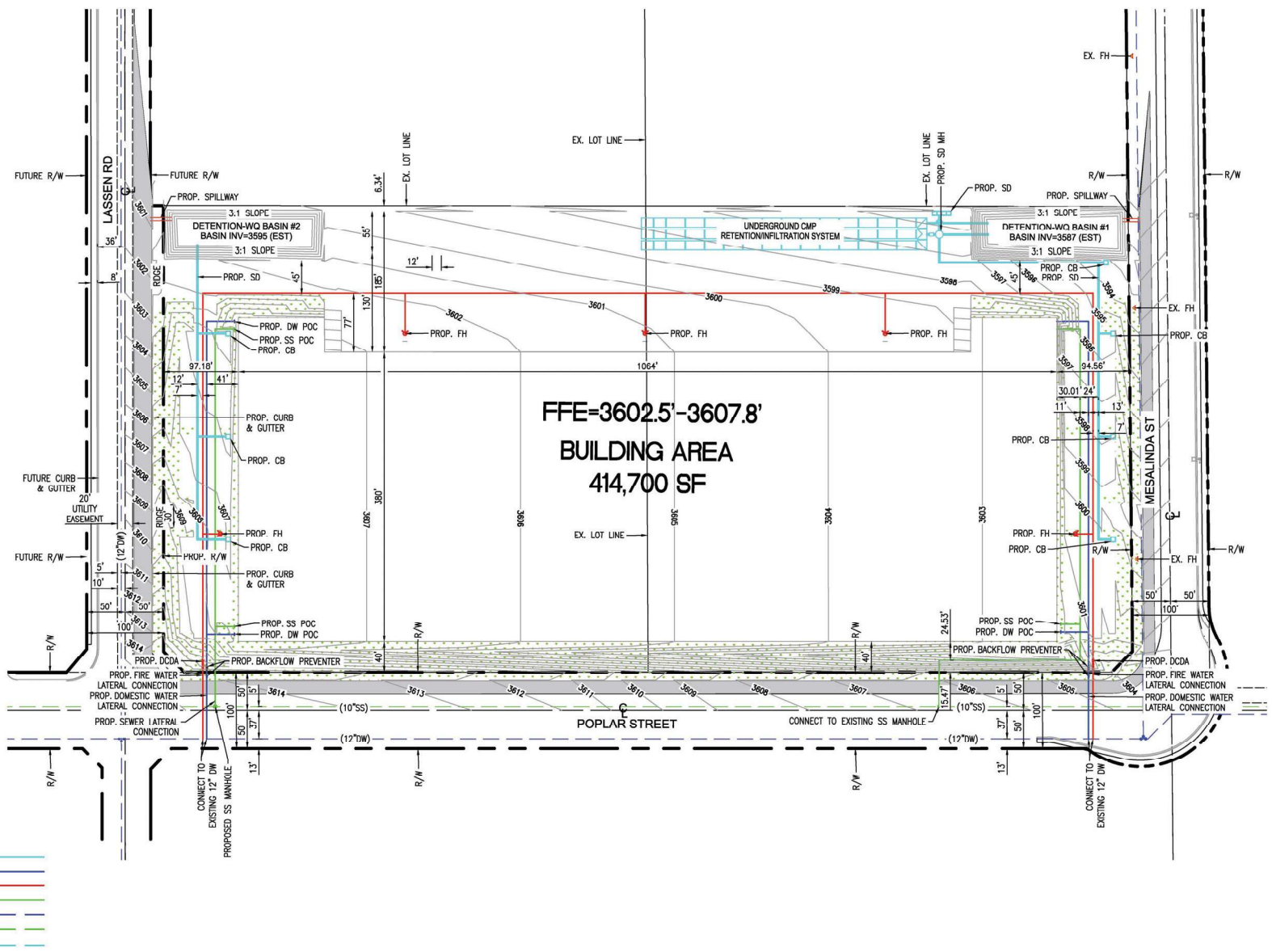
Poplar 18 Project

INTENTIONALLY LEFT BLANK



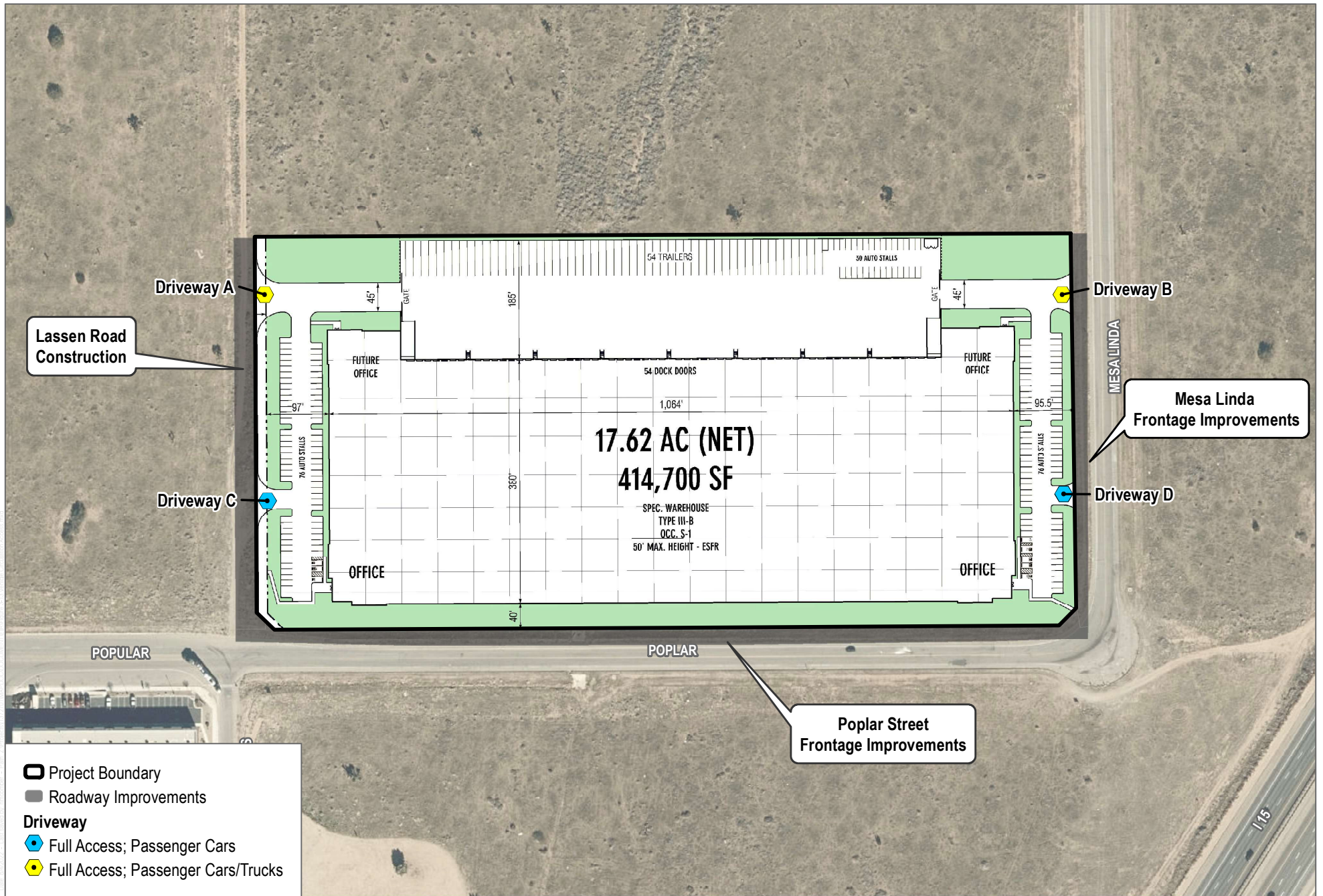
SOURCE: RGA 2022

INTENTIONALLY LEFT BLANK



SOURCE: Westland Group 2022

INTENTIONALLY LEFT BLANK



SOURCE: Esri World Imagery Basemap 2021; RGA Office Of Architectural Design 2021

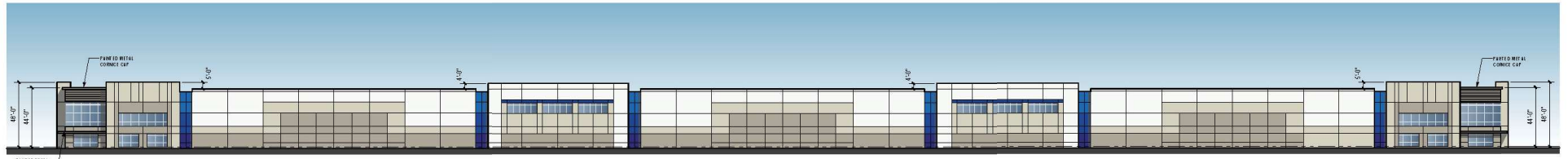
INTENTIONALLY LEFT BLANK



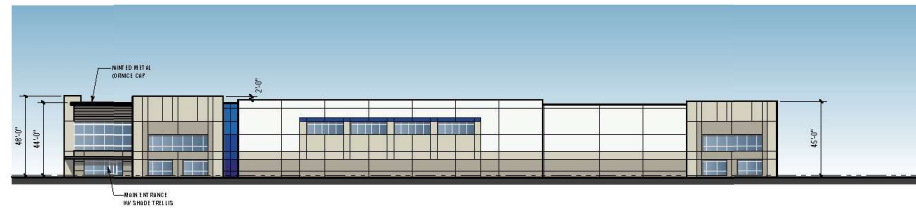
SOURCE: RGA Architects 2022

FIGURE 3-14
Schematic Rendering
Poplar 18 Project

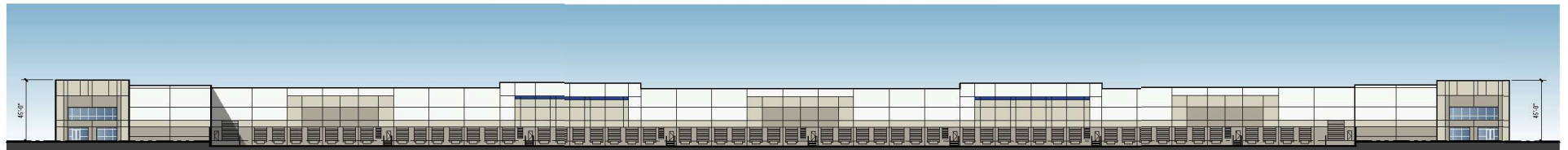
INTENTIONALLY LEFT BLANK



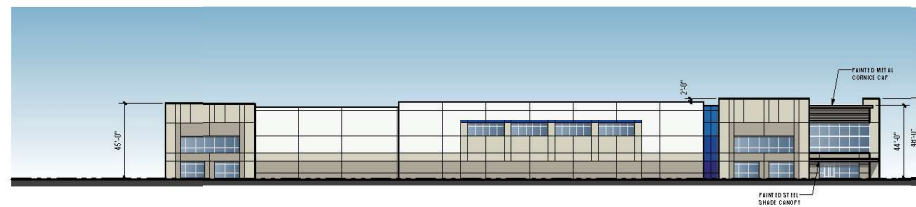
SOUTH ELEVATION



EAST ELEVATION



NORTH ELEVATION



WEST ELEVATION

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

4 Environmental Analysis

The purpose of this Environmental Impact Report (EIR) is to evaluate the potential environmental effects of the Poplar 18 Project (Project). The City of Hesperia (City) circulated a Notice of Preparation (NOP) beginning on August 11, 2022, with the public review period ending on September 9, 2022. The NOP was transmitted to the State Clearinghouse, responsible agencies, other affected agencies, and other public and private potential stakeholders to solicit feedback regarding the scope of the environmental analysis to be addressed in the Project's EIR. The NOP, Initial Study, and comment letters received are contained in Appendix A of this EIR.

Sections 4.1 through 4.11 of this EIR contain the potential environmental impacts analysis associated with implementation of the Project, and focus on the following issues:

- Section 4.1 – Aesthetics
- Section 4.2 – Air Quality
- Section 4.3 – Biological Resources
- Section 4.4 – Cultural, Tribal Cultural, and Paleontological Resources
- Section 4.5 – Energy
- Section 4.6 – Greenhouse Gas Emissions
- Section 4.7 – Hazards, Hazardous Materials, and Wildfire
- Section 4.8 – Hydrology and Water Quality
- Section 4.9 – Noise
- Section 4.10 – Transportation
- Section 4.11 – Utilities and Service Systems

Technical Studies

Technical studies were prepared to analyze air quality and greenhouse gas emissions, health risks, biological resources, cultural resources, energy consumption, geology and soils, hazards and hazardous materials, hydrology and water quality, water supply impacts, noise, and transportation and were used in the preparation of this EIR. These documents are identified in the discussions for the individual environmental issues, and are included as technical appendices on a flash drive attached to the EIR and available at the City.

Analysis Format

The EIR assesses how the Project would impact each of the above-listed resource areas. Each environmental issue addressed in this EIR is presented in terms of the following subsections:

- **Existing Conditions:** Provides information describing the existing setting on and/or surrounding the Project site that may be subject to change as a result of implementation of the Project. This setting discussion describes the conditions that existed when the NOP was sent to responsible agencies and the State Clearinghouse.
- **Relevant Regulations, Plans, Policies, and Ordinances:** Provides a discussion of federal, state, regional, and local regulations, plans, policies, and ordinances applicable to the Project.

- **Thresholds of Significance:** Provides criteria for determining the significance of Project impacts for each environmental issue.
- **Impact Analysis:** Provides a discussion of the characteristics of the Project that may have an impact on the environment, analyzes the nature and extent to which the Project is expected to change the existing environment, and indicates whether the Project's impacts would meet or exceed the levels of significance thresholds.
- **Mitigation Measures and Level of Significance After Mitigation:** Identifies mitigation measures to reduce significant adverse impacts to the extent feasible and provides a discussion of significant adverse environmental impacts that cannot be feasibly mitigated or avoided, significant adverse environmental impacts that can be feasibly mitigated or avoided, adverse environmental impacts that are not significant, and beneficial impacts.
- **References Cited:** Lists the sources cited during preparation of the EIR.

4.1 Aesthetics

This section describes the existing visual conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Project.

4.1.1 Existing Conditions

Regional Setting

The Project site is located in the western part of the City of Hesperia (City) in the Victor Valley region of San Bernardino County (County). The region contains open space with a variety of topographical features and vegetation communities, including the Mojave River to the east, San Bernardino Mountains and San Gabriel to the south/southwest, rolling foothills, and the surrounding desert landscape within the Victor Valley. Surrounding mountains and ridgelines are the most prominent features of the landscape. Other features that shape the visual environment and provide both physical and visual relief include the natural desert terrain that spreads across the flat valley floor, natural vegetation, natural drainage patterns and watercourses (i.e., Mojave River, Oro Grande Wash, Antelope Valley Wash, Honda Valley Wash, and an unnamed Wash east of Interstate [I] 15) and surrounding open space, habitat areas, and recreation areas.

The topography of the City includes many areas that contain bluffs with scenic value, including the area north of the Burlington, Northern, and Santa Fe railroad from Highway 138 running northeast along the edge of the Mesa to the Hesperia Airport. Ridgelines are concentrated in the Rancho Las Flores area in the southeastern portion of the City near the entrance to the Cajon Pass.

Project Setting

The Project site is located in the western portion of the City, specifically in the southwest quadrant of Interstate (I) 15 and Main Street. U.S. Highway 395 and I-15 are the two major highways that work as transportation corridors for the City. I-15 is located adjacent to the Project site's eastern boundary and U.S. Highway 395 is located adjacent to the Project site's western boundary. Although the majority of this area is undeveloped, transportation-related and trucking-related land uses (e.g., truck yards, convenience stations, and warehouses) associated with these highways are located intermittently along highway frontages and are interspersed by parcels of undeveloped land.

More specifically, the rectangular shaped Project site consists of vacant and undeveloped, relatively flat land characterized by desert landscape consisting of exposed soils, moderate vegetation cover composed of brush, shrub, and grass cover as well as scattered large Joshua and Juniper trees (see Figure 3-4, Existing Conditions). The Project site has been disturbed by illegal dumping (resulting in several debris piles throughout the site) and trespassing. Various dirt roads and trails that appear well-traveled by motorized off-road vehicles form bands of exposed, bare soils that traverse the site. The site is bounded by Sultana Road to the north, Mesa Linda Street to the east, Poplar Street to the south, and Lassen Road to the west. Surrounding land uses and elements that form the visual environment in the Project area are described as follows.

North: Sultana Road is an east-west extending dirt road that transitions into Mesa Linda Street east of the Project site. Flat desert terrain similar in vegetation cover to the Project site stretches to the north until Main Street, with the exception of commercial uses scattered along Main Street.

South: Poplar Street is an east-west, two to four lane undivided roadway that borders the Project site to the south. Light industrial and commercial uses border the opposite side of Poplar Street. Additionally, I-15 borders the southeastern corner of the Project site.

East: Mesa Linda Street is a north-south, two-lane, undivided roadway that extends along the eastern border of the Project site. Mesa Linda Street terminates to the north near Phelan/Main Street and to the south near Poplar Street. Mesa Linda Street and the surroundings consist of Commercial/Industrial uses. I-15 borders the Project site east of Mesa Linda Street. Regional Commercial uses are located east of I-15.

West: Lassen Road is a dirt road that extends along the western border of the Project Site. Lassen Road has not yet been constructed but is a planned arterial road in the City's Circulation Element. U.S. Highway 395 is a north-west two-lane to six-lane, undivided highway located to the east of the Project site. Flat desert terrain similar in vegetation cover to the Project site stretches to the west beyond U.S. Highway 395, along with scattered residential uses.

Scenic Vistas

Scenic vistas are typically broad views of scenic resources such as landforms and waterways that are visible from publicly accessible viewpoints. The City of Hesperia General Plan identifies natural scenic open space as a valuable scenic resource that contributes to the visual landscape. Such resources include the Mojave River to the east, the San Bernardino and San Gabriel Mountain ranges to the south and the surrounding Victor Valley, along with neighboring hillsides and the natural desert environment. These scenic resources provide visual relief from the man-made structures in the City and also provide residents with a connection to the natural environment (City of Hesperia 2010a). Relative to the Project site, undisturbed areas of the natural desert environment and sprawling valley are located approximately 7 miles to the south and east of the Project site; the Mojave River is located over 8 miles to the east; and the foothills and elevated terrain within the San Gabriel and San Bernardino Mountains are located between approximately 5 miles to the southwest and approximately 10 miles to the southeast, respectively. While the Project site and the surrounding area contain some natural desert landscape, existing development such as commercial uses, trucking-related uses (i.e., truck stops) lodging accommodations, big-box retail developments, and major interstate highways preclude the area from being an area with significant scenic value that could comprise a scenic vista. Areas within the City that provide higher-quality views of undisturbed natural desert landscape are located within the southern portion of the City and east of the City limits, approximately 5 miles south and 10 miles east of the Project site, respectively.

With the exception of the San Gabriel and San Bernardino Mountains visible in the background of the site photos, scenic resources identified by the City's General Plan are not visible in the vicinity of the Project site.

Several washes and natural water courses traverse the City and are identified in the City's General Plan as providing physical and visual relief from the surrounding urban development. These include the Mojave River, the Oro Grande Wash, the Antelope Valley Wash, the Honda Valley Wash, and an unnamed wash. Exhibits OS-4 through OS-7 of the City's General Plan, and the Wash Protection Overlay in the Main Street and Freeway Corridor Specific Plan (MSFCSP) identify preservation areas within these washes. The washes encompass approximately 1,512 acres used for a variety of activities such as hiking, equestrian riding, a golf course, and natural open space, with the majority remaining in a natural and relatively undisturbed condition (City of Hesperia 2010a). The nearest wash area to the Project site is the Oro Grande Wash, which flows at an angle in a general southwest to northeast direction, approximately 0.25 miles west of the Project site beyond U.S. Highway 395. Given that these watercourses are below the grade of the general topography, as well as due to distance and intervening development and vegetation, views of these water courses are not available from the Project site.

Scenic Routes

There are no officially designated scenic roads or highways within the City (City of Hesperia 2010b). According to the California Department of Transportation (Caltrans), there is one officially designated state scenic highway in the County and 11 eligible scenic highways (Caltrans 2019). Route 38, the County's only designated scenic highway, is located approximately 27 miles southeast of the Project site in the San Bernardino National Forest. Routes 138 and 173 are both eligible scenic highways located within City limits (Caltrans 2019). Route 138 is the closest to the Project site, located approximately 7 miles to the southeast of the Project site, where the road winds through the lower elevations of the San Bernardino National Forest. None of the County's officially designated or eligible scenic highways are visible from the Project site, nor is the Project site visible from the highways.

Light and Glare

The Project site does not currently support any existing sources of light or glare. Existing sources of light and glare in the Project area include streetlights and exterior building lights in scattered commercial and light industrial areas.

Viewshed and Visibility

Due to the relatively flat nature of the Project site and surrounding area, the site is visible from surrounding roads and land uses, including commercial and light industrial uses. Views of the Project site from surrounding public vantage points consist of undeveloped land within a flat valley characterized as a desert landscape with disturbed soils where dirt roads and trails cross the Project site, scattered Joshua and Juniper trees, and moderate vegetation cover consisting of grasses and shrubs. Intervening vegetation, scattered development, and I-15 partially screen views to the Project site from some locations. Views from public vantage points were analyzed and photographed in the field to document the existing visual environment (see Figure 3-4).

Viewer groups afforded views to the Project site include motorists traveling on nearby highways and roads, and those frequenting the nearby commercial and light industrial areas. Viewer points in the Project area are further described below.

Viewpoints

Viewpoint 1—Northeast View from Lassen Road (Photo Point 1 on Figure 3-4)

Northeast view from the Lassen Road shows the flat, undeveloped Project site with disturbed soil, natural desert vegetation consisting of bushes and occasional Joshua trees and trash debris. The Project site also consists of distant views of the foothills to the northeast and surrounding commercial/industrial development.

Viewpoint 2 – Northward View from Poplar Street (Photo Point 2 on Figure 3-4)

The northward view of the Project site from Poplar Street consists of a dirt road (Lassen Road), natural desert vegetation consisting of bushes and occasional Joshua trees, trash debris and foothills to the north. As motorists move through Poplar Street, distant and unobstructed views of the surrounding commercial/industrial development continue to be seen.

Viewpoint 3 – Westward View from Mesa Linda Street (Photo Point 3 on Figure 3-4)

Westward view from Mesa Linda Street also consists of vacant land with natural desert vegetation. Distant view of utility poles can also be seen throughout Mesa Linda Street.

Surrounding Viewpoints

I-15

Motorists traveling on I-15 are provided views of the eastern and southern portion of the Project site. Views to the northern portion of the Project site are screened by commercial uses and intervening vegetation. Views toward the Project site from I-15 consists of a variety of natural vegetation, including scattered Joshua trees and Juniper, and distant ridgelines and mountains that create a backdrop to the flat desert terrain.

U.S. Highway 395

Motorists traveling on U.S. Highway 395 are afforded views to portions of the western side of the Project site. Views towards the Project site from U.S. Highway 395 consist of a variety of natural vegetation, including scattered Joshua trees and Juniper.

Local Roads and Surrounding Commercial and Light Industrial Areas

Views of the Project site from local roads (i.e., Main Street) are visible to motorists traveling through light industrial/commercial areas in the vicinity of the Project site. Similar views are also available to occupants and visitors of the surrounding commercial/light industrial uses. Views to the Project site from these areas include views of flat desert terrain with moderate vegetation cover. Views from local roads also include views of the surrounding industrial, commercial, and highway-related uses.

4.1.2 Relevant Plans, Policies, and Ordinances

State

California Scenic Highway Program

California's Scenic Highway Program was created by the state legislature in 1963. This program's purpose is to "preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways" (Caltrans 2008). The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. The California Scenic Highway System includes a list of highways that are officially designated as scenic highways or eligible for designation as scenic highways. As discussed in Section 4.1.1, Existing Conditions, there are no state-designated or eligible state scenic highways within the viewshed of the Project site.

California Code of Regulations

Title 24 – California Building Standards Code

Title 24, California Building Standards Code, consists of regulations to control building standards throughout the state. The following components of Title 24 include standards related to lighting:

Title 24, Part 1 – California Building Code / Title 24, Part 3 – California Electrical Code

The California Building Code (Title 24, Part 1) and the California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress.

Title 24, Part 6 – California Energy Code

The California Energy Code (Title 24, Part 6) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems, with the aim of reducing energy consumption through efficient and effective use of lighting equipment. Section 130.2 sets forth requirements for Outdoor Lighting Controls and Luminaire Cutoff requirements. All outdoor luminaires rated above 150 watts shall comply with the backlight, up light, and glare (BUG) ratings in accordance with IES TM-15-11, Addendum A, and shall be provided with a minimum of 40% dimming capability activated to full on by motion sensor or other automatic control. This requirement does not apply to streetlights for the public right of way, signs, or building facade lighting.

Section 140.7 establishes outdoor lighting power density allowances in terms of watts per area for lighting sources other than signage. The lighting allowances are provided by the Lighting Zone, as defined in Section 10-114 of the California Energy Code. Under Section 10-114, all urban areas within California are designated as Lighting Zone 3. Additional allowances are provided for Building Entrances or Exits, Outdoor Sales Frontage, Hardscape Ornamental Lighting, Building Facade Lighting, Canopies, Outdoor Dining, and Special Security Lighting for Retail Parking and Pedestrian Hardscape.

Section 130.3 stipulates sign lighting controls with any outdoor sign that is on during both day and nighttime hours must include a minimum 65% dimming at night. Section 140.8 of the California Energy Code sets forth lighting power density restrictions for signs.

Title 24, Part 11 – California Green Building Standards Code

The California Green Building Standards Code (Title 24, Part 24) is commonly referred to as the CALGreen Code. The CALGreen Code stipulates maximum allowable light levels, efficiency requirements for lighting, miscellaneous control requirements, and light trespass requirements for electric lighting and daylighting. Paragraph 5.1106.8 Light Pollution Reduction, specifies that all non-residential outdoor lighting must comply with the following:

- The minimum requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code; and
- BUG ratings as defined in the Illuminating Engineering Society of North America's Technical Memorandum on Luminaire Classification Systems for Outdoor Luminaires (IESNA TM-15-07); and
- Allowable BUG ratings not exceeding those shown in Table A5.106.8 in Section 5.106.8 of the CALGreen Code; or
- Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

IESNA Recommended Practices

Illuminating Engineering Society of North America (IESNA) recommends illumination standards for a wide range of building and development types. These recommendations are widely recognized and accepted as best practices and are a consistent predictor of the type and direction of illumination for any given building type. For all areas not stipulated by the regulatory building code, municipal code, or specifically defined requirements, the IESNA

standards are used as the basis for establishing the amount and direction of light for the Project. The IESNA provides recommendations for pre-curfew and post-curfew light levels to limit light trespass. Pre-curfew is from dusk until 11:00 p.m. local time, when the area being illuminated is more likely to be in use. Post-curfew is from 11:00 p.m. to 7:00 a.m. local time (NLPIP 2007).

The IESNA 10th Edition Lighting Handbook defines lighting zones (LZ) relative to ambient light levels, which are used to establish a basis for outdoor lighting regulations. The existing conditions surrounding the Project site are best described as LZ 3, which has a maximum recommended light trespass limit of 8 lux (0.74 foot-candles) during pre-curfew hours and 3 lux (0.28 foot-candles) during post-curfew hours.

California Vehicle Code

Chapter 2, Article 3 of the California Vehicle Code stipulates limits to the location of light sources that may cause glare and impair the vision of drivers.

Article 3. Offenses Relating to Traffic Devices [21450–21468] (Article 3 enacted by Stats. 1959, Ch. 3), Section 21466.5. No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway.

Local

City of Hesperia General Plan

The City's General Plan contains the following goals and policies applicable to aesthetics, visual resources, and the visual quality and character of the Project and the surrounding area.

Land Use Element

Goal LU-1. Regulate development so that the density of residential development and the intensity of non-residential development are appropriate to the property, surrounding properties, and the general neighborhood.

Policy LU-1.1. Require that new construction, additions, renovations, and infill developments be sensitive to neighborhood context and building form and scale.

Policy LU-1.3. Require that new construction, additions, renovations, and infill developments be sensitive to the intent of the land use designations, incorporating neighborhood context as well as building form and scale.

Policy LU-1.4. Encourage architecture which breaks massive buildings into smaller parts. Focus on maintaining a human scale when creating common spaces or amenities.

Goal LU-3. Promote balanced, efficient commercial development that is functional, safe, attractive and convenient to users, and which will strengthen the local economy.

Policy LU-3.3. Ensure that the sign ordinance provides for commercial signage that is attractive, non-intrusive, safe, and consistent with overall City aesthetic goals.

Policy LU-3.4. Encourage the beautification of pedestrian areas, particularly through the use of landscaping.

Policy LU-3.5. Require the separation or buffering of residential areas from businesses which produce noise, odors, high traffic volumes, light or glare, and parking through the use of landscaping, setbacks, and other techniques.

Policy LU-3.6. Design outdoor commercial uses of property to minimize impacts to adjacent residential neighborhoods.

Policy LU-3.7. Incorporate varied planes and textures and variety in materials to provide superior architectural design on commercial buildings.

Policy LU-3.8. Incorporate landscape plantings into commercial developments to define and emphasize entrances, inclusive of those areas along the front of a building facing a parking lot.

Policy LU-3.9. Incorporate on all major commercial developments theme elements intended to distinguish them from other development, foster individuality, and promote gathering opportunities.

Policy LU-3.10. Where possible, connect rear parking lots of commercial development to the fronts of buildings with sidewalks or other features.

Policy LU-3.11. Where possible, reduce conflicts between delivery areas and pedestrian areas.

Policy LU-3.12. Require outdoor or seasonal storage areas, where permitted, to be screened from public view.

Policy LU-3.13. Include full architectural treatment on all sides of development projects.

Goal LU-4. Promote industrial development within the City which will expand its tax base and provide a range of employment activities, while not adversely impacting the community or environment.

Policy LU-4.1. Require landscaped buffers and other techniques to protect residentially designated property directly adjacent to industrial land uses.

Policy LU-4.4. Require the separation or buffering of residentially designated areas from industrial businesses which produce noise, odors, high traffic volumes, light and/or glare, and parking through the use of landscaping, setbacks, and other techniques. Existing residential areas should not limit the potential uses within industrial areas.

Policy LU-4.5. Design industrial uses adjacent to residential property to minimize impacts to the residential property

Policy LU-4.6. Incorporate varied planes and textures and variety in building materials on industrial buildings to achieve high quality architectural design.

Policy LU-4.7. Incorporate landscape plantings into industrial projects to define and emphasize entrances, inclusive of those areas along the front of a building facing a parking lot.

Policy LU-4.8. Require delivery areas to be separated from pedestrian areas.

Policy LU-4.9. Include full architectural treatment on all sides of buildings facing streets.

Goal LU-7. Facilitate a self-contained community with a well-designed and maintained community with a full range of densities and uses within the capacity of infrastructure and services.

Policy LU-7.1 Continue to encourage quality design in all new construction to further improve the built environment of the City.

Open Space Element

Goal OS-2. Identify and preserve natural open space in order to protect sensitive environments and preserve amenities such as washes, bluffs, Joshua tree forests, or juniper woodlands. Open space areas should be contiguous or connected through trails to provide accessibility for hikers and equestrians as well as wildlife.

Policy OS 2.3. Utilize natural open space to preserve natural resources such as historical, biological and scenic resources.

Goal OS-3. The areas within the Oro Grande Wash and the Unnamed Wash east of Interstate 15 identified as Area A, B and C of Exhibit OS - 7 shall be preserved in their natural state.

Policy OS-3.1. The City shall develop a policy to implement the Transfer of Development Rights (TDR) Program. The program should allow for the full transfer of development rights from portion of properties affected by slopes and/or drainage.

Goal OS-4. Permit a variety of uses within open space areas, depending upon the natural amenities available.

Policy OS-4.2. Preserve the aesthetic integrity and usefulness of open space washes by implementing restrictive development standards on projects occurring in or around the wash areas, and ensuring development proposals are compatible.

Policy OS-4.3. Establish setbacks for buildings and walls along the rim of washes to preserve natural land, form, and vegetation.

Main Street and Freeway Corridor Specific Plan

Land use and development for the Project area is further guided by the MSFCSP. According to the MSFCSP, the Project site is located within the Main Street/I-15 Land Use District and within the Industrial Business Park MSFCSP Zone; the zoning designations for the Project site is Commercial/Industrial Business Park (CIBP) (City of Hesperia 2020) (see Figure 3-6, Land Use Designations, and Figure 3-7, Zoning, in Chapter 3, Project Description).

Further, the MSFCSP establishes the preservation of Oro Grande Wash and other smaller washes through the Wash Protection Overlay, which limits the construction of permanent structures within the washes' right-of-way to keep the washes natural and undeveloped (City of Hesperia 2020). As shown in Figure 6.1 of the MSFCSP, the Oro Grande Wash area located east of the Project site (on the eastern side of U.S. Highway 395) is designated as within the Wash Protection Overlay.

The following goals and policies of the MSFCSP aim to preserve the existing visual resources within the MSFCSP area:

Urban Design and Open Space

Goal UD-1. Strengthen the identity of the City of Hesperia and the Specific Plan [MSFCSP] area by building upon the surrounding natural resources and amenities, and create a new image for Main Street and the Freeway Corridor that expresses an attractive, inviting, high quality character and commercial vitality.

Policy UD-1.1. Recognize and capitalize on Hesperia's unique location and setting — “Gateway to the High Desert” at the top of the Cajon Pass, desert landscape, and dramatic natural features such as the Oro Grande Wash - to further establish a sense of pride in the community.

Policy UD-1.2. Identify regional gateways into the City along Interstate-15 and create City identity at these locations by taking inspiration from the City's dramatic location at the top of Cajon Pass and Cajon Summit.

Policy UD-1.4. Preserve views of the mountains - San Gabriel Mountains to the southwest and San Bernardino National Forest to the southeast.

Goal UD-3. Take advantage of the City's climate and natural setting while preserving existing open space resources and planning for new resources.

Policy UD-3.1. Recognize and preserve the washes' multiple functions: a place for recreation, a natural habitat and a channel for storm runoff.

Policy JD-3.5. Preserve and protect significant areas of native wildlife and plant habitat.

Policy UD-3.6. Utilize the SCE corridor right-of-way for creating a walking and biking trail.

Policy UD-3.7. Preserve trails for equestrian uses.

Goal UD-4. Enhance the pedestrian environment and driving experience within the City.

Policy UD-4.I. Establish an open space network that connects the City's existing and planned open space resources. Recognize Main Street as a fundamental element of this network.

Commercial/Industrial Business Park Zone Development Standards

Chapter 9, Section G, Commercial/Industrial Business Park Zone, of the MSFCSP outlines permitted uses and development standards for the CIBP Zone. The purpose of the CIBP Zone is to create employment-generating uses in a business park setting. This zone is intended to provide for service commercial, light industrial, light manufacturing, and industrial support uses. The development standards for this zone aim to ensure a quality appearance, and because of the size and scale of industrial buildings, it is especially important to consider design to ensure compatibility with other parts of the community. Further, Chapter 11, Industrial Design Standards and Guidelines, of the MSFCSP outlines additional site and architectural design standards and guidelines, including landscape design standards and guidelines for industrial uses. The design standards and guidelines aim to improve the quality of design and create attractive and functional site arrangements that create visual interest and improve the appearance and character of the freeway corridor. Table 4.1-1 outlines the development standards for the CIBP Zone that are applicable to the Project.

Table 4.1-1. Main Street and Freeway Corridor Development Standards for CIBP Zone**Hesperia Main Street and Freeway Corridor Development Standards for CIBP Zone****Minimum Lot Size:** 10 acres**Minimum Width:** 500 feet**Minimum Depth:** 500 feet**Maximum Gross Floor Area Ratio:** 0.50**Maximum Building Height:** 60 feet (45 feet within the portion of the lot that falls within 100 feet of an adjacent residential zone)**Street Yard Setbacks:** 25 feet**Front Yard Setback:** 25 feet**Street Side Yard Setback:** 15 feet**Rear Yard Setback:** None (except where the rear yard abuts a residential zone or residential development as a part of a Regional Commercial zone: 50 feet)**Interior Side Yard Setback:** None (except where the interior property line abuts a residential zone, or residential development as a part of a Regional Commercial zone: 20 feet)

Parking and Loading: In addition to the off-street parking requirements and standards set forth in Chapter 16.20, Article IV (Parking and Loading Standards) of the HMC, the following shall apply: (1) To alleviate the unsightly appearance of loading facilities for industrial uses, these areas should not be located at the front of buildings where it is difficult to adequately screen them from view. Such facilities are more appropriately located at the rear of the site where special screening may not be required. (2) When it is not possible to locate loading facilities at the rear of the building, loading docks and doors should not dominate the frontage and must be screened from the street. Loading facilities should be offset from driveway openings. (3) Backing from the public street onto the site for loading into front end docks causes unsafe truck maneuvering and should not be utilized except at the ends of industrial cul-de-sacs where each circumstance will be studied individually at the time of design review.

Landscaping: (1) Drought-tolerant and water conserving landscaping and water efficient irrigation systems and techniques shall be utilized whenever possible. (2) In addition, the design standards and guidelines included in Chapter 11 (Industrial Design Standards and Guidelines) of this Plan shall apply. The provisions of Chapter 16.20, Article XII (Landscape Regulations) and Chapter 16.24 (Protected Plants) of the HMC shall apply with the following exceptions/additions: (3) Industrial development in this zone shall provide a minimum of ten percent on-site landscaping, including that required in setback areas.

Refer to section 16.20 Article XII of the HMC for minimum landscape requirements.

Walls and Fences: (1) An industrial development adjacent to any residential zone shall have a minimum 6 foot high wall, not to exceed 8 feet, along property lines adjacent to such districts. (2) Both sides of all perimeter walls should be architecturally treated. Appropriate materials include decorative masonry, concrete, stone and brick.

Outdoor Displays, Storage, Equipment, and Work Areas: (1) No retail sales, merchandise displays or work areas shall occur outside building(s). (2) Outside storage and equipment shall be confined to the rear half of the property or the rear of the principal structure on site, whichever is more restrictive, and screened from public view from any adjoining properties and public rights-of-way by appropriate walls, fencing and landscaping. (3) Outdoor hoists are subject to the conditions and standards listed in Chapter 9(C)(4.18).

Source: City of Hesperia 2020.

Note: CIBP = Commercial/Industrial Business Park

City of Hesperia Municipal Code

The City provides landscaping guidelines and regulations through Chapter 16.20, Article XII of the Municipal Code. The purpose of this chapter is to provide water conservation and landscape development standards and guidelines that will promote the general welfare of the City's residents by creating a responsible outdoor environment. The

landscape regulations aim to achieve a diversity of drought-tolerant landscaping that is appropriate to the high-desert environment and creates aesthetically pleasing views and vistas along public streets

Chapter 16.24 Protected Plants of the City of Hesperia Municipal Code preserves and protects specific desert native plants and provides for the conservation of desert resources, through regulation, guidelines and enforcement that manage the removal or harvesting of such plants. These plants contribute to the visual resources of an area, and as a consequence, “the city finds that it is in the public interest to preserve and protect specified desert native plants and provide for the conservation and wise use of our desert resources, through regulation, guidelines and enforcement that manage the removal or harvesting of such plants.” Detailed analysis regarding these resources is provided in Section 4.3, Biological Resources, of this EIR.

The City of Hesperia has established Sign Regulations in Chapter 16.36 of the Municipal Code. The purpose of this chapter is to encourage economic development by supporting the commercial communication needs of the business community, enhance the quality of life by providing a visually pleasing environment, and promote public health, safety and welfare. As such, the Project would be required to adhere to the regulations outlined in Chapter 16.36.

Section 16.20.135 contains general performance standards related to glare such that any activity shall not cause glare above 0.5 footcandles when measured in a residential district or lot.

4.1.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to aesthetics are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to aesthetics would occur if the Project would:

- A. Have a substantial adverse effect on a scenic vista.
- B. Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- C. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.
- D. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.1.4 Impacts Analysis

Threshold A: Would the Project have a substantial adverse effect on a scenic vista?

Less-than-Significant Impact. As discussed in Section 4.1.1, Existing Conditions, while the Project site and the surrounding area contain some areas with undisturbed natural desert landscape, existing development (including commercial uses, trucking-related uses [i.e., truck stops], lodging accommodations, big-box retail developments, and major interstate highways) precludes the area from being an area with significant scenic value that could comprise a scenic vista.

Physical improvements proposed as part of the Project would be limited to the Project site and the immediate vicinity. Given that existing scenic resources are outside of the Project's disturbance footprint and located between 5 and 10 miles away from the Project site, the Project would not result in any physical modifications to scenic resources that comprise a scenic vista.

With the exception of the San Gabriel and San Bernardino Mountains visible in the background of the site photos, scenic resources identified by the City's General Plan that comprise scenic vistas are not visible in the vicinity of the Project site. Due to the relatively flat topography of the Project area, views of the San Gabriel and San Bernardino Mountains are available to viewer groups in the vicinity of the Project site, including motorists traveling on nearby highways and roads, as well as employees and visitors of the nearby commercial and light industrial areas. These viewers are provided intermittent background views of mountain ridgelines under optimal atmospheric conditions and when not obstructed by existing development in the area. Development of the Project's proposed building would result in minimal obstruction of the existing mountain views. The presence of existing development, major roadways, and other man-made elements (i.e., transmission lines, signage, and traffic and streetlights) already reduces the unobstructed views of the mountains in the Project vicinity.

The Project building is designed in such a manner that building colors and project design as a whole conform with the development standards of the Hesperia Municipal Code and the MSFCSP in order to promote the visual character and quality of the surrounding area. The Project's landscaping would also have a similar effect by providing natural elements throughout the Project site. Thus, with conformance of the development standards of the Hesperia Municipal Code and the MSFCSP, the Project would not result in a significant impact to scenic vistas and impacts would be less than significant.

Threshold B: Would the Project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no officially designated scenic roads or highways within City boundaries (City of Hesperia 2010b). The nearest designated state scenic highway, Route 38, is located approximately 27 miles southeast of the Project site. The nearest eligible scenic highway, Route 138, is located 7 miles to the southeast of the Project site (Caltrans 2019). Due to distance and intervening terrain, vegetation, and development, none of these officially designated or eligible scenic highways are visible from the Project site, nor is the Project site visible from the highways. Therefore, no impacts associated with scenic resources within a state scenic highway would occur.

Threshold C: In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?

Less-than-Significant Impact. California Public Resources Code Section 21071 defines an "urbanized area" as "an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." The City's population as of April 1, 2020, was approximately 99,818 people (U.S. Census 2020). However, the City is bordered by the City of Victorville to the north, Town of Apple Valley to the east, unincorporated San Bernardino County land to the south, and the unincorporated community of Oak Hills to the west. The combined population of the City of Hesperia and any one of these adjacent Cities is over 100,000 persons. Thus, the Project site is considered to be within an urbanized area and the following analysis considers whether the Project would conflict with applicable zoning or other regulations governing scenic quality.

In an attempt to ensure that current and future development within the City is designed and constructed to conform to existing the visual character and quality, the City of Hesperia Development Code (Title 16 of the City’s Municipal Code) includes design standards related to building size, height, floor area ratio, and setbacks, as well as landscaping, signage, and other visual considerations. These design standards help adjacent land uses to be visually consistent with one another and their surroundings and reduce the potential for conflicting visual elements. More specific to the Project site, the MSFCSP sets forth development standards for the CIBP Zone and industrial development. The design specifications for the Project will be reviewed by the City for compliance with all applicable provisions set forth by the City’s Development Code and the MSFCSP. As part of the City’s development review process, the Project’s architectural plans are reviewed by City staff and the Planning Commission to determine whether Project design conforms to the Development Code and MSFCSP and promotes the visual character and quality of the surrounding area. Table 4.1-2 provides a consistency analysis with the development standards for the CIBP Zone (Chapter 9 of the MSFCSP).

Table 4.1-2. Project Consistency with Development Standards for CIBP Zone

Hesperia Main Street and Freeway Corridor Specific Plan Development Standards for CIBP Zone	Project Design
Minimum Lot Size: 10 acres Minimum Width: 500 feet Minimum Depth: 500 feet	Consistent. The proposed project lot size is consistent with these standards, as detailed below: ▪ Lot Size: 17.87 acres ▪ Width: Approximately 1,426.1 feet ▪ Depth: Approximately 661.7 feet See Figures 3-11, Site Plan and 3-12, Detailed Site Plan in Chapter 3, Project Description.
Maximum Gross Floor Area Ratio: 0.50	Inconsistent. The proposed building would have a gross floor area ratio of .533. The development of a 414,700 SQ FT warehouse is the most efficient use of the property. However, because the building would be greater than 200,000 SQ FT, a Conditional Use Permit would be required for the project and would include Conditions of Approval that would ensure project development would be consistent with the intent of the MSFCSP Standards. See Figures 3-11, Site Plan and 3-12, Detailed Site Plan in Chapter 3, Project Description.
Maximum Building Height: 60 feet	Consistent. The maximum building height for the building would be 50 feet, measured from the finished floor to the top of the building parapets. See Figures 3-14, Schematic Renderings; 3-15, Architectural Elevations in Chapter 3, Project Description.
Street Yard Setbacks: 25 feet Front Yard Setback: 25 feet Street Side Yard Setback: 15 feet Rear Yard Setback: None (except where the rear yard abuts a residential zone or residential development as a part of a Regional Commercial zone: 50 feet)	Consistent. Proposed setbacks of front and side yards would be a minimum of 25’. See Figures 3-11, Site Plan and 3-16, Landscape Plan. Figures are provided in Chapter 3.

Table 4.1-2. Project Consistency with Development Standards for CIBP Zone

Hesperia Main Street and Freeway Corridor Specific Plan Development Standards for CIBP Zone	Project Design
Interior Side Yard Setback: None (except where the interior property line abuts a residential zone, or residential development as a part of a Regional Commercial zone: 20 feet)	
Parking and Loading: In addition to the off-street parking requirements and standards set forth in Chapter 16.20, Article IV (Parking and Loading Standards) of the HMC, the following shall apply: (1) To alleviate the unsightly appearance of loading facilities for industrial uses, these areas should not be located at the front of buildings where it is difficult to adequately screen them from view. Such facilities are more appropriately located at the rear of the site where special screening may not be required. (2) When it is not possible to locate loading facilities at the rear of the building, loading docks and doors should not dominate the frontage and must be screened from the street. Loading facilities should be offset from driveway openings. (3) Backing from the public street onto the site for loading into front end docks causes unsafe truck maneuvering and should not be utilized except at the ends of industrial cul-de-sacs where each circumstance will be studied individually at the time of design review.	Consistent. Parking areas would be provided on-site consistent with Chapter 16.20, Article IV (Parking and Loading Standards) of the HMC. Single loaded truck bays would be located entirely on the rear of the proposed building when viewed from southbound Poplar Street. The facades of the building sides when viewed from these locations feature walls with varying paint colors, rooflines, off-set walls, and windows. Each side of the facades are complemented with storefronts featuring a variety of building materials, windows with high quality glazing, and accent panels. In addition, the Project's landscape plan incorporates vegetative screening to soften views of the Project site and to enhance visual quality. See Figures 3-11, Site Plan; 3-14, Schematic Renderings; 3-15, Architectural Elevations; and 3-16, Landscape Plan. Figures are provided in Chapter 3.
Landscaping: (1) Drought-tolerant and water conserving landscaping and water efficient irrigation systems and techniques shall be utilized whenever possible. (2) In addition, the design standards and guidelines included in Chapter 11 (Industrial Design Standards and Guidelines) of this Plan shall apply. The provisions of Chapter 16.20, Article XII (Landscape Regulations) and Chapter 16.24 (Protected Plants) of the HMC shall apply with the following exceptions/additions: (3) Industrial development in this zone shall provide a minimum of ten percent on-site landscaping, including that required in setback areas. Refer to section 16.20 Article XII of the HMC for minimum landscape requirements.	Consistent. Project landscaping would consist of water efficient landscaping that would incorporate natural desert vegetation and would feature a variety of trees, shrubs, accents, and groundcovers. The sites for proposed building would provide approximately 14.9% landscape coverage. See Figures 3-11, Site Plan and 3-16, Landscape Plan. Figures are provided in Chapter 3.
Walls and Fences: (1) An industrial development adjacent to any residential zone shall have a minimum 6 foot high wall, not to exceed 8 feet, along property lines adjacent to such districts. (2) Both sides of all perimeter walls should be architecturally treated. Appropriate materials include decorative masonry, concrete, stone and brick.	Not Applicable. The Project site does not abut a residential zone, and therefore, would not have a solid perimeter wall. Nonetheless, the Project's landscape plan incorporates vegetative screening to soften views of the Project site and to enhance visual quality. See Figures 3-11, Site Plan and 3-16, Landscape Plan. Figures are provided in Chapter 3.

Table 4.1-2. Project Consistency with Development Standards for CIBP Zone

Hesperia Main Street and Freeway Corridor Specific Plan Development Standards for CIBP Zone	Project Design
Outdoor Displays, Storage, Equipment, and Work Areas: (1) No retail sales, merchandise displays or work areas shall occur outside building(s). (2) Outside storage and equipment shall be confined to the rear half of the property or the rear of the principal structure on site, whichever is more restrictive, and screened from public view from any adjoining properties and public rights-of-way by appropriate walls, fencing and landscaping. (3) Outdoor hoists are subject to the conditions and standards listed in Chapter 9(C)(4.18).	Consistent. While the Project does not involve retail sales or merchandise displays and work areas would primarily be located within the warehouse building, outdoor equipment such as yard trucks and pallets may be stored within the truck court. These areas would be confined to the rear of the buildings and enclosed with fencing and vegetative screening. <i>See Figures 3-11, Site Plan and 3-12, Detailed Site Plan. Figures are provided in Chapter 3.</i>

As provided in Table 4.1-2, the Project would be consistent with the development standards of the CIBP Zone.

Additionally, due to the size and scale of industrial buildings, it is especially important to consider design to ensure compatibility with other parts of the community. Chapter 11 of the MSFCSP provides additional details regarding design standards and guidelines for industrial development. In accordance with the MSFCSP design guidelines, all setback areas would be landscaped, and building orientation, siting and entrances would be designed to minimize conflicts with the surrounding visual environment. For instance, landscaping and vegetation is incorporated into the site plan to provide visual screening and building facades would feature a complementary neutral color palette and a variety of building materials.

The building colors shall be reviewed to assure conformance with the development standards of the Hesperia Municipal Code and the MSFCSP. Buildings would include materials such as concrete, metal, aluminum entry framing, and glass, and building elevations would include vertical and horizontal elements that would break up the overall massing of the buildings and provide visual interest (see Figures 3-14, Schematic Renderings and 3-15, Architectural Elevations, in Chapter 3).

The visual setting surrounding the Project site currently consists of a mix of developed and undeveloped areas. Development in the area includes commercial uses, trucking-related uses [i.e., truck stops], lodging accommodations, big-box retail developments, public roadways and landscaping, and major interstate highways. Undeveloped areas consist of flat desert terrain with sparse vegetation. As a result, the Project site and surrounding area can be characterized as low density industrial and commercial development within a desert landscape setting. The Project would result in the development of vacant, undeveloped land with an industrial building that would feature contemporary architecture landscaping, and streetscape improvements that would assist in completing a cohesive ‘gateway’ corridor envisioned in the MSFCSP. The Project would also eliminate the illegal uses currently occurring on site (trespassing and illegal dumping).

In summary, the Project would not conflict with applicable zoning or other regulations governing scenic quality and the Project would be consistent with the visual character of the surrounding area. Therefore, with compliance with the City’s Development Code and the MSFCSP design standards and guidelines and implementation of site specific landscaping, the Project would not conflict applicable zoning or other regulations governing scenic quality and impacts related to visual character and quality would be less than significant.

Threshold D: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-than-Significant Impact. The Project site is currently undeveloped and does not support any existing sources of light or glare, and development of the Project would introduce new sources of light and glare to the Project site. However, developed portions of the City contain numerous sources of light and glare typical of urban and semi-rural environments. Existing sources of light or glare include streetlights, freestanding lights, building-mounted lights, illuminated signage, reflective building materials, and vehicular headlights. The undeveloped portions of the City, such as the Project site, contain few, if any, sources of light and glare. New sources of nighttime lighting resulting from the implementation of the Project include parking lot and loading area lighting, as well as building mounted lights. The Project would include a variety of exterior building light fixtures and parking lot lighting fixtures, including building mounted and pole mounted light fixtures. As depicted in Figures 3-14, Schematic Renderings, building materials would primarily include concrete, metal, aluminum, and glass windows. These features could result in light trespass, light pollution, and glare.

The majority of construction activities associated with the Project would occur during daytime hours consistent with standard industry practices. In the event that work is required outside the standard construction hours (to reduce traffic or other impacts), lighting would be focused directly on work activity areas and would be temporary. As such, nighttime construction lighting impacts would be less than significant.

Upon Project implementation, the Project could potentially result in significant adverse light and glare impacts on nighttime views due to the addition of building and parking lot lighting. However, the Project would be required to minimize light and glare impacts to sensitive land uses through the incorporation of setbacks, site planning, and other design techniques (consistent with General Plan Policy LU-3.5). Section 16.20.135 of the City's Municipal Code contains general performance standards related to light and glare such that any industrial activity shall not cause light trespass above 0.5 footcandles when measured in a residential district or lot (City of Hesperia 2020). While the Project would not be located adjacent to any residential districts or lots, the Project's lighting would be designed such that lighting is directed on-site and away from neighboring parcels. Lighting associated with streetlights would be designed consistent with City standards for safety and proper roadway illumination, consistent with other streetlights throughout the City. In addition, as part of the final engineering and site plan check phase, a photometric plan will be prepared by City planning staff prior to finalization of site plans. During this process, City staff would ensure that Project lighting would not result in glare on adjacent properties.

Further, all light fixtures would be required to be consistent with the California Green Building Standards Code for illumination. The California Green Building Standards Code sets forth minimum requirements based on Lighting Zones, as defined in Chapter 10 of the California Administrative Code. The requirements are designed to minimize light pollution in an effort to maintain dark skies and ensure new development reduces backlight, uplight, and glare (BUG) from exterior light sources (CALGreen 2019). The Project would be required to comply with the CALGreen BUG rating for Lighting Zone 3. Further, all lights would be shielded and directed downward, and the proposed lighting plan does not include blinking, flashing, or oscillating light sources.

The warehouse building would incorporate a variety of building materials. As depicted on Figures 3-12, Architectural Elevations, building materials would primarily include concrete, metal, aluminum, and glass windows. Metal canopy overhangs for shading would be included above building entrances, and aluminum entrance fronts would include glass and metal attachments. Blue reflective glazing and high gloss paint is proposed for the entrance fronts and canopies. Glass windows would consist of tempered vision insulated glass with a solarban 60 rating, which has a low exterior reflectance percentage to maximize daylighting opportunities to interior building spaces. Although metallic materials and glass have been incorporated into Project design, Project setbacks and proposed

landscaping would provide screening to screen such Project elements from view, and all paint finishes would be flat (with the exception of the high gloss proposed for entrance fronts and canopies). As such, building materials would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Therefore, impacts associated with light and glare would be less than significant.

Threshold E: Would the Project result in cumulatively considerable impacts with regard to aesthetic and visual considerations?

Less-than-Significant Impact. The Project is located within the MSFCSP area, and thus, would be designed and constructed according to the design guidelines and standards outlined in the MSFCSP for the CIBP Zone and industrial development. These guidelines and standards aim to protect the MSFCSP area's high desert setting and panoramic mountain views. All related projects located within the MSFCSP area would be subject to these design guidelines and standards, which include recommendations for the architectural character of new buildings to maximize views of the landscape while taking inspiration from surrounding natural elements.

The development and design standards provide the framework for the desired aesthetic and visual environment. Other development projects in the area will incorporate development standards, design guidelines, and other strategies outlined in the MSFCSP. In addition, the Project's proposed building colors shall be reviewed to assure conformance with the development standards of the Hesperia Municipal Code and the MSFCSP in order to promote the visual character and quality of the surrounding area. Thus, cumulative impacts related to the visual quality and character of the Project area would not be cumulatively considerable, assuming that related Projects would implement the same mandatory design standards set forth in the MSFCSP to which the Project must adhere.

Related development in the MSFCSP area and surrounding areas would introduce new sources of light in a setting that includes large areas of undeveloped land. However, Project lighting would comply with existing requirements (i.e., lighting would be directed downward, shielded, and focused on the Project site) to ensure lighting has a minimal effect on the overall night sky and reduce the potential for glare. Other projects located throughout the MSFCSP area would similarly be required to comply with these regulations. Therefore, compliance with these regulations would ensure that lighting and glare impacts would be less than significant and no mitigation would be required.

4.1.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project have a substantial adverse effect on a scenic vista?

The Project would result in **less-than-significant impacts** to scenic vistas. No mitigation is required.

Threshold B. Would the Project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Project would result in **no impact** to scenic highways. No mitigation is required.

Threshold C. Would the Project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality?

The Project would result in **less-than-significant impacts** to visual character or quality. No mitigation is required.

Threshold D. Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Project would result in less-than-significant impacts to light and glare. No mitigation is required.

Threshold E: Would the Project result in cumulatively considerable impacts with regard to aesthetic and visual considerations?

The Project would result in less-than-significant cumulative impacts related to aesthetic and visual considerations. No mitigation is required.

4.1.6 References Cited

CALGreen (California Green Building Standards Code). 2019. <https://codes.iccsafe.org/content/CAGBSC2019/cover>

Caltrans (California Department of Transportation). 2008. Scenic Highway Guidelines. <https://dot.ca.gov/-/media/dot-media/programs/design/documents/scenic-hwy-guidelines-04-12-2012.pdf>

Caltrans. 2019. Scenic Highways. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>

City of Hesperia. 2010a. *Hesperia General Plan Update*. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

City of Hesperia. 2010b. *Hesperia 2010 General Plan Update Environmental Impact Report*. <https://www.cityofhesperia.us/DocumentCenter/View/1588/Hesperia-2010-GPU-Draft-EIR-121610>

City of Hesperia. 2020. *Main Street and Freeway Corridor Specific Plan*. <https://www.cityofhesperia.us/DocumentCenter/View/15940/MSFCSP-update>

NLPIP (National Lighting Product Information Program). 2007. *Lighting Answers*. <https://www.lrc.rpi.edu/programs/nlpip/lightinganswers/lightpollution/environmentalZones.asp>

U.S. Census Bureau. 2020. *QuickFacts, Hesperia city, California*. Accessed: September 24, 2022. <https://www.census.gov/quickfacts/hesperiacitycalifornia>.

4.2 Air Quality

This section describes the existing air quality conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential air quality impacts, and identifies mitigation measures related to implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2 of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following sources:

- Air Quality and GHG Emission Estimates, prepared by Dudek in October 2022 (Appendix B-1).
- Health Risk Assessment, prepared by Dudek in October 2022 (Appendix B-2).
- South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District Full Amicus Briefs, various dates (Appendix B-3).
- Transportation Attachments, prepared by Dudek in October 2022 (Appendix I).

4.2.1 Existing Conditions

Meteorological and Topographical Conditions

The Project site is located within the Mojave Desert Air Basin (MDAB).¹ The MDAB includes the desert portions of Los Angeles, Kern, San Bernardino, and Riverside Counties. Most of this area is commonly referred to as the high desert because elevations range from approximately 2,000 to 5,000 feet above mean sea level. The MDAB is generally above the regional inversion layer and experiences relatively good dispersion conditions.

The MDAB is separated from Southern California coastal regions and Central California valley regions by mountains extending up to 10,000 feet above mean sea level. As a result, the Mojave Desert is removed from the cooling effects of the Pacific Ocean and is characterized by extreme temperatures. The MDAB consists of an assemblage of mountain ranges interspersed with valleys that often contain dry lakes. Lower-elevation mountains scattered throughout the basin are generally 1,000 feet to 4,000 feet high. Mountain passes form channels for air masses flowing from the west and southwest, and the prevailing winds from the west and southwest are caused by the proximity of the MDAB to coastal and central regions and to the blocking effect of the Sierra Nevada to the north.

This MDAB region is characterized by hot, dry summers and cool winters, with little precipitation. During the summer, the MDAB is generally influenced by a Pacific subtropical high-pressure cell that resides off the coast of California. This high-pressure cell prevents cloud formation and engenders daytime solar heating. The MDAB is rarely influenced by the cold air masses that move south from Canada and Alaska, as these frontal systems diffuse by the time they reach the MDAB. Most moisture arrives in frequent warm, moist, unstable air masses from the south. The MDAB averages between 3 and 7 inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The Victorville California Irrigation Management Information System station recorded an average annual precipitation of 2.9 inches of precipitation between November 2020 and October 2021 (CIMIS 2021). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least 3 months have maximum average temperatures over 100.4° F (MDAQMD 2008).

¹ The description of the MDAB climate and topography is based on the Mojave Desert Air Quality Management District (MDAQMD) 2016 CEQA and Federal Conformity Guidelines (MDAQMD 2016). The description of the Western Mojave Desert ozone (O₃) nonattainment area is based on the MDAQMD Federal 8-Hour Ozone Attainment Plan for the Western Mojave Desert Non-Attainment Area (MDAQMD 2008).

The Project is also located within the Mojave Desert Air Quality Management District (MDAQMD) portion of the Western Mojave Desert ozone (O₃) nonattainment area (MDAQMD 2008), which includes the following San Bernardino County communities: Phelan, Hesperia, Adelanto, Victorville, Apple Valley, Barstow, Joshua Tree, Yucca Valley, and Twentynine Palms (the southwestern portion of the MDAQMD).

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established minimum ambient air quality standards (AAQS), or criteria, for outdoor pollutant concentrations in order to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀), particulate matter with an aerodynamic diameter equal to or less than 2.5 microns (PM_{2.5}), and lead (Pb). These pollutants, as well as toxic air contaminants (TACs), are discussed below.² In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O₃ is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O₃ precursors. These precursors are mainly oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) (also referred to as reactive organic gases). The maximum effects of precursor emissions on O₃ concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O₃ formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O₃ exists in the upper atmosphere O₃ layer (stratospheric O₃) and at Earth's surface in the lower atmosphere (tropospheric O₃).³ The O₃ that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to ground level, where people live, exercise, and breathe. Ground-level O₃ is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O₃. Stratospheric, or "good," O₃ occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O₃ layer, plant and animal life would be seriously harmed.

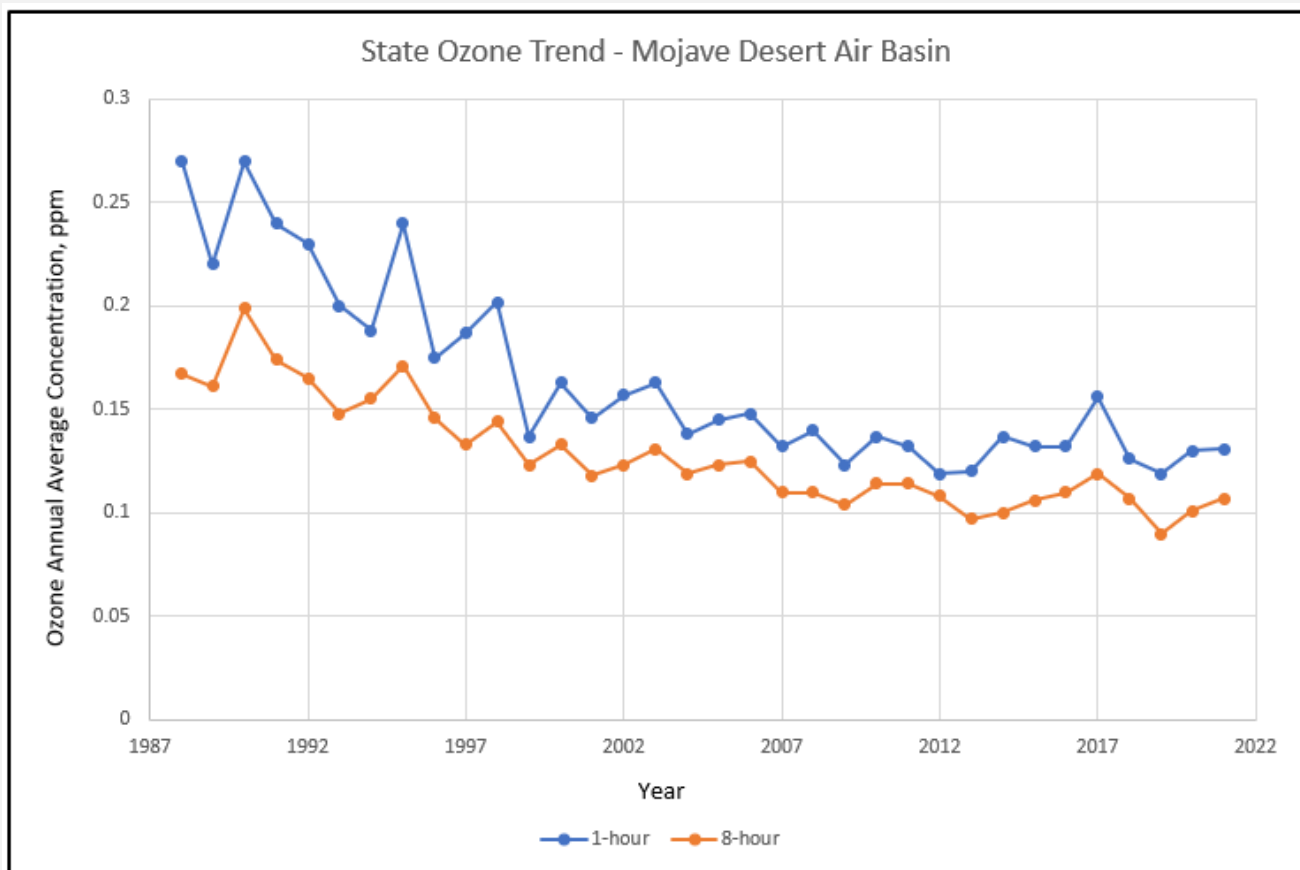
Adverse Health Effects: O₃ in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O₃ can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2020). Inhalation of O₃ causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O₃ can reduce the volume of air that the lungs breathe in and can cause shortness of breath. O₃ in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O₃ exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O₃ exposure. While there are relatively few studies of O₃'s effects on children, the available studies show that children are no more

² The descriptions of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency's "Criteria Air Pollutants" (EPA 2021a), as well as the California Air Resources Board's "Glossary" (CARB 2021a)

³ The troposphere is the layer of Earth's atmosphere nearest to the surface of Earth, extending outward approximately 5 miles at the poles and approximately 10 miles at the equator.

or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O₃ and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents, and adults who exercise or work outdoors, where O₃ concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2021b). Air quality in the MDAB has generally improved since the inception of air pollutant monitoring. This improvement is mainly a result of lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the MDAQMD and nearby air districts including the South Coast Air Quality Management District (SCAQMD) and the San Joaquin Valley Air Pollution Control District, as well as CARB and EPA. This general trend toward cleaner air within the state, including the MDAB, has occurred in spite of continued population growth. Figure 4.2-1 State Ozone Trend – Mojave Desert Air Basin, demonstrates the reduction in O₃ over time.

Figure 4.2-1. State 1-Hour and 8-Hour Ozone Concentration Trend in MDAB (ppm)



Source: CARB 2022, iADAM Air Quality Statistics. Units = parts per million (ppm).

Nitrogen Dioxide. NO₂ is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO₂ in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x, which includes NO₂ and NO, plays a major role, together with VOC, in the atmospheric reactions that produce O₃. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO₂ is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources (such as electric utility and industrial boilers).

Adverse Health Effects: A large body of health science literature indicates that exposure to NO₂ can induce adverse health effects. The strongest health evidence, and the health basis for the AAQS for NO₂, results from controlled human exposure studies that show that NO₂ exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO₂ exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO₂ than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO₂ exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2021c).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

Adverse Health Effects: CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2021d).

Sulfur Dioxide. SO₂ is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO₂ are coal and oil used in power plants and industries; as such, the highest levels of SO₂ are generally found near large industrial complexes. In recent years, SO₂ concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO₂ and limits on the sulfur content of fuels.

Adverse Health Effects: Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO₂ exposure, compared with the non-asthmatic population. Effects at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO₂ (above 1 part per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. The elderly and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2021e).

SO₂ is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO₂-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO₂ is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

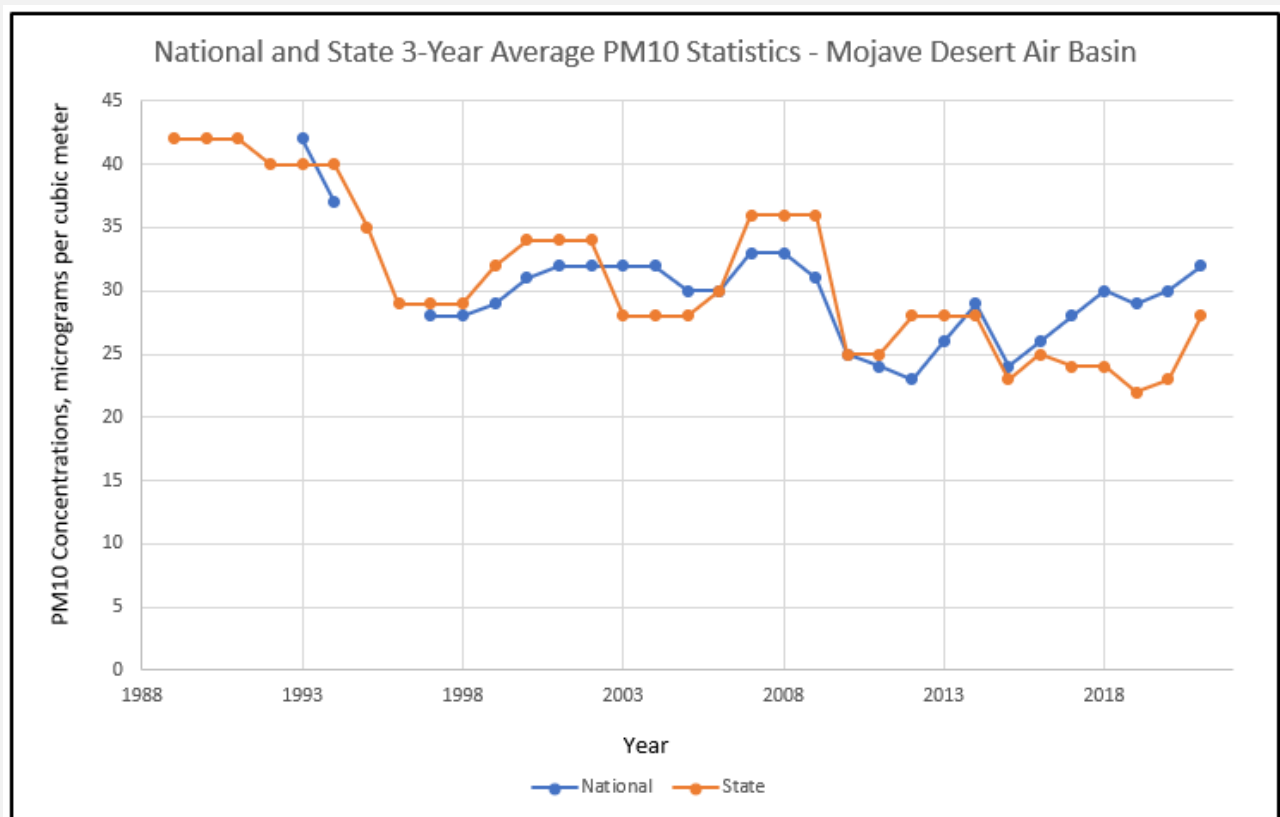
Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM_{2.5} and PM₁₀ represent fractions of particulate matter. Coarse particulate matter (PM₁₀) is about 1/7 the thickness of a human hair. Major sources of PM₁₀ include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter (PM_{2.5}) is roughly 1/28 the diameter of a human hair. PM_{2.5} results from fuel combustion (e.g., from motor vehicles, power generation, and industrial facilities), residential fireplaces, and woodstoves. In addition, PM_{2.5} can be formed in the atmosphere from gases such as sulfur oxides, NO_x, and VOCs.

Adverse Health Effects: PM_{2.5} and PM₁₀ pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM_{2.5} and PM₁₀ can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM₁₀ tends to collect in the upper portion of the respiratory system, PM_{2.5} is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

A number of adverse health effects have been associated with exposure to both PM_{2.5} and PM₁₀. For PM_{2.5}, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, PM_{2.5} is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM₁₀ have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2021f).

Long-term exposure (months to years) to PM_{2.5} has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM₁₀ are less clear, although several studies suggest a link between long-term PM₁₀ exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2021f). As discussed for Ozone, air quality in the MDAB has generally improved since the inception of air pollutant monitoring including PM₁₀ ambient concentrations. Figure 4.2-2 National and State 3-Year Average PM₁₀ Statistics – Mojave Desert Air Basin, demonstrates the reduction in PM₁₀ trend over time.

Figure 4.2-2. National and State 3-Year Average PM₁₀ Statistics – Mojave Desert Air Basin



Source: CARB 2022, iADAM Air Quality Statistics. Units = micrograms per cubic meter.

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Adverse Health Effects: Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood, because children are highly susceptible to the effects of lead. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO₂ in the atmosphere.

Adverse Health Effects: Sulfates can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents.

Adverse Health Effects: Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants.

Adverse Health Effects: Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Sources of visibility-reducing particles are the same as for PM_{2.5} described above.

Adverse Effects: Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O₃ are referred to and regulated as VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the main sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

Adverse Health Effects: The primary health effects of VOCs result from the formation of O₃ and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic

substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples of TACs include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills.

Adverse Health Effects: Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70 the diameter of a human hair), and thus is a subset of PM_{2.5} (CARB 2021g). DPM is typically composed of carbon particles (soot, also called black carbon) and numerous organic compounds, including over 40 known carcinogenic organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2021g). In August 1998, CARB classified “particulate emissions from diesel-fueled engines” (i.e., DPM) (17 CCR 93000) as a TAC. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others.

Adverse Health Effects: Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of PM_{2.5}, DPM also contributes to the same noncancer health effects as PM_{2.5} exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2021g). Those most vulnerable to noncancer health effects are children, whose lungs are still developing, and the elderly, who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person’s reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Valley Fever. Coccidioidomycosis, more commonly known as “Valley Fever,” is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils.

San Bernardino County is not considered a highly endemic region for Valley Fever as the latest report from the California Department of Public Health listed San Bernardino County as having 1.8 cases per 100,000 people (CDPH 2017).

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). The MDAQMD identifies sensitive receptors as residences, schools, playgrounds, childcare centers, and medical facilities (MDAQMD 2016).

Local Ambient Air Quality

Mojave Desert Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as “attainment” for that pollutant. If an area exceeds the standard, the area is classified as “nonattainment” for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as “unclassified” or “unclassifiable.” The designation of “unclassifiable/attainment” means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as “attainment” or “nonattainment,” but based on California Ambient Air Quality Standards (CAAQS) rather than the NAAQS. Table 4.2-1 depicts the current attainment status of the Project area with respect to the NAAQS and CAAQS. Notably, the MDAB has experienced a substantial reduction in maximum 8-hour concentrations of O₃ over time, as well as reductions in PM₁₀, from strategies including implementation of Reasonable Available Control Technology, vehicle emission standards, and other measures, as described in the respective MDAQMD O₃ attainment plan (MDAQMD 2008) and PM₁₀ attainment demonstration and maintenance plan (MDAQMD 1995).

Table 4.2-1. Mojave Desert Air Basin Attainment Classification

Pollutant	Designation/Classification ^a	
	Federal Standards	State Standards
O ₃ – 1 hour	No federal standard	Nonattainment
O ₃ – 8 hours	Severe nonattainment^b	Nonattainment
NO ₂	Unclassifiable/attainment	Attainment
CO	Unclassifiable/attainment	Attainment
SO ₂	Unclassifiable/attainment	Attainment
PM ₁₀	Moderate nonattainment^c	Nonattainment
PM _{2.5}	Unclassifiable/attainment	Attainment ^d
Lead	Unclassifiable/attainment	Attainment
Hydrogen sulfide	No federal standard	Unclassified ^e

Table 4.2-1. Mojave Desert Air Basin Attainment Classification

Pollutant	Designation/Classification ^a	
	Federal Standards	State Standards
Sulfates	No federal standard	Attainment
Visibility-reducing particles	No federal standard	Unclassified
Vinyl chloride	No federal standard	No designation

Sources: EPA 2021b (federal); CARB 2021h (state).

Notes: O₃ = ozone; NO₂ = nitrogen dioxide; CO = carbon monoxide; SO₂ = sulfur dioxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter.

^a Designations/classifications in **bold** type indicate nonattainment.

^b West Mojave Desert portion of the MDAB, where the Project is located, is designated severe nonattainment. The Kern County portion of the MDAB is designated moderate nonattainment, and the remaining areas of the MDAB are designated unclassifiable/attainment.

^c The Project is located in an area designated moderate nonattainment in the MDAB.

^d The Project is located in an area designated attainment in the MDAB.

^e The entire MDAB is designated unclassified, except for the Searles Valley portion of the basin, which is designated nonattainment.

Definitions: attainment = meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

In summary, the Project is located in an area of the MDAB that is designated as a nonattainment area for federal and state O₃ standards and federal and state PM₁₀ standards, and unclassifiable/attainment for all other criteria air pollutants (EPA 2021b; CARB 2021h).

Despite the current nonattainment status for O₃ and PM₁₀, air quality in the MDAB has generally improved since the inception of air pollutant monitoring as discussed previously and presenting in Figure 4.2-1 and Figure 4.2-2, for O₃ and PM₁₀ respectively.

The MDAQMD is downwind of the Los Angeles basin, and to a lesser extent, is downwind of the San Joaquin Valley. Prevailing winds transport O₃ and O₃ precursors from both regions into and through the MDAB during the summer O₃ season and these transport couplings have been officially recognized by CARB. While local MDAQMD emissions contribute to exceedances of both the NAAQS and CAAQS for O₃, because the MDAQMD is overwhelmingly impacted by O₃ transported from the South Coast Air Basin, the MDAB would likely be in attainment of O₃ standards without the influence of this transported air pollution from upwind regions (MDAQMD 2008). Nonetheless, the MDAQMD has experienced a substantial reduction in maximum 8-hour ozone concentrations. Per the O₃ indicator values between 1995 and 2006 within the Western Mojave Desert, all indicators, including number of exceedance days, have decreased since 1995, indicating overall improvements in the various measures of O₃ air quality (MDAQMD 2008). The three stations closest to the South Coast Air Basin have the highest historical O₃ concentrations (Phelan, Hesperia and Victorville), while the more distant or isolated stations (Barstow and Twentynine Palms) have much lower O₃ concentrations and are experience concentrations in attainment of the NAAQS (MDAQMD 2008).

Regarding particulate matter (PM), which is a primary and secondary pollutant, the MDAQMD believes that local sources contribute to PM₁₀ concentrations in the Mojave Desert Planning Area as the monitoring sites are located in and around anthropogenic sources of dust (e.g., primary PM); however, O₃ precursor transport from upwind air basins include some nitrate and sulfate aerosol or secondary particulates, which contribute to PM concentrations. Because the Mojave Desert Planning Area contains relatively limited NO_x and sulfur sources, transport contributions are estimated as half of the measured total nitrate and sulfate content, which contribute to overall PM concentrations (MDAQMD 1995).

Accordingly, it is important to note that the SCAQMD, which has jurisdiction over the South Coast Air Basin, has also experienced an improvement in air quality over the last few decades. The SCAQMD implements air quality plans, such as the 2016 Air Quality Management Plan and the draft 2022 Air Quality Management Plan, which are comprehensive documents that outline their air pollution control program for attaining all CAAQS and NAAQS. Specifically, the SCAQMD draft 2022 Air Quality Management Plan addresses attainment of the 2015 8-hour O₃ standard (70 parts per billion) for the South Coast Air Basin and the Coachella Valley. PM₁₀ levels have declined almost 50% since 1990 within the South Coast Air Basin, and PM_{2.5} levels have also declined 50% since measurements began in 1999 (SCAQMD 2013). Similar improvements are observed with O₃ within the South Coast Air Basin, although the rate of O₃ decline has slowed in recent years (SCAQMD 2013). Despite great strides in cleaning the air over the past several decades, the Los Angeles area still has the highest levels of O₃ in the nation and meeting the O₃ standards within the South Coast Air Basin will require federal action and zero- and low-emission technologies to reduce NO_x (SCAQMD 2022). Overall, improvements within the South Coast Air Basin will also result in improvements within the MDAB. Lastly, the MDAQMD continues to implement available control technologies and rules and regulations to further reduce sources of O₃ and PM within their jurisdictional boundaries including attainment plans and rule development, as explained in Section 4.2.2 (Local).

Local Ambient Air Quality Conditions

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The MDAQMD monitors local ambient air quality in the Project area. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2018 to 2020 are presented in Table 4.2-2. The Hesperia monitoring station, located at 17288 Olive Street, Hesperia, California, is the nearest air quality monitoring station to the Project site, and is located approximately 5.7 miles east of the Project. The data collected at this station are considered representative of the air quality experienced in the Project vicinity. Air quality data for O₃ and PM₁₀ from the Hesperia monitoring station are provided in Table 4.2-2. Because CO, PM_{2.5}, NO₂, and SO₂ measurements are not monitored at the Hesperia monitoring station, the measurements were taken from the Victorville monitoring station (14306 Park Avenue, Victorville, California, approximately 7.0 miles northeast of the Project site). The number of days exceeding the AAQS is also shown in Table 4.2-2.

Table 4.2-2. Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2018	2019	2020	2018	2019	2020
Ozone (O ₃)										
Hesperia	ppm	Maximum 1-hour concentration	State	0.09	0.113	0.108	0.118	9	9	9
	ppm	Maximum 8-hour concentration	State	0.070	0.100	0.088	0.094	71	47	46
			Federal	0.070	0.100	0.088	0.094	71	47	46
Nitrogen Dioxide (NO ₂)										
Victorville	ppm	Maximum 1-hour concentration	State	0.18	0.051	0.056	0.059	0	0	0
			Federal	0.100	0.051	0.056	0.059	0	0	0

Table 4.2-2. Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2018	2019	2020	2018	2019	2020
	ppm	Annual concentration	State	0.030	0.011	0.011	0.012	0	0	0
			Federal	0.053	0.011	0.011	0.012	0	0	0
Carbon Monoxide (CO)										
Victorville	ppm	Maximum 1-hour concentration	State	20	1.4	1.5	1.7	0	0	0
			Federal	35	1.4	1.5	1.7	0	0	0
	ppm	Maximum 8-hour concentration	State	9.0	1.1	1.1	1.4	0	0	0
			Federal	9	1.1	1.1	1.4	0	0	0
Sulfur Dioxide (SO2)										
Victorville	ppm	Maximum 1-hour concentration	Federal	0.075	0.010	0.004	0.004	0	0	0
	ppm	Maximum 24-hour concentration	Federal	0.14	0.003	0.003	0.003	0	0	0
	ppm	Annual concentration	Federal	0.030	0.001	0.001	0.001	0	0	0
Coarse Particulate Matter (PM10) ^a										
Hesperia	µg/ m³	Maximum 24-hour concentration	State	50	—	—	—	—	—	—
			Federal	150	139.8	157.7	224.1	0.0 (1)	1.0 (1)	1.0 (1)
	µg/ m³	Annual concentration	State	20	27.8	24.5	28.2	—	—	—
Fine Particulate Matter (PM2.5) ^a										
Victorville	µg/ m³	Maximum 24-hour concentration	Federal	35	32.7	17.8	48.4	0.0 (0)	0.0 (0)	4.0 (4)
	µg/ m³	Annual concentration	State	12	8.7	7.0	10.4	0	0	0
			Federal	12.0	7.4	8.7	7.9	0	0	0

Sources: CARB 2021i; EPA 2021b.

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter; — = not available.

Data taken from CARB iADAM (CARB 2021i) and EPA AirData (EPA 2021b) represent the highest concentrations experienced over a given year.

Exceedances of federal and state standards are only shown for O₃ and particulate matter. Daily exceedances for particulate matter are estimated days because PM₁₀ and PM_{2.5} are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM₁₀, or 24-hour SO₂, nor is there a state 24-hour standard for PM_{2.5}.

^a Measurements of PM₁₀ and PM_{2.5} are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

4.2.2 Relevant Plans, Policies, and Ordinances

Federal

Criteria Air Pollutants

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including setting NAAQS for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O₃ protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the public. The NAAQS (other than for O₃, NO₂, SO₂, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5} are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants

The 1977 federal Clean Air Act amendments required the EPA to identify national emission standards for HAPs to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

State

Criteria Air Pollutants

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established the CAAQS, which are generally more restrictive than the NAAQS. As stated previously, an ambient air quality standard defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. For each pollutant, concentrations must be below the relevant CAAQS before a basin can attain the corresponding CAAQS. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, and PM_{2.5} and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

California air districts have based their thresholds of significance for California Environmental Quality Act (CEQA) purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an ambient air quality standard is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the ambient air quality standard, this means that the thresholds established by air districts are also protective of human health. The NAAQS and CAAQS are presented in Table 4.2-3.

Table 4.2-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
O ₃	1 hour	0.09 ppm (180 µg/m ³)	—	Same as primary standard ^f
	8 hours	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³) ^f	
NO ₂ ^g	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	
CO	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	
SO ₂ ^h	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^g	—
	Annual	—	0.030 ppm (for certain areas) ^g	—
PM ₁₀ ⁱ	24 hours	50 µg/m ³	150 µg/m ³	Same as primary standard
	Annual arithmetic mean	20 µg/m ³	—	
PM _{2.5} ⁱ	24 hours	—	35 µg/m ³	Same as primary standard
	Annual arithmetic mean	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
Lead ^{j,k}	30-day average	1.5 µg/m ³	—	—
	Calendar quarter	—	1.5 µg/m ³ (for certain areas) ^k	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m ³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	—	—
Vinyl chloride ^l	24 hours	0.01 ppm (26 µg/m ³)	—	—
Sulfates	24 hours	25 µg/m ³	—	—

Table 4.2-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
Visibility reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016.

Notes: O₃ = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO₂ = nitrogen dioxide; CO = carbon monoxide; mg/m³ = milligrams per cubic meter; SO₂ = sulfur dioxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; PST = Pacific Standard Time.

- ^a California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter (PM₁₀, PM_{2.5}), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ^b National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- ^c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 °C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25 °C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^d National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- ^e National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ^f On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- ^g To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ^h On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- ⁱ On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
- ^j CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- ^k The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 200 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. In 1987, the Legislature enacted the Air Toxics “Hot Spots” Information and Assessment Act of

1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. “High-priority” facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings. As a result of the state Air Toxics Program, more than 30,000 facilities have reduced their toxic emissions which has led to the reduction of cancer risk in California by about 80 percent since 1990 (CARB 2022).

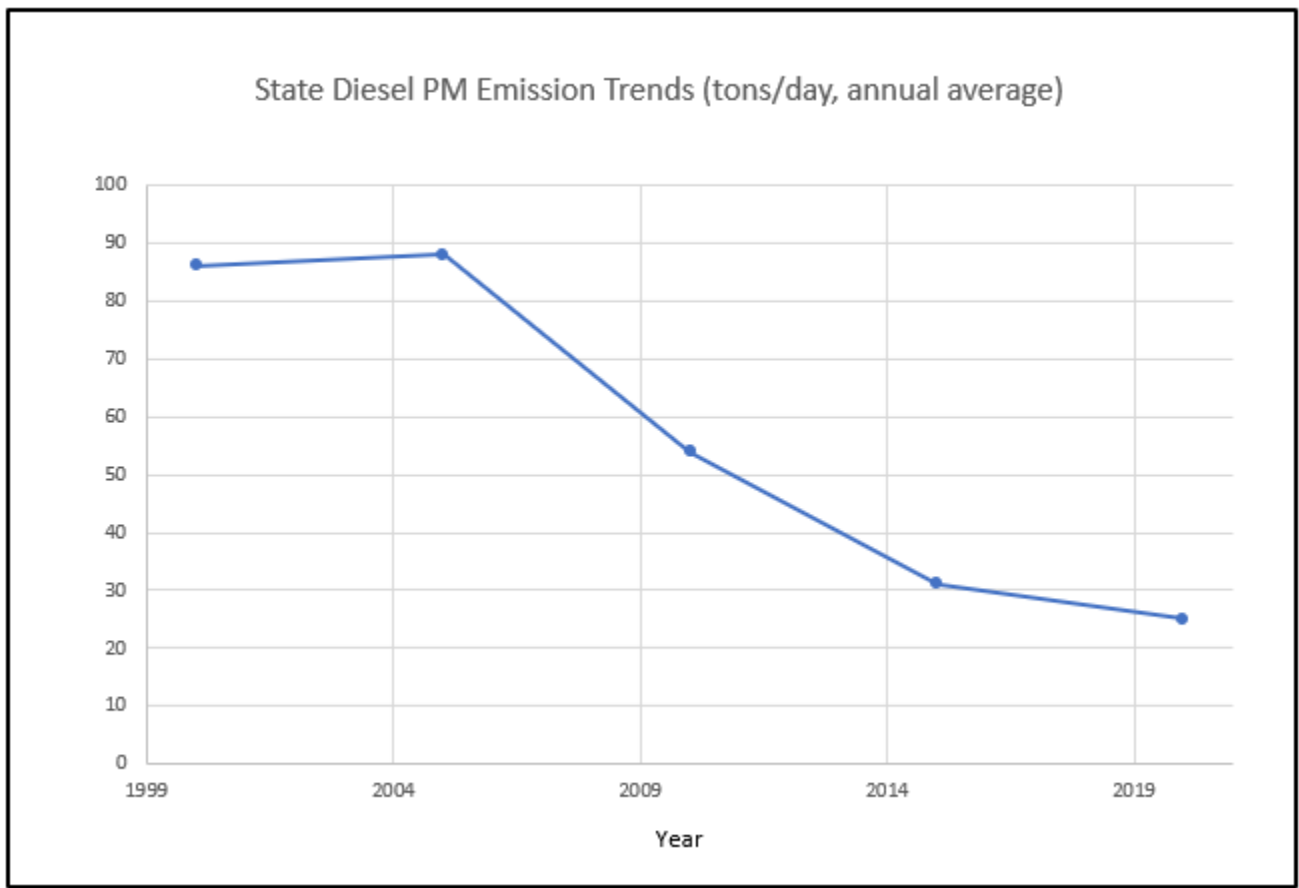
In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

In 2013 CARB published the California Almanac of Emissions and Air Quality. The Almanac contains 20-year trend summaries of air quality and emissions data for five criteria pollutants: ozone, PM₁₀, CO, NO₂, and SO₂. Data are summarized for the State as a whole and for the five most populated air basins (South Coast, San Francisco Bay Area, San Joaquin Valley, San Diego, and Sacramento Valley). In addition to information on criteria pollutants, the Almanac provides information on air quality and emissions for DPM. Figure 4.2-3 provides a graphical depiction of the diesel particulate matter emissions trend for the State based on the CARB California Almanac of Emissions and Air Quality 2013 report. As shown the trend of DPM is decreasing significantly since 2005 to report projected year 2020, 88 tons per day, annual average to 25 tons per day, annual average, respectively.

California Health and Safety Code Section 41700

Section 41700 of the California Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors

Figure 4.2-3. Statewide Diesel Particulate Matter Trends



Source: CARB 2013, California Almanac of Emissions and Air Quality 2013.

Local

Mojave Desert Air Quality Management District

The MDAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the San Bernardino County portion of the MDAB, where the Project is located. The MDAQMD operates monitoring stations in the MDAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The MDAQMD’s air quality management plans include control measures and strategies to be implemented to attain state and federal AAQS in the MDAB. The MDAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. The MDAQMD’s most recent air quality plans are the PM₁₀ attainment demonstration and maintenance plan (MDAQMD 1995) and the O₃ attainment plan (MDAQMD 2008).

Applicable Rules. Emissions that would result from mobile, area, and stationary sources during construction and operation of the Project are subject to the rules and regulations of the MDAQMD. The MDAQMD rules applicable to the Project may include, but are not limited to, the following:

- **Rule 219 – Equipment Not Requiring a Permit:** The rule identifies equipment exempt from permit requirements of District Rules 201 and 203.
 - District permit required for Internal combustion engines with manufacturer’s maximum continuous rating greater than or equal to 50 brake horsepower
- **Rule 401 – Visible Emissions:** This rule establishes the limit for visible emissions from stationary sources.
- **Rule 402 – Nuisance:** This rule prohibits the discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403 – Fugitive Dust Control for the Mojave Desert Planning Area:** This rule ensures that the NAAQS for PM₁₀ will not be exceeded due to anthropogenic sources of fugitive dust within the Mojave Desert Planning Area and implements the control measures contained in the Mojave Desert Planning Area Federal PM₁₀ Attainment Plan. Rule 403 includes requirements for a Dust Control Plan, signage and fencing requirements, as well as surface watering and stabilization with chemicals, gravel and asphaltic pavement to eliminate visible fugitive dust from vehicular travel and wind erosion.
- **Rule 431 – Sulfur Content of Liquid Fuels:** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of SO_x and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the MDAQMD. The rule also affects diesel fuel supplied for mobile sources.
- **Rule 442 – Usage of Solvents:** The purpose of this rule is to reduce VOC emissions from VOC-containing materials or equipment that is not subject to limits of any rule found in District Regulation XI – Source Specific Standards.
- **Rule 1113 – Architectural Coatings.** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

On April 7, 2016, SCAG’s Regional Council adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS). The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The 2016–2040 RTP/SCS was prepared through a collaborative, continuous, and comprehensive

process with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. In June 2016, SCAG received its conformity determination from the Federal Highway Administration and the Federal Transit Administration indicating that all air quality conformity requirements for the 2016 RTP/SCS and associated 2015 Federal Transportation Improvement Program Consistency Amendment through Amendment 15-12 have been met (SCAG 2016).

SCAG has developed Connect SoCal, the 2020–2045 RTP/SCS, which is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, planning strategies, and the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's 2020–2045 RTP/SCS was adopted on September 3, 2020 (SCAG 2020).

City of Hesperia General Plan

The City of Hesperia General Plan contains the following goals and policies applicable to air quality and the Project (City of Hesperia 2010):

Conservation Element

Goal CN-8. Implement policies and measures to reduce air pollution and emissions of pollutants.

Policy CN-8.1. Implement measures to reduce fugitive dust from unpaved areas, parking lots, and construction sites.

Policy CN-8.2. Implement measures to reduce exhaust emissions from construction equipment.

Policy CN-8.5. Minimize exposure of sensitive receptor land uses and sites to health risks related to air pollution.

4.2.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to air quality are based on CEQA Guidelines Appendix G. According to CEQA Guidelines Appendix G, a significant impact related to air quality would occur if the Project would:

- A. Conflict with or obstruct implementation of the applicable air quality plan.
- B. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.
- C. Expose sensitive receptors to substantial pollutant concentrations.
- D. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.
- E. Result in cumulatively considerable air quality impacts.

CEQA Guidelines Appendix G indicates that, where available, significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the Project

would have a significant impact on air quality. As outlined in the MDAQMD's *CEQA and Federal Conformity Guidelines* (MDAQMD 2016), a project would result in a significant environmental impact if it:

1. Would generate total emissions (direct and indirect) in excess of the established significance thresholds (presented as Table 4.2-4)
2. Would generate a violation of any ambient air quality standard when added to the local background
3. Does not conform with the applicable attainment or maintenance plan
4. Would expose sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million (10×10^{-6}) and/or a hazard index (noncarcinogenic) greater than or equal to 1

Residences, schools, daycare centers, playgrounds, and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned sensitive receptor land use must be evaluated using Threshold 4:

- any industrial project within 1,000 feet
- a distribution center (40 or more trucks per day) within 1,000 feet
- a major transportation project (50,000 or more vehicles per day) within 1,000 feet
- a dry cleaner using perchloroethylene within 500 feet
- a gasoline dispensing facility within 300 feet

The MDAQMD *CEQA Air and Federal Conformity Guidelines* (MDAQMD 2016) sets forth quantitative emission significance thresholds for criteria air pollutants below which a project would not have a significant impact on ambient air quality. Project-related air quality emissions estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 4.2-4 are exceeded. The emission-based thresholds for O_3 precursors are intended to serve as a surrogate for an “ozone significance threshold” (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly. MDAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions.

Table 4.2-4. Mojave Desert Air Quality Management District Daily Air Quality Significance Thresholds

Pollutant	Daily Threshold (pounds per day)
VOC	137
NO_x	137
CO	548
SO_x	137
PM_{10}	82
$PM_{2.5}$	65
Hydrogen sulfide ^a	54
Lead ^a	3

Source: MDAQMD 2016.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.

^a The Project includes typical equipment and on-road vehicles, which result in negligible (if any) emissions of hydrogen sulfide and lead. Therefore, these pollutants are not discussed in this analysis.

Regarding localized CO, although the MDAQMD does not have screening levels for intersection traffic that could result in potential CO hotspots, several other air districts have established these levels, which are described below to provide context of the magnitude of hourly volumes that could result in significant localized CO:

- The SCAQMD conducted CO modeling for its 2003 Air Quality Management Plan (SCAQMD 2003a) for the four worst-case intersections in the South Coast Air Basin. At the time the 2003 Air Quality Management Plan was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue. Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least more than 100,000 vehicles per day.
- The Bay Area Air Quality Management District determined that projects would result in a less-than-significant impact to localized CO concentrations if (1) project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour, or (2) project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway) (BAAQMD 2017).

Based on the Project's proximity to the South Coast Air Basin, the SCAQMD screening criterion of 100,000 vehicles per day has been applied to this Project as a metric to evaluate CO hotspots.

Methodology

Emissions from construction and operation of the Project and existing land uses were estimated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0.⁴ CalEEMod input parameters, including the Project land use type and size and construction schedule, were based on information provided by the Project Applicant, or default model assumptions if Project specifics were unavailable. Notably, the latest version of CalEEMod (CAPCOA 2021) uses vehicle emission rates obtained from the EMISSIONS FACTOR model (EMFAC) 2017 web database. EMFAC 2017 emission rates of all vehicle categories are based on aggregated model year and aggregated speed for all counties, air basins, air districts and statewide average for 31 scenario years that each includes three seasons (annual, summer, and winter).

Construction

Emissions from the construction phase of the Project were estimated using information provided by the Project Applicant and CalEEMod default values where Project specific information was not available. For the purpose of estimating Project emissions, construction was modeled beginning in January 2023 and concluding in October 2023⁵ and lasting approximately 11 months. The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate):

- Site preparation: 2 weeks (January 2023)
- Grading: 1.5 months (January 2023–February 2023)

⁴ CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with the construction and operational activities from a variety of land use projects, such as residential, commercial, and industrial facilities.

⁵ The analysis assumes a construction start date of January 2023, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and greenhouse gas emissions, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

- Building construction: 6 months (February 2023–August 2023)
- Paving: 1 month (August 2023–September 2023)
- Application of architectural coatings: 1 month (September 2023–October 2023)

Construction modeling assumptions for equipment and vehicles are provided in Table 4.2-5. Equipment mix, including equipment horsepower, load factor, quantity, and usage hours, was based on CalEEMod default values. The site would not require the import or export of earthwork materials as onsite material will be balanced during the grading phase. For the analysis, it was generally assumed that heavy-duty construction equipment would be operating at the site 5 days per week. To account for off-site construction activities which may include lateral connections for utilities and roadway and pedestrian improvements, repaving of the portion of Poplar Road adjacent to the project was included in the emission modeling analysis.

Table 4.2-5. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site Preparation	10	0	0	Rubber-tired dozers	1	8
				Tractors/loaders/backhoes	1	8
Grading	30	0	0	Excavators	2	8
				Graders	1	8
				Rubber-tired dozers	1	8
				Scrapers	2	8
				Tractors/loaders/backhoes	2	8
Building Construction	328	128	0	Cranes	1	7
				Forklifts	3	8
				Generator sets	1	8
				Tractors/loaders/backhoes	3	7
				Welders	1	8
Paving	16	0	0	Pavers	2	8
				Paving equipment	2	8
				Rollers	2	8
Architectural Coating	66	0	0	Air compressors	1	6

Source: Appendix B-1.

Operation

Emissions from the operational phase of the Project were estimated using CalEEMod. Operational year 2024 was assumed consistent with the assumptions in the EIR's transportation analysis (Appendix I).

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2021). Consumer product VOC emissions were estimated in CalEEMod based on the floor area of buildings and default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were assumed.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from the application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emissions factor is based on the VOC content of the surface coatings, and MDAQMD Rule 1113, Architectural Coatings, governs the VOC content for interior and exterior coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (MDAQMD 2020). CalEEMod default values were assumed, including the surface area to be painted, the VOC content of architectural coatings, and the reapplication rate of 10% of area per year.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use were estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

Mobile Sources

The Project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of the employee passenger vehicles (workers) and truck traffic associated with the operation of the warehouse.

Emissions from the mobile sources during operation of the Project were estimated in CalEEMod. The maximum daily trip rates, taken from the EIR's transportation analysis (Appendix I), were 1,281 primary trips per day, which were assumed 7 days per week. Consistent with the EIR's transportation analyses, the primary trips per day are based on daily trip rates of 4.87 and 2.129 for land uses of general light industrial and high-cube fulfillment center warehouse, respectively. The passenger vehicle trip lengths were assumed to be CalEEMod default trip length of 16.6 miles for commercial-work trips (i.e., trips made by someone who is employed by the warehouse land use) and assumed to be 100% of primary trips.

To identify an appropriate trip length assumption for heavy-duty truck trips, two different methods of estimation were evaluated: (1) project-specific EMFAC-based estimate, and (2) SCAQMD recommendations. For method 1, to determine an average operational truck trip distance, EMFAC data and the distance to the Port of Long Beach was examined. EMFAC data was queried for San Bernardino County for operational year 2024 for light-heavy duty (LHDT1

and LHDT2), medium heavy duty (MHDT), and heavy-heavy duty trucks (HHDT) for total vehicle miles traveled (VMT) and number of vehicle trips. Based on the EMFAC data it is estimated that MHDTs average 6.85 miles per trip and HHDTs average 12.19 miles per trip in San Bernardino County. LHDT1 and LHDT2s have a shorter EMFAC trip distance compared to MHDT, therefore, as a conservative assumption, LHDT1 and LHDT2 were assumed to have the same trip distance as MHDTs. The estimated trip distance from the Port of Long Beach to the project was estimated to be 89 miles. Based on the EIR's transportation analysis, HHDT make up 57.3% of the total truck trips for the project and LHDT1, LHDT2, and MHDTs make up 42.7% of truck trips. Conservatively assuming all HHDTs originate from the Port of Long Beach, then 50% of HHDT truck trips, arrival trips, are assumed to be of a distance of 89 miles. The other 50% making up the HHDT departure from the project are assumed to have trip distance equal to the average EMFAC San Bernardino County trip distance of 12.19 miles. To determine an average total truck distance for use in CalEEMod HHDT trips are averaged with the other 42.7% of the trucks (and LHDT1, LHDT2, and MHDTs) to determine an overall weighted average truck trip distance equal to 32 miles. See Table 4.2-5 for calculation details.

Table 4.2-6. Operational Truck Trip Distance

Vehicle	Percent of Trucks Trips (%) ¹	EMFAC Data			Trip Distance
		EMFAC Truck Classification	County-wide VMT	County-wide Vehicle Trips	VMT per Trip
2-4 Axle Trucks (Arriving and Departing)	42.7	LHDT1, LHDT2, and MHDT	1,270,676 ²	185,376 ²	6.85
5+ Axle Trucks (Arriving from Port)	28.7 (50% of total HHDT Trips ⁴)	HHDT	N/A	N/A	89 ³
5+ Axle Trucks (Departing)	28.7(50% of total HHDT Trips ⁴)	HHDT	4,347,745	356,564	12.19
Weighted Average (All Truck Trips)					31.92

Notes:

- ¹ Based on project traffic impact analysis, Appendix I.
- ² LHDT1, LHDT2, and MHDT conservatively based on EMFAC VMT and Trip data for MHDT.
- ³ Based on the distance from the project site to the Port of Long Beach.
- ⁴ Percent of truck trips represents arrival and departure trips, therefore 50% of trips (arrival) conservatively assumed to originate at the Port of Long Beach. 50% of trips assumed to depart the project facility and estimated truck trip distance is based on EMFAC county-wide average HHDT truck VMT per trip.

For method 2, the light-duty, medium-heavy-duty, and heavy-duty truck trip lengths were based on the SCAQMD recommendation of 40 miles and assumed to be 100% of primary trips.⁶ While method 1 provides a tailored trip length estimate based on the project's location and the reasonably anticipated origin and destination of operational truck trips and goods movement, because method 2 yields a higher trip length, it is conservatively applied in this analysis to estimate mobile source emissions.

⁶ The average trip length for heavy-duty trucks were based on implementation of the Facility-Based Mobile Source Measures adopted in the SCAQMD's 2016 AQMP. SCAQMD's "Preliminary Warehouse Emission Calculations" assumed a heavy-heavy-duty truck trip length of 39.9 miles (SCAQMD 2021), and the default commercial-nonwork trip length for trucks in CalEEMod is 6.9 miles. Therefore, the conservatively assumed trip length of 40 miles is used for this analysis.

Vehicle emissions occur during startup, operation (running), and idling, as well as from evaporative losses when the engines are resting. The emissions factors for trucks and passenger vehicles were determined using CalEEMod.

Project truck idling would be limited to 5 minutes in accordance with CARB's adopted Airborne Toxic Control Measure; however, for modeling purposes, it was conservatively assumed that the trucks would idle for a total of 15 minutes: 5 minutes at the entrance, 5 minutes at the loading dock, and 5 minutes at the exit of the Project site.

Energy Source Emissions

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gas emissions in CalEEMod, since criteria pollutant emissions would occur at the site of power plants, which are not on the Project site. However, natural gas combustion would occur at the Project site itself, in association with equipment that uses natural gas. The emissions associated with natural gas use were calculated using CalEEMod default parameters, which assume compliance with the 2019 Title 24 Building Energy Efficiency Standards.

Off-Road Equipment

It is common for industrial buildings to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment are forklifts, pallet jacks, and yard trucks, which are designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors, hustlers, yard hostlers, and yard tractors. The cargo handling equipment is assumed to have a horsepower (hp) range of approximately 175 hp to 215 hp. For this particular Project, based on the maximum square footage of building space permitted by the Project, on-site modeled operational equipment includes a total of 50 electric-powered forklifts (forklifts and pallet jacks) and 2 electric-powered yard tractors operating at 8 hours a day for 365 days of the year. See Appendix B-2 for detail calculations.

Project Design Features

The Project incorporates and expresses the following Project design features (PDFs). Because these features/attributes are integral to the Project and assumed at the inception of the project design, they are not considered to be mitigation measures.

PDF-AQ-1, Zero-Emissions Off-Road Equipment. All outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and landscaping equipment) shall be zero-emission vehicles. The project shall include the necessary charging stations or other necessary infrastructure for cargo handling equipment. The building manager or their designee shall be responsible for enforcing these requirements.

Health Risk Assessments

Construction Health Risk Assessment

An HRA was performed to evaluate potential health risk associated with construction of the Project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix B-2.

For risk assessment purposes, PM₁₀ in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on road vehicle exhaust (e.g., heavy-duty diesel trucks). For the construction HRA, the CalEEMod scenario for the Project was adjusted to reduce diesel truck one-way trip distances to 1,000 feet (0.19 miles) to estimate emissions from truck pass-by at proximate receptors.

The air dispersion modeling methodology was based on MDAQMD's generally accepted modeling practices (MDAQMD 2020). Air dispersion modeling was performed using the EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 21112 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 10.0.1. The HRA followed the Office of Environmental Health Hazard Assessment 2015 guidelines (OEHHA 2015) and MDAQMD guidance to calculate the health risk impacts at all proximate receptors as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the MDAQMD and EPA guidance and identified as representative of the Project site and Project activities. Principal parameters of this modeling are presented in Table 4.2-7.

Table 4.2-7. AERMOD Principal Parameters

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Southern California Logistics Airport air monitoring station (station 23131) was used for the dispersion modeling (CARB 2021j). A meteorological data set from 2009 through 2010 was obtained from the CARB in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban dispersion option was selected due to the developed nature of the Project area and per MDAQMD guidelines. San Bernardino County's population of 2,180,000 was used in the analysis.
Terrain Characteristics	The elevation of the site is 3,600 feet above sea level.
Elevation Data	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the U.S. Geological Survey's National Elevation Dataset format with a resolution of 1 degree (approximately 30 meters), consistent with the MDAQMD guidance (MDAQMD 2020).
Source Release Characterizations	Air dispersion modeling of DPM emissions was conducted assuming the off-road equipment would operate in accordance with the modeling scenario estimated in CalEEMod (Appendix B-1). The construction equipment and on-site truck travel DPM emissions were modeled as a line of adjacent volume sources across the Project site to represent Project construction with a release height of 3.4 meters, plume height of 6.8 meters, and plume width of 8.6 meters (EPA 2015).

Notes: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; MDAQMD = Mojave Desert Air Quality Management District; DPM = diesel particulate matter; CalEEMod = California Emissions Estimator Model. See Appendix B-2.

Regarding receptors, the construction scenario used an 8-kilometer by 8-kilometer Cartesian receptor grid with 400-meter spacing to establish the impact area and evaluate locations of maximum health risk impact. Fine Cartesian receptor grids with 20-meter spacing were placed over residential receptors in close proximity to the Project site.

The health risk calculations were performed using the Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion Modeling and Risk Tool (ADMRT), Version 21112. AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was partitioned evenly based on the 1 gram per second emission rate. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the non-cancer chronic health indices. There is no reference exposure level for acute health impacts from DPM, and, thus, acute risk was not evaluated.

Operational Health Risk Assessment

For the operational health risk, the operation year 2024 was assumed consistent with completion of Project construction. Emissions from the operation of the Project include truck trips, and truck idling emissions. For risk assessment purposes, PM₁₀ in diesel exhaust is considered DPM, originating mainly from trucks traveling on site and off site and truck idling located at the loading docks. Truck travel and idling emission rates were obtained from CARB's EMFAC2021. Emission factors representing the vehicle mix and emissions for 2024 were used to estimate emissions associated with operation of the Project. Truck idling would be limited to 5 minutes in accordance with CARB's adopted Airborne Toxic Control Measure; however, truck idling was conservatively assumed to idle for 15 minutes.⁷ Therefore, the analysis conservatively overestimates DPM emissions from idling. All deliveries would occur Monday through Sunday. All forklifts and yard trucks will be electric powered and, therefore, no emissions were estimated for the HRA analysis.

Conservatively, a 2024 EMFAC2021 run was conducted and a constant 2024 emission factor data set was used for the entire duration of the analysis (i.e., 30 years). Use of the 2024 emission factors would overstate potential impacts since this approach does not include reductions in emissions due to fleet turnover or cleaner technology with lower emissions. The truck travel DPM emissions were calculated by applying the exhaust PM₁₀ emission factor from EMFAC2021 and the total truck trip number over the length of the distance traveled. In addition, the on-site truck idling exhaust emissions were calculated by applying the idle exhaust PM₁₀ emission factor from EMFAC2021 and total truck trip over the total idling time (i.e., 15 minutes).

The dispersion modeling was performed using AERMOD (Version 21112). The truck traffic was modeled as a line of adjacent volume sources from I-15 to the Project site and truck travel on site to estimate emissions at proximate receptors. Truck idling was modeled as line volume sources.

As previously described, health effects from carcinogenic air toxics are usually described in terms of cancer risk. The MDAQMD recommends a carcinogenic (cancer) risk threshold of 10 in one million. Some TACs increase noncancer health risk due to long-term (chronic) exposures. A hazard index less than one (1.0) means that adverse health effects are not expected. Within this analysis, noncarcinogenic exposures of less than 1.0 are considered less than significant. The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts.

Dudek evaluated the Project's potential cancer and noncancer health impacts using exposure periods appropriate to evaluate long-term emission increases (third trimester of pregnancy to 30 years). Emissions dispersion of DPM was modeled using AERMOD, then cancer risk and noncancer health impacts subsequently using the CARB HARP2 (ADMRT, Version 21112). The health risk results were then compared to MDAQMD thresholds to assess Project significance. Principal parameters of this modeling are presented in Table 4.2-8.

⁷ Although the Project is required to comply with CARB's idling limit of 5 minutes, on-site idling emissions was estimated for 15 minutes of truck idling, which would take into account on-site idling while the trucks are waiting to pull up to the loading dock, idling at the loading dock, and idling during check-in and check-out.

Table 4.2-8. Operational Health Risk Assessment AERMOD Operational Principal Parameters

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Southern California Logistics Airport air monitoring station (station 23131) was used for the dispersion modeling (CARB 2021j). A meteorological data set from 2009 through 2010 was obtained from CARB in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban dispersion option was selected due to the developed nature of the Project area and per MDAQMD guidelines. San Bernardino County's population of 2,180,000 was used in the analysis.
Terrain Characteristics	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the U.S. Geological Survey's National Elevation Dataset format with a resolution of 1 degree (approximately 30 meters), consistent with the MDAQMD guidance (MDAQMD 2020).
Emission Sources and Release Parameters	Air dispersion modeling of off-site and on-site truck travel and truck idling were conducted using emissions generated using EMFAC2021. Off-road equipment emissions were estimated using CalEEMod.
Source Release Characterizations	Off-site and on-site truck travel were modeled as a line of adjacent volume sources, and based on EPA methodology, the modeled sources would result in a release height of 3.4 meters, a plume height of 6.8 meters, and a plume width of 9.3 meters (EPA 2015). The truck idling emissions were modeled as a line of adjacent volume sources with a plume height of 3.16 meters, plume width of 3.12 meters, and release height of 4 meters (EPA 2015; SCAQMD 2003b; SJVAPCD 2006).

Source: See Appendix B-2.

Note: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; MDAQMD = Mojave Desert Air Quality Management District; SCAQMD = South Coast Air Quality Management District; EPA = U.S. Environmental Protection Agency.

Regarding receptors, the construction scenario used an 8-kilometer by 8-kilometer Cartesian receptor grid with 400-meter spacing to establish the impact area and evaluate locations of maximum health risk impact. Fine Cartesian receptor grids with 20-meter spacing were placed over residential receptors in close proximity to the Project site.

4.2.4 Impacts Analysis

Threshold A: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less-than-Significant Impact. The Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert set forth a comprehensive set of programs that will lead the MDAB into compliance with federal and state air quality standards. The control measures and related emission reduction estimates within the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. A project is non-conforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable MDAQMD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Zoning changes, specific plans, general plan amendments and similar land use plan changes that do not increase dwelling unit density, do not increase vehicle trips, and do not increase VMT are also deemed to comply with the applicable air quality plan (MDAQMD 2016).

The Project would be required to comply with all applicable MDAQMD Rules and Regulations, including, but not limited to Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust). The Project site is located within the Main Street and Freeway Corridor Specific Plan, and the site is designated for Commercial/Industrial Business Park uses. The Commercial/Industrial Business Park designation is intended to provide for service commercial, light industrial, light manufacturing, and industrial support uses. Therefore, the Project would be consistent with the current land use designation and General Plan.

As discussed below, the Project's construction and operational emissions would not exceed applicable MDAQMD regional thresholds. As such, emissions are considered less than significant, and the Project would not have the potential to increase the frequency or severity of a violation in the federal or state ambient air quality for on-going Project operations. The health effects of criteria air pollutants are discussed further under the next impact criterion and in depth in Appendix B-2.

Based on the preceding considerations, the Project would comply with all applicable all MDAQMD Rules and Regulations and would be consistent with the current land use designation and General Plan. Therefore, impacts associated with the conflicting with the MDAQMD would be less than significant.

Threshold B: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Less-than-Significant Impact. Construction and operation of the Project would result in emissions of criteria air pollutants from mobile, and area sources, which may cause exceedances of federal and state AAQS or contribute to existing nonattainment of AAQS. The following discussion identifies potential short-term construction and long-term operational impacts that would result from implementation of the Project.

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the MDAQMD develops and implements plans for future attainment of AAQS. Although the area of the MDAB where the Project is located is currently designated a nonattainment area for federal and state O₃ standards and federal and state PM₁₀ standards, the MDAB has experienced a substantial reduction in maximum 8-hour concentrations of O₃ over the past 30 years, as well as reductions in PM₁₀ over time, as described in the respective MDAQMD O₃ and PM₁₀ attainment plans. CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the AAQS. Based on these considerations, Project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

Short-Term Construction Impacts

Construction of the Project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

As discussed in the Methodology – Construction subsection of Section 4.2.3, Thresholds of Significance, criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. CalEEMod calculates maximum daily emissions for summer and winter periods. The estimated maximum daily construction emissions without mitigation are summarized in Table 4.2-9. Detailed construction model outputs are presented in Appendix B-1.

Table 4.2-9. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	Pounds Per Day					
2023	98.48	34.6	32.02	0.09	5.95	3.06
Maximum Daily Emissions	98.48	34.6	32.02	0.09	5.95	3.06
<i>MDAQMD Threshold</i>	<i>137</i>	<i>137</i>	<i>548</i>	<i>137</i>	<i>82</i>	<i>65</i>
Threshold Exceeded?	No	No	No	No	No	No

Source: Appendix B-1.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; MDAQMD = Mojave Desert Air Quality Management District.

The values shown are the maximum summer or winter daily emissions results from CalEEMod.

As shown in Table 4.2-9, daily construction emissions would not exceed the MDAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5} during Project construction, and short-term construction impacts would be less than significant.

Long-Term Operational Impacts

Operation of the Project would generate VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from mobile sources, including passenger vehicle and truck trips; area sources, including the use of consumer products, architectural coatings for repainting, and landscape maintenance equipment; energy sources, including combustion of fuels used for space and water heating. CalEEMod uses summer and winter EMFAC emission factors in order to derive vehicle emissions associated with on-road vehicle activities, which vary by season. As such, operational activities for the maximum of either summer or winter scenarios are presented in Table 4.2-10. Detailed operational model outputs are presented in Appendix B-1.

Table 4.2-10. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions

Emissions Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	Pounds per Day					
Area	9.58	<0.01	0.09	<0.01	<0.01	<0.01
Energy	0.15	1.41	1.18	0.01	0.11	0.11
Mobile	3.01	40.04	44.07	0.30	20.90	6.02
Total	12.74	41.81	45.34	0.31	21.01	6.13
<i>MDAQMD Threshold</i>	<i>137</i>	<i>137</i>	<i>548</i>	<i>137</i>	<i>82</i>	<i>65</i>
Threshold Exceeded?	No	No	No	No	No	No

Source: See Appendix B-1 for complete results.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; MDAQMD = Mojave Desert Air Quality Management District; <0.01 = reported value less than 0.01.

As shown in Table 4.2-10, Project operations would not exceed the numerical thresholds of significance for any criteria air pollutant as established by the MDAQMD. This impact would be less than significant.

Health Effects of Criteria Air Pollutants

Construction and operation of the Project would result in emissions that would not exceed the MDAQMD thresholds for criteria air pollutants.

As discussed in Section 4.2.1, Existing Conditions, under the heading Pollutants and Effects, health effects associated with O₃ include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019b). VOCs and NO_x are precursors to O₃, for which the MDAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs and NO_x to regional ambient O₃ concentrations is the result of complex photochemistry. The increases in O₃ concentrations in the MDAB due to O₃ precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O₃ concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O₃ NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O₃ precursors is speculative. That being said, because the Project would not exceed the MDAQMD NO_x thresholds during Project operations, the Project would not contribute to significant health effects associated with O₃.

Health effects associated with NO_x and NO₂ (which is a constituent of NO_x) include lung irritation and enhanced allergic responses (see Section 4.2.1) (CARB 2019c). Because the Project would not exceed the MDAQMD NO_x thresholds, the Project would not contribute to significant health effects associated with NO_x and NO₂.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (see Section 4.2.1) (CARB 2019d). CO tends to be a localized impact associated with congested intersections. The potential for CO hotspots is discussed under the subsequent impact criterion below and determined to be less than significant. Thus, the Project's CO emissions would not contribute to significant health effects associated with CO.

Health effects associated with PM₁₀ include premature death and hospitalization, primarily for worsening of respiratory disease (see Section 4.2.1) (CARB 2017). Construction and operation of the Project would not exceed the MDAQMD threshold for PM₁₀. As such, the Project would not contribute to exceedances of the NAAQS and CAAQS for particulate matter and obstruct the MDAB from coming into attainment for these pollutants, or result in associated health effects.

The California Supreme Court's *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 decision (referred to herein as the Friant Ranch decision; issued on December 24, 2018), addresses the need to correlate mass emission values for criteria air pollutants to specific health consequences, and contains the following direction from the California Supreme Court: "The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further" (*italics original*). Currently, MDAQMD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the Project to specific health effects. In addition, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days.

In connection with the judicial proceedings culminating in issuance of the Friant Ranch decision, the SCAQMD and the San Joaquin Valley Air Pollution Control District (SJVAPCD) filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both the SJVAPCD and the SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in the state. The key, relevant points from the SCAQMD and SJVAPCD briefs are summarized herein and the full amicus briefs are provided in Appendix B-3.

In requiring a health impact type of analysis for criteria air pollutants, it is important to understand how O₃ and PM is formed, dispersed, and regulated. The formation of O₃ and PM in the atmosphere, as secondary pollutants,⁸ involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources. The O₃ reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO₂ is photochemically reformed from NO. In this way, O₃ is controlled by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O₃ (NRC 2005). Although these reactions and interactions are well understood, variability in emission source operations and meteorology creates uncertainty in the modeled O₃ concentrations to which downwind populations may be exposed (NRC 2005). Once formed, O₃ can be transported long distances by wind and due to atmospheric transport, contributions of precursors from the surrounding region can also be important (EPA 2008). Because of the complexity of O₃ formation, a specific tonnage amount of VOCs or NO_x emitted in a particular area does not equate to a particular concentration of O₃ in that area (SJVAPCD 2015). PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O₃, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015). This is especially true for individual projects, like the Project, where Project-generated criteria air pollutant emissions are not derived from a single “point source,” but from construction equipment and mobile sources (passenger cars and trucks) driving to, from and around the Project site.

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. For example, health effects from O₃ are correlated with increases in the ambient level of O₃ in the air a person breathes (SCAQMD 2015). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O₃ levels over an entire region (SCAQMD 2015). The lack of link between the tonnage of precursor pollutants and the concentration of O₃ and PM_{2.5} formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects; rather, it is the concentration of resulting O₃ that causes these effects (SJVAPCD 2015). Indeed, the ambient air quality standards, which are statutorily required to be set by EPA at levels that are requisite to protect the public health, are established as concentrations of O₃ and PM_{2.5} and not as tonnages of their precursor pollutants (EPA 2018b). Because the ambient air quality standards are focused on achieving a particular concentration region-wide, the tools and plans for attaining the AAQS are regional in nature. For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the AAQS, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O₃ or PM that will be created at or near the Project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it “would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have” (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin but are constantly fluctuating based upon meteorology and other environmental factors. SJVAPCD noted that the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated

⁸ Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

that, “Running the photochemical grid model used for predicting O₃ attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved” (SJVAPCD 2015).

SCAQMD and SJVAPCD have indicated that it is not feasible to quantify project-level health impacts based on existing modeling (SCAQMD 2015; SJVAPCD 2015). Even if a metric could be calculated, it would not be reliable because the models are equipped to model the impact of all emission sources in an air basin on attainment and would likely not yield valid information or a measurable increase in O₃ concentrations sufficient to accurately quantify O₃-related health impacts for an individual project.

Nonetheless, following the Supreme Court’s Friant Ranch decision, some EIRs where estimated criteria air pollutant emissions exceeded applicable air district thresholds have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model⁹ and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition [CE]).¹⁰ The publicly available health impact assessments (HIAs) typically present results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from a project’s estimated increase in concentrations of O₃ and PM_{2.5}.¹¹ To date, the five publicly available HIAs reviewed have concluded that the evaluated projects’ health effects associated with the estimated project-generated increase in concentrations of O₃ and PM_{2.5} represent a small increase in incidences and a very small percentage of the number of background incidences, indicating that these health impacts are negligible and potentially within the models’ margin of error. It is also important to note that while the results of the five available HIAs conclude that project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity is also conservatively inputted into the HIA and thus, overestimate health incidences, particularly for PM_{2.5}.

As explained in the SJVAPCD brief and noted previously, running the photochemical grid model used for predicting O₃ attainment with the emissions solely from an individual project like the Friant Ranch project or the Project is not likely to yield valid information given the relative scale involved. The five examples reviewed support the SJVAPCD’s brief contention that consistent, reliable, and meaningful results may not be provided by methods applied at this time. Accordingly, additional work in the industry and more importantly, air district participation, is needed to develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public. Furthermore, at the time of writing, no HIA has concluded that health effects estimated using the photochemical grid model and BenMAP approach are substantial provided that the estimated project-generated incidences represent a very small percentage of the number of background incidences, potentially within the models’ margin of error.

⁹ The first step in the publicly available HIAs includes running a regional photochemical grid model, such as the Community Multiscale Air Quality (CMAQ) model or the Comprehensive Air Quality Model with extensions (CAMx) to estimate the increase in concentrations of O₃ and PM_{2.5} as a result of project-generated emissions of criteria and precursor pollutants. Air districts use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2017).

¹⁰ After estimating the increase in concentrations of O₃ and PM_{2.5}, the second step in the five examples includes use of BenMAP or BenMAP-CE to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2018c). The health impact function in BenMAP-CE incorporates four key sources of data: (i) modeled or monitored air quality changes, (ii) population, (iii) baseline incidence rates, and (iv) an effect estimate. All of the five example HIAs focused on O₃ and PM_{2.5}.

¹¹ The following CEQA documents included a quantitative HIA to address Friant Ranch: (1) California State University Dominguez Hills 2018 Campus Master Plan EIR (CSUDH 2019), (2) March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA 2019), (3) Mineta San Jose Airport Amendment to the Airport Master Plan EIR (City of San Jose 2019), (4) City of Inglewood Basketball and Entertainment Center Project EIR (City of Inglewood 2019), and (5) San Diego State University Mission Valley Campus Master Plan EIR (SDSU 2019).

In summary, construction and operation of the Project would not result in exceedances of the MDAQMD significance thresholds and because the MDAQMD thresholds are based on levels that the MDAB can accommodate without affecting the attainment date for the AAQS and the AAQS are established to protect public health and welfare, the Project is not anticipated to result in health effects associated with NO_x, VOCs, CO, SO_x, PM₁₀, or PM_{2.5}. The potential health effects associated with criteria air pollutants are considered less than significant.

Threshold C: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Less-than-Significant Impact. The potential impact of Project-generated air pollutant emissions at sensitive receptors has been considered. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child-care centers, and athletic facilities can also be considered as sensitive receptors. As discussed in detail below, the Project would not expose sensitive receptors to substantial pollutant concentrations.

Local Carbon Monoxide Concentrations

Mobile source impacts occur on two scales of motion. Regionally, Project-related travel would add to regional trip generation and increase VMT within the local airshed and the MDAB. Locally, Project-generated traffic would be added to the roadway system near the Project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles “cold-started” and operating at pollution-inefficient speeds, and operates on roadways already crowded with non-Project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. However, because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the MDAB is steadily decreasing.

The MDAQMD thresholds of significance for local CO emissions is the 1-hour and 8-hour CAAQS of 20 ppm and 9 ppm, respectively. By definition, these represent levels that are protective of public health. As noted previously, the MDAB is currently designated attainment for both state and national CO ambient air quality standards, and the City of Hesperia typically experiences low background CO concentrations.

As described in Section 4.2.3, to verify that the Project would not cause or contribute to a violation of the CO standard, a screening evaluation was conducted comparing the highest hourly traffic volumes at any studied intersection in proximity to the Project site to the 100,000 vehicles per day criterion from the SCAQMD Air Quality Management Plan (SCAQMD 2003a). The highest average daily trips on a segment of road would be 61,500 daily trips on the I-15 Northbound Ramps and Main Street (Appendix I), which would be substantially less than the 100,000 vehicles per day screening criterion applied. Therefore, impacts associated with CO hotspots would be less than significant.

Toxic Air Contaminant Exposure

As the Project consists of 269,555 square feet of high-cube fulfillment center use and 145,145 general light industrial land use, the potential impact of Project-generated air pollutant emissions at sensitive receptors has been evaluated. As described previously, an HRA for construction and operation has been prepared and is included in full as Appendix B-2.

Construction Health Risk

As discussed in Section 4.2.3, a construction HRA was performed to estimate the Maximum Individual Cancer Risk and the Chronic Hazard Index for residential receptors as a result of Project construction including repaving of the portion of Poplar Road adjacent to the project. Results of the construction HRA are presented in Table 4.2-11.

Table 4.2-11. Construction Health Risk Assessment Results - Unmitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – Residential	Per Million	0.38	10	Less than Significant
Chronic Hazard Index – Residential	Index Value	0.0005	1.0	Less than Significant

Source: Appendix B-2.

Note: CEQA = California Environmental Quality Act.

As shown in Table 4.2-11, Project construction activities would result in a Residential Maximum Individual Cancer Risk of 0.38 in 1 million, which is less than the significance threshold of 10 in 1 million. Project construction would result in a Residential Chronic Hazard Index of 0.0005, which is below the 1.0 significance threshold. The Project construction TAC health risk impacts would be less than significant.

Operational Health Risk

As discussed in Section 4.2.3, an HRA was performed to estimate the Maximum Individual Cancer Risk and Chronic Hazard Index for residential receptors associated with Project operations. Results of the operational HRA are presented in Table 4.2-12.

Table 4.2-12. Operational Health Risk Assessment Results - Unmitigated

Impact Parameter	Units	Impact Level	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – Residential	Per Million	0.71	10	Less than Significant
Chronic Hazard Index – Residential	Index Value	0.0002	1.0	Less than Significant

Source: Appendix B-2.

Notes: CEQA = California Environmental Quality Act.

As shown in Table 4.2-12, the DPM emissions from operation of the Project would result in a Residential Maximum Individual Cancer Risk of 0.71 in 1 million and a Residential Chronic Hazard Index of 0.0002. These risk levels would be less than the MDAQMD significance thresholds and would result in a less than significant impact.

Valley Fever

As discussed in Section 4.2.1 under the subsection Valley Fever, Valley Fever is not highly endemic to San Bernardino County with an incident rate of 1.8 cases per 100,000 people (CDPH 2017). In contrast, in 2016 the statewide annual incident rate was 13.7 per 100,000 people. The California counties considered highly endemic for Valley Fever include Kern (251.7 per 100,000), Kings (157.3 per 100,000), San Luis Obispo (82.8 per 100,000), Fresno (60.8 per 100,000), Tulare (45.3 per 100,000), Madera (31.5 per 100,000), and San Joaquin (25.3 per 100,000), and accounted for 70% of the reported cases in 2016 (CDPH 2017).

Even if present at the site, construction activities may not result in increased incidence of Valley Fever. Propagation of Valley Fever is dependent on climatic conditions, with the potential for growth and surface exposure highest following early seasonal rains and long dry spells. Valley Fever spores can be released when filaments are disturbed by earth-moving activities, although receptors must be exposed to and inhale the spores to be at increased risk of developing Valley Fever. Moreover, exposure to Valley Fever does not guarantee that an individual will become ill—approximately 60% of people exposed to the fungal spores are asymptomatic and show no signs of an infection (USGS 2000).

In order to reduce fugitive dust from the Project and minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the MDAQMD Rules 401 and 403.2, which limit the amount of fugitive dust generated during construction. These requirements are consistent with California Department of Public Health recommendations for the implementation of dust control measures, including regular application of water during soil-disturbance activities, to reduce exposure to Valley Fever by minimizing the potential that the fungal spores become airborne (CDPH 2013). Further, regulations designed to minimize exposure to Valley Fever hazards are included in Title 8 of the California Code of Regulations and would be complied with during the Project's construction phase (California Department of Industrial Relations 2017).

In summary, the Project would not result in a significant impact attributable to Valley Fever exposure based on its geographic location and compliance with applicable regulatory standards and dust mitigation measures, which will serve to minimize the release of and exposure to fungal spores. Therefore, impacts associated with Valley Fever exposure for sensitive receptors would be less than significant.

Threshold D: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less-than-Significant Impact. Land uses most commonly associated with odor complaints generally include agricultural uses (livestock and farming), wastewater treatment plants, food-processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The Project does not include uses that would be substantive sources of objectionable odors. Potential temporary and intermittent odors may result from construction equipment exhaust, the application of asphalt, and architectural coatings. Temporary and intermittent construction-source emissions are controlled through existing requirements and industry Best Management Practices addressing proper storage of and application of construction materials.

Over the life of the Project, odors may result from storage of municipal solid waste pending its transport to area landfills. Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City of Hesperia's solid waste regulations.

The Project would also be required to comply with MDAQMD Rule 402 (Nuisance). Rule 402 provides that “[a] person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property” (MDAQMD 1976). Based on the preceding, the potential for the Project to create objectionable odors affecting a substantial number of people would be less than significant.

Threshold E: Would the Project result in cumulatively considerable air quality impacts?

Less-than-Significant Impact. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the MDAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Individual projects that do not generate operational or construction emissions that exceed the MDAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the MDAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact.

The area of the MDAB in which the Project is located is a nonattainment area for O₃ and PM₁₀ under the NAAQS and/or CAAQS. The poor air quality in the MDAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., VOC and NO_x for O₃) potentially contribute to poor air quality. As indicated in Tables 4.2-8, and 4.2-9 daily construction emissions and operational emissions associated with the Project would not exceed the MDAQMD significance thresholds. As such, Project construction and operational emissions would be cumulatively less than significant.

4.2.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The Project would comply with all applicable all MDAQMD Rules and Regulations and would be consistent with the current land use designation and General Plan. Therefore, impacts associated with the conflicting with the MDAQMD would be less than significant. No mitigation is required.

Threshold B: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Short-Term Construction Impacts

Construction of the Project would result in a **less-than-significant** cumulatively considerable net increase of criteria pollutants for which the Project region is nonattainment. No mitigation is required.

Long-Term Operational Impacts

Operation of the Project would result in a **less-than-significant** cumulatively considerable net increase of criteria pollutants for which the Project region is nonattainment. No mitigation is required.

Threshold C: Would the Project expose sensitive receptors to substantial pollutant concentrations?

The potential impact of Project-generated air pollutant emissions at sensitive receptors has been considered. The Project would not expose sensitive receptors to substantial pollutant concentrations. No mitigation is required.

Threshold D: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The Project would result in **less-than-significant** impacts associated other emissions (such as those leading to odors) which could adversely affect a substantial number of people. No mitigation is required.

Threshold E: Would the Project result in cumulatively considerable air quality impacts?

As indicated in Tables 4.2-8, and 4.2-9 daily construction emissions and operational emissions associated with the Project would not exceed the MDAQMD significance thresholds. As such, Project construction and operational emissions would be cumulatively less than significant. No mitigation is required.

4.2.6 References Cited

- BAAQMD (Bay Area Air Quality Management District). 2017. California Environmental Quality Act Air Quality Guidelines. May 2017. Accessed November 17, 2021. https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en
- California Department of Industrial Relations. 2017. “Protection from Valley Fever.” November 2017. Accessed October 2021. <http://www.dir.ca.gov/dosh/valley-fever-home.html>.
- CAPCOA (California Air Pollution Control Officers Association). 2021. *California Emissions Estimator Model (CalEEMod) User’s Guide Version 2020.4.0*. Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. May 2021. <http://www.caleemod.com>.
- CARB (California Air Resources Board). 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October 2000. Accessed November 17, 2021. <http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf>.
- CARB. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005. Accessed November 17, 2021. <https://www.arb.ca.gov/ch/handbook.pdf>.
- CARB. 2016. “Ambient Air Quality Standards.” May 4, 2016. Accessed November 17, 2021. <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.
- CARB. 2021a. “Glossary.” Accessed November 17, 2021. <https://ww2.arb.ca.gov/about/glossary>.
- CARB. 2021b. “Ozone & Health.” Accessed November 17, 2021. <https://ww2.arb.ca.gov/resources/ozone-and-health>.
- CARB. 2021c. “Nitrogen Dioxide & Health.” Accessed November 17, 2021. <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>.
- CARB. 2021d. “Carbon Monoxide & Health.” Accessed November 17, 2021. <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>.
- CARB. 2021e. “Sulfur Dioxide & Health.” Accessed November 17, 2021. <https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health>.
- CARB. 2021f. “Inhalable Particulate Matter and Health (PM2.5 and PM10).” Accessed November 17, 2021. <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>.
- CARB. 2021g. “Overview: Diesel Exhaust and Health.” Accessed November 17, 2021. <https://www.arb.ca.gov/research/diesel/diesel-health.htm>.
- CARB. 2021h. “Area Designation Maps/State and National.” Accessed November 17, 2021. Available <http://www.arb.ca.gov/desig/adm/adm.htm>.
- CARB. 2021i. “Ambient air quality data” [digital CARB data]. iADAM: Air Quality Data Statistics. Accessed November 17, 2021. <http://www.arb.ca.gov/adam/topfour/topfour1.php>.

- CARB. 2021j. HARP AERMOD Meteorological Files. Accessed September 2021. <https://ww2.arb.ca.gov/resources/documents/harp-aermod-meteorological-files>.
- CARB 2022. CARB Identified Toxic Air Contaminants | California Air Resources Board <https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants> website accessed August 2022
- CDPH (California Department of Public Health). 2013. “Preventing Work-Related Coccidioidomycosis (Valley Fever).” June 2013. <https://www.cdph.ca.gov/Programs/CCDC/DEODC/OHB/HESIS/CDPH%20Document%20Library/CocciFact.pdf>.
- CDPH. 2017. Epidemiologic Summary of Coccidioidomycosis in California, 2016. June 2017. Accessed November 17, 2021. <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciEpiSummary2016.pdf>.
- CIMIS (California Irrigation Management Information System). 2021. CIMIS Monthly Report Victorville Station. Accessed November 17, 2021. <https://cimis.water.ca.gov/UserControls/Reports/MonthlyReportViewer.aspx>.
- City of Hesperia. 2010. *City of Hesperia General Plan Update*. Accessed November 17, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.
- City of Inglewood. 2019. Inglewood Basketball and Entertainment Center Project EIR. http://ibecproject.com/D_AirQuality.pdf.
- City of San Jose. 2019. Mineta San Jose Airport Amendment to the Airport Master Plan EIR. <https://www.sanjoseca.gov/Home/ShowDocument?id=44596>.
- CSUDH (California State University Dominguez Hills). 2019. California State University Dominguez Hills Campus Master Plan EIR. <https://www.csudh.edu/Assets/csudh-sites/fpcm/docs/campus-master-plan/2019-09-11-FEIR-appendices.pdf>.
- EPA (U.S. Environmental Protection Agency). 2008. Final Ozone NAAQS Regulatory Impact Analysis. March 2008. https://www3.epa.gov/ttnecas1/regdata/RIAs/452_R_08_003.pdf
- EPA. 2020. *Integrated Science Assessment for Ozone and Related Photochemical Oxidants*. April 2020. Accessed November 17, 2021. https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NCEA&dirEntryId=348522#:~:text=The%20Integrated%20Science%20Assessment%20for%20Ozone%20and%20Related,Related%20Photochemical%20Oxidants%20under%20the%20Clean%20Air%20Act.
- EPA. 2015. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas. EPA-420-B-15-084. November 2015. Accessed October 20, 2010. <https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf>.
- EPA. 2017. Support Center for Regulatory Atmospheric Modeling (SCRAM) - Photochemical Air Quality Modeling. <https://www.epa.gov/scram/photochemical-air-quality-modeling>.
- EPA. 2018b. “Ground-level Ozone Basics.” Last updated October 31, 2018. <https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics>.

- EPA. 2018c. Community Multiscale Air Quality (CMAQ) Models. <https://www.epa.gov/cmaq/cmaq-models-0>.
- EPA. 2021a. “Criteria Air Pollutants.” August 16, 2021. Accessed November 17, 2021. <https://www.epa.gov/criteria-air-pollutants>.
- EPA. 2021b. “Region 9: Air Quality Analysis, EPA Region 9 Air Quality Maps and Geographic Information.” Last updated June 10, 2021. Accessed November 17, 2021. <https://www3.epa.gov/region9/air/maps/index.html>.
- EPA. 2021. “AirData: Access to Air Pollution Data.” February 2021. <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>.
- March JPA (March Joint Powers Association). 2019. K4 Warehouse and Cactus Channel Improvements EIR. https://www.marchjpa.com/documents/docs_forms/K-4_Final_Draft_EIR.pdf.
- MDAQMD (Mojave Desert Air Quality Management District). 1976. Rule 402 – Nuisance. May 7, 1976. <http://mdaqmd.ca.gov/home/showdocument?id=290>.
- MDAQMD. 1995. Final Mojave Desert Planning Area Federal PM10 Attainment Plan. July 31, 1995. Accessed November 17, 2021. Available <https://www.mdaqmd.ca.gov/home/showpublisheddocument/176/636305689057870000>.
- MDAQMD. 2008. Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-Attainment Area). Adopted June 9, 2008. Accessed November 2021.
- MDAQMD. 2016. “MDAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines.” MDAQMD, Planning, Rule Making and Grants Section, Air Monitoring Section. August 2016. Accessed November 17, 2021. <https://www.mdaqmd.ca.gov/home/showdocument?id=192>.
- MDAQMD. 2020. Comprehensive Emission Inventory Guidelines. December 2020. Accessed September 2021. <https://www.mdaqmd.ca.gov/home/showpublisheddocument/8575/637438780016970000>.
- NRC (National Research Council). 2005. Interim Report of the Committee on Changes in New Source Review Programs for Stationary Sources of Air Pollutants. Washington, D.C.: The National Academies Press. Accessed November 17, 2021. <https://doi.org/10.17226/11208>.
- OEHHA (Office of Environment Health Hazard Assessment). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines: The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. California Environmental Protection Agency, OEHHA. February 2015. Accessed April 3, 2018.
- SCAG (Southern California Association of Governments). 2016. 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. Adopted April 2016. Accessed November 17, 2021. <https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557>.

- SCAG. 2020. Connect SoCal: The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Adopted September 3, 2020. Accessed November 17, 2021. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.
- SCAQMD (South Coast Air Quality Management District). 2003a. Final 2003 Air Quality Management Plan, Appendix V Modeling and Attainment Demonstrations. August 2003. Accessed November 17, 2021. <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2003-air-quality-management-plan/2003-aqmp-appendix-v.pdf?sfvrsn=2>.
- SCAQMD. 2003b. Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis. August 2003. Accessed August 2020. <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.
- SCAQMD. 2015. Brief of Amicus Curiae in Support of Neither Party, Sierra Club v. County of Fresno, Case No. S219783 (filed Apr. 13, 2015). <https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf>.
- SCAQMD. 2021. Preliminary Draft Staff Report, Proposed Rule 2305 Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305 March 2021. Accessed October 20, 2021. https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/pr2305_draft-staff-report_03032021.pdf?sfvrsn=8.
- SDSU (San Diego State University). 2019. San Diego State University Mission Valley Campus Master Plan EIR Additional Information Regarding Potential Health Effects of Air Quality Impacts. December 2019. https://missionvalley.sdsu.edu/assets/pdfs/FEIR/appendices/4_2_3_SDSU_MV_Health_Effects_Memo.pdf
- SJVAPCD (San Joaquin Valley Air Pollution Control District). 2006. Guidance for Air Dispersion Modeling. August. Accessed September 2021. http://www.valleyair.org/busind/pto/Tox_Resources/Modeling%20Guidance.pdf.
- SJVAPCD. 2015. Brief of Amicus Curiae in Support of Defendant and Respondent, County of Fresno, and Real Party in Interest and Respondent, Friant Ranch, L.P., Sierra Club v. County of Fresno, Case No. S219783 (filed Apr. 13, 2015). <https://www.courts.ca.gov/documents/7-s219783-ac-san-joaquin-valley-unified-air-pollution-control-dist-041315.pdf>.
- USGS (U.S. Geological Survey). 2000. Operational Guidelines (version 1.0) for Geological Fieldwork in Areas 1 Endemic for Coccidioidomycosis (Valley Fever). USGS Open-File Report 00-348, Version 1.0. Accessed October 20, 2021. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.486.1526&rep=rep1&type=pdf>.

INTENTIONALLY LEFT BLANK

4.3 Biological Resources

This section describes the existing biological resources conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2 of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following sources:

- Biological Technical Report, Poplar 18 Project, prepared by Dudek in August 2022 (Appendix C)

4.3.1 Existing Conditions

The approximately 22.9-acre Project, including the 17.84-acre Project site and 5.06-acre Off-Site Improvement Area, is located in the in the western part of the Hesperia, which is within the Victor Valley region of San Bernardino County. The Project is on the southwest quadrant of Interstate (I) 15 and Main Street. The Project site is located south of Sultana Road, west of Mesa Linda Street and I-15, north of Poplar Street and west of Lassen Road and U.S. Highway 395. The Project consists of Assessor's Parcel Numbers 3064-581-04-0000 and 3064-581-05-0000. Specifically, the Project is located in in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map. Regional access to the Project is provided via I-15, located east of the Project, and U.S. Highway 395, located west of the Project. Local access to the Project is provided via Poplar Street, Lassen Road, Sultana Road and Mesa Linda Street. The Project is rectangularly shaped and located on two parcels. Building 3 site is vacant and undeveloped, with the exception of a drain located on site.

Ground surface cover consists of moderate native brush and shrub growth, with occasional juniper and Joshua trees located throughout the site. The Project site is subject to disturbance as a result of illegal dumping and trespassing. These unpermitted activities have led to areas of exposed bare soils (where trails have formed) and several debris piles.

Land uses surrounding the Project site primarily consist of vacant land, along with some scattered residential, commercial, light industrial, and utility uses. Specific land uses located in the immediate vicinity of the Project site include the following:

- **North:** Sultana Road
- **East:** Mesa Linda Street and I-5
- **South:** Poplar Street
- **West:** Lassen Road and U.S. Highway 395

In the broader Project vicinity, development includes commercial uses, trucking-related uses (i.e., truck stops), lodging accommodations, big-box retail developments, and residential subdivisions.

4.3.1.1 Topography and Soils

The Project site's surface elevation ranges between approximately 3,600 and 3,630 feet above mean sea level (amsl). The Project site and immediate surrounding area is relatively flat with a slight slope from the southwestern to northeastern corner.

According to the U.S. Department of Agriculture Natural Resources Conservation Service's Web Soil Survey (USDA 2022a), the Project site occurs within the San Bernardino County, Mojave River Area (CA671). The Project site area consists of one soil type: Hesperia loamy fine sand (2% to 5% slopes).

4.3.1.2 Vegetation Communities and Land Covers

Six vegetation communities or land cover types were mapped within the biological survey area (BSA), which includes the Project site and Off-Site Improvements Area plus a 100-foot buffer (Table 2). The spatial distribution of the vegetation communities and land covers are presented on Figure 4.3-1, Biological Resources Map. The Off-Site Improvement Area includes Mesa Linda Street, Lassen Street, and Poplar Street.

Table 4.3-1. Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types within the BSA

Floristic Alliance	Association	Vegetation Community ¹	Project Site (Acres)	Off-Site Areas (Acres)	100-Foot Buffer (Acres)	Total BSA (Acres)
<i>Ericameria nauseosa</i>	<i>Ericameria nauseosa</i> shrubland	Rubber rabbitbrush scrub	3.05	0.14	0.34	3.54
<i>Yucca brevifolia</i>	N/A	Joshua tree woodland	1.49	0.03	0.77	2.28
<i>Brassica nigra</i>	<i>Brassica nigra</i>	Upland Mustards	0.39	1.07	0.07	1.52
N/A	N/A	Disturbed habitat	0.05	0.22	0.13	0.40
<i>Avena</i> spp. – <i>Bromus</i> spp. <i>Herbaceous Semi-Natural</i>	Wild oats and annual brome grasslands	Non-native grassland	12.86	1.36	4.73	18.94
N/A	N/A	Urban/Developed	—	2.25	0.25	2.50
Total²			17.84	5.06	6.28	29.18

Notes: BSA = biological survey area; N/A = Not Applicable.

¹ The spatial distribution of the vegetation communities and land covers are presented on Figure 4.3-1.

² Total acreages may not sum exactly due to rounding

California Department of Fish and Wildlife (CDFW) rankings of 1, 2, or 3 are considered high priority for inventory or special status, and impacts to these communities typically require mitigation. One vegetation community, Joshua tree woodland, has a CDFW ranking of 3.2 and is considered special status.

Rubber Rabbitbrush Scrub

Rubber rabbitbrush scrub or *Ericameria nauseosa shrubland* alliance is recognized by the Natural Communities List and the communities include rubber rabbitbrush (*Ericameria nauseosa*) as the dominant or codominant species in the shrub canopy with a sparse or grassy herbaceous layer (CNPS 2022b). Rubber rabbitbrush scrub has an open

to continuous shrub canopy of less than 3 meters (9 feet) in height (CNPS 2022b). This alliance consists of at least 2% absolute cover of rubber rabbitbrush or more than 25% relative cover in the shrub canopy (CNPS 2022b). The rubber rabbitbrush scrub occurs in disturbed settings on well-drain sands and gravels (CNPS 2022b).

Rubber rabbitbrush scrub occurs north of Poplar Street along the southern boundary and within the central portions of the BSA. This community is dominated by rubber rabbitbrush. The rubber rabbitbrush scrub alliance is ranked as S5 and therefore is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

Joshua Tree Woodland

Joshua tree woodland or *Yucca brevifolia* alliance is recognized by the Natural Communities List, and the community includes western Joshua tree (*Yucca brevifolia*) as an emergent small tree over a shrub or grass layer (CNPS 2022b). Joshua tree woodland has an open to intermittent tree canopy less than 14 meters (45 feet) in height, and an open to intermittent shrub and herbaceous layer with perennial grasses and seasonal annuals (CNPS 2022b). This alliance consists of Joshua trees evenly distributed of at least 1% cover with *Juniperus* and/or *Pinus* spp. of at least more than 1% absolute cover in tree canopy (CNPS 2022b). Joshua tree woodland alliance occurs on gentle alluvial fans, ridges, and gentle to moderate slopes. Joshua tree woodland may occupy coarse sands, very fine silts, gravel, or sandy loams (CNPS 2022b).

Joshua tree woodland occurs in one patch within the western portion of the BSA, west of Lassen Street. While only two Joshua trees were mapped within the BSA in this location, this community continues west outside of the BSA. In addition, there are Portions of the western BSA where individual Joshua trees are located do not meet the minimum requirement of 1% cover and therefore were not mapped as Joshua tree woodland alliance. The Joshua tree woodland alliance is ranked as S3.2 and is considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

Upland Mustards

The upland mustards and other ruderal forbs alliance features black mustard (*Brassica nigra*), shortpod mustard (*Hirschfeldia incana*), Maltese star-thistle (*Centaurea melitensis*), or yellow star-thistle (*Centaurea solstitialis*), among other similar ruderal forbs, as the dominant species in the herbaceous layer. Per alliance membership rules, black mustard and shortpod mustard, or other mustards must make up more than 80% of the relative cover along with other non-native plant species. Communities within this alliance can grow in an open to continuous layer under 3 meters (10 feet) in height. Emergent shrubs may be present but at low cover. Upland mustards and other ruderal forbs occur in fallow fields, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, and generally within disturbed areas under 1,500 meters (4,921 feet) amsl (CNPS 2022b).

Upland mustards occur in one patch immediately north of Poplar Street, within the southern portions of the BSA. This community is dominated by shortpod mustard, ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), and common Mediterranean grass (*Schismus barbatus*), with a low cover of redstem stork's bill (*Erodium cicutarium*). The upland mustards and other ruderal forbs semi-natural alliance is not ranked by CDFW (2021), and therefore is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

Disturbed Habitat

Although not recognized by the California Natural Communities List (CDFW 2021), disturbed habitat refers to areas that have had physical anthropogenic disturbance and, as a result, cannot be identified as a native or naturalized vegetation association. However, these areas do have a recognizable soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species.

Within the BSA, disturbed habitat includes the existing dirt roads including Lassen Street within the western portion of the BSA and an unnamed dirt road located within the southeastern portion of the BSA. These roads are commonly used by hikers and vehicles. Disturbed habitat is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

Non-Native Grassland

Non-native grassland or *Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural alliance, is recognized by the Natural Communities List and the community includes wild oats (*Avena* spp.) and annual brome (*Bromus* spp.) as the dominant or co-dominant species, along with other non-natives in the herbaceous layer (CNPS 2022b). Non-native grassland has an open to continuous herbaceous cover of less than 1.2 meters (4 feet) in height (CNPS 2022b). Non-native grassland occurs in foothills, waste places, rangelands, and opening in woodlands (CNPS 2022b).

Non-native grassland is the largest community found within the BSA, and occurs throughout the site. It is co-dominated by a mix of non-native grasses, including ripgut brome, red brome, soft brome (*Bromus hordeaceus*), cheatgrass (*Bromus tectorum*), and common Mediterranean grass, with a low cover of redstem stork's bill. Non-native grassland is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

Urban/Developed Land

Although not recognized by the Natural Communities List (CDFW 2021), urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

Within the BSA, urban/developed land consists of the paved roads: Poplar Street running east/west along the southern boundary, and Mesa Linda Street continuing north/south through the eastern portion of the BSA. Urban/Developed is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

4.3.1.3 Plants and Wildlife Observed

Biological field surveys, including a biological reconnaissance survey, aquatic resources delineation, western Joshua tree mapping, protocol presence/absence survey for Mojave desert tortoise (*Gopherus agassizii*) and Mohave ground squirrel (*Xerospermophilus mohavensis*), and focused special-status plant surveys were conducted within the BSA from November 2021 through July 2022. All plant and wildlife species observed during the surveys were recorded.

Plants

A total of 48 species of native or naturalized plants, 36 native (75%) and 12 non-native (25%), were recorded within the BSA. A full list of plant species observed is provided in Appendix D, Plant Compendium of Appendix C (Biological Technical Report). Dipodomys Ecological Consulting biologists observed the following additional plant species: bristly fiddleneck (*Amsinckia tessellata*), compact brome (*Bromus madritensis*), bluedicks (*Dipterostemon capitatus*), California goldfields (*Lasthenia californica*), and Mojave cottonthorn (*Tetradymia stenolepis*) (Appendix C of Appendix C).

Wildlife

A total of 17 wildlife species, consisting of 16 native species (94%) and one non-native species (6%), were recorded within the BSA or vicinity during surveys (Appendix E of Appendix C). Birds detected on or in the immediate vicinity of the BSA included house finch (*Haemorhous mexicanus*), common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), house sparrow (*Passer domesticus*), phainopepla (*Phainopepla nitens*), mountain bluebird (*Sialia currucoides*), yellow-rumped warbler (*Setophaga coronata*), cactus wren (*Campylorhynchus brunneicapillus*), and white-crowned sparrow (*Zonotrichia leucophrys*). Mammals detected included coyote (*Canis latrans*), black-tailed jackrabbit (*Lepus californicus*), and desert cottontail (*Sylvilagus audubonii*). One reptile was detected and included common side-blotched lizard (*Uta stansburiana*). Dipodomys Ecological Consulting biologists observed the following additional mammal species: California ground squirrels (*Otospermophilus beecheyi*), white-tailed antelope ground squirrel (*Otospermophilus beecheyi*), and Panamint kangaroo rat (*Dipodomys panamintinus*) (Appendix C of Appendix C)

4.3.1.4 Special-Status Plants

Special-status plants include those listed, or candidates for listing, as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and CDFW, and species identified as rare by the California Native Plant Society (particularly California Rare Plant Rank [CRPR] 1A, presumed extinct in California; CRPR 1B, rare, threatened, or endangered throughout its range; and CRPR 2, rare or endangered in California, more common elsewhere).

Dudek biologists performed an extensive desktop review of literature, existing documentation, and geographic information system (GIS) data to evaluate the potential for special-status plant species to occur within the BSA. Each special-status plant species was assigned a rating of “not expected,” “low,” “moderate,” or “high” potential to occur based on relative location to known occurrences, vegetation community, soil, and elevation. Based on the results of the literature review and database searches, 28 special-status plant species were identified as potentially occurring within the region of the BSA, and 6 species were determined to have at least a moderate potential to occur within the BSA: western Joshua tree, white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), Mojave monkeyflower (*Diplacus mohavensis*), sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*), short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), and beaver dam breadroot (*Pediomelum castoreum*). Therefore, a focused survey for these species was conducted on May 9, 2022, as further detailed in Appendix C, Section 3.2.4.1, Special-Status Plant Survey. One special-status plant species, western Joshua tree, was observed within the BSA and is further discussed in Section 5.3.2, Western Joshua Tree. No other listed or non-listed CRPR 1 or CRPR 2 plants were observed during the focused surveys conducted on May 9, 2022. There are no special-status plant species that were determined to have a moderate or high potential to occur within the BSA based on the soils, vegetation communities (habitat) present, elevation range, and previous known locations based on the CNDDb, the USFWS Information for Planning and Conservation (IPaC) database, and the California Native Plant Society Inventory (Appendix G of Appendix C).

Western Joshua Tree

Western Joshua tree is a California State Candidate for Listing. Western Joshua tree is a monocot tree in the asparagus family (Agavaceae) that occurs within Joshua tree woodland, Great Basin grassland and scrub, Mojavean desert scrub, pinyon and juniper woodland, Sonoran desert scrub, and valley and foothill grassland. This species occurs in San Bernardino County and other southern and eastern counties in California from 1,310 to 6,560 feet amsl (CNPS 2022b). This species typically blooms in April and May.

A total of 32 western Joshua tree individuals were observed in the western and northern portions of the BSA within Joshua tree woodland, rubber rabbitbrush scrub, and non-native grassland (Figure 4.3-1).

Desert Native Plants

No desert native plant species, except for western Joshua tree, were observed within the BSA during the focused desert native plant survey (Figure 4.3-1).

4.3.1.5 Special-Status Wildlife

Special-status wildlife include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, and those designated as species of special concern by CDFW and as sensitive by USFWS.

Similar to special-status plants, Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status wildlife species to occur within the BSA. Each special-status wildlife species was assigned a rating of “not expected,” “low,” “moderate,” or “high” potential to occur based on relative location to known occurrences and vegetation community/habitat association. Based on the results of the literature review and database searches, 42 special-status wildlife species were reported in the CNDDDB and USFWS databases as occurring in the vicinity of the BSA. Of these, two wildlife species were determined to have a moderate potential to occur within the BSA based on habitat present and previous known locations in the CNDDDB (CDFW 2022c) and USFWS Information for Planning and Conservation database (USFWS 2022b): burrowing owl (*Athene cunicularia*) and loggerhead shrike (*Lanius ludovicianus*). Protocol surveys for desert tortoise and Mohave ground squirrel were negative. Although desert kit fox (*Vulpes macrotis arsipus*) and American badger (*Taxidea taxus*) are not expected to occur within the BSA, in an abundance of caution, these species were also included and analyzed. These species, in addition to burrowing owl and loggerhead shrike are detailed in the following discussion.

Burrowing Owl

Burrowing owl is a USFWS Bird of Conservation Concern and a California Species of Special Concern. With a relatively wide-ranging distribution throughout the west, burrowing owls are considered to be habitat generalists (Lantz et al. 2004). In California, burrowing owls are yearlong residents of open, dry grassland and desert habitats, and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats (Zeiner et al. 1990). Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils (Haug et al. 1993).

The presence of burrows is the most essential component of burrowing owl habitat because they are required for nesting, roosting, cover, and caching prey (Coulombe 1971; Martin 1973; Green and Anthony 1989; Haug et al. 1993). In California, western burrowing owls most commonly live in burrows created by California ground squirrels (*Spermophilus beecheyi*). Burrowing owls may occur in human-altered landscapes such as agricultural areas, ruderal grassy fields, vacant lots, and pastures if the vegetation structure is suitable (i.e., open and sparse); useable burrows are available, and foraging habitat occurs in close proximity (Gervais et al. 2008). Debris piles, riprap, culverts, and pipes can be used for nesting and roosting.

Burrowing owl has moderate potential to occur within the BSA.

Loggerhead Shrike

Loggerhead shrike is a USFWS Bird of Conservation Concern and a California Species of Special Concern. It is widespread throughout the United States, Mexico, and portions of Canada (Humble 2008). The species is a yearlong

resident in most of the United States, including from California east to Virginia and south to Florida, and in Mexico. In California, although shrikes are widespread at the lower elevations in the state, the largest breeding populations are located in portions of the Central Valley, the Coast Ranges, and the southeastern deserts (Humple 2008).

Preferred habitats for loggerhead shrikes are open areas that include scattered shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground, as well as nearby spiny vegetation or human-made structures (such as the top of chain-link fences or barbed wire) that provide a location to impale prey upon for storage or manipulation (Humple 2008). Loggerhead shrikes occur most frequently in riparian areas along woodland edges, grasslands with sufficient perch and butcher sites, scrublands, and open canopied woodlands, although they can be quite common in agricultural and grazing areas, and can sometimes be found in mowed roadsides, cemeteries, and golf courses. Loggerhead shrikes occur only rarely in heavily urbanized areas. For nesting, the height of shrubs and presence of canopy cover are most important (Yosef 1996).

Loggerhead shrike has moderate potential to occur within the BSA.

Desert Tortoise

Desert tortoise (*Gopherus agassizii*) is a federally and state-listed threatened species. The range of the Mojave population includes portions of the Mojave Desert and the Colorado Desert in Southern California (parts of Inyo, Kern, Los Angeles, San Bernardino, and Riverside Counties), southern Nevada (Clark, Esmeralda, Nye, and Lincoln Counties), northwestern Arizona (Mohave County), and southwestern Utah (Washington County).

The typical habitat for desert tortoise in the Mojave Desert is creosote bush scrub where precipitation ranges from 2 to 8 inches, with relatively high diversity of perennial plants, and high productivity of ephemeral plants. Throughout most of the Mojave Desert, desert tortoises occur most commonly on gently sloping terrain with sandy gravel soils and where there is sparse cover of low-growing shrubs, which allows for the establishment of herbaceous plants. Soils must be friable enough for digging of burrows, but firm enough so that burrows do not collapse (USFWS 2008). Although populations of desert tortoise are not generally known to inhabit elevations much higher than 4,000 feet amsl, they occur from below sea level to an elevation of 7,300 feet amsl. Occupied habitat varies from flats and slopes dominated by creosote bush scrub at low elevations, to rocky slopes in blackbrush and juniper woodland ecotones at higher elevations (USFWS 2008).

Desert tortoise was not observed during 2022 protocol surveys.

Mohave Ground Squirrel

Mohave ground squirrel is a State of California threatened species. This species' distribution range is restricted to the Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo Counties (Zeiner et al. 1990). Mohave ground squirrels generally inhabit areas where the soil is friable and sandy or gravelly. Mohave ground squirrels occur in desert scrub habitats dominated by creosote bush and desert saltbush scrub at elevations from 1,800 to 5,000 feet amsl.

Mohave ground squirrel was not observed during 2022 focused protocol surveys.

American Badger and Desert Kit Fox

American badger is a California Species of Special Concern. Desert kit fox is considered a "fur-bearing mammal," protected from take under the California Fish and Game Commission's Mammal Hunting Regulations (Subdivision 2, Chapter 5), which effectively protects it from hunting pressure. Desert kit fox is not listed by USFWS

or CDFW under any special-status designation. Desert kit fox lives in the open desert, on creosote bush flats, and amongst sand dunes, and American badgers prefer open scrub or grassy areas (NPS 2015; USGS 2020). The Project site is predominated by Joshua tree woodland, and lacks creosote bush flats, sand dunes, or larger areas of open scrub or grassy areas. Thus, American badger is not expected to occur within the BSA due to a lack of suitable vegetation to support this species. Desert kit fox is not expected to occur within the BSA due to the surrounding areas that are conducive to stray dogs that further limit the potential for this species to occur. the Project site is not expected to support either desert kit fox or American badger. Furthermore, no desert kit fox or American badger individuals (or sign) were observed during desert tortoise or Mohave ground squirrel surveys, or incidentally observed during other focused surveys conducted within the BSA.

Notwithstanding, in an abundance of caution and to ensure that potential impacts to these species are less than significant, these species are analyzed.

4.3.1.6 Aquatic Resources

The Jurisdictional Aquatic Resources Delineation identified one ephemeral drainage within the BSA (Appendix A of Appendix C). The results of the jurisdictional delineation concluded there is approximately 0.06 acres (396 linear feet) of jurisdictional aquatic resources within the BSA (Figure 4.3-2, Jurisdictional Aquatic Resources Map). Of that total, all 0.06 acres is non-wetland waters of the state under Regional Water Quality Control Board (RWQCB) jurisdiction and streambeds under CDFW jurisdiction. This feature is not likely subject to U.S. Army Corps of Engineers (USACE) jurisdiction because this feature is isolated and does not meet the relatively permanent or significant nexus standard as a waters of the United States.

The BSA also included a swale south of Poplar Street in the southern portion of the BSA. The swale appears to have been developed to collect seasonal precipitation, but lacked a defined bed and bank, ordinary high water mark, established hydrophytic vegetation, or indicators of hydric soil. This topographical feature would not constitute jurisdictional resources regulated by CDFW and/or RWQCB.

4.3.1.7 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The Project site is located in an area of encroaching development and is regionally isolated by U.S. Highway 395 to the west and I-15 to the east. All terrestrial species' movement is hindered by I-15 and U.S. Highway 395, and, to a lesser degree, surface streets and paved roads, including Poplar Street running east/west along the southern boundary and Mesa Linda Street continuing north/south along the eastern boundary of the BSA. As a result, the Project site does not provide for regional wildlife movement or serve as a regional wildlife corridor. However, on a local level, wildlife may move across the site when migrating or foraging/hunting. Because the BSA does not provide

for regional wildlife movement or serve as a regional wildlife corridor, the Project is not expected to contribute to the impediment of local or seasonal movement of wildlife through the surrounding habitat.

4.3.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by USFWS for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under FESA, it is unlawful to “take” any listed species; “take” is defined as, “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the intentional and unintentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, “take” is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Currently, the Migratory Birds office considers nests that support eggs, nestlings, or juveniles to be active. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Clean Water Act

The Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The RWQCBs administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found at 33 Code of Federal Regulations (CFR) Parts 320 through 332. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction with USACE (40 CFR 230). The guidelines allow the

discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

Based on a recent court case ordering vacation of the Navigable Waters Protection Rule, USACE and the U.S. Environmental Protection Agency halted implementation of the rule and are interpreting waters of the United States consistent with the pre-2015 regulatory regime until further notice. Per 33 CFR 328.3(a), “waters of the United States” are defined as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.
8. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

The USACE/U.S. Environmental Protection Agency Rapanos Guidance states that USACE regulates traditional navigable waters, adjacent wetlands, relatively permanent waters tributary to traditional navigable waters, and adjacent wetlands. Non-relatively permanent waters (those exhibiting less than 3 months of continuous surface flows) and their adjacent wetlands are regulated if there is a significant nexus from the site to traditional navigable waters.

The State Water Resources Control Board has authority over wetlands through Section 401 of the CWA, as well as the Porter–Cologne Water Quality Control Act (Porter–Cologne Act), California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredge or fill material into waters of the United States) first obtain certification from the appropriate state agency stating that the fill is consistent with the state’s water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the State Water Resources Control Board to the nine RWQCBs. A request for certification is submitted to the RWQCB at the same time that an application is filed with USACE.

State

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code, Sections 2050–2068) provides protection and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, under CESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to FESA, and is prohibited for both listed and candidate species. Take authorization may be obtained by a project applicant from the California Department of Fish and Wildlife (CDFW) under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of mitigation implementation, and monitoring of mitigation measures.

On October 21, 2019, the California Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list western Joshua tree (*Yucca brevifolia*) (Center for Biological Diversity 2019).¹ On November 1, 2019, the Commission referred the petition to CDFW for evaluation. CDFW evaluated the scientific information presented in the petition and other relevant information possessed by CDFW at the time of review, and prepared a report for submittal to the Commission. The report states that CDFW recommended that the Commission accept the petition for further consideration of western Joshua tree under CESA. On September 22, 2020, the Commission approved the petition to accept the candidacy proposal for western Joshua tree, effective October 9, 2020 (CDFW 2020a). When a plant or wildlife species is granted candidacy under CESA, the species is given the same protection as a threatened or endangered species while the Commission evaluates whether formal listing as threatened or endangered under is warranted. For this Project, take or removal of western Joshua trees would require a 2081 Incidental Take Permit from CDFW.

California Fish and Game Code

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the “take” of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Sections 1600–1616

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. CDFW takes jurisdiction to the top of bank of the stream, or the limit of the adjacent riparian vegetation, which may include oak

¹ On October 21, 2019, the California Fish and Game Commission received a petition to list the following as threatened under the California Endangered Species Act: (1) western Joshua tree (*Yucca brevifolia*) throughout its California range, or, in the event the Commission determines that listing of *Yucca brevifolia* throughout its California range is not warranted, then (2) the western Joshua tree population within the northern part of western Joshua tree’s California range, or (3) the western Joshua tree population within the southern part of western Joshua tree’s California range.

woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high water mark to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under California Fish and Game Code, Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete certified CEQA document.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (Section 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the Legislature’s intent to “preserve, protect and enhance rare and endangered plants in this State.” The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as “endangered” or “rare,” and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, the categories of “threatened” and “endangered” species were added to CESA. All “rare” animals in CESA were converted to “threatened,” but this did not change for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the Project proponent.

Nesting Birds

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

California Environmental Quality Act

CEQA requires identification of a project’s potentially significant impacts on biological resources, and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

The State of California CEQA Guidelines (CEQA Guidelines) Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose “survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors.” A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists “in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or ... [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered ‘threatened’ as that term is used in the federal Endangered Species Act.” Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of “Special Species” as “a general term that refers to all of the taxa the California Natural Diversity Database (CNDDDB) is interested in tracking, regardless of their legal or protection status.” This is a broader list than those species that are protected under FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List Species. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as CRPR 1 and 2 by the California Native Plant Society, and potentially some CRPR 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines requires an evaluation of impacts to “any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.”

Porter–Cologne Water Quality Control Act

Pursuant to provisions of the Porter–Cologne Act, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code Section 13260[a]). The State Water Resources Control Board defines a water of the state as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code Section 13050[e]). All waters of the United States are waters of the state. Waters of the state include wetlands, and the State Water Resources Control Board definition of wetlands includes the following:

1. Natural wetlands.
2. Wetlands created by modification of a surface water of the state.
3. Artificial wetlands that meet any of the following criteria:
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration.
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state.
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape.
 - d. Greater than or equal to 1 acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

Wetlands that may not meet all of USACE’s wetland delineation criteria are considered wetland waters of the state if, “under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation” (SWRCB 2019). Additionally, aquatic resources that USACE determines to not be waters of the

United States because they lack a significant nexus to a traditional navigable water or are above the ordinary high water mark limit of federal jurisdiction, may also be considered waters of the state. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (waste discharge requirements) for impacts to waters of the state under the Porter–Cologne Act.

California Desert Native Plants Act

The purpose of the California Desert Native Plants Act (CDNPA) is to protect certain species of California desert native plants from unlawful harvesting on both public and privately owned lands. The CDNPA only applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties. Within these counties, the CDNPA prohibits the harvest, transport, sale, or possession of specific native desert plants unless a person has a valid permit or wood receipt, and the required tags and seals. The appropriate permits, tags and seals must be obtained from the sheriff or commissioner of the county where collecting will occur, and the county will charge a fee. More information on the CDNPA, including the species protected under the law, is available by reading the provisions of the law.

Local

San Bernardino County General Plan and Development Code

The County of San Bernardino General Plan contains the goals and policies that guide future development within San Bernardino County (County of San Bernardino 2007). San Bernardino County is divided into three distinct geographic planning regions: the Valley, the Mountains, and the Desert. The Project site occurs within the Desert Planning Region of San Bernardino County. The Desert Planning Region has two goals and policies: (1) to preserve open lands by working with the Bureau of Land Management, and (2) to ensure that off-highway vehicle use is managed to protect environmentally sensitive resources.

The Project would also need to comply with the Development Code. The County of San Bernardino Development Code (County of San Bernardino 2014) implements the goals and policies of the General Plan. Chapter 88.01.060, Desert Native Plant Protection, of the Development Code is a subset of the Plant Protection and Management Code (Chapter 88.01 of the Development Code) and focuses on the conservation of specified desert plant species.

The City of Hesperia General Plan

The City of Hesperia (City) General Plan Conservation and Open Space Elements (City of Hesperia 2010) include goals and policies that address biological resources. The following goals and policies pertain to biological resources and are relevant to the Project:

Goal CN-3. Minimize development and set aside necessary open space near and along the surface waters as well as those washes and other water passageways located in the City to preserve and protect plant and animal species and their natural habitat dependent on such surface waters and waterways.

Policy CN-3.1. Monitor the development impacts to these surface water resources within the city.

Policy CN 3.2. Preserve areas within the Oro Grande wash and un-named wash #1 that exhibit ideal native habitat in a natural state.

Goal CN 4. Establish policies and regulations to protect the natural environment and habitat of the City's biological resources.

Policy CN-4.1. Preserve pristine open space areas and known wildlife corridors areas for conservation to protect sensitive species and their habitats.

Policy CN-4.2. Encourage the protection, preservation and long-term viability of environmentally sensitive habitats and species in the City.

Policy CN-4.3. Identify lands that are suitable for preservation for sensitive species and their habitats.

Policy CN-4.4. In those areas known as possible habitat for endangered and sensitive species, require proper assessments before authorizing development.

Policy CN-4.5. Where such assessments indicate the presence of endangered or sensitive species, require appropriate actions to preserve the habitat and protect the identified species.

City of Hesperia Municipal Code, Chapter 16.24 – Protected Plant Policy

Chapter 16.24 of the Hesperia Municipal Code identifies the City's Protected Plant Policies. This chapter establishes policies governing the removal of protected plants, including the following (City of Hesperia 2009):

1. The following regulated desert native plants with stems two inches or greater in diameter or six feet or greater in height:
 - a. *Dalea spinosa* (smoketree);
 - b. All species of the family *Agavaceae* (century plants, nolin, yuccas);
 - c. All species of the genus *Prosopis* (mesquites).
2. Creosote rings, ten feet or greater in diameter.
3. All Joshua trees (mature and immature).
4. All plants protected or regulated by the California Desert Native Plants Act.

Additionally, Section 16.24.060 of the Hesperia Municipal Code states the following (City of Hesperia 2009):

Prior to the issuance of a native tree or plant removal permit in conjunction with a development permit and/or approval of a land use application which authorizes such removal, a plot plan or grading plan shall be approved by the appropriate City review authority for each site indicating exactly which trees or plants are authorized to be removed. The required information can be added to any other required site plan. Prior to issuance of development permits in areas with native trees or plants that are subject to the provisions of this chapter, a preconstruction inspection shall be conducted by the appropriate authority. Such preconstruction inspections may be combined with any other required inspection.

Protected Plant Plan and Relocation/Adoption

Furthermore, the City's Protected Plants policy (City of Hesperia 2009) states the following for Tentative Tract, non-single-family residential developments (i.e., commercial, industrial, and apartment development):

- A protected plant plan shall be prepared by a certified arborist or registered botanist.
- An application and fee shall be completed and paid to the City.
- Healthy, transplantable plants shall be relocated on site or may be placed in an adoption program.

To qualify as an approved adoption program, a developer shall provide a letter on company letterhead, describing the program and the community notification process. The program shall identify the following, as a minimum.

- A. A public notice process which may include publication in local newspapers, radio advertisement, hand distributed fliers, and other noticing techniques. Noticing must occur over a period of not less than three weeks.
- B. The location where the trees may be viewed by the public and a clearly identified period of at least two weeks (including weekends) when trees/plants are available for adoption.
- C. The person that will be available on-site to assist those adopting trees to find the actual trees/plants for removal. An on-site or cell phone number for that person is required.
- D. A note that a copy of the City Joshua Tree Transplanting Guidelines will be provided to each adopter.
- E. A log showing the name, address, and phone number of each adopter and the number and type of trees/plants they received.

Note: At least 50% of the transplantable trees and plants shall be adopted or the remaining number below 50% shall be purchased at \$350 per transplantable tree. Purchased trees must be recycled at Advance Disposal.

Per Hesperia Municipal Code Section 16.24.040, the reviewing authority must authorize the removal of a native tree or plant subject to the provisions of the Hesperia Municipal Code only if the following findings are made:

- A. The removal of the native tree or plant does not have a significant adverse impact on any proposed mitigation measures, soil retention, soil erosion and sediment control measures, scenic routes, flood and surface water runoff and wildlife habitats (flora and fauna), especially those with limited habitats (e.g., eagles).
- B. The removal of the native tree or plant is justified for one of the following reasons:
 - 1. The location of the native tree or plant and/or its drip line interferes with the reasonable improvement of the site with an allowed structure, sewage disposal area, paved area or other approved improvement or ground disturbing activity. Also such improvements have been designed in such a manner as to save as many healthy native trees and/or plants as reasonably practicable in conjunction with the proposed improvements;
 - 2. The location of the native tree or plant and/or its drip line interferes with the planned improvement of a street or development of an approved access to the subject or adjoining private property;
 - 3. The location of the native tree or plant is hazardous to pedestrian or vehicular travel or safety as determined by the director of transportation, flood control and airports or other county reviewing authority;
 - 4. The native tree or plant or its presence interferes with or is causing excessive damage to utility services or facilities, roadways, sidewalks, curbs, gutters, pavement, sewer line(s), drainage or flood control improvements, foundations, existing structures, or municipal improvements;
 - 5. The condition or location of the native plant or tree is adjacent to and in such close proximity to existing or proposed structure that the native plant or tree has or will sustain significant damage.

6. Joshua trees that are proposed to be removed have been transplanted or stockpiled for future transplanting wherever possible. In the instance of stockpiling the permittee has posted a bond to ensure such Joshua trees are transplanted appropriately.

4.3.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to biological resources are based on CEQA Guidelines Appendix G. Potential Project-related impacts analyzed in this section account for biological resources that occur or have the potential to occur on the Project site and the Off-Site Improvement Area. According to CEQA Guidelines Appendix G, a significant impact related to biological resources would occur if the Project would:

- A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- C. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- F. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.3.4 Impacts Analysis

Threshold A: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less-than-Significant Impact with Mitigation Incorporated. The following section evaluates the Project's potential direct and indirect effects on plant and wildlife species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Special-Status Plant Species

Direct Impacts

No non-listed special-status plant species were observed or have high or moderate potential to occur within the BSA; therefore, the Project would have no direct or indirect impacts to non-listed special-status plant species. One listed special-status plant species was observed within the BSA: western Joshua tree.

Western Joshua Tree

Western Joshua tree, a candidate for state listing under CESA, was observed and would be directly impacted by the Project. Based on the site plan, implementation of the Project would result in direct impacts to 16 western Joshua tree individuals. All ground-disturbing activities, even areas temporarily impacted, are considered permanent impacts to western Joshua trees. Direct impacts to western Joshua trees would be significant absent mitigation.

Based on a literature review completed by CDFW, CDFW would like the western Joshua tree locations to be buffered by 186 feet to account for the impacts to the seed bank for western Joshua trees and their associated habitat. Therefore, a 186-foot buffer (or radius) was applied to each western Joshua tree location. Direct impacts to this 186-foot buffer were analyzed, and the Project would result in 10.9 acres of impacts to western Joshua trees, their seed bank, and their associated habitat.

As required by Mitigation Measure (MM) BIO-1, mitigation for direct and indirect impacts to 32 western Joshua trees would be fulfilled through conservation of western Joshua tree through purchase of credits at a CDFW-approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Additionally, as required by MM-BIO-2 and in accordance with Chapter 16.24 of the Hesperia Municipal Code, the preparation of a western Joshua tree and desert native plants relocation plan is required to mitigate impacts to western Joshua trees as a result of the Project (also further discussed in Section 6.5, Impacts to Wildlife Corridors and Habitat Linkages). As such, a Joshua Tree Preservation, Protection, and Relocation Plan, and California Desert Native Plant Relocation Plan (Appendix E) was prepared to provide detailed specifications for the Project applicant to meet the requirements of Chapter 16.24 of the Hesperia Municipal Code to protect, preserve, and mitigate impacts to western Joshua trees. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to Joshua tree woodland. Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-2 (Relocation of Desert Native Plants) would reduce potential direct impacts to western Joshua trees to less than significant.

Indirect Impacts

Western Joshua Tree

Based on a letter from CDFW, any western Joshua tree within 186 feet of the direct impact footprint would be considered indirectly impacted. Thus, although these 16 western Joshua trees would be directly avoided, CDFW would consider these trees to be indirectly impacted due to loss of seedbank and associated species.

Construction-related indirect impacts may include inadvertent spillover impacts outside of the construction footprint, dust accumulation on western Joshua tree individuals, chemical spills, stormwater erosion and sedimentation, and increased wildfire risk. Potential long-term (post-construction) indirect impacts from operation and maintenance activities may include effects of herbicides, changes in water quality, increased wildfire risk, induced demand on the surrounding area, increased traffic and vehicle emissions, and accidental chemical spills. Indirect impacts to western Joshua tree individuals would be significant absent mitigation.

Implementation of MM-BIO-6 gives the Project's Designated Biologist the authority to stop work if construction is not compliant with CEQA. MM-BIO-7 requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts to the Project impact footprint. MM-BIO-8 would provide construction personnel with training related to western Joshua trees that are present on and adjacent to the impact footprint. MM-BIO-9 provides for documentation that an education program is administered to applicable personnel. MM-BIO-10 requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project

impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to western Joshua trees that are outside the permitted Project footprint. Thus, implementation of MM-BIO-6 through MM-BIO-10 would enable the Project to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint.

To reduce fugitive dust resulting from Project construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the Mojave Desert Air Quality Management District (MDAQMD) Rules 401 and 403.2, which limit the amount of fugitive dust generated during construction.

MM-BIO-11 would ensure that a prompt and effective response to any accidental chemical spills will be implemented and that repair and clean-up of any hazardous waste occurs. Thus, implementation of MM-BIO-11 would help to avoid and minimize impacts to western Joshua tree from any construction-related chemical spills.

A stormwater pollution prevention plan (SWPPP) would be prepared and implemented to prevent all construction pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and any other pollutants from moving off site and into receiving waters. Best management practices (BMPs) employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a SWPPP would help to avoid and minimize the potential effects of stormwater erosion during construction.

Construction of the Project would introduce potential ignition sources to the Project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. However, the Project would be required to comply with City of Hesperia and state requirements for fire safety practices to reduce the possibility of fires during construction activities. Further, vegetation would be removed from the site prior to the start of construction. Adherence to City and state regulatory standards during Project construction would reduce the risk of wildfire ignition and spread during construction activities. Therefore, short-term construction impacts involving wildland fires would not be substantial.

Potential long-term (post-construction) indirect impacts from operations and maintenance activities may include effects of herbicides, changes in water quality, increased wildfire risk, and accidental chemical spills.

MM-BIO-12 would limit herbicide use to instances where hand or mechanical efforts are infeasible and would only be applied when wind speeds are less than 7 miles per hour to prevent drift into off-site western Joshua trees.

Implementation of low-impact-development features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); the improper management of hazardous materials; trash and debris; and the improper management of portable restroom facilities (e.g., regular service) in accordance with all relevant local and state development standards. In addition, in accordance with California Green Building Code (CALGreen) requirements (24 CCR, Part 11), Project source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, and outdoor loading/unloading areas. Therefore, impacts to western Joshua trees due to changes in water quality would be avoided and minimized through implementation of low-impact-development features and BMPs.

Upon completion of Project construction, with adherence to the City of Hesperia's Municipal Code and because of the low ignitability of the proposed structures and implementation of fire-resistant and irrigated landscaping, the Project would not facilitate wildfire spread or exacerbate wildfire risk. Further, given that surrounding off-site fuels consist of moderately spaced vegetation, wildfires in the immediate surrounding area are not common, and it is

unlikely that the Project site would be exposed to the uncontrolled spread of a wildfire. It is not anticipated that the Project, due to slope, prevailing winds, and other factors, would exacerbate wildfire risks or the uncontrolled spread of a wildfire; thus, with adherence to the City of Hesperia's Municipal Code, long-term indirect impacts to western Joshua tree associated with increased wildlife risk is not expected to occur.

Implementation of MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-10 (Delineation of Property Boundaries), MM-BIO-11 (Hazardous Waste), and MM-BIO-12 (Herbicides) would reduce potential indirect impacts to western Joshua tree to less than significant.

Special-Status Wildlife

Direct Impacts

The Project could result in significant impacts to two special-status wildlife species: burrowing owl, loggerhead shrike.

Burrowing Owl

Burrowing owl was not observed on the Project site or BSA; however, suitable habitat exists on site, and the species could occupy the Project site or BSA prior to construction.

The Project would result in the loss of 16 acres of suitable habitat for burrowing owl, including impacts to disturbed habitat, Joshua tree woodland, and non-native grassland. These potential direct impacts to burrowing owls would be significant absent mitigation under CEQA.

Pursuant to the California Fish and Game Code and MBTA, a pre-construction survey in compliance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012) would be necessary to reevaluate the locations of potential burrowing owl burrows within the Project limits so take of owls and active owl nests can be avoided. Consistent with MM-BIO-3, a pre-construction survey for burrowing owl would be conducted in areas supporting potentially suitable habitat and within 14 days prior to the start of construction activities. A Burrowing Owl Relocation Plan has been prepared to facilitate implementation of this mitigation measure, and is attached as part of Appendix I of Appendix C.

As required by MM-BIO-1, mitigation for direct impacts to western Joshua trees would be fulfilled through purchase of credits at a CDFW-approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Conservation efforts for western Joshua tree associated with the Western Joshua Tree Mitigation Fund will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to loss of suitable habitat for burrowing owl.

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-3 (Pre-Construction Surveys for Burrowing Owl and Avoidance) would reduce potential direct impacts to burrowing owl to less than significant.

Loggerhead Shrike

Loggerhead shrike is a CDFW Species of Special Concern during its nesting period. It can be found in lowlands and foothills throughout California. It prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and western Joshua tree habitats. Loggerhead shrike was not observed during the biological surveys but has a moderate potential to occur in the BSA. Extensive suitable nesting habitat, particularly near western Joshua trees, is present within the BSA.

In addition, the Project would result in the loss of 1.5 acres of suitable habitat for loggerhead shrike (i.e., impacts to Joshua tree woodland). These potential direct impacts to loggerhead shrike would be significant absent mitigation under CEQA.

To avoid potential direct impacts to nesting loggerhead shrike, it is recommended that vegetation removal activities be conducted outside the general bird nesting season (February 1 through August 31). If vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal. This requirement is outlined in MM-BIO-4.

As required by MM-BIO-1, mitigation for direct impacts to western Joshua trees would be fulfilled through purchase of credits at a CDFW-approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Conservation efforts for western Joshua tree associated with the Western Joshua Tree Mitigation Fund will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to loss of suitable habitat for loggerhead shrike.

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance) would reduce potential direct impacts to loggerhead shrike to less than significant.

Desert Tortoise

The results of the survey determined that desert tortoise is currently considered absent from the BSA. The on-site vegetation has been determined to provide low-quality habitat for the desert tortoise. While suitable (albeit low-quality) habitat for this species will be removed as a result of construction of the Project, this habitat is unoccupied, and the Project would not result in any direct or indirect impacts to desert tortoise. Therefore, impacts to desert tortoise associated with the BSA would be less than significant.

Mohave Ground Squirrel

The Project site is located in an area that is cut off from known Mohave ground squirrel populations by I-15 and U.S. Highway 395 to the east and by the California Aqueduct to the north. Disturbances from human presence and fragmentation from surrounding roadways, including off-highway-vehicle use and illegal waste dumping within the BSA has had a negative effect on habitat quality for Mohave ground squirrel. CNDDDB records reveal two occurrences of Mohave ground squirrel near the BSA that were detected in 2005 and 2011. However, both these records are from sites located across the California Aqueduct, making dispersal to the Project site highly unlikely because the aqueduct creates a considerable barrier to dispersal.

The visual survey concluded that the BSA provides low-quality/disturbed suitable habitat for Mohave ground squirrel. Specifically, foraging plants for Mohave ground squirrel, such as spiny hopsage and winterfat, were absent. However, other foraging plants including peach thorn (*Lycium cooperi*), western Joshua tree, fiddleneck (*Amsinckia* spp.), and red-stemmed filaree (redstem stork's bill) were observed within the BSA, along with burrows and burrow complexes that showed that soils present are suitable for burrowing. However, surrounding roadways and various forms of human presence, including trash and litter, have marginalized the habitat quality.

Although low-quality/disturbed suitable Mohave ground squirrel habitat is present in the BSA, no Mohave ground squirrels were detected at the camera stations or captured during the trapping surveys. Additionally, the BSA is located within the southern portion of the mapped Mohave ground squirrel range, where Mohave ground squirrel occurrences are rare and populations densities have historically been low with the closest occurrences occurring north of the California Aqueduct, which presents a significant barrier to Mohave ground squirrel dispersal. As such, the survey results indicate that Mohave ground squirrel does not inhabit the BSA.

Therefore, the Project would not result in any direct or indirect impacts to Mohave ground squirrel. Therefore, impacts to Mohave ground squirrel associated with the Project would be less than significant under CEQA.

American Badger and Desert Kit Fox

No desert kit fox or American badger individuals (or sign) were observed during desert tortoise or Mohave ground squirrel surveys or incidentally observed during other focused surveys conducted within the BSA. In addition, no suitable habitat exists on site. Disturbances from human presence and fragmentation from surrounding roadways, including off-highway-vehicle use and illegal waste dumping within the BSA have had a negative effect on habitat quality for these species. However, albeit unlikely, these species could eventually occupy the BSA prior to construction; therefore, potential direct impacts to American badger and desert kit fox would be significant absent mitigation.

To avoid potential direct impacts to American badger and kit fox, a pre-construction survey for American badger and desert kit fox would be conducted within 10 days prior to the start of construction to determine the presence/absence of either species. As such, in an abundance of caution and to ensure that potential impacts to these species are less than significant, the Project applicant would prepare a mitigation and monitoring plan that addresses desert kit fox and American badger if either species is determined to occur on the Project site prior to the start of construction, pursuant to MM-BIO-5 (Pre-Construction Survey for American Badger and Desert Kit Fox and Avoidance). With the incorporation of mitigation, impacts associated with desert kit fox and American badger would be less than significant under CEQA.

Nesting Migratory Birds and Raptors

Similar to most other sites containing trees, shrubs, and other vegetation, the Project site contains opportunities for birds of prey (raptors) and other avian species to nest on site. Native nesting bird species with potential to occur within the Project site are protected by California Fish and Game Code Sections 3503 and 3503.5, and by the federal MBTA (16 USC 703–711). In particular, California Fish and Game Code Section 3503 provides that it is unlawful to take, possess, or needlessly destroy the active nests or eggs of any bird in California; Section 3503.5 protects all raptors and their eggs and active nests; and the MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of native migratory bird species throughout the United States. Currently, California considers any nest that is under construction or modification, or is supporting eggs, nestlings, or juveniles as “active.” Therefore, impacts to nesting migratory birds and raptors would be significant absent mitigation under

CEQA. To ensure compliance with the California Fish and Game Code and MBTA and to avoid potential impacts to nesting birds, it is recommended that vegetation removal activities be conducted outside the general bird nesting season (February 1 through August 31, depending on the species), and if vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal. This requirement is outlined in MM-BIO-4. With the incorporation of mitigation, impacts associated with nesting birds, including raptors, would be less than significant.

Implementation of MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance) would reduce potential direct impacts to nesting migratory birds and raptors to less than significant.

Indirect Impacts

Burrowing Owl

Construction activities have the potential to result in indirect impacts to burrowing owls and their habitat. Those impacts could include dust, noise and vibration, trash and debris, increased human presence, vehicle collisions, chemical spills, and night-time lighting. These potential short-term or temporary indirect impacts to burrowing owls would be significant absent mitigation under CEQA.

Post-construction (long-term) activities have the potential to result in indirect impacts to burrowing owls and their habitat. Long-term impacts that could result from development within or adjacent to burrowing owl habitat include night-time lighting and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to burrowing owls would be significant absent mitigation under CEQA.

MM-BIO-3 would require burrowing owl surveys and result in establishment of construction buffers around any burrowing owl burrows found, thus limiting effects from most short-term indirect impacts, including noise and vibration, increased human presence, night-time lighting, and vehicle collisions. MM-BIO-13 would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward. Additionally, MM-BIO-6, MM-BIO-7, MM-BIO-8, and MM-BIO-9 would require that all workers complete a Worker Environmental Awareness Program (WEAP) training and would require ongoing biological monitoring and compliance with all biological resource mitigation requirements. MM-BIO-14 would require trash and debris to be removed regularly and would require animal-resistant trash receptacles to avoid attracting urban-related, predator species. MM-BIO-11 would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from Project construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with MDAQMD's Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction.

Potential long-term indirect impacts that could result from development within or adjacent to burrowing owl habitat include nighttime lighting and increased invasive plant species that may degrade habitat. MM-BIO-13 would require night-time lighting during operations within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-15 (Invasive Plant Management) would require that landscape plants within 200 feet of native vegetation communities not be on the most recent version of the California Invasive Plant Council's Inventory of Invasive Plants (<http://www.cal-ipc.org/ip/inventory/index.php>).

Implementation of MM-BIO-3 (Pre-Construction Surveys for Burrowing Owl and Avoidance), MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), MM-BIO-13 (Lighting), MM-BIO-14 (Trash and Debris), and MM-BIO-15 (Invasive Plant Management) would reduce potential indirect impacts to burrowing owl to less than significant.

Loggerhead Shrike

Construction activities have the potential to result in indirect impacts to loggerhead shrike and their habitat. Those impacts could include dust, noise and vibration, increased human presence, vehicle collisions, chemical spills, and night-time lighting. These potential short-term or temporary indirect impacts to loggerhead shrike would be significant absent mitigation under CEQA.

Post-construction (long-term) activities have the potential to result in indirect impacts to loggerhead shrike and their habitat. Long-term impacts that could result from development within or adjacent to loggerhead shrike habitat include night-time lighting and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to loggerhead shrikes would be significant absent mitigation under CEQA.

MM-BIO-4 would require nesting bird surveys and would result in establishment of construction buffers around nests, thus limiting effects from most short-term indirect impacts, including noise and vibration, increased human presence, night-time lighting, and vehicle collisions. MM-BIO-13 would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-6, MM-BIO-7, MM-BIO-8, and MM-BIO-9 would require that all workers complete a WEAP training and would require ongoing biological monitoring and compliance with all biological resource mitigation requirements. MM-BIO-11 would ensure that a prompt and effective response to any accidental chemical spills be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with MDAQMD's Rules 401 and 403.2, which limit the amount of fugitive dust generated during construction.

Potential long-term indirect impacts that could result from development within or adjacent to loggerhead shrike habitat include nighttime lighting and increased invasive plant species that may degrade habitat. MM-BIO-13 would require night-time lighting during operations within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-15 (Invasive Plant Management) would require that landscape plants within 200 feet of native vegetation communities not be on the most recent version of the California Invasive Plant Council's Inventory of Invasive Plants (<http://www.cal-ipc.org/ip/inventory/index.php>).

Implementation of MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance), MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), MM-BIO-13 (Lighting), and MM-BIO-15 (Invasive Plant Management) would reduce potential indirect impacts to loggerhead shrike to less than significant.

American Badger and Desert Kit Fox

Construction activities have the potential to result in short-term indirect impacts to American badger and desert kit fox, and their habitats. Those impacts could include dust, noise and vibration, trash and debris, increased human presence, vehicle collisions, chemical spills, and night-time lighting. However, albeit unlikely, these species could occupy the BSA prior to construction; these potential short-term or temporary indirect impacts to these species would be significant absent mitigation under CEQA.

MM-BIO-5 would require a pre-construction survey for American badger and desert kit fox, and if determined present, would result in establishment of an American Badger/Desert Kit Fox Mitigation and Monitoring Plan which would include avoidance and minimization measures to reduce potential impacts to either species, as well as compensatory mitigation to offset indirect impacts including noise and vibration, increased human presence, night-time lighting, and vehicle collisions. MM-BIO-13 would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-6, MM-BIO-7, MM-BIO-8, and MM-BIO-9 would require that all

workers complete a WEAP training and would require ongoing biological monitoring and compliance with all biological resource mitigation requirements. MM-BIO-11 would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with MDAQMD's 401 and 403.2, which would limit the amount of fugitive dust generated during construction.

Potential long-term indirect impacts that could result from development within or adjacent to the BSA include nighttime lighting and increased invasive plant species that may degrade habitat. MM-BIO-13 would require night-time lighting during operations within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-15 (Invasive Plant Management) would require that landscape plants within 200 feet of native vegetation communities not be on the most recent version of the California Invasive Plant Council's Inventory of Invasive Plants (<http://www.cal-ipc.org/ip/inventory/index.php>).

Implementation of MM-BIO-5 (Pre-Construction Survey for American Badger and Desert Kit Fox and Avoidance), MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), MM-BIO-13 (Lighting), and MM-BIO-15 (Invasive Plant Management) would reduce potential indirect impacts to American badger and desert kit fox to less than significant.

Nesting Migratory Birds and Raptors

Construction activities have the potential to result in indirect impacts to nesting migratory birds and raptors, and their habitats. Those impacts could include the loss of a nest through increased dust, noise and vibration, increased human presence, and night-time lighting. Potential short-term or temporary indirect impacts to these species would be significant absent mitigation under CEQA.

Post-construction (long-term) activities have the potential to result in indirect impacts to migratory birds and raptors, and their habitat. Long-term impacts that could result from development within or adjacent to suitable habitat include night-time lighting and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to migratory birds and raptors would be significant absent mitigation under CEQA.

To ensure compliance with the California Fish and Game Code and MBTA and to avoid potential indirect impacts to nesting birds, vegetation removal activities should be conducted outside the general bird nesting season (February 1 through August 31, depending on the species), and if vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey (MM-BIO-4) by a qualified biologist is required prior to vegetation removal. Indirect impacts including increased dust, noise, and vibration, increased human presence, and night-time lighting, would be offset through implementation of MM-BIO-13, which would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-6, MM-BIO-7, MM-BIO-8, and MM-BIO-9 would require that all workers complete a WEAP training, ongoing biological monitoring, and compliance with all biological resource mitigation requirements. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with MDAQMD's Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction.

Implementation of MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance), MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction

Monitoring Notebook), and MM-BIO-13 (Lighting) would reduce potential indirect impacts to nesting birds and raptors to less than significant.

Threshold B: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less-than-Significant Impact with Mitigation Incorporated. Joshua tree woodland is a sensitive CDFW natural community. As described under Threshold A, western Joshua trees are also protected under CEQA as a candidate species.

Direct Impacts

A total of 22.90 acres, including 17.84 acres within the Project site and 5.06 acres within the Off-Site Improvement Areas, would be permanently impacted from the Project (see Figure 4.3-3, Impacts to Biological Resources). Table 3 summarizes permanent direct impacts to vegetation communities and land covers within the BSA. As stated in BTR Section 5.1 (see Appendix C), Vegetation Communities and Land Covers, CDFW state rankings of 1, 2, or 3 are considered high priority for inventory or special status, and impacts to these communities typically require mitigation. Joshua tree woodland is considered a sensitive biological resource by CDFW under CEQA.

All ground-disturbing activities, even areas temporarily impacted, are considered permanent impacts to Joshua tree woodland. The Project would result in permanent impacts to 1.52 acres of Joshua tree woodland, which would be considered a significant impact under CEQA absent mitigation.

The Project would also result in permanent impacts to 21.39 acres of vegetation communities and land cover types that are not considered sensitive by CDFW, including upland mustards, rubber rabbitbrush scrub, disturbed habitat, non-native grassland, and urban/developed lands. Therefore, these direct impacts would be less than significant under CEQA.

Table 4.3-2. Impacts to Vegetation Communities and Land Cover Types within the BSA

Floristic Alliance	Association	Vegetation Community	Total Existing BSA (Acres)	On-Site Permanent Impacts (Acres)	Off-Site Permanent Impacts Areas (Acres)	Total Permanent Impacts (Acres)
<i>Ericameria nauseosa</i>	<i>Ericameria nauseosa</i> shrubland	Rubber rabbitbrush scrub	3.54	3.05	0.14	3.20
<i>Yucca brevifolia</i>	N/A	Joshua tree woodland	2.28	1.49	0.03	1.52
<i>Brassica nigra</i>	<i>Brassica nigra</i>	Upland Mustards	1.52	0.39	1.07	1.46
N/A	N/A	Disturbed habitat	0.40	0.05	0.22	0.27
<i>Avena</i> spp. – <i>Bromus</i> spp. Herbaceous Semi-Natural	Wild oats and annual brome grasslands	Non-native grassland	18.94	12.86	1.36	14.22
N/A	N/A	Urban/Developed	2.50	—	2.25	2.25
Total¹			29.18	17.84	5.06	22.90

Notes: BSA = biological survey area; N/A = not applicable.

¹ Total acreages may not sum exactly due to rounding.

Mitigation for direct impacts to 32 western Joshua tree individuals would also mitigate for impacts to 1.52 acres of Joshua tree woodland. As required by MM-BIO-1, mitigation for direct impacts to 32 western Joshua trees would be fulfilled through conservation of western Joshua tree through purchase of credits at a CDFW-approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Conservation efforts for western Joshua tree would focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to 1.52 acres of Joshua tree woodland.

Additionally, as required by MM-BIO-2 and in accordance with Chapter 16.24 of the Hesperia Municipal Code, the preparation of a western Joshua tree and desert native plants relocation plan is required to mitigate for impacts to western Joshua trees as a result of the Project. As such, a Joshua Tree Preservation, Protection, and Relocation Plan (Appendix F of Appendix C) was prepared for the Project to provide detailed specifications for the Project applicant to meet the requirements of Chapter 16.24 of the Hesperia Municipal Code to protect, preserve, and mitigate impacts to Joshua trees. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to Joshua tree woodland.

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-2 (Relocation of Desert Native Plants) would reduce potential direct impacts to sensitive vegetation communities (i.e., Joshua tree woodland) to less than significant.

Indirect Impacts

Construction-related indirect impacts may include inadvertent spillover impacts outside of the construction footprint, dust accumulation on Joshua tree woodland, chemical spills, stormwater erosion and sedimentation, and increased wildfire risk. Potential long-term (post-construction) indirect impacts from operation and maintenance activities may include effects of herbicides, changes in water quality, increased wildfire risk, induced demand on the surrounding area, increased traffic and vehicle emissions, and accidental chemical spills. Indirect impacts to Joshua woodland would be significant absent mitigation.

Implementation of MM-BIO-6 (Designated Biologist Authority) gives the Project's designated biologist the authority to stop work if construction is not compliant with CEQA. MM-BIO-7 (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts to the Project impact footprint. MM-BIO-8 (Education Program) would provide construction personnel with training related to western Joshua trees that are present on and adjacent to the impact footprint. MM-BIO-9 (Construction Monitoring Notebook) provides for documentation that an education program is administered to applicable personnel. MM-BIO-10 (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to western Joshua trees that are outside the permitted Project footprint. Thus, implementation of MM-BIO-6 through MM-BIO-10 would enable the Project to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint.

To reduce fugitive dust resulting from Project construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with MDAQMD's Rules 401 and 403.2, which limit the amount of fugitive dust generated during construction.

MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills will be implemented, and that repair and clean-up of any hazardous waste occurs. Thus, implementation of MM-BIO-11 would help to avoid and minimize impacts to western Joshua tree from any construction-related chemical spills.

A SWPPP would be prepared and implemented to prevent all construction pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and any other pollutants from moving off site and into receiving waters. BMPs employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a SWPPP would help to avoid and minimize the potential effects of stormwater erosion during construction.

Construction of the Project would introduce potential ignition sources to the Project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. However, the Project would be required to comply with City of Hesperia and state requirements for fire safety practices to reduce the possibility of fires during construction activities. Further, vegetation would be removed from the site prior to the start of construction. Adherence to City and state regulatory standards during Project construction would reduce the risk of wildfire ignition and spread during construction activities. Therefore, short-term construction impacts involving wildland fires would not be substantial.

Potential long-term (post-construction) indirect impacts from operations and maintenance activities may include effects of herbicides, changes in water quality, increased wildfire risk, and accidental chemical spills.

MM-BIO-12 (Herbicides) would limit herbicide use to instances where hand or mechanical efforts are infeasible, and would only be applied when wind speeds are less than 7 miles per hour to prevent drift into off-site western Joshua trees.

Implementation of low-impact-development features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); the improper management of hazardous materials; trash and debris; and the improper management of portable restroom facilities (e.g., regular service) in accordance with all relevant local and state development standards. In addition, in accordance with CALGreen Code requirements (24 CCR, Part 11), Project source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, and outdoor loading/unloading areas. Therefore, impacts to western Joshua trees due to changes in water quality would be avoided and minimized through implementation of low-impact-development features and BMPs.

Upon completion of Project construction, with adherence to the City of Hesperia's Municipal Code and because of the low ignitability of the proposed structures and implementation of fire-resistant and irrigated landscaping, the Project would not facilitate wildfire spread or exacerbate wildfire risk. Further, given that surrounding off-site fuels consist of moderately spaced vegetation, wildfires in the immediate surrounding area are not common, and it is unlikely that the Project site would be exposed to the uncontrolled spread of a wildfire. It is not anticipated that the Project, due to slope, prevailing winds, and other factors, would exacerbate wildfire risks or the uncontrolled spread of a wildfire; thus, with adherence to the City of Hesperia's Municipal Code, long-term indirect impacts to western Joshua tree associated with increased wildfire risk is not expected to occur.

Implementation of MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-10 (Delineation of Property

Boundaries), MM-BIO-11 (Hazardous Waste), and MM-BIO-12 (Herbicides) would reduce potential indirect impacts to western Joshua tree to less than significant.

Threshold C: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less-than-Significant Impact with Mitigation Incorporated. The BSA supports 0.06 acres (396 linear feet) of ephemeral drainages. The one ephemeral drainage feature is likely subject to CDFW and/or RWQCB jurisdiction based on evidence of bed and bank. This feature is not likely subject to USACE jurisdiction because this feature is isolated and does not meet the relatively permanent or significant nexus standard as waters of the United States. One swale was also investigated but determined to be non-jurisdictional.

Direct Impacts

The Project would result in the loss of 0.06 acres of potential jurisdictional waters likely subject to CDFW and/or RWQCB jurisdiction (Figure 4.3-4). These potential direct impacts to jurisdictional waters would be significant absent mitigation under CEQA.

Direct impacts to 0.06 acres of jurisdictional aquatic resources would occur with Project implementation. For direct impacts to 0.06 acres of waters and streams that are regulated under the California Porter-Cologne Water Quality Control Act and California Fish and Game Code, permits would be required from each of the regulatory agencies, and typically entail providing mitigation to offset the impacts and loss of beneficial uses and functions and values to the jurisdictional waters and habitats. MM-BIO-16 (Aquatic Resources Mitigation) would require obtaining permits from each of the regulatory agencies. A waste discharge report would be required for impacts to waters of the state, and a Streambed Alteration Agreement would be required for impacts to jurisdictional streambed. MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), and MM-BIO-9 (Construction Monitoring Notebook) would require that all workers complete a WEAP training, and would require ongoing biological monitoring and compliance with all biological resource mitigation requirements. MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste would occur. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with MDAQMD's 401 and 403.2, which would limit the amount of fugitive dust generated during construction.

Implementation of MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), and MM-BIO-16 (Aquatic Resources Mitigation) would reduce potential indirect impacts to jurisdictional aquatic resources to less than significant.

Indirect Impacts

Construction-related (short-term) indirect impacts may include inadvertent spillover impacts outside of the construction footprint, chemical spills, and stormwater erosion and sedimentation. These potential short-term or temporary indirect impacts to jurisdictional aquatic resources would be significant absent mitigation under CEQA.

Post-construction (long-term) indirect impacts from operations and maintenance activities may include changes in water quality and accidental chemical spills. These potential long-term indirect impacts to jurisdictional aquatic resources would be significant absent mitigation under CEQA.

Implementation of MM-BIO-6 gives the Project's Designated Biologist the authority to stop work if construction is not compliant with this CEQA document. MM-BIO-7 requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts within the Project footprint. MM-BIO-8 would provide construction personnel with training related to waters of the state that are present on and adjacent to the impact footprint. MM-BIO-9 provides for documentation that the education program was administered to applicable personnel. MM-BIO-10 requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to waters of the state that are outside the permitted Project footprint. Thus, implementation of MM-BIO-6 through MM-BIO-10 would enable the Project to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint.

MM-BIO-11 would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste would occur. Thus, implementation of MM-BIO-11 would help to avoid and minimize impacts to waters of the state from any construction-related chemical spills.

A SWPPP would be prepared and implemented to prevent all construction pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and any other pollutants from moving off site and into receiving waters. BMPs employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a SWPPP would help to avoid and minimize the potential effects of stormwater erosion during construction.

Potential long-term (post-construction) indirect impacts from operations and maintenance activities may include changes in water quality and accidental chemical spills.

Implementation of low-impact-development features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); the improper management of hazardous materials; trash and debris; and the improper management of portable restroom facilities (e.g., regular service) in accordance with all relevant local and state development standards. In addition, in accordance with CALGreen Code requirements (24 CCR, Part 11), Project source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, and outdoor loading/unloading areas. Therefore, impacts to western Joshua trees due to changes in water quality would be avoided and minimized through implementation of low-impact-development features and BMPs.

MM-BIO-11 would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and repair and clean-up of any hazardous waste would occur. Thus, implementation of MM-BIO-11 would help to avoid and minimize impacts to jurisdictional aquatic resources from any operations-related chemical spills.

Implementation of MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-10 (Delineation of Property Boundaries), and MM-BIO-11 (Hazardous Waste) would reduce potential indirect impacts to jurisdictional aquatic resources to less than significant.

Threshold D: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less-than-Significant Impact with Mitigation Incorporated. No significant direct permanent impacts would occur on wildlife movement or use of native wildlife nursery sites associated with Project activities; however, potential long-term indirect impacts to wildlife movement would be significant absent mitigation under CEQA. The following analysis evaluates the Project's potential impacts on wildlife movement, wildlife corridors, and wildlife nursery sites.

Direct Impacts

The Project site is located in an area of encroaching development and has been regionally isolated by U.S. Highway 395 to the west and I-15 to the east. As a result, the Project site does not provide for regional wildlife movement or serve as a regional wildlife corridor. Wildlife movement may be temporarily disrupted during the construction phase of the Project, although this effect would be both localized and short-term. Nearby corridors that could support wildlife movement in the region, include the Oro Grande Wash and La Bureau of Power and Light Road immediately to the west; these would not be impacted by the Project. Further, the Project site does not contain nursery sites, such as bat colony roosting sites or colonial bird nesting areas. Therefore, impacts associated with wildlife movement, wildlife corridors, and wildlife nursery sites would result in significant direct impacts to wildlife corridors or migratory routes under CEQA.

Indirect Impacts

Some short-term indirect impacts to localized wildlife movement could occur due to construction-related noise and work in the vicinity. However, these impacts would be temporary and would not be expected to significantly disrupt wildlife movement due to ambient noise conditions and the ability for wildlife to continue to move around the construction area and upland portions of the BSA during and after construction. Work activities are not currently proposed during the night-time. Therefore, implementation of the Project would not result in significant short-term indirect impacts to wildlife corridors or migratory routes.

Post-construction (long-term) indirect impacts from operations and maintenance activities may include night-time lighting. These potential long-term indirect impacts to wildlife movement would be significant absent mitigation under CEQA.

MM-BIO-13 would ensure all lighting during operations and within 50 feet of the outside edge of the impact footprint containing habitat for special-status wildlife would be directed away from natural areas.

Implementation of MM-BIO-13 (Lighting) would reduce potential indirect impacts to wildlife movement to less than significant.

Threshold E: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less-than-Significant Impact with Mitigation Incorporated. The City of Hesperia Municipal Code Chapter 16.24 regulates and protects California Desert Native Plants, including Joshua trees. The following analysis evaluates the Project's potential conflicts with such local policies and ordinances.

California Desert Native Plants

No desert native plant species, in addition to western Joshua tree, were recorded on the BSA.

Joshua Trees

In accordance with Chapter 16.24 of the Hesperia Municipal Code, the preparation of a western Joshua tree and desert native plants relocation plan is required to mitigate impacts to Joshua trees as a result of the Project. As such, a Joshua Tree Preservation, Protection, and Relocation Plan and Desert Native Plant Relocation Plan was prepared for the Project to provide detailed specifications for the Project Applicant to meet the requirements of Chapter 16.24 of the Hesperia Municipal Code to protect, preserve, and mitigate impacts to western Joshua trees.

The Joshua Tree Preservation, Protection, and Relocation Plan addresses the requirements of the City's Protected Plant Policy and provides details for the initial survey of the Project site's Joshua trees, detailed specifications for the protection of trees to be preserved on site, and relocation/salvage requirements for those trees requiring removal and relocation (Appendix F of Appendix C).

Pursuant to MM-BIO-2, the Project applicant will submit an application and applicable fee paid to the City of Hesperia for removal or relocation of protected native desert plants under Hesperia Municipal Code Chapter 16.24. The application will include certification from a qualified Joshua tree and native desert plant expert(s) to determine that proposed removal or relocation of protected native desert plants are appropriate, supportive of a healthy environment, and in compliance with the City of Hesperia Municipal Code. The application will include the Joshua Tree Preservation, Protection, and Relocation Plan, and Desert Native Plant Relocation Plan (Appendix F of Appendix C). The plan will be prepared by a qualified Joshua Tree and native desert plant expert(s). With the incorporation of mitigation, and with adherence to both the CDNPA and the Hesperia Municipal Code, impacts associated with western Joshua tree and desert native plants would be less than significant.

The Project could result in potentially significant impacts to native desert plants (e.g., western Joshua trees), of which are addressed by state and local plant and tree preservation regulations, absent mitigation. Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-2 (Relocation of Desert Native Plants) would reduce potential impacts California desert native plants (including western Joshua tree to less than significant.

Threshold F: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less-than-Significant Impact. The Project is located within the California Desert Conservation Area Plan (BLM 1980). The Project is also located within the Draft West Mojave Plan (BLM 2005) and the Desert Renewable Energy Conservation Plan (BLM 2016) areas. The West Mojave Plan and Desert Renewable Energy Conservation Plan are amendments to the California Desert Conservation Area Plan. The Bureau of Land Management issued a Record of Decision for the West Mojave Plan in 2006, although the West Mojave Plan has not been formally adopted. The Project will not conflict with the conservation criteria associated with the California Desert Conservation Area Plan or Desert Renewable Energy Conservation Plan. Therefore, the Project would not be in conflict with any Habitat Conservation Plans under CEQA.

Threshold G: Would the Project result in cumulatively considerable impacts to biological resources?

Less-than-Significant Impact with Mitigation Incorporated. The Project would result in potentially cumulatively considerable impacts to western Joshua trees and Joshua tree woodland vegetation on the Project site. Western Joshua trees are a state candidate species for listing under CESA and are locally protected by the City of Hesperia and by the CDNPA. Joshua tree woodlands are considered a sensitive natural community by CDFW (CDFW 2020). As required by MM-BIO-1, mitigation for direct impacts to 32 western Joshua trees will be fulfilled through purchase of credits at a CDFW-approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Additionally, as required by MM-BIO-2 and in accordance with Chapter 16.24 of the Hesperia Municipal Code, the preparation of a Joshua tree and desert native plants relocation plan is required to mitigate impacts to western Joshua trees as a result of the Project. As such, a Joshua Tree Preservation, Protection, and Relocation Plan, and Desert Native Plant Relocation Plan was prepared.

Potential impacts to special-status wildlife species, such as burrowing owl, loggerhead shrike, American badger and desert kit fox and nesting birds and raptors would be reduced to less than significant through Project implementation of MM-BIO-3 through MM-BIO-15. Implementing these mitigation measures would reduce potential impacts to less than significant and would significantly reduce the potential for direct or indirect impacts to special-status species. Therefore, there would not be a cumulatively considerable impact on any special-status species.

Potential impacts to jurisdictional waters of the state, if necessary, would be reduced to less than significant through implementation of MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), and MM-BIO-16 (Aquatic Resources Mitigation). Implementing these mitigation measures would reduce potential impacts to less than significant and would significantly reduce the potential for direct or indirect impacts to waters of the state. Therefore, there would not be a cumulatively considerable impact to waters of the state.

Additionally, the Project would not result in a significant impact to wildlife corridors and linkages, nor to local policies and regional conservation plans. The Project would therefore not contribute to a cumulative impact on these resources.

4.3.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

One candidate for state listing under CESA, western Joshua tree, was observed and would be directly impacted by the Project. Two wildlife species were determined to have a moderate potential to occur within the BSA and could occur during construction of the Project: burrowing owl and loggerhead shrike. Suitable habitat for burrowing owl and loggerhead shrike would be directly impacted by the Project.

The Project could result in potentially significant impacts to species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS, including native desert plants protected under the CDNPA and City of Hesperia Municipal Code, western Joshua trees, burrowing owl, loggerhead shrike, and nesting migratory birds and raptors. Implementation of MM-BIO-1 through MM-BIO-14 is required to reduce impacts to less than significant level.

MM-BIO-1 **Conservation of Western Joshua Tree Lands.** Based on a literature review completed by the California Department of Fish and Wildlife (CDFW), CDFW indicated that western Joshua tree locations shall be buffered by 186 feet to account for the take of seed bank for western Joshua trees and their associated habitat. Therefore, a 186-foot buffer (or radius) shall be applied to each western Joshua tree location. The direct impacts to this 186-foot buffer were analyzed, and the Project would result in 10.9 acres of impacts to western Joshua trees, their seed bank, and their associated habitat. Mitigation for direct impacts to 10.9 acres of western Joshua trees and their 186-foot buffer shall be fulfilled through conservation of western Joshua trees at a 2:1 habitat replacement of equal or better functions and values to those impacted by the Project, for a total of 21.8 acres. Mitigation shall be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank and lands are conserved separately, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement(s) area in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a Project-specific Property Analysis Record (PAR) to calculate the costs of in-perpetuity land management. The PAR shall take into account all of the management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

Additionally, no take of western Joshua tree shall occur without authorization from CDFW in the form of an Incidental Take Permit pursuant to California Fish and Game Code 2081. The Project applicant shall adhere to measures and conditions set forth within the Incidental Take Permit.

MM-BIO-2 **Relocation of Desert Native Plants.** Prior to the issuance of grading permits, the Project applicant shall submit an application and applicable fee paid to the City of Hesperia for removal or relocation of protected native desert plants under Hesperia Municipal Code Chapter 16.24 as required and schedule a pre-construction site inspection with the Planning Division and the Building Division. The application shall include certification from a qualified western Joshua tree and native desert plant expert(s) to determine that proposed removal or relocation of protected native desert plants are appropriate, supportive of a healthy environment, and in compliance with the City of Hesperia Municipal Code. Protected plants subject to Hesperia Municipal Code Chapter 16.24 may be relocated on site, or within an area designated as an area for species to be adopted later.

The application shall include a detailed plan for removal of all protected plants on the Project site. The Joshua Tree Preservation, Protection, and Relocation Plan and Desert Native Plant Relocation Plan shall be prepared by a qualified western Joshua tree and native desert plant expert(s). The plan shall include the following measures:

- Salvaged plants shall be transplanted expeditiously to either their final on-site location, or to an approved off-site area. If the plants cannot be expeditiously taken to their permanent relocation area at the time of excavation, they may be transplanted in a temporary area (stockpiled) prior to being moved to their permanent relocation site(s).
- Western Joshua trees shall be marked on their north facing side prior to excavation. Transplanted western Joshua trees shall be planted in the same orientation as they currently occur on the Project site, with the marking on the north side of the trees facing north at the relocation site(s).

- Transplanted plants shall be watered prior to and at the time of transplantation. The schedule of watering shall be determined by the qualified tree expert and desert native plant expert(s) to maintain plant health. Watering of the transplanted plants shall continue under the guidance of qualified tree expert and desert native plant expert(s) until it has been determined that the transplants have become established in the permanent relocation site(s) and no longer require supplemental watering.

MM-BIO-3 **Pre-Construction Surveys for Burrowing Owl and Avoidance.** One pre-construction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the Project site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the 2012 (or current version) Staff Report on Burrowing Owl Mitigation prepared by the California Department of Fish and Game [now California Department of Fish and Wildlife (CDFW)].

If burrowing owls are detected, a Burrowing Owl Relocation Plan shall be implemented in consultation with the CDFW. As required by the Burrowing Owl Relocation Plan, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation or current version. No Project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed.

Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Owls shall be excluded from burrows in the immediate Project area and within a buffer zone by installing one-way doors in burrow entrances. These doors shall be placed at least 48 hours prior to ground-disturbing activities. The Project area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Compensatory mitigation for permanent loss of owl habitat shall be provided following the guidance in the Staff Report on Burrowing Owl Mitigation (current version).

Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow.

MM-BIO-4 **Pre-Construction Nesting Bird Surveys and Avoidance.** Construction activities shall avoid the migratory bird nesting season (typically February 1 through August 31) to reduce any potential significant impact to birds that may be nesting in the survey area. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the Project site and within 500 feet of all impact areas must be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act (16 USC 703–712) and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate buffer established around the nest, which

shall be determined by a biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when construction occurs in proximity to an active nest buffer. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that nestlings have fledged and the nest is no longer active.

MM-BIO-5 **Pre-Construction Survey for American Badger and Desert Kit Fox and Avoidance.** A pre-construction survey for American badger and desert kit fox shall be conducted on the Project site and Off-Site Improvement Area within 10 days prior to the start of construction to determine the presence/absence of either species. If either species is discovered during the survey, an American badger/desert kit fox mitigation and monitoring plan shall be developed. The mitigation and monitoring plan shall include avoidance and minimization measures to reduce potential impacts to either species, as well as compensatory mitigation to offset direct or indirect impacts. The plan shall be developed in consultation with California Department of Fish and Wildlife. At a minimum, the plan shall contain the following:

- Identify pre-construction survey methods for American badger and desert kit fox
- Describe feasible pre-construction and construction-phase avoidance methods
- Describe pre-construction and construction-phase relocation methods, including the possibility for passive relocation
- For burrows that will not be impacted by the Project, identify appropriate construction exclusion zones for active and natal burrows
- Coordinate survey findings prior to and during construction to meet the information needs of wildlife health officials in monitoring the health of kit fox populations.

MM-BIO-6 **Designated Biologist Authority.** The Designated Biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures and/or to order any reasonable measure to avoid the unauthorized take of an individual western Joshua tree.

MM-BIO-7 **Compliance Monitoring.** The Designated Biologist shall be on site daily when impacts occur. The Designated Biologist shall conduct compliance inspections to minimize incidental take of western Joshua trees and impacts to other sensitive biological resources; prevent unlawful take of western Joshua trees; and ensure that signs, stakes, and fencing are intact, and that impacts are only occurring outside the permitted impact footprint. Weekly written observation and inspection records that summarize oversight activities and compliance inspections and monitoring activities required by the Incidental Take Permit shall be prepared.

MM-BIO-8 **Education Program.** An education program (Worker Environmental Awareness Program [WEAP]) for all persons employed or otherwise working in the Project area shall be administered before impacts occur. The WEAP shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and status of western Joshua tree, burrowing owl, and loggerhead shrike; and other biological resources mitigation measures described in the California Environmental Quality Act document. Interpretation for non-English-speaking workers shall be provided, and the same

instruction shall be provided to any new workers before they are authorized to perform work in the Project area. Upon completion of the WEAP, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees who will be conducting work in the Project area.

- MM-BIO-9 **Construction Monitoring Notebook.** The Designated Biologist shall maintain a construction-monitoring notebook on site throughout the construction period, which shall include a copy of the biological resources mitigation measures with attachments and a list of signatures of all personnel who have successfully completed the education program. The permittee shall ensure that a copy of the construction monitoring notebook is available for review at the Project site upon request by the California Department of Fish and Wildlife.
- MM-BIO-10 **Delineation of Property Boundaries.** Before beginning activities that will cause impacts, the contractor shall, in consultation with the Designated Biologist, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area.
- MM-BIO-11 **Hazardous Waste.** The Project applicant shall immediately stop work and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so.
- MM-BIO-12 **Herbicides.** The Project applicant shall limit herbicide use for invasive plant species and shall use herbicides only if it has been determined that hand or mechanical efforts are infeasible. To prevent drift, the permittee shall apply herbicides only when wind speeds are less than 7 miles per hour. All herbicide application shall be performed by a licensed applicator and in accordance with all applicable federal, state, and local laws and regulations.
- MM-BIO-13 **Lighting.** Lighting for construction activities and operations within 50 feet of the outside edge of the impact footprint containing habitat for special-status wildlife shall be directed away from natural areas.
- MM-BIO-14 **Trash and Debris.** The following avoidance and minimization measures shall be implemented during Project construction:
- (1) Fully covered trash receptacles that are animal-proof shall be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles shall be removed at least once a week from the Project site.
 - (2) Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter, vehicle fluids, and food waste from the Project site on a daily basis.
- MM-BIO-15 **Invasive Plant Management.** To reduce the spread of invasive plant species, landscape plants within 200 feet of native vegetation communities shall not be on the most recent version of the California Invasive Plant Council's Inventory of Invasive Plants (<http://www.cal-ipc.org/ip/inventory/index.php>). Post-construction, the Project applicant shall continually remove invasive plant species on site by hand or mechanical methods, as feasible.

Threshold B: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The Project could result in potentially significant impacts to Joshua tree woodland, a CDFW sensitive natural community (CDFW 2020). Implementation of MM-BIO-1 and MM-BIO-2 is required to reduce direct impacts to a *less than significant* level. Implementation of MM-BIO-6, MM-BIO-7, MM-BIO-8, MM-BIO-9, MM-BIO-10, MM-BIO-11, and MM-BIO-12 are required to reduce indirect impacts to western Joshua tree to a less than significant level.

Threshold C: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The Project could result in potentially significant impacts to state-defined non-wetland waters as a result of Project activities. Short-term and long-term indirect impacts to jurisdictional waters relating to construction activities (edge effects) and trash/pollution would not likely result in significant impacts, especially with the application of the standard BMPs that would be implemented during Project construction. Implementation of MM-BIO-6 through MM-BIO-11 and MM-BIO-16 is required to reduce direct and indirect impacts to a less-than-significant level.

MM-BIO-16 Aquatic Resources Mitigation. The Project site supports aquatic resources that are jurisdictional under the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW). Prior to construction activity, the Project applicant shall coordinate with the Lahontan RWQCB (Region 6) to ensure conformance with the requirements of Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Prior to activity within CDFW jurisdictional streambeds or associated riparian habitat, the applicant shall coordinate with CDFW (Inland Deserts Region 6) relative to conformance with the Lake and Streambed Alteration permit requirements.

The Project shall mitigate to ensure no-net-loss of waters at a minimum of 1:1 with re-establishment credits (0.06 acres RWQCB/CDFW) for impacts to aquatic resources as part of an overall strategy to ensure no net loss. Mitigation shall be completed through the use of a mitigation bank (e.g., West Mojave Mitigation Bank) or other applicant-sponsored mitigation. Final mitigation ratios and credits shall be determined in consultation with the RWQCB and/or CDFW based on agency evaluation of current resource functions and values and through each agency's respective permitting process.

Should applicant-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared in accordance with State Water Resources Control Board guidelines and approved by the agencies in accordance with the applicable permits. The HMMP shall include a conceptual planting plan, including planting zones, grading, and irrigation, as applicable; a conceptual planting plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity.

Best management practices shall be implemented to avoid any indirect impacts on jurisdictional waters, including the following:

- Vehicles and equipment shall not be operated in ponded or flowing water except as described in permits.
- Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows.

- Spoil sites shall not be located within 30 feet from the boundaries of jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages.
- Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources resulting from Project-related activities shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters.
- No equipment maintenance shall be performed within 100 feet of jurisdictional waters, including wetlands and riparian areas, where petroleum products or other pollutants from the equipment may enter these areas. Fueling of equipment shall not occur on the Project site.

Threshold D: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No significant direct permanent impacts or construction-related short-term impacts would occur on wildlife movement or use of native wildlife nursery sites associated with Project activities. However, the Project could result in potentially significant long-term indirect impacts from operations and maintenance activities that could disrupt wildlife movement around the Project site due to increased lighting from buildings. Implementation of MM-BIO-13 is required to reduce long-term indirect impacts to a **less-than-significant** level.

Threshold E: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-2 (Relocation of Desert Native Plants) would reduce potential impacts California desert native plants, western Joshua tree, to **less than significant**.

Threshold F: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project will not conflict with the conservation criteria associated with the California Desert Conservation Area Plan or Desert Renewable Energy Conservation Plan. Therefore, the Project would not be in conflict with any habitat conservation plans. The Project would result in **less-than-significant impacts** to an adopted conservation plan. **No** mitigation is required.

Threshold G: Would the Project result in cumulatively considerable impacts to biological resources?

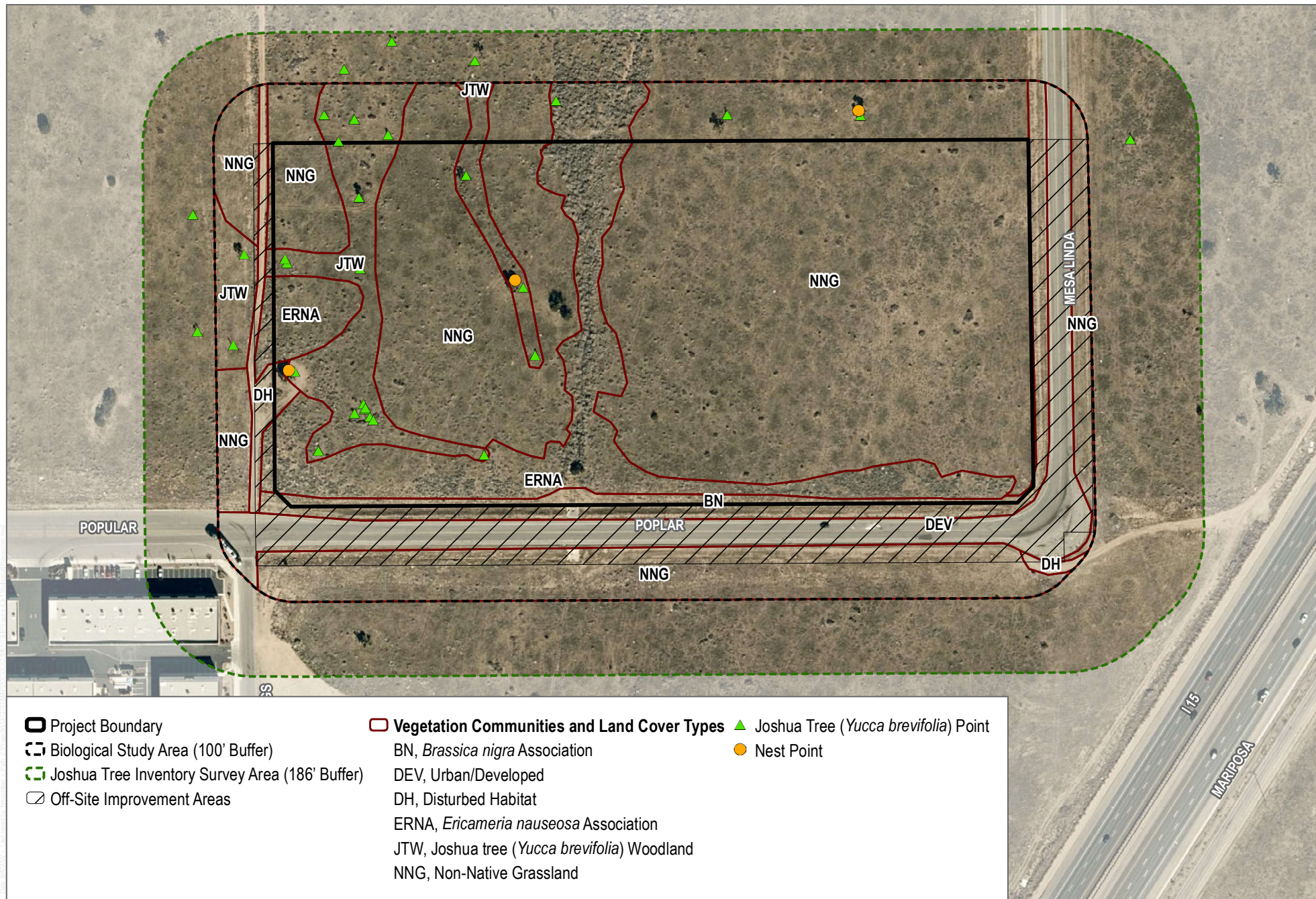
The Project could contribute to a cumulative considerable impact related to native desert plants protected under the CNDPA, western Joshua trees, burrowing owl, loggerheaded shrike, American badger and desert kit fox, and nesting migratory birds and raptors. Potential cumulative impacts to jurisdictional resources could also occur, and mitigation would be required. Incorporation of MM-BIO-1 through MM-BIO-16 is required to reduce impacts to **less than significant**.

4.3.6 References Cited

- 24 CCR, Part 11. California Green Building Standards Code — CALGreen. July 2019. Accessed July 2021.
<https://www.hcd.ca.gov/building-standards/calgreen/index.shtml>.
- BLM (Bureau of Land Management). 1980. *The California Desert Conservation Area Plan, as amended*. 1980. Accessed July 2021. https://eplanning.blm.gov/public_projects/lup/66949/82080/96344/CDCA_Plan.pdf.
- BLM. 2005. *Final Environmental Impact Report and Statement for the West Mojave Plan: A Habitat Conservation and California Desert Conservation Area Plan Amendment*. Vols. 1 and 2. BLM/CA/ES-2004-005+1790+1600. <https://eplanning.blm.gov/eplanning-ui/project/72544/570>.
- BLM. 2016. *Land Use Plan Amendment to the California Desert Conservation Plan, Bishop Resource Management Plan, and Bakersfield Resource Management Plan*. BLM/CA/PL-2016/03+1793+8321. Prepared by the BLM. September 2016.
- CDFG (California Department of Fish and Game). 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resource Agency, Department of Fish and Game, May 7, 2012. Accessed October 26, 2021. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843>.
- CDFW (California Department of Fish and Wildlife). 2020. "California Natural Communities List." Sacramento, California: CDFW, Vegetation Classification and Mapping Program. September 9, 2020. Accessed January 2021. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>.
- City of Hesperia. 2010. *The City of Hesperia General Plan Update*. Accessed July 2021.
<https://www.cityofhesperia.us/409/Hesperia-General-Plan>.
- CNPS (California Native Plant Society). 2021. *Inventory of Rare and Endangered Plants of California*. Online edition, Version 8-03. Sacramento, California: CNPS, Rare Plant Program. Accessed February 2021.
<http://www.rareplants.cnps.org/>.
- Coulombe, H.N. 1971. "Behavior and Population Ecology of the Burrowing owl, *Speotyto cunicularia*, in the Imperial Valley of California." *Condor* 73:162–176.
- County of San Bernardino. 2007. *2006 General Plan Program, Final Environmental Impact Report and Appendices*. SCH No. 2005101038. February 2007. <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FinalEIR2007.pdf>.
- County of San Bernardino. 2014. *County of San Bernardino 2007 Development Code*. Adopted March 13, 2007. Amended January 16, 2014. Accessed October 26, 2021. <http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DC011614.pdf>.
- Gervais, J.A., D.K. Rosenberg, and L.A. Comrack. 2008. "Burrowing Owl (*Athene cunicularia*)." In *California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*, edited by W.D. Shuford and T. Gardali, 218–226. Studies of Western Birds no. 1. California: Western Field Ornithologists (Camarillo), and California Department of Fish and Game (Sacramento). February 4, 2008. Accessed December 11, 2012.
<http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html>.

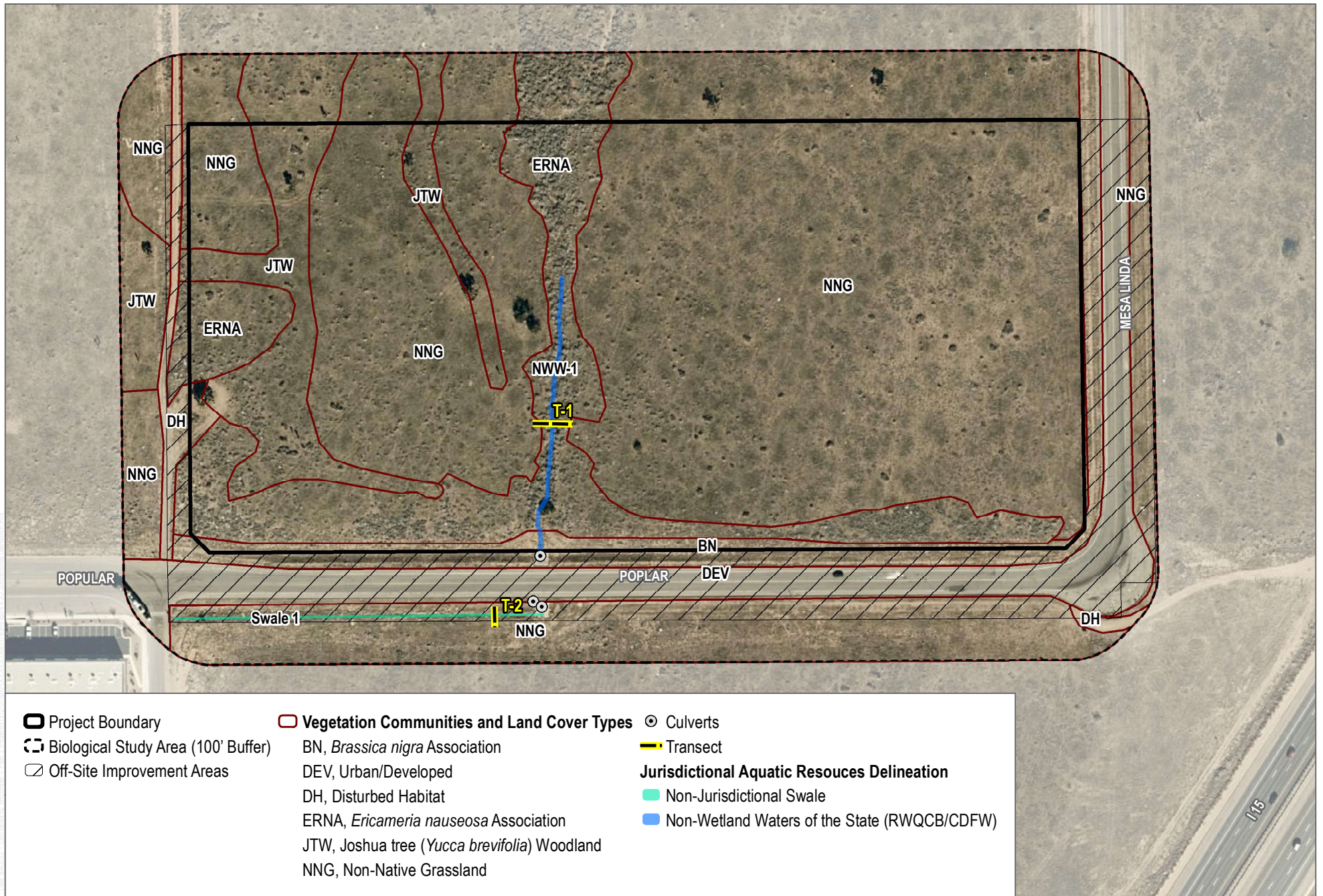
- Green, G.A. and R.G. Anthony. 1989. "Nesting Success and Habitat Relationships of Burrowing owls in the Columbia Basin, Oregon." *Condor* 91:347–354.
- Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. "The Burrowing Owl (*Speotyto cunicularia*)." In *The Birds of North America*, edited by A. Poole and F. Gill. Philadelphia, Pennsylvania: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.
- Hesperia Municipal Code. 2021. A Codification of the General Ordinances of the City of Hesperia, California. Chapter 16.24 – Protected Plants. Version July 23, 2021. Accessed July 2021. https://library.municode.com/ca/hesperia/codes/code_of_ordinances?nodeId=HECAMUCO.
- Humple, D. 2008. "Loggerhead Shrike (*Lanius ludovicianus*)." In *California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*, edited by W.D. Shuford and T. Gardali, 271–277. Studies of Western Birds no. 1. California: Western Field Ornithologists (Camarillo) and California Department of Fish and Game (Sacramento). February 4, 2008. Accessed December 11, 2012. <http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html>.
- Lantz, S. J., H. Smith, and D.A. Keinath. 2004. *Species Assessment for Western Burrowing Owl (Athene cunicularia hypugaea) in Wyoming*. Prepared for the U.S. Department of Interior and Bureau of Land Management, Wyoming State Office, Cheyenne, Wyoming. September 2004.
- Martin, D.J. 1973. "Selected Aspects of Burrowing owl Ecology and Behavior." *Condor* 75: 446–456.
- NPS (National Park Service). 2015. "Desert Kit Fox." February 28, 2015. <https://www.nps.gov/jotr/learn/nature/kitfox.htm>.
- Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. *A Manual of California Vegetation*. Second edition. Sacramento, California: California Native Plant Society.
- SWRCB (State Water Resources Control Board). 2019. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Adopted April 2, 2019. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf.
- USDA (U.S. Department of Agriculture). 2022a. "Web Soil Survey" USDA, Natural Resources Conservation Service. Accessed February 2022. <http://websoilsurvey.nrcs.usda.gov/>.
- USDA. 2022b. PLANTS Database. USDA Natural Resources Conservation Service. Accessed February 2022. <http://plants.usda.gov/java/>.
- USFWS (U.S Fish and Wildlife Service). 2008. *Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)*. California and Nevada Region, Sacramento, California.
- USFWS. 2010. *Preparing for any Action That May Occur Within the Range of the Mojave Desert Tortoise (Gopherus agassizii)*.

- USFWS. 2011. *Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)*. Sacramento, California: Region 8, Pacific Southwest Region, U.S. Fish and Wildlife Service. May 6, 2011. https://www.fws.gov/nevada/desert_tortoise/documents/recovery_plan/RRP%20for%20the%20Mojave%20Desert%20Tortoise%20-%20May%202011.pdf.
- USFWS. 2022a. “National Wetlands Inventory.” U.S. Department of the Interior, USFWS. Accessed May 2022. <http://www.fws.gov/wetlands/>.
- USFWS. 2022b. Environmental Conservation Online System, Information for Planning and Conservation Report (online edition, v2.3.2). Accessed November 2021. <http://ecos.fws.gov/ipac/>.
- Yosef, R. 1996. “Loggerhead Shrike.” In *The Birds of North America Online*, edited by A. Poole. Ithaca, New York: Cornell Lab of Ornithology. Accessed February 12, 2008. <http://bna.birds.cornell.edu/bna/species/231>.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1990. *California’s Wildlife*. Vol. II. Birds. Sacramento, California: California Department of Fish and Game.



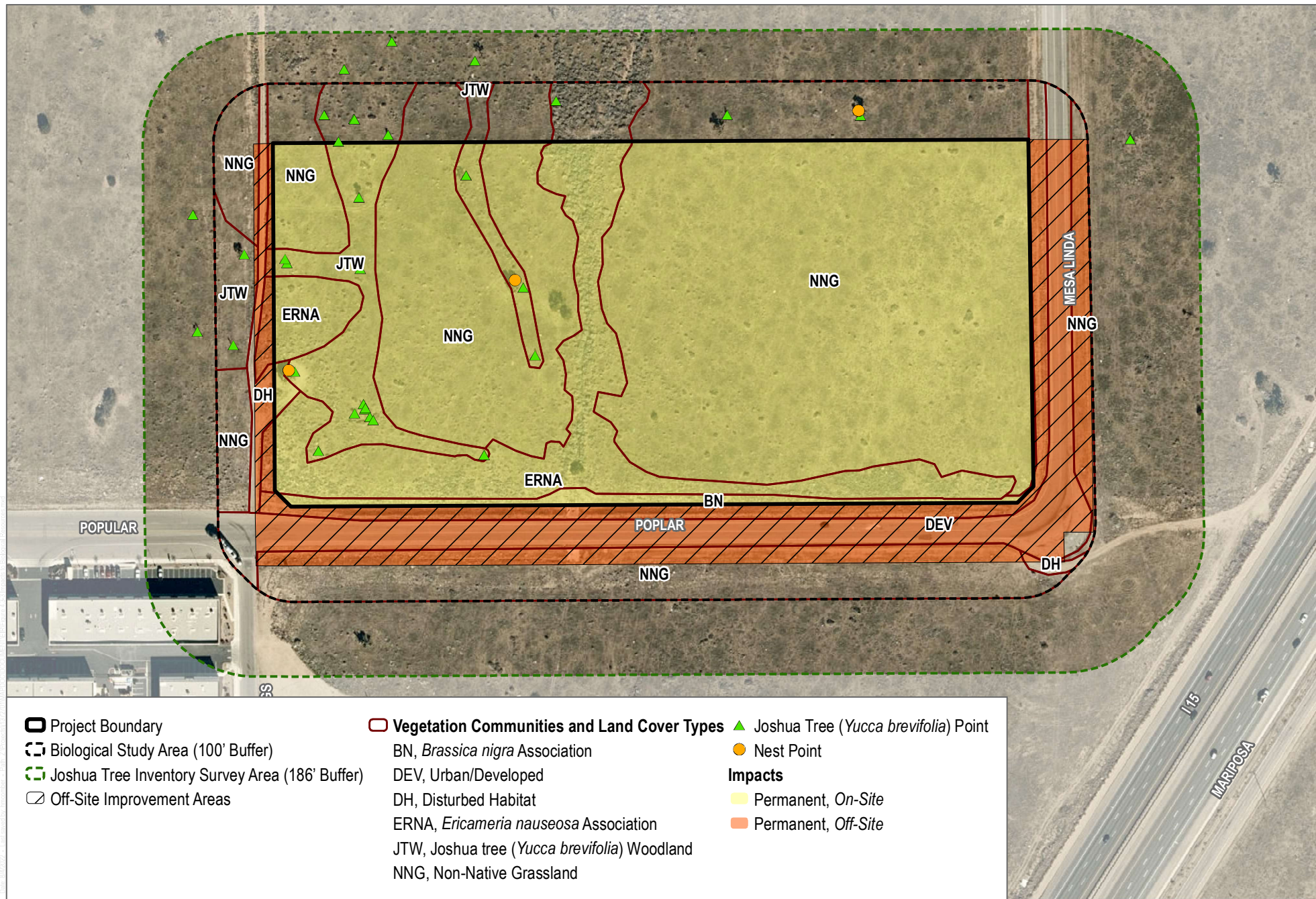
SOURCE: Esri World Imagery Basemap; County of San Bernadino 2017

INTENTIONALLY LEFT BLANK



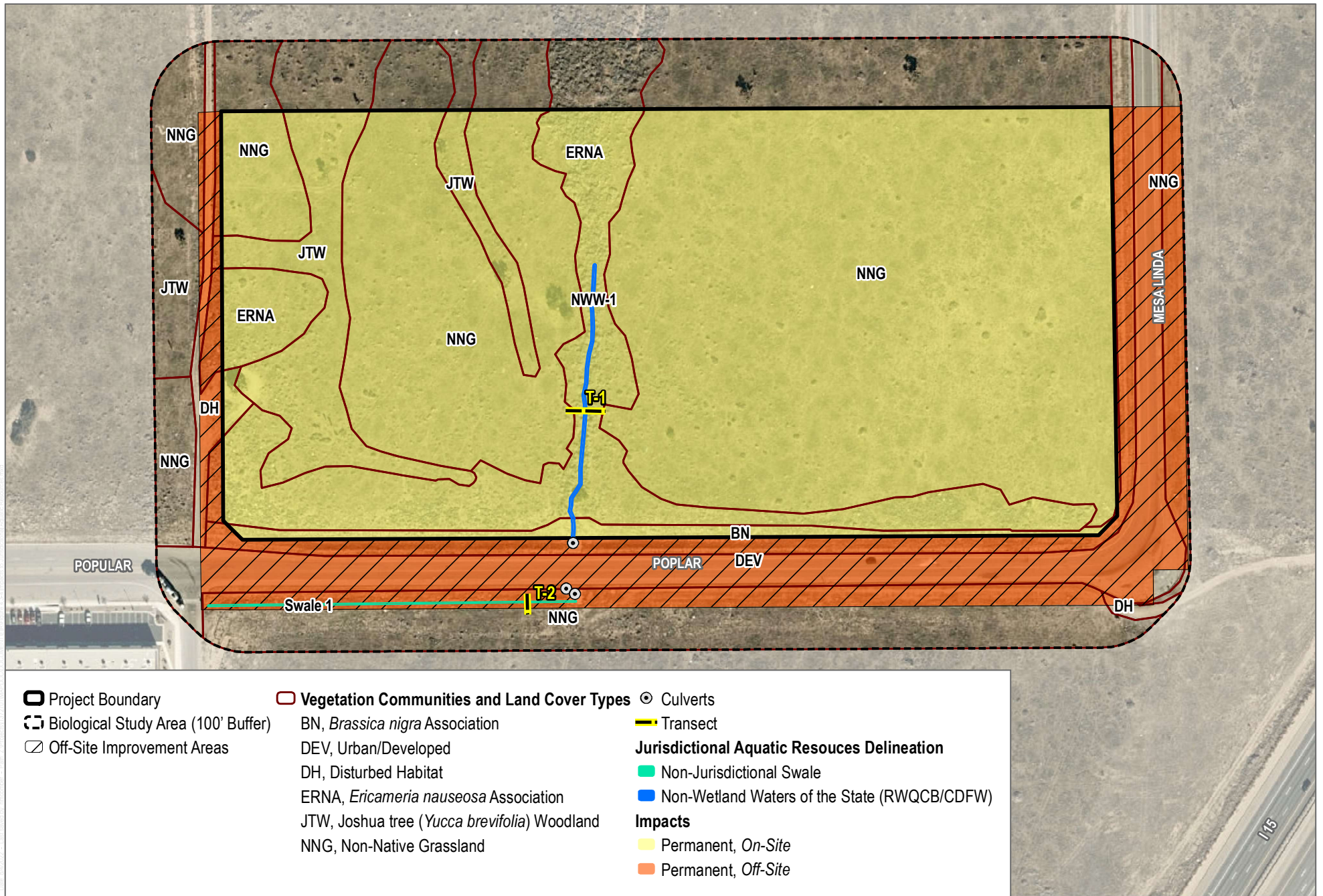
SOURCE: Esri World Imagery Basemap; County of San Bernardino 2017

INTENTIONALLY LEFT BLANK



SOURCE: Esri World Imagery Basemap; County of San Bernadino 2017

INTENTIONALLY LEFT BLANK



SOURCE: Esri Imagery Basemap; County of San Bernadino 2017

FIGURE 4.3-4
Impacts to Jurisdictional Aquatic Resources
Poplar 18 Project

INTENTIONALLY LEFT BLANK

4.4 Cultural, Tribal Cultural, and Paleontological Resources

This section describes the existing cultural, tribal cultural, and paleontological resources conditions of the Poplar 18 Project (Project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2 of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following sources:

- Cultural Resources Assessment Report, prepared by Dudek in August 2022 (Appendix D)
- Geotechnical Investigation, prepared by Southern California Geotechnical in April 2022 (Appendix E)

4.4.1 Existing Conditions

Prehistoric Setting

Evidence for continuous human occupation in Southern California spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad period have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. However, given the direction of research and differential timing of archaeological study following intensive development in Riverside County, chronology building in the Inland Empire must rely on data from neighboring regions to fill the gaps. To be more inclusive, this research employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (before 7500 BP), Archaic (10,000–1500 BP), Late Prehistoric (1500 BP–AD 1769), and Ethnohistoric (after AD 1769).

Paleoindian Period (before 7500 years ago)

Evidence for Paleoindian occupation in the region is tenuous. Our knowledge of associated cultural pattern(s) is informed by a relatively sparse body of data that has been collected from within an area extending from coastal San Diego, through the Mojave Desert, and beyond. A very unique technology defined by fluted projectile points and a highly formal lithic tool kit with almost no processing equipment is often considered to be the earliest evidence of human adaptation to North America. Widely known as “Clovis,” regional manifestations of this toolkit show important variability both in projectile point style and tool kit composition. Importantly, the attributes of “Clovis” are uncommon in California, with very few examples of the diagnostic, “fluted” Clovis point. There is, however, a notable exception from Crystal Cove State Park in southern Orange County (Fitzgerald and Rondeau 2012). This, along with other potential attributes of Clovis culture along the California Coast remain undated, and most of the earliest well-dated sites from the region contain rather different archaeological assemblages (Erlandson et al. 2007).

While the earliest evidence for human activity in California comes from the Channel Islands, ca. 13,000 BP, it does not exhibit obvious cultural similarity with the Clovis phenomenon. However, in the southern Central Valley fluted Clovis points date from ca. 11,000–10,500 BP (Rogers and Yohe 2020). One of the earliest dated archaeological assemblages in coastal Southern California (excluding the Channel Islands) comes from SDI-4669/W-12 in La Jolla, with human remains dating to ca. 9900–9050 BP (Bada et al. 1984). The burial is part of a larger site complex that

contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of ground stone, battered cobbles, and expedient flake tools) (Kennedy 1983). In contrast, typical Paleoindian assemblages include large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of ground stone tools. Prime examples of this pattern come from Naval Air Weapons Station China Lake near Ridgecrest (Davis 1978). These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Fluted points from SBR-2355 and SBR-2356, also in the Mojave Desert, are considered quite ancient (on the thickness of obsidian hydration rinds) and co-occur with a diverse assemblage that also contains stemmed points, typically attributed to the Lake Mojave archaeological culture. Other typical Paleoindian sites in the desert include the Komodo site (MNO-679)—a multi-component fluted point site, and MNO-680—a single component Great Basined Stemmed point site (Basgall 1987, 1988; Basgall et al. 2002). At MNO-679 and -680, ground stone tools were rare while finely made projectile points were common.

Turning back to coastal Southern California, the fact that some of the earliest dated assemblages are dominated by processing tools runs counter to traditional image of Paleoindians as highly mobile big-game hunters. Evidence for the latter—that is, typical Paleoindian assemblages—may have been located along the coastal margin at one time, prior to glacial desiccation and a rapid rise in sea level during the early Holocene (before 7500 BP) that submerged as much as 16 kilometers of the San Diego coastline since people first arrived in California, ca. 13,000 years ago (ICF 2013). If this were true, however, it would also be expected that such sites would be located on older landforms near the current coastline. Some sites, such as SDI-210 along Agua Hedionda Lagoon, contain stemmed points similar in form and age to Silver Lake and Lake Mojave projectile points from the high desert (Basgall and Hall 1993; Warren et al. 2004). However, sites of this nature are extremely rare; more typical are sites that contain large numbers of milling tools intermingled with older projectile point forms. Separating cultural components on the basis of artifact form and frequency is therefore difficult.

Warren et al. (2004) claim that a biface manufacturing tradition at the Harris site complex (SDI-149) is representative of typical Paleoindian occupation in the San Diego region that possibly dates between ca. 11,200 and 8200 BP (on the basis of radiocarbon dates from the Harris site itself). Termed San Dieguito (also see Rogers 1945), assemblages at the Harris site are qualitatively distinct from most others in the San Diego region because the site has large numbers of well-made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (also see Warren 1964; Warren 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is hotly debated. Gallegos (1987, 2017) suggested that the San Dieguito pattern is simply the inland manifestation of a broader economic pattern. This interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the San Diego region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely made bifaces and formal flake tools implies that relatively large amounts of time were spent on tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies the regional Archaic sites (see below). It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents an economic strategy distinct from that represented by other roughly contemporaneous assemblages from throughout the region.

San Dieguito sites are rare in the inland valleys, with one possible candidate, RIV-2798/H, located on the shore of Lake Elsinore. Excavations at Locus B at RIV-2798/H produced a toolkit consisting predominately of flaked stone tools, including crescents, points, and bifaces, and lesser amounts of ground stone tools, among other items (Grenda 1997). A calibrated and reservoir-corrected radiocarbon date on a shell from this site points to an early occupation, ca. 8880–8525 BP. Grenda suggested this site represents seasonal exploitation of lacustrine resources and small game and resembles coastal San Dieguito assemblages and spatial patterning.

If the San Dieguito pattern truly represents a socioeconomic strategy distinct from the regional Archaic processing regime, its rarity implies that it was not only short-lived, but that it was not as economically successful as the Archaic strategy. Such a conclusion would fit with other trends in Southern California deserts, where hunting-related tools were replaced by processing tools during the early Holocene (Basgall and Hall 1990).

Archaic Period (10,000 – 1500 years ago)

The more than 2,500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in Southern California. If San Dieguito is the only recognized Paleoindian component in the coastal Southern California, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004) admitted as much, citing strong desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the region (see Hale 2001, 2009).

The Archaic pattern, which has also been termed the Milling Stone Horizon (among other things), is relatively easy to define with assemblages that consist primarily of processing tools, such as milling stones, hand stones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the region with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (Basgall and Hall 1990; Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurred until the bow and arrow, and then ceramics, were adopted after 1500 BP (Griset 1996; Hale 2009; Schaefer 2012). Even then, assemblage formality remained low. After the bow was adopted, small arrow points appear in large quantities and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped milling stones and hand stones decreased in proportion relative to expedient, unshaped ground stone tools (Hale 2009). Thus, the terminus of the Archaic period is equally as hard to define as its beginning because basic assemblage constituents and patterns of manufacturing investment remain stable, complemented only by the addition of the bow and ceramics.

Late Prehistoric Period (1500 BP–AD 1769)

The period of time following the Archaic and before Ethnohistoric times (AD 1769) is commonly referred to as the Late Prehistoric (McDonald and Eighmey 2004; Rogers 1945; Wallace 1955); however, several other subdivisions continue to be used to describe various shifts in assemblage composition. In general, this period is defined by the addition of arrow points and ceramics, as well as the widespread use of bedrock mortars. The fundamental Late Prehistoric assemblage is very similar to the Archaic pattern but includes arrow points and large quantities of fine debitage from producing arrow points, as well as ceramics, and cremations. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces. Some argue that the Ethnohistoric intensive acorn economy extends as far back as 1500 BP (Bean and Shipek 1978). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred before 600 BP. In Riverside County and the surrounding region, milling stones and hand stones persisted in higher frequencies than

mortars and pestles until the last 500 years (Basgall and Hall 1990); even then, weighing the economic significance of milling stone-hand stone versus mortar-pestle technology is tenuous due to incomplete information on archaeological assemblages.

Ethnohistoric Period (after AD 1769)

The history of the Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the region come predominantly from European merchants, missionaries, military personnel, and explorers. These briefs, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The establishment of the missions in the region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century (Bean and Shipek 1978; Boscana 1846; Harrington 1934; Laylander 2000; Sparkman 1908; White 1963). The principal intent of these researchers was to record the precontact and culturally specific practices, ideologies, and languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as “salvage ethnography,” was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his “memory culture” approach (Lightfoot 2005, p. 32) by recording languages and oral histories within the region. Ethnographic research by Dubois, Kroeber, Harrington, Spier, and others during the early twentieth century seemed to indicate that traditional cultural practices and beliefs survived among local Native American communities.

It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about native life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of precontact, aboriginal culture was being increasingly supplied by individuals born in California after considerable contact with Europeans. As Heizer (1978) stated, this is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California.

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006, p. 34). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007).

Golla contended that one can interpret the amount of variability within specific language groups as being associated with the relative “time depth” of the speaking populations (Golla 2007, p. 80). A large amount of variation within the language of a group represents a greater time depth than a group’s language with less internal diversity. One method that he has employed is by drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla observed that the “absolute chronology of the internal diversification within a language family” can be correlated with archaeological dates (2007, p. 71). This type of interpretation is modeled on concepts of genetic drift and gene flows that are associated with migration and population isolation in the biological sciences.

The tribes of this area have traditionally spoken Takic languages that may be assigned to the larger Uto–Aztecan family (Golla 2007, p. 74). These groups include the Gabrielino, Cahuilla, and Serrano. Golla interpreted the amount of internal diversity within these language-speaking communities to reflect a time depth of approximately 2,000 years. Other researchers have contended that Takic may have diverged from Uto–Aztecan ca. 2600 BC–AD 1, which was later followed by the diversification within the Takic speaking tribes, occurring approximately 1500 BC–AD 1000 (Laylander 2000).

Serrano

Traditionally, the Serrano lived in an area east of the Gabrielino and north of the Cahuilla, near present-day western San Bernardino County and northeastern Los Angeles County (Laylander 2010). The Serrano occupied an area in and around the San Bernardino Mountains between approximately 1,500 and 11,000 feet amsl. Their territory extended west along the northern slope of the San Gabriel Mountains, east as far as Twentynine Palms, north along the Mojave River, and south to the San Jacinto area. Kroeber (1925) divided the Serrano into four distinct groups within the western Mojave Desert: the Kitanemuk, Tataviam, Serrano, and Vanyume. Each group held a distinct territory within the region (Kroeber 1925). According to Bean and Smith (1978, p. 570), “the Serrano resided in an area that extended east of the Cajon Pass, located in the San Bernardino Mountains, to Twenty-nine Palms, the north foothills of the San Bernardino Mountains and south to include portions of the Yucaipa Valley.”

Serrano social organization was based on patrilineal and patrilocal lineages. Exogamy rules required that a man could not marry a woman related to them within five generations. Women moved to their husband’s village but kept their identity as a member of their natal lineage.

The Serrano were mainly hunters and gatherers who occasionally fished. Game hunted included mountain sheep, deer, antelope, rabbits, small rodents, and various birds, particularly quail. Vegetable staples consisted of acorns, piñon nuts, bulbs and tubers, shoots and roots, berries, mesquite, barrel cacti, and Joshua tree (Bean and Smith 1978). A variety of materials was used for hunting, gathering, and processing food, as well as for shelter, clothing, and luxury items. Shells, wood, bone, stone, plant materials, and animal skins and feathers were used for making baskets, pottery, blankets, mats, nets, bags and pouches, cordage, awls, bows, arrows, drills, stone pipes, musical instruments, and clothing (Bean and Smith 1978).

The majority of the Serrano lived in small villages, close to sources of fresh water (Benedict 1924). Houses and ramadas were round, dome-shaped, and constructed of poles covered with bark and tule mats (Benedict 1924; Kroeber 1925). The Serrano also had sweat houses and ceremonial houses for religious activities. Further, according to Benedict (1924), a typical Serrano settlement was a village with multiple small satellite camps surrounding it. Most Serrano villages also had a ceremonial house used as a religious center. Other structures within the village might include granaries and sweathouses (Bean and Smith 1978). According to DeBarros (2004), one of the more prominent Serrano villages was called Guapiabit, and it was located in Summit Valley

Historic Setting

Post-Contact history for the State of California is generally divided into three periods: the Spanish Period (1769–1821), Mexican Period (1822–1848), and American Period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American Period when California became a territory of the United States.

Background Research

Cultural Resources Records Search

Dudek referenced a CHRIS records search that was previously completed for another project immediately adjacent to the present Project site (completed February 5, 2021), which included a search of any previously recorded cultural resources and investigations within a 1-mile radius of the Project site. The CHRIS search also included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The confidential records search results are provided in Confidential Appendix B of Appendix D.

Due to COVID-19 restrictions, the SCCIC notified researchers that they are only able to provide data for San Bernardino County that has already been digitized. As such, not all available data known to CHRIS may be provided in the records search. Additionally, the SCCIC is currently unable to provide quality assurance/quality control of their records searches, a once routine procedure prior to COVID-19 restrictions. Therefore, some discrepancies within the records search are possible. Dudek reviewed the available SCCIC records to determine whether the implementation of the Project would have the potential to impact any known and unknown cultural resources.

Previously Conducted Cultural Resources Studies

Results of the CHRIS records search indicate that 52 previous cultural resources studies have been conducted within 1 mile of the Project site between 1973 and 2016. Of the 52 studies, 5 studies, SB-01025, SB-01026, SB-01027, SB-02476, and SB-08205, either overlap or are immediately adjacent to the Project site and together address approximately one-third of the Project site. Of these 5 reports, 4 studies, SB-01025, SB-01026, SB-01027, and SB-02476, consist of large-scale studies related to water district improvements that do not directly assess the Project site. Furthermore, report SB-08205 was not digitized and therefore not provided. Table 4.4-1, below, provides a complete list of all 52 previous cultural resources studies within 1 mile of the Project site.

Table 4.4-1. Previously Conducted Cultural Resources Studies within 1 Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-00191	Smith, Gerald A.	1973	Archaeological, Historical and Paleontological Site Survey for County Service Area No. 70 Improvement Zone "J", Assessment of Impact and Recommendations	Outside
SB-00986	Reynolds, Robert E.	1980	Baldy Mesa Water Lines, Cultural Resources Assessment	Outside
SB-01025	Harris, Ruth	1973	Archaeological, Historical, and Paleontological Site Survey for County Service Area No. 70 Improvement Zone "J", Assessments of Impact and Recommendations	Subsumes Project site
SB-01026	Harris, Ruth	1974	Archaeological, Historical, and Paleontological Site Survey for County Service Area No. 70 Improvement Zone "J", Assessments of Impact and Recommendations	Subsumes Project site

Table 4.4-1. Previously Conducted Cultural Resources Studies within 1 Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-01027	Reynolds, Robert E.	1980	Cultural Resources Assessment: Baldy Mesa Water Lines, County Service Area 70, Improvement Zone J, San Bernardino County, California	Subsumes Project site
SB-02202	McKenna, Jeanette A.	1990	A Phase I Archaeological Investigation of Proposed Water Pipeline Routes and reservoir/Pumping Locations, in the Baldy Mesa/Phelan Area, San Bernardino County, California	Outside
SB-02229	Shinn, Juanita R.	1991	Archaeological Assessment of 10 Acre Parcel for Creative Boundaries	Outside
SB-02238	Knell, Edward J.	1991	Cultural Resources Reconnaissance of Twenty One Acres Near Hesperia, San Bernardino County, California	Outside
SB-02395	White, Robert S.	1991	An Archaeological Assessment of Tentative Tract 14596, a 235.33-Acre Parcel Located in Hesperia, San Bernardino County	Outside
**SB-02476	McKenna, Jeanette A.	1991	A Phase I Linear Survey: Cultural Resources Investigations for the Hesperia Improvement District, Hesperia, San Bernardino County, California	Subsumes Project site
SB-02507	Sundberg, Frederick A. and Nancy Whitney-Desautels	1992	Archaeological and Paleontological Survey for a Three Mile Segment of Phelan Road, San Bernardino County, California	Outside
SB-02674	Singer, Clay A., John E. Atwood, and Barbie S. Laney	1992	Cultural Resources Survey and Impact Assessment for APN 404-281-36 in the Baldy Mesa Area of San Bernardino County, California	Outside
SB-02730	McKenna, Jeanette A.	1993	Cultural Resources Investigations of the Tracy Smith Property, APN 404-092-53 (TPM 14387), San Bernardino County, California	Outside
SB-02732	Parr, Robert E.	1992	An Archaeological Assessment of Tentative Parcel Map #14242 Baldy Mesa, San Bernardino County, CA	Outside
SB-02803	Love, Bruce	1993	Main St./I-15 Interchange, Hesperia	Outside
SB-03110	Brock, James and Christine L. D'Iorio	1996	Historic Property Survey and Historic Architectural Evaluation Report for the Widening of Phelan Road from Baldy Mesa Road to State Hwy 395, San Bernardino County, California	Outside
SB-03366	Brechibiel, Brant	1998	Cultural Resource Records Search and Survey Report for a PMBS Services Telecommunications Facility: CM 239-01 in the City of Hesperia, California	Outside

Table 4.4-1. Previously Conducted Cultural Resources Studies within 1 Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-03448	Alexandrowicz, John Stephen	2000	A Historical Resources Identification Investigation for the Little Sisters Truck Wash, City of Hesperia	Outside
SB-04036	Cerreto, Ricard and Christy Malan	2004	Cultural Resource Assessment for Parcel 3, APN: 3064-591-17, City of Hesperia, San Bernardino County, California	Outside
SB-04191	McKenna, Jeanette A.	2004	An Intensive Archaeological Survey of the Frontier Homes Property, Tract No. 16744 in the City of Hesperia, San Bernardino County, California	Outside
SB-04281	Cerreto, Richard, Christy Malan, and Katherine Ward	2004	Cultural Resources Assessment for APN: 3064-481-12, the City of Hesperia, San Bernardino County, CA	Outside
SB-04282	Fulton, Phil	2004	Cultural Resources Assessment: Cingular Wireless Facility No. SB 333-01, Hesperia, San Bernardino County, California	Outside
SB-04283	Budinger, Fred E.	2002	A Cultural Resources Phase I Archaeological Survey of the Parcel of the 138 Acre Hesperia Master Plan Parcel, City of Hesperia, San Bernardino County, California	Outside
SB-04284	Alexandrowicz, John Stephen	2001	Historic Archaeology at John E. Dufton's Homestead	Outside
SB-04285	Green, Julia K.	2004	Cultural Resources Inventory and Evaluation: Timbisha Shoshone Hotel and Casino, San Bernardino County, California	Outside
SB-04286	Love, Bruce	1999	08-SBD Hesperia Park and Ride Facility at the Intersection of US 395 and Joshua St Near the City of Hesperia	Outside
SB-04289	White, Robert S. and Laura S. White	2003	A Cultural Resources Assessment of the San Bernardino County Special Districts CSA 70 Zone J Casita Ave Water Pipeline Project Near Hesperia, San Bernardino Co	Outside
SB-04290	Hammond, Stephen and David Bricker	1997	The Realignment of US Highway 395 and Main ST in the City of Hesperia, San Bernardino County, California	Outside
SB-04309	McKenna, Jeanette A.	2000	Results of a Phase I Cultural Resources Investigation of the Nick Adams Property (APN: 3039-321-03), San Bernardino County, California	Outside
SB-04580	Hatheway, Roger	2005	A Phase I Historical and Archaeological Survey of the Caliente Industrial Park Property, Assessor Parcel # 3039-321-08-0000, City of Hesperia, California.	Outside

Table 4.4-1. Previously Conducted Cultural Resources Studies within 1 Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-04582	Duff, Gabrielle and Manuel R. Palacios-Fest	2005	Archaeological and Paleontological Survey of the Ludwig Property, Hesperia, San Bernardino County, California.	Outside
SB-04796	Brunzell, David	2005	Cultural Resource Assessment Vista Del Valle City of Victorville San Bernardino County, California	Outside
SB-04975	Wetherbee, Matthew	2005	Historical/Archaeological Resources Survey Report: Baldy Mesa Water District Arsenic Treatment Project, Cities of Victorville and Hesperia, San Bernardino County, California.	Outside
SB-05107	Chandler, Evelyn N, Cotterman, Cary D, and Mason, Roger D	2002	Cultural Resources Survey of the Proposed California Charter Academy Hesperia, San Bernardino County, California	Outside
SB-05216	McKenna, Jeanette A.	2006	Results of a Phase 1 Cultural resources Investigation for the Proposed Wal-Mart Supercenter Approximately 38 Acres in the City of Hesperia, San Bernardino County, California	Outside
SB-05452	McKenna, Jeanette A.	2007	Results of a Phase I Cultural Resources Investigation for Approximately 20 Acres of Land (APN 3039-321-10) In the City of Hesperia, San Bernardino County, California	Outside
SB-05698	Hogan, Michael	2007	Historical/Archaeological Resources Survey Report: US Highway 395 Realignment EIR, Victorville Area, San Bernardino County, California.	Outside
SB-05818	Budinger, Fred E.	2007	An Archaeological Survey of 10-Acres (APN 3064-601-01) for the Proposed Holiday Inn Hesperia Project to located Southeast of the Intersection of Main Street and Mesa Linda Street in the City of Hesperia, San Bernardino County, California 92392	Outside
SB-06162	Bonner, Wayne and Aislin-Kay, Marnie	2008	Cultural Resource Records Search and Site Visit Results for Royal Street Communications California, LLC Candidate LA3329A (Outpost Road), 8391 Outpost Road, Oak Hills, San Bernardino County, California	Outside
SB-06164	Sander, Jay	2007	Cultural Resources Inventory of APN 3064-561-12 Hesperia, San Bernardino County, California	Outside
SB-06333	Horne, Melinda C.	2005	Cultural Resources Survey for the Mojave Water Agency Water Banking Project	Outside
SB-06510	White, Laura S.	2005	A Cultural Resources Assessment of TT 16751, A 21.96-Acre Parcel Located Adjacent to Sultana Street, East of Escondido Avenue, City of Hesperia, San Bernardino County	Outside

Table 4.4-1. Previously Conducted Cultural Resources Studies within 1 Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-06600	Tang, Bai, Smallwood, Josh, John J. Eddy, Harry M. Quinn, Terri Jacquemain, Daniel Ballester, and Laura Hensley Shaker	2008	Extended Phase I Historical/Archaeological Resources Study: Northeast Recycled Water Expansion Projects, In and Near the Cities of Rancho Cucamonga and Fontana, San Bernardino County, California	Outside
SB-06602	Wlodarski, Robert J.	2009	Cultural Resources Record Search and Archaeological Survey Results for the proposed Royal Street Communications, California, LLC, Site LAee28A (Vacant Lot TMO-Pine Colo) located at 9980 Lassen Street, Hesperia, San Bernardino County, California 92345	Outside
SB-06652	ESA	2010	Preliminary Archaeological Survey Report for 98 Linear Miles of the east Branch Extension of the California Aqueduct for the DWR East Branch Enlargement Project Los Angeles and San Bernardino Counties (California)	Outside
SB-07156	Tang, Bai "Tom", Daniel Ballester, and Nina Gallardo	2011	Historical/Archaeological Resources Survey Report: Water Supply System Improvements Projects, Fiscal Years 2010/2011 - 2014/2015, Victorville Water District, San Bernardino County, California.	Outside
SB-07493	Dahdul, Miriam, Daniel Ballester, John D. Goodman II, and Nina Gallardo	2013	Historical/Archaeological Resources Survey Report: Westside Terraces Project, Assessor's Parcel No's 3064-441-01 to -03, City of Hesperia, San Bernardino County, California.	Outside
SB-07971	McDougall, Dennis	2007	Cultural Resources Survey of Approximately 522.7 Acres Within the Oro Grande Wash North - Recharge Basins Project Area for the Mojave Water Agency Water Banking Project	Outside
SB-08019	Hogan, Michael	2016	Archaeological Survey Report Park and Ride Facility Expansion Project City of Hesperia, San Bernardino County, California	Outside
SB-08179	Hogan, Michael	2015	Archaeological/Paleontological Monitoring Program, Tractor Supply Company Retail Facility Project, 12543 Main Street, City of Hesperia, San Bernardino County	Outside
**SB-08205	McKenna, Jeanette A.	2015	A Phase I Cultural Resources Investigation of the Proposed Summit Leadership Academy, High Desert Campus, City of Hesperia, San Bernardino Co., California	Adjacent

Table 4.4-1. Previously Conducted Cultural Resources Studies within 1 Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-08232	Tang, Bai, Jesse Yorck, Daniel Ballester, and Nina Gallardo	2016	Historical/Archaeological Resources Survey Report Country Inn and Suites Project	Outside

Note:

* Reports have not been digitized and are therefore unavailable due to current SCCIC Covid-19 protocols.

Previously Recorded Cultural Resources

The CHRIS records search identified two previously recorded cultural resources within the Project site: P-36-004179/CA-SBR-004179H and P-36-010288/CA-SBR-010288H. One of these resources, P-36-004179/CA-SBR-004179H is a historic-period unpaved road, and one resource, P-36-010288/CA-SBR-010288H, consists of a late nineteenth century homestead. A discussion of these two previously recorded cultural resources is provided below.

The CHRIS records search identified an additional 35 previously recorded cultural resources within the 1-mile records search radius. These resources consist of 8 built environment resources, 24 historic-period archaeological resources, and 3 prehistoric archaeological resources. The built environment resources consist of 6 unpaved roads and 2 paved roads. The historic-period archaeological resources consist of 8 household refuse scatters, 8 household refuse dumps, 1 metal can scatter, 1 homestead site, and 6 isolates consisting of bottle glass shards and/or metal cans. The prehistoric archaeological resources consist of 1 low-density lithic scatter and 2 isolated tested or battered cobbles. The prehistoric archaeological resources are generally distributed to the north, west, and south of the Project site along the eastern bank of the Oro Grande Wash. The nearest prehistoric resource to the Project site is located approximately 170 meters (560 feet) south of the Project site and consists of an isolated tested cobble. Table 4.4-2, below, provides a summary of all 35 previously recorded cultural resources within 1 mile of the Project site followed by discussion of these two previously recorded cultural resources that overlap the Project site.

Table 4.4-2. Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
004179	004179H	Built Environment: Road	Historic route known as the Canal Lane Historic Road.	7R: Not evaluated	1980 (R. Reynolds); 1980 (R. Reynolds); 2007 (D. Ballester); 2007 (D. Ballester); 2009 (ESA); 2010 (M. Valask)	Overlaps
004251	004251H	Built Environment: Road	Historic road known as the Baldy Mesa	6Z: Ineligible for NRHP,	1980 (R. Reynolds); 1991 (J. Petersen);	936m (3070 ft)

Table 4.4-2. Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
			Pole Line; poles have since been removed leaving only the access road intact.	CRHR, or Local	1993 (K. Becker); 2009 (K. Anderson); 2010 (J. Coleman); 2011 (J. Trampier); 2018 (C. Bennett)	east of the Project site
004266	004266	Archaeological site: Prehistoric	Prehistoric site consisting of low-density lithic scatter, core, fire-affected rock, and two secondary flakes.	7R: Not evaluated	1980 (R. Reynolds); 1993 (K. Becker)	1032m (3385 ft) southwest of the Project site
004267	004267H	Built Environment: Road	Historic road known as the Oro Grande Wash/Oak Hill Cutoff Road. Most recent record of this site claims it has been destroyed and no evidence of the original road remains.	7R: Not evaluated	1980 (R. Reynolds); 1993 (K. Becker); 2007 (D. Ballester); 2007 (M. Linder)	815m (2675 ft) north of the Project site
004268	004268H	Built Environment: Road	Historic road known as the Oro Grande Wash/White Road Cutoff. Most recent record of this site claims it has been destroyed and no evidence of the original road remains.	6Z: Ineligible for NRHP, CRHR, or Local	1980 (R. Reynolds); 1993 (K. Becker); 1993 (J. McKenna); 1995 (J. Brock); 2007 (D. Ballester)	985m (3230 ft) north of the Project site
004275	004275H	Built Environment: Road	Historic road known as Houghton's Crossing Toll Road.	6Z: Ineligible for NRHP, CRHR, or Local	1980 (R. Reynolds); 1991 (Knell); 1993 (K. Becker); 2002 (Cotterman)	600m (1968 ft) east of the Project site

Table 4.4-2. Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
007545	007545H	Built Environment: Road	Historic highway known as State Route 395.	6Z: Ineligible for NRHP, CRHR, or Local	1993 (T. Wahoff and L. Peterson); 1996 (D. Bricker); 1997 (D. Bricker); 2000 (J. Underwood and S. Rosel); 2007 (D. Ballester); 2009 (K. Anderson); 2010 (M. Valasik); 2010 (S. Jow); 2013 (L. Honey); 2013 (D. Martinez); 2014 (J. Hall and C. Morgan)	455m (1495 ft) northwest of the Project site
007680	007680H	Archaeological site: Historic-period	Historic refuse dump consisting of nails, glass, ceramics, metal fragments, and vehicle parts form a Model A Ford.	7R: Not evaluated	1993 (J. McKenna and Reeves)	1440m (4725 ft) southwest of the Project site
007755	007755H	Archaeological site: Historic-period	Historic site consisting of glass fragments, ironstone bowl fragments, cans, Pepsi glass bottle, and a glass bottle.	7R: Not evaluated	1993 (K. Becker)	1344m (4410 ft) northwest of the Project site
007756	007756H	Archaeological site: Historic-period	Historic trash scatter consisting of glass bottles, glass fragments, umbrella parts, tin cans, metal fragments, and ironstone dish fragments.	7R: Not evaluated	1993 (K. Becker)	1320m (4430 ft) northwest of the Project site
007757	007757H	Archaeological site: Historic-period	Historic trash scatter consisting of a variety of can and glass artifacts.	7R: Not evaluated	1993 (K. Becker)	1152m (3780 ft) northwest of the Project site

Table 4.4-2. Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
007758	007758H	Built Environment: Road	Historic segments of paved road.	7R: Not evaluated	1993 (K. Becker)	528m (1732 ft) northwest of the Project site
008077	008077H	Archaeological site: Historic-period	Historic trash scatter consisting of various cans, glass fragments, ceramic fragments, asphalt fragments, vehicle parts, and various modern debris.	7R: Not evaluated	1995 (Brock and James)	1296m (4252 ft) northwest of the Project site
008082	008082H	Built Environment: Road	Historic road known as Phelan Road.	6Z: Ineligible for NRHP, CRHR, or Local	1995 (Brock and James); 2007 (D. Ballester)	1008m (3307 ft) north of the Project site
010287	010287H	Archaeological site: Historic-period	Historic site consisting of dirt path, a temporary homestead site and various isolated refuse objects including tin cans, and metal hinges.	7R: Not evaluated	2000 (J. Alexandrowicz)	195m (630 ft) south of the Project site
010288	010288H	Archaeological site: Historic-period	Historic property known as the John E. Dufton Homestead.	6Z: Ineligible for NRHP, CRHR, or Local	2000 (J. Alexandrowicz); 2015 (J. McKenna)	Overlaps

Table 4.4-2. Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
010920	010920H	Archaeological site: Historic-period	Historic trash dump consisting of tin cans, metal fragments, glass fragments, lumber, and ceramic fragments.	6Z: Ineligible for NRHP, CRHR, or Local	2002 (C. Cotterman)	600m (1968 ft) east of the Project site
010921	010921H	Archaeological site: Historic-period	Historic refuse deposit consisting of metal artifacts, tin cans, glass bottle fragments, and ceramic fragments.	6Z: Ineligible for NRHP, CRHR, or Local	2002 (C. Cotterman)	744m (2440 ft) southeast of the Project site
012056	012056H	Archaeological site: Historic-period	Historic site consisting of structural remains and low-density trash scatter including paint cans, food cans, glass fragments, couch springs, wire screen, and architectural material.	7R: Not evaluated	2005 (G. Duff)	600m (1968 ft) northeast of the Project site
012339	012217H	Archaeological site: Historic-period	Historic high-density trash scatter consisting of ceramic fragments, glass bottle fragments, and various cans.	7R: Not evaluated	2005 (S. Norris)	504m (1654 ft) northwest of the Project site
012340	012218H	Archaeological site: Historic-period	Historic refuse deposit consisting of a ceramic plate, ceramic fragments, and various cans.	7R: Not evaluated	2005 (S. Norris)	430m (1415 ft) north of the Project site

Table 4.4-2. Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
012341	012219H	Archaeological site: Historic-period	Historic refuse deposit consisting of glass bottle fragments, porcelain fragments, various cans, and a brick.	7R: Not evaluated	2005 (S. Norris)	552m (1810 ft) northwest of the Project site
012342	012220H	Archaeological site: Historic-period	Historic refuse deposit consisting of porcelain fragments, clear glass fragments, and various cans.	7R: Not evaluated	2005 (S. Norris)	385m (1260 ft) northwest of the Project site
012343	012221H	Archaeological site: Historic-period	Historic low-density trash scatter consisting of a horseshoe, kerosene lamp burner, bullet cartridge, glass fragments, porcelain lids, and various cans.	7R: Not evaluated	2005 (K. Becker)	288m (995 ft) north of the Project site
012344	012222H	Built Environment: Road	Historic road 6 to 8 feet wide and heavily disturbed due to recreational use of off-road vehicles.	7R: Not evaluated	2005 (V. Austerman and L. Lee)	865m (2835 ft) northwest of the Project site
012345	012223H	Built Environment: Road	Historic unpaved dirt road.	7R: Not evaluated	2005 (V. Austerman and L. Lee)	550m (1810 ft) northwest of the Project site
012346	012224H	Built Environment: Road	Historic unpaved north to south running dirt road.	7R: Not evaluated	2005 (V. Austerman and L. Lee)	335m (1100 ft) northwest of the Project site

Table 4.4-2. Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
012347	—	Archaeological isolate: Prehistoric	Prehistoric isolate described as a tested quartzite cobble with 3 flake scars.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (K. Becker, T. Diaz, and M. Knyppstra)	720m (2360 ft) northwest of the Project site
013356	012556H	Archaeological site: Historic-period	Historic refuse dump of 6 fragments of sun-altered manganese glass, 13 ceramic shards, and various metal cans.	7R: Not evaluated	2007 (D. Ballester)	985m (3230 ft) north of the Project site
020263	—	Archaeological isolate: Prehistoric	Prehistoric isolate described as a tested obsidian nodule with two or three flake scars.	6Z: Ineligible for NRHP, CRHR, or Local	2004 (Cerreto and Cunningham)	195m (630 ft) south of the Project site
020473	—	Archaeological isolate: Historic-period	Historic isolate described as a glass bottle with inverted base.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (G. Duff)	1152m (3780 ft) northeast of the Project site
020556	—	Archaeological isolate: Historic-period	Historic isolate described as an aqua glass shard.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (K. Pollock, P. Stanton, L. Lee, and K. Sewell)	1320m (4430 ft) northwest of the Project site
020557	—	Archaeological isolate: Historic-period	Historic isolate described as two hole-in-cap meat cans.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (K. Pollock, P. Stanton, L. Lee, and K. Sewell)	1392m (4567 ft) northwest of the Project site
020558	—	Archaeological isolate: Historic-period	Historic isolate described as a hole-in-cap can.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (K. Pollock, P. Stanton, L. Lee, and K. Sewell)	1440m (4725 ft) northwest of the Project site
026211	016620H	Archaeological site:	Historic refuse scatter consisting of ceramic	7R: Not evaluated	2013 (D. Ballester)	1056m (3465 ft)

Table 4.4-2. Previously Recorded Cultural Resources Within a 1-Mile Radius of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
		Historic-period	fragments, metal artifacts, red brick, and amethyst glass fragments.			north of the Project site
026212	016621H	Archaeological site: Historic-period	Historic refuse scatter consisting of hole-in-cap cans, lard buckets, and beef cans.	7R: Not evaluated	2013 (D. Ballester)	1320m (4330 ft) north of the Project site
026213	016622H	Archaeological site: Historic-period	Historic trash dump consisting of various cans, bottle caps, glass bottle fragments, and assorted domestic items.	7R: Not evaluated	2013 (D. Ballester)	1128m (3700 ft) north of the Project site
033090	—	Archaeological isolate: Historic-period	Historic isolate described as three amethyst glass fragments and one sardine can.	6Z: Ineligible for NRHP, CRHR, or Local	2018 (R. Goodwin, M. Jenkins, and A. Garcia)	1560m (5118 ft) northwest of the Project site
033091	—	Archaeological isolate: Historic-period	Historic isolate described as a condensed milk can and steel church-key beverage can.	6Z: Ineligible for NRHP, CRHR, or Local	2018 (R. Goodwin, M. Jenkins, and A. Garcia)	1512m (4960 ft) northwest of the Project site

P-36-004179 [CA-SBR-04179H]

Resource P-36-004179/CA-SBR-004179H is a historic-period unpaved road that runs generally north south for approximately 7 miles (11.3 kilometers). An approximate 130-foot (40-meter) segment of the road traverses the northwestern corner of the Project site. Reynolds formerly recorded P-36-004179/CA-SBR-004179H in 1980 as the historic-period roadway known as the Toll Road-Lanes Crossing that connected Brown's Toll Road with the Salt Lake Trail. Portions of the road were revisited in the subsequent years, and the site record was updated with varying results. Ballester revisited a segment of the road in 2007 and stated that the road appeared modern and "retains no identifiable characteristics to suggest that it is a historic-era road." Additional updates from Anderson in 2009

and Valask in 2010 state that segments of P-36-004179/CA-SBR-004179H recorded within their study areas were unable to be relocated.

P-36-010288 [CA-SBR-010288H]

Resource P-36-010288/CA-SBR-010288H is a historic-period homestead site that measures approximately 2,620 feet by 2,620 feet (800 by 800 meters) at an elevation of 3,630 feet above mean sea level (amsl). The site subsumes the entirety of the Project site. Alexandrowicz initially recorded the site in 2000 as a late nineteenth to early twentieth century homestead consisting of structural debris and household refuse scatters. Site dimensions were determined by artifact distribution and measured approximately 209 feet by 140 feet. Alexandrowicz surmised that at least some of refuse scatter may be considered road toss associated with the previously recorded resource Toll Road-Lanes Crossing (P-36-004179/CA-SBR-004179H). Important to note is that the artifact scatter Alexandrowicz recorded is outside of the current Project site. It was not until McKenna expanded the site boundary in 2015 that the boundary of P-36-010288/CA-SBR-010288H overlapped the current Project site.

Historical Maps and Aerial Photographs Review

Preparation of the Cultural Resources Assessment Report (Appendix D) included consulting historical topographic maps and aerial photographs to understand the development of the Project site and surrounding area. Topographic maps from 1902 to 2018 and aerial photographs from 1938 to 2016 were also reviewed as part of the archival research effort. Overall, the aerial photographs and topographic maps show that the Project site has remained vacant and undeveloped since at least 1938 and relatively undisturbed since at least 1902, while the surrounding area steadily increased in development.

Geotechnical Report Review

Southern California Geotechnical, Inc. conducted a geotechnical study for the proposed project site in April of 2022. *Geotechnical Investigation Proposed I-15 Business Park Building 3 NWC Mesa Linda Street and Poplar Street Hesperia, California for Covington Realty Advisors, LLC* (Southern California Geotechnical Inc. 2022), documents the subsurface geotechnical conditions within the 17.87-acre proposed Project site. The report details the results of seven subsurface exploratory borings performed by a hollow-stem auger drill rig. These borings were placed at accessible locations throughout the proposed Project site to a maximum depth ranging from 15 to 30 feet below ground surface (bgs) to determine subsurface conditions. All of the borings encountered native alluvium extending from the surface to the maximum depth of each boring. Native soil characteristics typically consisted of 0 to 5.5 feet of loose to medium dense silty fine to coarse sands, loose fine to coarse sandy silts, and loose silty fine sands to fine sandy silts and 30+ feet of medium dense to very dense silty fine to coarse sands, fine to medium sands, and fine to coarse sandy silts with varying gravel, clay, and cobbles.

Results of the geotechnical reports indicate that should cultural deposits exist within the current Project site, they may be encountered within the native younger and older alluvium soils that extend from surface elevation to a maximum depth of 30+ feet bgs. Cultural deposits typically exist within A soil horizon (topsoil) and B soil horizon (subsoil) that locations not exposed to recent alluvial deposits usually extend to an approximate depth of 6 feet bgs. However, in areas where environmental conditions include alluvial activity, the depth where cultural material can be found has the potential of being considerably deeper.

Cultural Resources Pedestrian Survey

Dudek Lead Archaeologist, Linda Kry, and Dudek Associate Paleontologist/Archaeologist, Kira Archipov, conducted a pedestrian survey of the Project site on October 19, 2021, using standard archaeological survey procedures and techniques. The intensive-level survey methods consisted of a pedestrian survey conducted in parallel transects, spaced no more than 10 meters apart (approximately 30 feet), traversing east to west. The ground surface was inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, ground stone tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of structures and/or buildings (e.g., standing exterior walls, post holes, foundations), and historical artifacts (e.g., metal, glass, ceramics, building materials). In reference to metal cans, these resources were only considered if they were observed to be within discrete deposits or determined to be from a primary depositional location. Ground disturbances such as burrows, cut banks, trails, and drainages were also visually inspected for exposed subsurface materials. Additionally, the locations of the two previously recorded overlapping resources, P-36-004179/CA-SBR-004179H and P-36-010288/CA-SBR-010288H, were revisited in order to document the current site conditions. Site updates were recorded on Department of Parks and Recreation (DPR) 523 forms and included in Confidential Appendix C of the Cultural Resources Assessment Report (Appendix D of this EIR). No artifacts were collected during the survey.

All fieldwork was documented using field notes and an Apple Generation 7 iPad (iPad) equipped with ESRI Collector and Avenza PDF Maps software with close-scale georeferenced field maps of the Project site, and aerial photographs. Location-specific photographs were taken using the iPad's 12-mega-pixel resolution camera. Cultural resources identified during this inventory within the Project site were to be recorded on DPR forms, using the Instructions for Recording Historical Resources. All field notes, photographs, and records related to the current study are on file at Dudek's Pasadena, California, office. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory.

The Project site is composed of an open field with various unimproved dirt roads, low-lying dried vegetation, and the occasional taller tree. The intensive-level pedestrian survey provided 100% coverage of the Project site. Ground surface visibility ranged from good to excellent (70%–100%) throughout the Project site. In areas of moderate ground coverage, surface scrapes were occasionally implemented, when necessary, to enhance detection of archaeological materials that may have been obscured on the surface.

There is evidence of disturbance throughout the Project site. Modern debris was noted throughout the Project site and includes large items such as furniture, electronics, vehicle parts, tires, and clothing. The amount of modern refuse encountered during the survey suggests that the Project site is used for illegal dumping. Portions of the Project site, especially adjacent to Poplar Street and Mesa Linda Street, have been subject to previous grading. Numerous informal dirt roads caused by off-road vehicle use traverse the Project site. No new cultural resources were identified within the Project site as a result of the pedestrian survey.

Dudek revisited the location of the two previously recorded cultural resources within the Project site that were identified during the CHRIS records search. The following paragraphs provide a summary of findings.

P-36-004179 [CA-SBR-04179H]

As mapped, a portion of resource P-36-004179/CA-SBR-004179H, a historic period dirt road informally called "Toll Road-Lanes Crossing," intersects the northwest corner of the Project site. The approximate 930-foot (283-meter) road segment was not relocated during the pedestrian survey. According to the DPR prepared for P-36-004179/CA-

SBR-004179H, multiple sources found no evidence of the road within their respective study areas. The mapped location of P-36-004179/CA-SBR-004179H within the current Project site was found to be overgrown with vegetation, and no evidence of the historic-period road remained. This suggests that either the unpaved road was ephemeral and succumbed to environmental conditions that erased any evidence of the road, or that the resource was mapped incorrectly in the original recording. Dudek documented this finding on a DPR 523 Update Form, which will be submitted to the SCCIC. An update of the record for P-36-004179/CA-SBR-004179H has been made and is included in Confidential Appendix C, DPR Forms, of EIR Appendix D (this confidential appendix will be available at Dudek's Pasadena office and submitted to the SCCIC). No further cultural resources considerations are required for this resource.

P-36-010288 [CA-SBR-010288H]

As mapped, resource P-36-010288/CA-SBR-010288H subsumes the entirety of the Project site. According to the DPR form prepared for P-36-010288/CA-SBR-010288H, the mapped boundary of the resource consists of the entire 160-acre homestead of John E. Dufton, though only a small portion of the total property boundary has been previously surveyed. The previously surveyed areas are outside of the current Project site, and therefore, any artifacts or features identified within areas outside of the current Project site were not revisited.

The current Project surveyed approximately 17.87 acres of the John E. Dufton homestead that were not previously surveyed. No artifacts, features, or structural remnants of the homestead were identified within the current Project site. Additionally, McKenna (2005) determined that the resource was not a significant resource as defined by the California Environmental Quality Act (CEQA) and not eligible for listing on the CRHR; therefore, no further cultural resources considerations are required for this feature during this current Project or any future projects.

Native American Coordination

Assembly Bill 52 Consultation

The Project is subject to compliance with Assembly Bill (AB) 52 (California Public Resources Code [PRC] Section 21074), which requires consideration of impacts to Tribal Cultural Resources (TCRs) as part of the CEQA process and requires the lead agency to notify any tribal groups (who have requested notification) of the proposed Project. Pursuant to AB 52, the City of Hesperia (City) sent Project notification letters on August 17, 2022, via U.S. Postal Service certified mailing and email, to tribal representatives of the Cabazon Band of Mission Indians, Torres Martinez Desert Cahuilla Indians, and San Manuel Band of Mission Indians inviting each tribe to engage in tribal consultation, if desired. The communications with the contacted tribes did not result in the identification of any TCRs. Because AB 52 is a government-to-government process including consultation regarding sensitive information, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City. The notification letters contained a Project description, outline of AB 52 timing, an invitation to consult, a Project location map, and contact information for the appropriate lead agency representative.

Geological and Paleontological Setting

The Project area is located within the Mojave Desert Geomorphic Province, which is characterized by rugged mountain ranges with intervening alluvial fans, bajadas, and valleys that have no drainage to the ocean (CGS 2002). According to surficial geological mapping by Dibblee (1965) at a 1:62,500 scale, Morton and Miller (2006) at a 1:100,000 scale, and the Technical Background Report in Support of the Cultural Resource Element: City of Hesperia General Plan Update (City of Hesperia 2010), the Project area is underlain by Holocene (< 11,700 years

ago) (Cohen et al. 2022) alluvial fan deposits (map units Qa and Qyf₃). Holocene alluvial deposits are typically an unconsolidated mixture of clay, silt, sand, and gravel.

San Bernardino County is host to numerous localities that have yielded significant paleontological resources. Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine- to medium-grained marine, lake, and stream deposits such as limestone, siltstone, sandstone, or shale, and in ancient soils (paleosols). They can also be recovered from coarse-grained sediments, such as conglomerates or coarse alluvium. Fossils are rarely preserved in igneous or metamorphic rock units (County of San Bernardino 2007).

More specifically, the City encompasses a wide variety of geological formations that differ in age and fossil-bearing sensitivity. Although the City is situated primarily on surface exposures of Holocene alluvial fan deposits having low paleontological sensitivity, well-dissected Pleistocene alluvial fan deposits are also mapped within the City. These deposits have a higher potential to contain fossil resources and can underlie Holocene alluvial deposits at shallow depths below the surface in the Mojave and Colorado Deserts (Stewart et al. 2012).

Holocene alluvial deposits are generally considered to be too young geologically to contain significant nonrenewable paleontological resources (i.e., fossils), and are thus typically assigned a low paleontological sensitivity. Additionally, the Technical Background Report in Support of the Cultural Resource Element: City of Hesperia General Plan Update (City of Hesperia 2010) determined that the Project has a low paleontological sensitivity, with the exception of Building 2, which is in a medium sensitivity area.

Paleontological Resources Records Search

Dudek requested a paleontological records search from the Natural History Museum of Los Angeles County (NHMLA) on July 29, 2022, and the results were received on August 6, 2022. The NHMLA reported no fossil localities from within the Project site; however, they have nearby localities from similar sediments that likely underlie the Project site at depth (Pleistocene alluvial deposits and the Pleistocene Shoemaker Gravel). Fossil locality LACM VP (Los Angeles County Museum Vertebrate Paleontology) 1224 produced a fossil camel (Camelidae) from the Shoemaker Gravel north of Hesperia in southern Victorville from an unknown depth bgs (NHMLA 2022). LACM VP 3353 yielded a fossil horse (*Equus*) also from an unknown depth bgs from the Shoemaker Gravel in Hesperia. Another fossil horse (*Equus*) (LACM VP 3352) was reported from the Shoemaker Gravels of northern Victorville (NHMLA 2022). LACM VP 3498 produced horse (*Equus*), deer (Cervidae), and antelope (Antilocapridae) from an unknown depth bgs in the Shoemaker Gravel on the west bank of the Mojave River, north of the Project site. From between 10 and 11 feet bgs, a fossil vole (*Microtus mexicanus*) (LACM VP 7786) was recovered near the Southern California Logistics Airport in Victorville. Finally, the NHMLA reported a Holocene locality, LACM VP 5942–5950, along Avenue S that produced kingsnake (*Lampropeltis*), gopher snake (*Pituophis*), lizards (Lacertilia, *Gambelia*), birds (Aves), and rodents (Rodentia, *Thomomys*, *Chaetodipus*, and *Dipodomys*) from 0 to 9 feet bgs.

4.4.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal plans or policies related to cultural or historical resources that are applicable to the Project.

State

The California Register of Historical Resources

In California, the term “historical resource” includes, but is not limited to, “any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California” (PRC Section 5020.1[j]). In 1992, the California legislature established the CRHR “to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. A resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one of the following criteria (PRC Section 5024.1[c][1–4]):

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. Prehistoric resources are those that pre-date written records, while historic resources reflect written records or recorded events of the past. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

The following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, TCRs, and paleontological resources:

- PRC Section 21083.2(g) defines “unique archaeological resource.”
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) define “historical resources.” In addition, CEQA Guidelines Section 15064.5(b) defines the phrase “substantial adverse change in the significance of an historical resource”; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines “tribal cultural resources.”
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.

- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with an archaeological site.

Under CEQA, a project may have a significant impact on the environment if it may cause “a substantial adverse change in the significance of an historical resource” (PRC Section 21084.1; 14 CCR 15064.5[b]). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is a “historical resource” and is presumed to be historically or culturally significant for the purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5[a]).

A “substantial adverse change in the significance of an historical resource” reflecting a significant impact under CEQA means “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (14 CCR 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register [CRHR] as determined by a lead agency for purposes of CEQA (14 CCR 15064.5[b][2]).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any “historical resources,” then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource’s historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a]–[c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC Section 21083.2[g]):

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; 14 CCR 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as a TCR (PRC Sections 21074[c] and 21083.2[h]), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

CEQA Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to paleontological resources. Paleontological resources, which are limited, nonrenewable resources of scientific, cultural, and educational value, are recognized as part of the environment under these state guidelines. This study satisfies project requirements in accordance with CEQA (13 PRC 21000 et seq.).

Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, the “Environmental Checklist Form,” which addresses the potential for adverse impacts to “unique paleontological resource[s] or site[s] or ... unique geological feature[s].” This provision covers fossils of signal importance – remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group – as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth.

PRC Section 5097.5

PRC Section 5097.5 (Stats 1965, c 1136, p. 2792) regulates removal of paleontological resources from state lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

California Health and Safety Code Section 7050.5

California law protects human remains, Native American burials, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County Coroner has examined the remains and determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the PRC (PRC Section 7050.5[b]). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact

the Native American Heritage Commission (NAHC) within 24 hours (PRC Section 7050.5[c]). The NAHC will notify the “most likely descendant” (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Assembly Bill 52

The legislature added the requirements regarding tribal cultural resources through AB 52. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process (AB 52 Section 1[b][7]).

Section 1 of the bill states the legislature’s intent as follows (AB 52 Section 1[b]):

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, it is the intent of the Legislature, in enacting this act, to accomplish all of the following: (1) Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities. (2) Establish a new category of resources in CEQA called “tribal cultural resources” that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation. (3) Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible. (4) Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources. (5) In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in the CEQA environmental review process.

To accomplish those goals, the legislature added or amended the following sections in the PRC: 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 5097.94.

Native American Historic Cultural Sites

The Native American Historic Resources Protection Act (PRC Section 5097 et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy a Native American historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

Local

City of Hesperia Code of Ordinances

The following sections of the City of Hesperia Code of Ordinances are relevant to the Project.

Article VIII. Historical Resources Designation and Protection

Section 16.20.270 – Purpose

The purpose of this article is to ensure the protection, enhancement, perpetuation and use of structures and sites of historic architectural, and engineering significance, located within the city, that are of cultural and aesthetic benefit to the community.

Section 16.20.290 – Landmark Designation Review Criteria

When designating a landmark, the city council shall consider the following criteria in making its determination:

- A. Historical and Cultural Significance.
 - 1. The proposed landmark is particularly representative of an historical period, type, style, region, or way of life;
 - 2. The proposed landmark is an example of a type of building which was once common but is now rare;
 - 3. The proposed landmark is of greater age than most of its kind;
 - 4. The proposed landmark was connected with someone who is or was renowned, important, or a local personality;
 - 5. The proposed landmark is connected with a business or use which was once common but is now rare; or
 - 6. The architect or builder was significant;
 - 7. The site is the location of an important historic event or building.
- B. Historic Architectural and Engineering Significance.
 - 1. The construction materials or engineering methods used in the proposed landmark are unusual, significant, or uniquely effective.
 - 2. The design of the proposed landmark contains details and materials that possess extraordinary or unique aesthetic qualities.
- C. Neighborhood and Geographic
 - 1. The proposed landmark materially benefits the historic character of the neighborhood.
 - 2. The proposed landmark in its location represents an established and familiar visual feature of the neighborhood, community or city.

City of Hesperia General Plan

The City of Hesperia General Plan contains the following goals and policies that address cultural resources and are applicable to the Project (City of Hesperia 2010).

Conservation Element

Goal CN-5. The City shall establish policies and procedures in compliance with state and Federal laws and regulations to identify and properly protect found historical, cultural and paleontological artifacts and resources.

Policy CN-5.1. Encourage the preservation of historical, paleontological and cultural resources.

Policy CN-5.2. In those areas where surveys and records indicate historical, cultural or paleontological resources may be found, appropriate surveys and record searches shall be undertaken to determine the presence of such resources, if any.

Policy CN-5.3. All historical, paleontological and cultural resources discovered shall be inventoried and evaluated according to CEQA regulations and the California Office of Historic Preservation.

Policy CN-5.4. The City shall coordinate with the Archeological Information Center at the San Bernardino County Museum in reviewing potential records and in preserving such artifacts as may be found.

Policy CN-5.5. Through its CEQA and other environmental procedures, the City shall notify appropriate Native American representatives of possible development and shall comply with all State and Federal requirements concerning the monitoring and preservation of Native American artifacts and places.

4.4.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to cultural resources are based on CEQA Guidelines Appendix G. According to CEQA Guidelines Appendix, a significant impact related to cultural resources would occur if the Project would:

- A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- C. Disturb any human remains, including those interred outside of dedicated cemeteries.
- D. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).
- E. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead

agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

- F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- G. Result in a cumulatively considerable impact to cultural, tribal cultural, or paleontological resources.

4.4.4 Impact Analysis

Threshold A: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

Less than Significant with Mitigation Incorporated. As defined by the CEQA Guidelines (14 CCR 15000 et seq.), a “historical resource” is considered to be a resource that is listed in or eligible for listing in the NRHP or CRHR, has been identified as significant in a historical resource survey, or is listed on a local register of historical resources. Under CEQA, a project may have a significant effect on the environment if it may cause “a substantial adverse change in the significance of an historical resource” (PRC Section 21084.1; 14 CCR 15064.5[b]). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is a historical resource and is presumed to be historically or culturally significant for the purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5[a]).

A cultural resources records search, review of literature and archival resources (historic maps, aerial photographs, topographic maps), and a field survey were conducted for the Project site. The CHRIS records search identified two (2) previously recorded cultural resources, including one (1) historic-period unpaved roads and one historic-period homestead site within the Project site. Although a portion of the Project site is included within a historic-period homestead property (P-36-010288/CA-SBR-010288H), a review of historical topographic maps and aerial photographs indicate that the specific area within the archaeological site where the Project is proposed was never occupied and has remained vacant and relatively undisturbed since at least 1902. Moreover, the homestead site (P-36-010288/CA-SBR-010288H) was previously evaluated and determined ineligible for listing on the CRHR, and therefore, future construction would not cause a significant impact to this resource. The other resource that overlaps the Project site, an unpaved road (P-36-004179/CA-SBR-004179H) has not been evaluated. However, the pedestrian survey determined that the mapped location of this resource within the current Project site was found to be overgrown with vegetation, and no evidence of the historic-period road remained. This suggests that either the unpaved road was ephemeral and succumbed to environmental conditions that erased any evidence of the road, or that the resource was mapped incorrectly in the original recording. Therefore, the Project would not cause a substantial adverse change in the significance of a known historical resource pursuant to Section 15064.5. However, the potential for intact cultural deposits to exist within native soils (below between surface and 30+ feet below existing ground surface) to the depths of assumed ground disturbance is unknown. In the event that unanticipated cultural resources are encountered during Project implementation, an assessment and evaluation of the resource would be conducted potentially resulting in the determination that the resource is historical in accordance with the definition outlined in Section 15064.5. As a result, the Project has a potential to impact and thus cause a substantial adverse change in the significance of a yet unknown historical resource.

Thus, mitigation is required to address impacts related to the inadvertent discovery of yet unknown historical resources, as outlined in Mitigation Measure (MM) CUL-1, MM-CUL-2, and MM-CUL-3. MM-CUL-1 requires that all

project construction personnel participate in a Workers Environmental Awareness Program training for the proper identification and treatment of inadvertent discoveries. MM-CUL-2 requires the retention of an on-call qualified archaeologist to address inadvertent discoveries. MM-CUL-3 requires construction work occurring within 100 feet of a cultural resource discovery be immediately halted until the qualified archaeologist, meeting the Secretary of Interior's Professional Qualification Standards for Archaeology, can assess and evaluate the discovery pursuant to CEQA. Additionally, MM-CUL-3 requires the inadvertent discovery clause be included on all construction plans. With implementation of MM-CUL-1, MM-CUL-2, and MM-CUL-3, significant impacts to historical resources would be reduced to less than significant with mitigation incorporated.

Threshold B: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Less than Significant with Mitigation Incorporated. A CHRIS database records search, NAHC Sacred Lands File search, background research, including a review of a geotechnical report, and an archaeological pedestrian survey were conducted as part of a Cultural Resources Assessment that was prepared for the Project (Appendix D). As discussed under Threshold A, the CHRIS records search identified two previously recorded cultural resources, including one historic-period unpaved road and one historic-period homestead site within the Project site. None of the identified resources would be impacted by the Project.

A review of a geotechnical report (Southern California Geotechnical Inc. 2022) prepared for the Project site determined that native younger and older alluvium soils were encountered from surface elevation to the maximum depth explored of 30+ feet below existing ground surface within all seven subsurface exploratory boring locations. A review of historical topographic maps and aerial photographs indicate that the specific area within the archaeological site where the Project is proposed was never occupied and has remained vacant and relatively undisturbed since at least 1902. An intensive-level pedestrian survey of the Project site was conducted on October 19, 2021. Ground surface visibility ranged from good to excellent (70%–100%) throughout the Project site. Disturbances observed throughout the Project site included modern debris scattered throughout the Project site, including large items such as furniture, electronics, vehicle parts, tires, and clothing. The amount of modern refuse encountered during the survey suggests that the Project site is used for illegal dumping. Portions of the Project site, especially areas adjacent to Poplar Street and Mesa Linda Street, have been subject to previous grading. Numerous informal dirt roads caused by off-road vehicle use traverse the Project site. No new cultural resources were identified within the Project site as a result of the pedestrian survey and the survey results.

Although the overall potential for archaeological resources to exist within the Project site is considered low, it is still possible that unknown intact archaeological resources could be encountered subsurface during ground-disturbing activities within native soils. Specifically, and in consideration of the findings of the geotechnical report prepared for the Project (Appendix E), the potential remains for intact archaeological deposits to be encountered within native younger and older alluvium identified within the Project site from surface elevation to a maximum depth of 30+ feet below existing ground surface. For this reason, the Project site should be treated as potentially sensitive for archaeological resources, and MM-CUL-1 through MM-CUL-3 are required to reduce potential impacts to unanticipated archaeological resources. MM-CUL-1 requires that all project construction personnel participate in a Workers Environmental Awareness Program training for the proper identification and treatment of inadvertent discoveries. MM-CUL-2 requires the retention of an on-call qualified archaeologist to conduct spot monitoring to respond to any inadvertent archaeological discoveries. MM-CUL-3 requires construction work occurring within 100 feet of a cultural resource discovery be immediately halted until the qualified archaeologist, meeting the Secretary of Interior's Professional Qualification Standards for Archaeology, can assess and evaluate the discovery pursuant to CEQA. Additionally, MM-CUL-3 requires the inadvertent discovery clause be included on all construction plans.

With implementation of MM-CUL-1, MM-CUL-2, and MM-CUL-3, potentially significant impacts to unknown archaeological resources would be reduced to less than significant with mitigation incorporated.

Threshold C: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant with Mitigation Incorporated. A cultural resources records search, review of literature and archival resources (historic maps, aerial photographs, topographic maps), and a field survey were conducted for the Project site. The CHRIS records search results and archival document review did not identify any location within or near the Project where human burials/remains exist, including those interred outside of formal cemeteries. Neither did the pedestrian survey identify any evidence of human remains or archaeological resources that may suggest the potential presence of human burials/remains, including those interred outside of formal cemeteries. However, in the unlikely event that human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98, pursuant to MM-CUL-4. The County Coroner must be notified of the inadvertent discovery immediately. If the remains are determined to be Native American, the County Coroner will notify the NAHC, which will determine and notify an MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains. With incorporation of MM-CUL-4, impacts associated with human remains would be less than significant.

Threshold D: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

AND

Threshold E: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant with Mitigation Incorporated. The Project is subject to compliance with AB 52 (PRC Section 21074), which requires consideration of impacts to “tribal cultural resources” as a part of the CEQA process, and requires the City of Hesperia, as the CEQA lead agency, to notify any groups who have requested notification of proposed projects that are subject to AB 52 compliance and are under the jurisdiction of the agency. On August 17, 2022, the City sent out AB 52 notification letters to tribal representatives of the Cabazon Band of Mission Indians, Torres Martinez Desert Cahuilla Indians, and San Manuel Band of Mission Indians, now known as the Yuhaaviatam of San Manuel Nation (Yuhaaviatam), inviting each tribe to engage in tribal consultation, if desired.

The Yuhaaviatam responded to the AB 52 notification letter via email to the City on September 6, 2022. The Yuhaaviatam did not request formal consultation but requested mitigation measures to address inadvertent

discovery of cultural resources (archaeological and tribal) be considered. The Yuhaaviatam also stated that they consider any further obligation of the City in accordance with AB-52 is complete with the exception that the Yuhaaviatam be contacted if the Project is approved and implemented and if an inadvertent discovery occurs. As a result of the Yuhaaviatam's request, MM-CUL-5 through MM-CUL-9 have been included as a condition of the Project.

As previously discussed in Section 4.4.1, no previously recorded archaeological resources of Native American origin or tribal cultural resources listed in the CRHR or a local register were identified within the Project site as a result of the SCCIC records search nor as a result of information provided from consulting tribes. Therefore, the project would not adversely affect TCRs that are listed or eligible for listing in the state or local register.

The Project site has been thoroughly researched, surveyed, and analyzed to identify the level of potential for TCRs. TCRs have not been identified through tribal consultation under AB 52, and the lead agency has not identified any TCRs within the project site that would warrant discretionary designation of a resource as a TCR. Results of the NAHC Sacred Lands File were negative for the presence of TCRs within the Project site. Notwithstanding, MM-CUL-3 and MM-CUL-4 are required to help ensure the proper treatment of TCRs and human remains that may be inadvertently encountered during ground-disturbing activities. With incorporation of MM-CUL-3, MM-CUL-4, and MM-CUL-5 through MM-CUL-9, impacts associated with TCRs would be less than significant.

Threshold F: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated. The City encompasses a wide variety of geological formations that differ in age and paleontological sensitivities. The Project site, however, is underlain by Holocene alluvial fan deposits. Holocene alluvium and alluvial fan deposits are generally considered to be too young geologically to contain significant nonrenewable paleontological resources (i.e., fossils) and are typically assigned a low paleontological sensitivity. However, Holocene alluvial deposits become older and have increased paleontological sensitivity with depth, where they become old enough to preserve and yield significant paleontological resources. Additionally, the Technical Background Report in Support of the Cultural Resource Element: City of Hesperia General Plan Update (City of Hesperia 2010) determined that the Project site has low to medium paleontological sensitivity. Holocene and Pleistocene alluvial deposits are not considered unique geological features.

Despite the low potential for paleontological resources to occur on the Project site, it is always possible that intact fossil deposits are present at subsurface levels and could be uncovered during ground-disturbing activities. As such, MM-CUL-10 would ensure that if paleontological resources are exposed during construction activities, all construction work occurring within the vicinity of the find would stop until a qualified paleontologist can evaluate the significance of the find and determine whether or not additional study is warranted. With incorporation of MM-CUL-10, impacts associated with paleontological resources would be less than significant.

Threshold G: Would the Project result in a cumulatively considerable impact to cultural, tribal cultural, or paleontological resources?

Less than Significant with Mitigation Incorporated. The geographic scope of the cumulative cultural resources analysis is the region surrounding the Project site. Ongoing development and growth in the broader Project area may result in a cumulatively significant impact to cultural resources due to the continuing disturbance areas, which could potentially contain significant, buried archaeological resources, paleontological resources, or TCRs. However, as discussed above, the individual, Project-level impacts associated with cultural, tribal cultural, and paleontological resources were found to be less than significant with the incorporation of mitigation measures (MM-CUL-1 through

MM-CUL-10). The Project would be required by law to comply with all applicable federal, state, and local requirements related to historical, archaeological, paleontological, and tribal cultural resources. Other related cumulative projects would similarly be required to comply with all such requirements and regulations, to be consistent with the provisions set forth by CEQA and the CEQA Guidelines, and to implement all feasible mitigation measures should a significant project-related and/or cumulative impact be identified. As such, cumulative impacts would be less than significant with mitigation incorporated.

4.4.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

The Project would have a less than significant with mitigation incorporated with regard to the substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5 for activities occurring on the Project site. With incorporation of MM-CUL-1 through MM-CUL-3, impacts associated with archaeological resources would be less than significant with mitigation incorporated.

MM-CUL-1 Workers Environmental Awareness Program (WEAP) Training. All construction personnel and monitors who are not trained archaeologists should be briefed regarding unanticipated discoveries prior to the start of construction activities. A basic presentation should be prepared and presented by a qualified archaeologist to inform all personnel working on the Project about the archaeological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker should also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the on-call archaeologist and if appropriate, tribal representative. Necessity of training attendance should be stated on all construction plans.

MM-CUL-2 On-Call Archaeological Construction Monitoring. In consideration of the general sensitivity of the Project site for cultural resources, a qualified archaeologist should be retained to conduct spot monitoring as well as on-call response in the case of an inadvertent discovery of archaeological resources. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, should oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits. The archaeologist should be responsible for maintaining monitoring logs. Following the completion of construction, the qualified archaeologist should provide an archaeological monitoring report to the lead agency and the South Central Coastal Information Center with the results of the archaeological monitoring program.

MM-CUL-3 **Inadvertent Discovery of Archaeological Resources.** In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the Project, all construction work occurring within 100 feet of the find should immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (CEQA; 14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted. If the discovery is Native American in nature, consultation with and/or monitoring by a tribal representative may be necessary.

Threshold B: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

The Project would result in potentially significant impacts with regard to a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. With incorporation of MM-CUL-1 through MM-CUL-3, impacts associated with archaeological resources would be less than significant with mitigation incorporated.

Threshold C: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project would result in potentially significant impacts associated with the disturbance of human remains, including those interred outside of formal cemeteries. With incorporation of MM-CUL-4, impacts associated with human remains would be less than significant with mitigation incorporated.

MM-CUL-4 **Inadvertent Discovery of Human Remains.** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant (MLD) from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The MLD would then determine, in consultation with the property owner, the disposition of the human remains.

Threshold D: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

AND

Threshold E: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The Project would result in potentially significant impacts associated with a substantial adverse change in the significance of a currently unknown or unidentified TCR if one or more are inadvertently encountered as a result of ground-disturbing activities. With the incorporation of previously outlined MM-CUL-3, MM-CUL-4, and MM-CUL-5 through MM-CUL-9, impacts associated with TCRs would be less than significant with mitigation incorporated.

MM-CUL-5 In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the discovery (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (Yuhaaviatam) shall be contacted, as detailed within MM-CUL-8, regarding any pre-contact and/or historic-era resources of a Native American origin and be provided information after the archaeologist makes his/her initial assessment of the nature of the discovery.

MM-CUL-6 If significant pre-contact and/or historic-era tribal cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to the Yuhaaviatam of San Manuel Nation Cultural Resources Department for review and comment, as detailed within MM-CUL-8. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

MM-CUL-7 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Project.

MM-CUL-8 The Yuhaaviatam of San Manuel Nation Cultural Resources Department (Yuhaaviatam) shall be notified, as detailed in MM-CUL-5, of any pre-contact and/or historic-era cultural resources discovered during project implementation and be provided information regarding the nature of the discovery, so as to provide tribal input with regards to significance and treatment. Should

the discovery be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the Yuhaaviatam, and all subsequent discoveries shall be subject to this Plan. This Plan shall allow for a monitor to be present representing the Yuhaaviatam for the remainder of the Project, should the Yuhaaviatam elect to place a monitor on site.

- MM-CUL-9 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to the Yuhaaviatam of San Manuel Nation Cultural Resources Department (Yuhaaviatam). The Lead Agency and/or applicant shall, in good faith, consult with the Yuhaaviatam throughout the life of the project.

Threshold F: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Project would result in potentially significant impacts associated with the destruction of a unique paleontological resource or site or unique geologic feature. With incorporation of MM-CUL-10, impacts associated with paleontological resources would be less than significant with mitigation incorporated.

- MM-CUL-10 If paleontological resources are exposed during Project construction activities, all construction work occurring within 100 feet of the find shall immediately stop until a qualified paleontologist, as outlined in the Society of Vertebrate Paleontology (2010) guidelines, can evaluate the significance of the find and determine whether or not additional study is warranted. If the discovery proves significant under the California Environmental Quality Act, discovered fossils or samples of such fossils shall be collected and identified by the qualified paleontologist. Significant specimens recovered shall be properly recorded, treated, and donated to the San Bernardino County Museum, Division of Geological Sciences, or other repository with permanent retrievable paleontological storage. A final report shall be prepared and submitted to the City of Hesperia that itemizes any fossils recovered, with maps to accurately record the original location of recovered fossils and evidence that the resources were curated by an established museum repository.

Threshold G: Would the Project result in a cumulatively considerable impact to cultural, tribal cultural, or paleontological resources?

The Project would result in potentially significant cumulative impacts to cultural, tribal cultural, or paleontological resources. With implementation of MM-CUL-1 through MM-CUL-10, cumulative Project impacts would be less than significant with mitigation incorporated.

4.4.6 References Cited

- Bada, Jeffrey L., R. Gillespie, J. A. J. Gowlett, and R. E. M. Hedges. 1984. Accelerator mass spectrometry radiocarbon ages of amino acid extracts from Californian paleoindian skeletons. *Nature* 312(29):442-444.
- Basgall, Mark E. 1987. Paleoindian occupation in central-eastern California: the Komodo site. *Current Research in the Pleistocene* 4:50-54.

- Basgall, Mark E. 1988. The archaeology of CA-MNO-679: a pre-Archaic site in Long Valley Caldera, Mono County, California. In *Early human occupation in far western North America: the Clovis-Archaic interface*, edited by J. Willig, C. M. Aikens, and J. Fagan. Nevada State Museum, Anthropological Papers 21.
- Basgall, Mark E., and Matthew C. Hall. 1990. Adaptive variation in the north-central Mojave Desert. Paper presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas, NV.
- Basgall, Mark E. 1993. Archaeology of the Awl Site, CA-SBR-4562, Fort Irwin, San Bernardino County, California. Submitted to Far Western Anthropological Research Group. Prepared for U.S. Army Corps of Engineers, Los Angeles District.
- Basgall, Mark E., L. Johnson, and Micah J. Hale. 2002. An evaluation of four archaeological sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California. Submitted to Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.
- Bean, Lowell J., and Florence C. Shipek. 1978. Luiseño. In *Handbook of North American Indians: Volume 8, California*, edited by Robert F. Hiezer, pp. 550-563. Smithsonian Institution Press, Washington DC.
- Bean, Lowell J., and C.R. Smith, 1978. "Gabrielino." In *California*, edited by R.F. Heizer, 538-548. Vol. 8 of *Handbook of North American Indians*. Washington, DC: Smithsonian Institution.
- Benedict, R.F. 1924. "A Brief Sketch of Serrano Culture." *American Anthropologist* 26(3): 366-392.
- Boscana, G. 1846. "Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California." In *Life in California*, by A. Robinson, 227-341. New York, New York: Wiley & Putnam.
- Byrd, Brian F., and Seetha N. Reddy. 2002. Late Holocene adaptations along the northern San Diego coastline: new perspectives on old paradigms. In *Catalysts to complexity: late Holocene societies of the California coast*, edited by Jon M. Erlandson, and Terry L. Jones, pp. 41-62. Cotsen Institute of Archaeology, University of California, Los Angeles, Los Angeles.
- California Geological Survey. 2002. *California Geomorphic Provinces: Note 36*. 4 pp.
- City of Hesperia. 2010. *Technical Background Report in Support of the Cultural Resource Element: City of Hesperia General Plan Update*. March 19, 2010. <http://www.cityofhesperia.us/DocumentCenter/View/1222/Cultural-Resource-Report-03-19-2010>,
- Cohen, K.M., S.C. Finney, P.L. Gibbard, and J.-X. Fan., 2022. "The ICS International Chronostratigraphic Chart." *Episodes* 36: 199--204. 2013; updated. Available at: <https://stratigraphy.org/ICSchart/ChronostratChart2021-05.jpg>.
- County of San Bernardino. 2007. *County of San Bernardino 2007 General Plan*. <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf>.
- Davis, Emma Lou. 1978. The ancient Californians: Rancholabrean hunters of the Mojave Lakes country. Natural History Museum of Los Angeles County Science Series No. 29, Los Angeles.

- DeBarros, P. 2004. *Cultural Resources Overview and Management Plan – Rancho Las Flores Project, Hesperia, San Bernardino County, California*. On file at the South Central Coast Information Center.
- Dibblee, T.W. 1965. Geologic map of the Hesperia 15-Minute Quadrangle, San Bernardino County, California: US Geological Survey, Open File Report, Map OF-65-43, scale 1:62,500.
- Erlandson, Jon M., Torben C. Rick, Terry L. Jones, and Judith F. Porcasi. 2007. One if by land, two if by sea: who were the first Californians? In *California Prehistory: colonization, culture, and complexity*, edited by Terry L. Jones, and Kathryn A. Klar, pp. 53-62. Alta Mira Press, Lanham, MD.
- Fitzgerald, Richard T., and Michael F. Rondeau. 2012. A fluted projectile point from Crystal Cove State Park, Orange County, Alta California. *California Archaeology* 4(2):247-256.
- Gallegos, Dennis R. (editor). 1987. *San Dieguito-La Jolla: chronology and controversy*. San Diego County Archaeological Society, Research Paper No. 1, San Diego.
- Gallegos, Dennis R. (editor). 2017. *First people: a revised chronology for San Diego County*. StorySeekers, San Diego.
- Golla, V. 2007. "Linguistic Prehistory." In *California Prehistory: Colonization, Culture, and Complexity*, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.
- Grenda, Donn R. 1997. *Site structure, settlement systems, and social organization at Lake Elsinore, California*. PhD, Anthropology, University of Arizona, Tucson, AZ
- Griset, Suzanne. 1996. *Southern California brown ware*. PhD, Anthropology, University of California, Davis, Davis.
- Hale, Micah J. 2001. *Technological organization of the Millingstone Pattern in southern California*. MA, Anthropology, California State University, Sacramento, Sacramento.
- Hale, Micah J. 2001. 2009. *Santa Barbara and San Diego: contrasting adaptive strategies on the southern California coast*. PhD, Anthropology, University of California, Davis, Davis, California.
- Harrington, J.P. 1934. "A New Original Version of Boscana's Historical Account of the San Juan Capistrano Indians of Southern California." *Smithsonian Miscellaneous Collections* 92(4).
- Heizer, R.F. 1978. "Introduction." In *California*, edited by R.F. Heizer, 1–6. Vol. 8 of *Handbook of North American Indians*. Washington, DC: Smithsonian Institution.
- Heizer, R.F. and K.M. Nissen. 1973. *The Human Sources of California Ethnography*. Berkeley, California: University of California, Berkeley Archaeological Research Facility.
- ICF. 2013. (ICF International, Davis Geoarchaeological Research, Southeastern Archaeological Research) *Inventory and analysis of coastal and submerged archaeological site occurrence on the Pacific Outer Continental Shelf*. Submitted to U.S. Department of the Interior, Bureau of Ocean Energy Management, Pacific OCS Region, Camarillo, California.
- Johnson, J.R., and J.G. Lorenz. 2006. "Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages." *Journal of California and Great Basin Anthropology* 26: 33–64.

- Kennedy, Gail E. 1983. An unusual burial practice at an early California Indian site. *Journal of New World Archaeology* 5(3):4-7.
- Kroeber, A. 1925. *Handbook of the Indians of California*. Washington DC: Smithsonian Institution.
- Laylander, D. 2000. *Early Ethnography of the Californias, 1533–1825*. Salinas, California: Coyote Press Archives of California Prehistory.
- Laylander, D. 2010. “Linguistic Prehistory.” *Research Issues in San Diego Prehistory*. Accessed August 31, 2012. <http://www.sandiegoarchaeology.org/Laylander/Issues/index.htm>
- Lightfoot, K.G. 2005. *Indians, missionaries, and merchants: the legacy of colonial encounters on the California frontiers*. Berkeley, California: University of California Press.
- Morton, D.M., and Miller, F.K., 2006, *Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California: U.S. Geological Survey, Open-File Report OF-2006-1217, scale 1:100,000*.
- McDonald, Meg, and James D Eighmey. 2004. *Late Period prehistory in San Diego. Submitted to Prehistoric and historic archaeology of metropolitan San Diego: an historic properties background study, prepared for Metropolitan Wastewater Department, San Diego, California, by ASM Affiliates, Inc., Carlsbad, California*.
- Rogers, Alexander K., and Robert M. Yohe. 2020. Obsidian hydration dating of proposed Paleoindian artifacts from Tulare Lake, California. *California Archaeology* 12(2):223-239.
- Rogers, Malcom J. 1945. An outline of Yuman prehistory. *Southwestern Journal of Anthropology* 1(2):167-198.
- Schaefer, Jerry. 2012. Coastal brown ware ceramics from Camp Pendleton, San Diego County. *Pacific Coast Archaeological Society Quarterly* 48(1 & 2):25-46.
- Society of Vertebrate Paleontology. 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.
- Southern California Geotechnical, Inc. 2022. *Geotechnical Investigation Proposed I-15 Business Park Building 3 NWC Mesa Linda Street and Poplar Street Hesperia, California for Covington Realty Advisors, LLC. Prepared for Covington Development Group, Inc. Newport Beach, California*.
- Sparkman, P. 1908. “The Cultural of the Luiseño Indians.” *University of California Publications in American Archaeology and Ethnology* 8: 187–234.
- Stewart, J.D., M. Williams, M. Hakel, and S. Musik, 2012. Wash it Washed in? New Evidence for the Genesis of Pleistocene Fossil Vertebrate Remains in the Mojave Desert of Southern California. *In: Reynolds, R. (ed.) Searching for the Pliocene: Southern Exposures*. California State University Desert Studies Center, The 2012 Desert Research Symposium, P. 140.
- Wallace, William J. 1955. A suggested chronology for Southern California coastal archaeology. *Southwestern Journal of Anthropology* 11(3):214-230.

- Warren, Claude N. 1964. Cultural change and continuity on the San Diego Coast. PhD, Anthropology, University of California, Los Angeles, Los Angeles.
- Warren, Claude N. 1968. Cultural tradition and ecological adaptation on the southern California coast. *Eastern New Mexico University Contributions in Anthropology* 1(3):1-15.
- Warren, Claude N., Gretchen Siegler, and Frank Dittmer. 2004. Paleoindian and early Archaic periods. Submitted to Prehistoric and historic archaeology of metropolitan San Diego: an historic properties background study, prepared for Metropolitan Wastewater Department, San Diego, California, by ASM Affiliates, Inc., Carlsbad, California.
- White, R. 1963. "Luiseño Social Organization." *University of California Publications in American Archaeology and Ethnology* 48: 91-194.

4.5 Energy

This section describes the existing energy conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements and evaluates potential impacts related to implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2 of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following source:

- Air Quality and GHG Emission Estimates by Dudek in October 2022 (Appendix B-1).

4.5.1 Existing Conditions

Electricity

According to the U.S. Energy Information Administration, California used approximately 250,379 gigawatt hours of electricity in 2019 (EIA 2021a). By sector in 2019, commercial uses utilized 46% of the state's electricity, followed by 35% for residential uses, and 19% for industrial uses (EIA 2021a). Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the commercial sector is lower than any other state except Hawaii (EIA 2021b).

Southern California Edison (SCE) provides electricity to the Project. SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. According to the California Public Utilities Commission (CPUC), approximately 84 billion kilowatt-hours of electricity were used in SCE's service area in 2017. Demand forecasts anticipate that approximately 75 billion kilowatt-hours of electricity would be used in SCE's service area in 2020 (CPUC 2020).

SCE receives electric power from a variety of sources. According to the 2019 SCE Power Content Label, renewable energy accounts for 35% of the overall energy resources, with geothermal resources at 6%, wind power at 12%, large hydroelectric sources at 1% and solar energy is at 16% (SCE 2020).

Natural Gas

According to the U.S. Energy Information Administration, California used approximately 2,154,030 million cubic feet of natural gas in 2019 (EIA 2020b). In 2019 (the most recent year for which data is available), by sector, industrial uses utilized 36% of the state's natural gas, followed by 33% from electric power, 19% from residential, 11% from commercial, and 1% from transportation uses (EIA 2021a). While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 91% of its supply of natural gas (EIA 2021c).

The Southern California Gas Company (SoCalGas) provides the Project with natural gas service. The territory serviced by SoCalGas encompasses approximately 20,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in SoCalGas's service territory. In 2024, the total capacity available is estimated to be 3.8 billion cubic feet per day (California Gas and Electric Utilities 2020). This amount is approximately equivalent to 3.88 billion thousand British thermal units (kBtu) per day, or 38.8 million therms per day. Over the course of a year, the available capacity would therefore be 14.2 billion therms per year, which is well above the existing and future anticipated natural gas demand in the area serviced by SoCalGas.

Petroleum

According to the U.S. Energy Information Administration, California used approximately 681 million barrels of petroleum in 2018, with the majority (584 million barrels) used for the transportation sector (EIA 2021d). There are 42 U.S. gallons in a barrel, so this equates to a total daily use of approximately 78.4 million gallons of petroleum among all sectors and 67.2 million gallons for the transportation sector. In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation, which are described in Section 4.5.2.

4.5.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer’s average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Policy Act of 2005

In January 2005, the Energy Policy Act was signed into law. It addresses energy production in the United States, including: energy efficiency; renewable energy; oil and gas; coal; Tribal energy; nuclear matters and security; vehicles and motor fuels, including ethanol; hydrogen; electricity; energy tax incentives (hydropower and geothermal energy); and climate change technology. The Energy Policy Act provides loan guarantees for entities that develop or use innovative technologies that avoid the by-production of greenhouse gases. Another provision of the Energy Policy Act is the Renewable Fuel Standard (RFS), which increases the amount of biofuel that must be mixed with gasoline sold in the United States.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased corporate average fuel economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Expansion of the RFS (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

The RFS requires ever-increasing levels of renewable fuels to replace petroleum (EPA 2017). The U.S. Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The first RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in greenhouse gas (GHG) emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program (RFS2) includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green” jobs.

State

Warren–Alquist Act

The California Legislature passed the Warren–Alquist Act in 1974, which created the California Energy Commission (CEC). The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation’s first energy conservation standards for both buildings constructed and appliances sold in California.
- It removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state’s electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state’s economy; and protect public health and safety (California Public Resources Code, Section 25301a). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report (IEPR).

The 2019 IEPR was adopted January 31, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2019 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector,

climate and sea level rise scenarios, and the California Energy Demand Forecast (CEC 2019). The 2020 IEPR Update was adopted in March 2021. The 2020 IEPR Update is divided into three volumes, Volume One is focused on California's transportation future and the transition to zero-emission vehicles (ZEVs). Volume Two addresses the viability and improvements in microgrid technology and infrastructure and its ability to contribute to a clean and resilient energy system. Volume Three is framed by California's energy demand outlook and plan for increases in energy demand resulting from growth in plug-in electric vehicles (EVs; CEC 2021).

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure the provision of adequate, reliable, and reasonably priced electrical power and natural gas supplies; it also identified cost-effective and environmentally sound energy policies, strategies, and actions for California's consumers and taxpayers. In 2005, the CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

Senate Bill 1078 (2002)

SB 1078 established the California Renewables Portfolio Standard (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

Senate Bills 107 (2006), X1-2 (2011), 350 (2015), and 100 (2018)

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 (2015) requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) increased the standards set forth in SB 350. The bill establishes that 44% of the total electricity sold per year to retail customers in California be secured from qualifying renewable energy sources by December 31, 2024, with that number increasing to 52% by December 31, 2027, and 60% by December 31, 2030. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Consequently, utility energy generation from non-renewable resources is expected to be reduced overtime and any project's reliance on non-renewable energy sources would also be reduced.

Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the state legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepared scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 4.6.2 in Section 4.6, Greenhouse Gas Emissions, of this EIR.

California Building Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards, which became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards would further reduce energy used and associated GHG emissions compared to prior standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards would use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018).

The 2022 Title 24 standards will improve upon the 2019 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The CEC updates the Title 24 Energy Code every 3 years. The CEC adopted the 2022 Title 24 Energy Code in August 2021 and the California Building Standards Commission approved incorporating the updated code into the California Green Building Standards Code (CALGreen Code) in December 2021. The 2022 Energy Code will go into effect on January 1, 2023. The 2022 Energy Code focuses on four key areas in newly constructed homes and businesses:

- Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units.
- Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking, and EV charging options whenever they choose to adopt those technologies.
- Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the state's progress toward a 100% clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

The CALGreen Code instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The current code is the 2019 California Building Code. The mandatory standards require the following:

- In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for low-emitting, fuel-efficient and carpool/van pool vehicles.
- Construction shall facilitate future installation of EV supply equipment.
- Shade trees shall be planted to comply with specifications for surface parking areas, landscape areas, and hardscape areas.
- Water conserving plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with efficiency standards.
- Outdoor potable water use in landscaped areas shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources Model Water Efficient Landscape Ordinance, whichever is more stringent.
- Outdoor recycled water supply systems shall be installed in accordance with applicable state codes.
- Installations of heating, ventilation, and air conditioning (HVAC); refrigeration; and fire suppression equipment shall comply with specified standards.

CALGreen Code standards also include voluntary efficiency measures that are implemented at the discretion of agencies and applicants.

State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be those whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009 through 2012 standards resulted in a reduction in approximately 22% of GHG emissions compared to emissions from the 2002 fleet, and the 2013 through 2016 standards resulted in a reduction of approximately 30%.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global-warming gases with requirements for greater numbers of ZEVs into a single package of standards called Advanced Clean Cars (ACC). By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global-warming gases and 75% fewer smog-forming emissions (CARB 2011).

In 2019, the EPA and National Highway Traffic Safety Administration published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1) (84 FR 51310), which revoked California's authority to set its own GHG emissions standards and set ZEV mandates in California. In March 2020, Part Two was issued which set carbon dioxide (CO₂) emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. In March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Advanced Clean Cars Program

The ACC I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the low-emission vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for ZEVs that contributes to both types of emission reductions (CARB 2021a). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021a). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

An ACC II rulemaking package, which will consider technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts, is anticipated to be presented to CARB for consideration in June 2022.

Advanced Clean Trucks Program

The purpose of the Advanced Clean Transportation Regulation (June 2020) is to accelerate the market for ZEVs in the medium- and heavy-duty truck sector (CARB 2021b). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will reduce health risks to people living in and visiting California and is needed to help

California meet established near- and long-term air quality and climate mitigation targets. The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

1. **Zero-emission truck sales:** Manufacturers who certify Class 2b–8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b–3 truck sales, 75% of Class 4–8 straight truck sales, and 40% of truck tractor sales.
2. **Company and fleet reporting:** Large employers including retailers, manufacturers, brokers, and others will be required to report information about shipments and shuttle services. Fleet owners with 50 or more trucks will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As codified in California Government Code Section 65080, SB 375 requires metropolitan planning organizations (e.g., Southern California Association of Governments) to include a Sustainable Communities Strategy in their regional transportation plan. The main focus of the Sustainable Communities Strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also part of a bigger effort to address other development issues, including transit and vehicle miles traveled (VMT), which influence the consumption of petroleum-based fuels.

Local

City of Hesperia General Plan

Policies pertaining to reducing the use of energy resources are addressed in the Conservation Element of the General Plan (City of Hesperia 2010). The following policies from the Conservation Element are applicable to the Project:

Goal CN-1. Conserve water resources within the Upper Mojave River Groundwater Basin.

Policy CN-1.1. Promote the use of desert vegetation with low water usage and drought tolerant materials in landscaped areas.

Policy CN-1.6. Encourage the use of low-water consumption fixtures in homes and businesses.

Goal CN-2. Establish building and development standards to maximize the reclamation of water resources.

Policy CN-2.2. Encourage the use of reclaimed water for irrigation and other non-potable uses.

Goal CN-6. Provide programs and incentives to encourage residents, businesses and developers to reduce consumption and efficiently use energy resources.

Policy CN-6.2. Encourage the use of green building standards and Leadership in Energy and Environmental Design (LEED) or similar programs in both private and public projects.

Goal CN-7. Develop, promote and implement policies to reduce and limit GHG emissions.

Policy CN-7.4. Promote the utilization of alternative energy resources such as wind and solar in new development.

Policy CN-7.5. Promote the utilization of environmentally sensitive construction materials to limit impacts on the ozone, global climate change and mineral resources.

Policy CN-7.7. Promote energy conservation through site layout, building design, natural light and efficient mechanical and electrical products in development.

Policy CN-7.8. Continue the existing recycling program and utilization of the material recovery facility program while exploring additional methods of reducing waste.

Policy CN-7.9. Promote sustainable principles in development that conserves such natural resources as air quality and energy resources.

4.5.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to energy are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to energy would occur if the Project would:

- A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.
- B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.
- C. Result in cumulatively considerable energy impacts.

Methodology

In June 2021, the South Coast Air Quality Management District, in conjunction with the California Air Pollution Control Officers Association and other California air districts, released the latest version, at the time of Project analysis, of the California Emissions Estimator Model (CalEEMod), Version 2020.4.0. The purpose of this model is to calculate construction-source and operational-source criteria pollutant and GHG emissions from direct and indirect sources as well as energy usage (CAPCOA 2021). Accordingly, CalEEMod has been used to determine the Project's anticipated transportation and facility energy demands. For purposes of this analysis, the 2024 analysis year was utilized to determine the average vehicle fuel economy used throughout the duration of the Project.

Construction

Construction of the Project would result in energy consumption primarily associated with use of off-road construction equipment, on-road vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in the Methodology subsection in Section 4.2.3 of Section 4.2, Air Quality, are also applicable for the estimation of construction-related energy consumption. As such, see Section 4.2.3 for a discussion of construction calculation methodology and assumptions used in the energy analysis. In addition to those assumptions discussed in Section 4.2.3, the following methodology was used to estimate construction energy consumption.

Electricity

Electricity is not expected to be consumed in large quantity during Project construction, as construction equipment and vehicles are not electric but rather diesel- or gas-powered. Although electrical service will be established to serve construction, the amount of electricity that will be used is likely to be small. Temporary electric power for as-necessary lighting and electronic equipment, such as computers inside temporary construction trailers, would be provided by SCE.

Natural Gas

Natural gas is not anticipated to be required during construction of the Project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the “petroleum” subsection.

Petroleum

Potential impacts were assessed through projected traffic trip generation during construction as provided by the CalEEMod outputs in the air quality calculations (Appendix B-1). Fuel consumption from construction equipment was estimated by converting the total CO₂ emissions from each construction phase to gallons using conversion factors for CO₂ to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton of CO₂ per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton of CO₂ per gallon (The Climate Registry 2021). Heavy-duty construction equipment associated with construction activities and vendor trucks were assumed to use diesel fuel. It was assumed that construction workers would travel to and from the Project site in gasoline-powered vehicles. Fuel consumption from worker and vendor trips was estimated by converting the total CO₂ emissions from the construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel.

Operation

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by on-road vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Electricity

The Project’s operational phase would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, and appliances, including refrigeration, electronics, equipment, machinery, electric forklifts and yard trucks. Energy would also be consumed during operation of the Project related to water usage, solid waste disposal, and EV trips. CalEEMod Version 2020.4.0 was used to analyze electrical usage, other than EV trips, during operation; the default value for electricity consumption for the proposed warehouse land uses was applied for the Project (CAPCOA 2021). Electric vehicles analyzed for the Project operation include electric powered pallet jacks, forklifts and yard trucks and are based on vendor information of typical expected units. Details of these calculations and assumptions are provided in Appendix B-1.

Natural gas

Natural gas consumption during operation would be required for various purposes, including, but not limited to, building heating and cooling. Natural gas would be supplied to the Project by SoCalGas. Default natural gas generation rates in CalEEMod for the proposed land use and climate zone were used.

Petroleum

The fuel consumption resulting from the Project's operational phase would be attributable to vehicles traveling to and from the Project site. The maximum daily trip rates, taken from the EIR's transportation analysis (Appendix I), were 1,281 primary trips per day, which were assumed 7 days per week. Consistent with the EIR's transportation analyses, the primary trips per day are based on daily trip rates of 4.87 and 2.129 for land uses of general light industrial and high-cube fulfillment center warehouse, respectively. Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies for the vehicles accessing the Project site. With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis (Appendix C-1), the Project would generate an estimated 5,795,521 annual VMT along area roadways for all worker vehicles and 3,440,555 annual VMT for trucks. In total, the Project is anticipated to generate 8,236,075 annual VMT at final buildout (Appendix B-1).

4.5.4 Impacts Analysis

Threshold A: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Less-than-Significant Impact. The Project consumption of energy resources during construction and operation would be less than significant, as discussed in further detail below.

Electricity

Construction Electricity Usage

Temporary electric power for as-necessary lighting and electronic equipment, such as computers inside temporary construction trailers, would be provided by SCE. The electricity used for such activities would be temporary, would be substantially less than that required for Project operation, and would therefore have a negligible contribution to the Project's overall energy consumption.

Operational Electricity Usage

The operational phase would require electricity for multiple purposes, including building heating and cooling, lighting, electronics, electric pumps, and EVs as described above. CalEEMod was used to estimate Project emissions from electricity uses (see the Project's Air Quality Impact Analysis for calculations). Default electricity generation rates in CalEEMod were used based on the proposed land use and climate zone. Table 4.5-1 shows the estimated annual Operational Electricity Demand by land use.

Table 4.5-1. Project Annual Operational Electricity Demand Summary

Electricity Demand	kWh/year
General Heavy Industry	1,439,890
High-Cube Fulfillment Center Warehouse	625,380
Parking	40,635
Water/Wastewater	1,028,112
Electric Vehicles (Off-road Equipment)	430,394
Total Project Electricity Demand	2,898,395

Source: Appendix B-1.
Note: kWh = kilowatt hour.

As shown in Table 4.5-1, the Project is anticipated to consume approximately 2,898,400 kilowatt-hours of electricity per year. The Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project electricity demands in total would be comparable to other projects of similar scale and configuration. Additionally, the Project would be required to comply with the applicable Title 24 standards which would further ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant.

Natural Gas

Construction Natural Gas Usage

Natural gas is not anticipated to be required during construction of the Project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the subsection “Petroleum,” below. Any minor amounts of natural gas that may be consumed as a result of Project construction would be temporary and negligible, and would not have an adverse effect; therefore, impacts would be less than significant.

Operational Natural Gas Usage

Natural gas consumption during operation would be required for various purposes, including, but not limited to, building heating and cooling. Default natural gas generation rates in CalEEMod for the proposed land use and climate zone were used. Table 4.5-2 presents the annual operational natural gas demand.

Table 4.5-2. Project Annual Operational Natural Gas Demand Summary

Natural Gas Demand	kBTU/year
General Heavy Industry	4,692,700
High-Cube Fulfillment Center Warehouse	541,816
Parking	0
Water/Wastewater	0
Total Project Electricity Demand	5,234,516

Source: Appendix B-1.

Note: kBTU = kilo-British Thermal Units

As shown in Table 4.5-2 the Project is estimated to have a total natural gas demand of 5,234,516 kBTU per year. The Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project natural gas demands in total would be comparable to other projects of similar scale and configuration. Additionally, the Project is subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Prior to Project approval, the applicant would ensure that the Project would meet Title 24 requirements applicable at that time, as required by state regulations through their plan review process. Thus, the natural gas consumption of the Project would not be considered inefficient or wasteful, and impacts would be less than significant.

Petroleum

Construction Petroleum Usage

Petroleum would be consumed throughout construction of the Project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities and haul trucks involved in relocating dirt around the Project site are assumed to use diesel fuel. Construction workers would travel to and from the Project site throughout the duration of construction. It is assumed that construction workers would travel to and from the Project site in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during Project construction. CalEEMod was used to estimate construction equipment usage; results are included in Appendix B-1 of this EIR. The estimated diesel fuel usage from construction equipment, and vendor trucks, as well as estimated gasoline fuel usage from worker vehicles is shown in Table 4.5-3.

Table 4.5-3. Construction Petroleum Demand

Project	Off-road Equipment (diesel)	Vendor Trucks (diesel)	Haul Trucks (Diesel)	Worker Vehicles (gasoline)
	Gallons			
Site Preparation	505.44	0	0	54.89
Grading	8,076.80	0	0	494.00
Building Construction	14,959.34	14,734.71	0	23,584.49
Paving	1,977.36	0	0	175.65
Architectural Coating	250.45	0	0	724.53
Total	25,769.38	14,734.71	0	25,033.55

Source: Appendix B-1.

In summary, construction of the Project is conservatively anticipated to consume 25,034 gallons of gasoline and 40,504 gallons of diesel. Notably, the Project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements. Project construction would represent a "single-event" petroleum demand and would not require on-going or permanent commitment of petroleum resources for this purpose. Overall, the Project would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state. Therefore, impacts would be less than significant.

Operational Petroleum Usage

During operations, the majority of fuel consumption resulting from the Project would involve the use of motor vehicles traveling to and from the Project site, as well as fuels used for alternative modes of transportation that may be used by employees of the Project.

Petroleum fuel consumption associated with motor vehicles traveling to and from the Project site is a function of the VMT as a result of Project operation. The annual VMT attributable to the Project is expected to be 9,236,075 VMT (Appendix B-1). Fuel demand estimates for the Project are provided in Table 4.5-4.

Table 4.5-4. Total Project-generated Transportation Annual Fuel Demand

Vehicle Type	Vehicle MT CO ₂	Kg/CO ₂ /Gallon	Estimated Annual Fuel Consumption (gallons)
Gasoline	3,244.52	8.78	369,536
Diesel	1,926.14	10.21	188,652
Total			558,187

Source: Appendix B-1.

As summarized on Table 4.5-4, the Project would result in an estimated annual fuel demand of 558,187 gallons of fuel. Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other industrial uses of similar scale and configuration. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. In compliance with the CALGreen Code, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. Facilitating pedestrian and bicycle access for employees would reduce VMT and associated energy consumption. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant.

Renewable Energy Potential

The Project shall include rooftop solar panels for each proposed warehouse to the extent feasible, with a capacity that matches the maximum allowed for distributed solar connections to the grid, other renewable energy systems including wind turbine generation, geothermal generation, energy storage and other renewable energy generation features are not considered technically or economically feasible and/or demonstrated for a similar project. Additionally, site constraints include limited land availability and incompatibility with land use for large-scale power generation facilities as well as unknown interconnection feasibility and compatibility with utility provider systems. For these reasons other onsite renewable energy systems are not considered feasible for the proposed Project.

Threshold B: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less-than-Significant Impact. The Project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR Part 6). Part 6 of Title 24 establishes energy efficiency standards for non-residential buildings constructed in California in order to reduce energy demand and consumption. As such, the Project would comply with the California code requirements for energy efficiency.

Part 11 of Title 24 sets forth voluntary and mandatory energy measures that are applicable to the Project under the CALGreen Code. The CALGreen Code institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, high-rise residential, state-owned buildings, schools, and hospitals, as well as certain residential and non-residential additions and alterations. Additionally, energy consumed by the Project's operation is calculated to be comparable to energy consumed by other industrial uses of similar scale and intensity that are constructed and operating in California. On this basis, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.

Threshold C: Would the Project result in a cumulatively considerable energy impact?

Less-than-Significant Impact. Cumulative projects that could exacerbate the Project's impacts include any projects that could result in wasteful, inefficient, or unnecessary use of energy. However, the Project would not result in wasteful, inefficient, or unnecessary use of energy during construction or operation. Construction will result in short-term and temporary energy demands. Operation of the Project would not result in a wasteful, inefficient or unnecessary use of energy or conflict with an applicable plan. Therefore, the Project would have a less-than-significant impact with regards to cumulative energy impacts.

4.5.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

The Project would have a less-than-significant impact with regard to the wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation. No mitigation is required.

Threshold B: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and impacts would be less than significant. No mitigation is required.

Threshold C: Would the Project result in a cumulatively considerable energy impact?

The Project would have a less-than-significant impact with regards to cumulative energy impacts. No mitigation is required.

4.5.6 References Cited

- California Gas and Electric Utilities (Southern California Gas Company, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southwest Gas Corporation, City of Long Beach Gas & Oil Department, and Southern California Edison Company). 2020. 2020 California Gas Report. Accessed November 2020. <https://www.socalgas.com/regulatory/cgr.shtml>.
- CAPCOA (California Air Pollution Control Officers Association). 2020. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2020.4.0*. Prepared by Trinity Consultants and the California Air Districts. May 2021. <http://www.caleemod.com>.
- CARB (California Air Resources Board). 2011. "Facts About the Advanced Clean Cars Program." Revised November 9, 2011. Accessed February 2019. https://www.arb.ca.gov/msprog/zevprog/factsheets/advanced_clean_cars_eng.pdf.
- CARB. 2018a. EMFAC 2017. March 1. Accessed August 2018. <https://www.arb.ca.gov/emfac/2017/>.
- CEC. 2018. 2019 Building Energy Efficiency Standards – Frequently Asked Questions. March 2018. Accessed May 2019. https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.
- CEC. 2019. 2019 Integrated Energy Policy Report Update. https://ww2.energy.ca.gov/2019_energypolicy/.
- CEC 2021. 2020 Intergrated Energy Policy Report Update. March 23, 2021. Accessed October 2021. <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2020-integrated-energy-policy-report-update>
- City of Hesperia. 2010. "Conservation Element." In *Hesperia General Plan*, pp. CN-i–CN-57.
- CPUC (California Public Utilities Commission). 2016. *Biennial RPS Program Update*. Report prepared in compliance with Public Utilities Code Section 913.6. January 1, 2016. Accessed April 9, 2018. http://www.cpuc.ca.gov/uploadedfiles/cpuc_website/content/utilities_and_industries/energy/reports_and_white_papers/final12302015section913_6report.pdf.
- CPUC. 2020. *2020 California Renewables Portfolio Standard Annual Report*. November 2020. Accessed March 2021. https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/2020%20RPS%20Annual%20Report.pdf.
- EIA (U.S. Energy Information Administration). 2021a. "State Electricity Profiles – California Electricity Profile 2019". November 2, 2020. Accessed October 2021. <https://www.eia.gov/electricity/state/california/index.php>.
- EIA. 2021b "California State Energy Profile." Last updated February 18, 2021. Accessed October 2021. <https://www.eia.gov/state/print.php?sid=CA>.
- EIA. 2021c. "Natural Gas Consumption by End Use." September 30, 2021. Accessed October 2021. https://www.eia.gov/dnav/ng/ng_cons_sum_a_EPGO_VCO_mmcf_a.htm.

EIA. 2021d. "Total Petroleum Consumption Estimates, 2019." [Online] 2021. Accessed October 2021. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.

EPA. 2017. "Overview for Renewable Fuel Standard." Last updated June 7, 2017. Accessed February 2019. <https://www.epa.gov/renewable-fuel-standard-program/overview-renewable-fuel-standard>.

SCE (Southern California Edison). 2020. 2019 Power Content Label. *Southern California Edison*. [Online] October 2020. Accessed October 2021. https://www.sce.com/sites/default/files/inline-files/SCE_2019PowerContentLabel.pdf

INTENTIONALLY LEFT BLANK

4.6 Greenhouse Gas Emissions

This section describes the existing greenhouse gas (GHG) conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2 of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following sources:

- Air Quality and Greenhouse Gas Emissions Calculations prepared by Dudek in October 2022 (Appendix B-1)
- Traffic Impact Analysis prepared by Dudek in October 2022 (Appendix I)

4.6.1 Existing Conditions

Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and is the most significant driver of observed climate change (IPCC 2013; EPA 2017a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system.

Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃) (see also 14 CCR 15364.5).¹ Some GHGs, such as CO₂, CH₄, and N₂O, are emitted into the atmosphere through natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO₂, include fluorinated gases, such as HFCs, PFCs, and SF₆, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.²

Carbon Dioxide. CO₂ is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO₂ include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO₂ are from the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

Methane. CH₄ is produced through both natural and human activities. CH₄ is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N₂O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N₂O. Sources of N₂O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N₂O as a propellant (such as in rockets, racecars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are powerful synthetic GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., chlorofluorocarbons [CFCs], hydrochlorofluorocarbons [HCFCs], and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives (along with HFCs) to the ozone-depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs

¹ Climate forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in the California Health and Safety Code Section 38505, because impacts associated with other climate forcing substances are not evaluated herein.

² The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change's Second Assessment Report and Fourth Assessment Report (IPCC 1995, 2007), the California Air Resources Board's Glossary of Terms Used in GHG Inventories (CARB 2018), and the U.S. Environmental Protection Agency's Glossary of Climate Change Terms (EPA 2016).

have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.

- **Sulfur Hexafluoride:** SF₆ is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF₆ is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** NF₃ is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric ozone (O₃).

Hydrochlorofluorocarbons. HCFCs are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential. Diesel particulate matter emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from the California Air Resources Board (CARB) regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014). CARB's draft 2022 Scoping Plan Update (CARB 2022) identifies that in 2017 the inventory was approximately 8 million metric tons (MMT) carbon dioxide equivalent (CO₂e) of black carbon and that under current strategies black carbon from transportation is expected to be reduced by over 60% in year 2030.

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O₃, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O₃, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O₂), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O₃, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2020). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons of CO₂ equivalent (MT CO₂e).

The current version of the California Emissions Estimator Model (CalEEMod) (Version 2020.4.0) assumes that the GWP for CH₄ is 25 (so emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298, based on the IPCC's Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the Project.

Greenhouse Gas Inventories

Per the U.S. Environmental Protection Agency (EPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2018 (EPA 2020), total U.S. GHG emissions were approximately 6,676.6 MMT CO₂e in 2018 (EPA 2020). The primary GHG emitted by human activities in the United States was CO₂, which represented approximately 81.3% of total GHG emissions (5,428.1 MMT CO₂e). The largest source of CO₂, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.8% of CO₂ emissions in 2018 (5,031.8 MMT CO₂e). Relative to 1990, gross U.S. GHG emissions in 2018 are higher by 3.7%, down from a high of 15.2% above 1990 levels in 2007. GHG emissions decreased from 2017 to 2018 by 2.9% (188.4 MMT CO₂e) and overall, net emissions in 2018 were 10.2% below 2005 levels (EPA 2020).

According to California's 2000–2017 GHG emissions inventory (2019 edition), California emitted 424 MMT CO₂e in 2017, including emissions resulting from out-of-state electrical generation (CARB 2019). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2017 are presented in Table 4.6-1.

Table 4.6-1. Greenhouse Gas Emissions in California

Source Category	Annual GHG Emissions (MMT CO ₂ e)	Percent of Total ^a
Transportation	169.86	40%
Industrial	89.40	21%
Electric power ^b	62.39	15%
Agriculture	32.42	8%
Residential	26.00	6%
Commercial	15.14	4%
High global-warming potential substances	19.99	5%

Table 4.6-1. Greenhouse Gas Emissions in California

Source Category	Annual GHG Emissions (MMT CO ₂ e)	Percent of Total ^a
Recycling and waste	8.89	2%
Total	424.10	100%

Source: CARB 2019.

Notes: GHG = greenhouse gas; MMT CO₂e = million metric tons of carbon dioxide equivalent per year.

Emissions reflect the 2017 California GHG inventory.

^a Percentage of total has been rounded, and total may not sum due to rounding.

^b Includes emissions associated with imported electricity, which account for 26.28 MMT CO₂e annually.

Between 2000 and 2017, per capita GHG emissions in California have dropped from a peak of 14.1 MT per person in 2001 to 10.7 MT per person in 2017, representing a 24% decrease. In addition, total GHG emissions in 2017 were approximately 5 MMT CO₂e less than 2016 emissions (CARB 2019).

The City of Hesperia has established a goal to reduce its communitywide GHG to reduce per capita GHG emissions 29% below business as usual by 2020 (City of Hesperia 2010a). The City's communitywide GHG emissions inventory for baseline year 2009 is presented in Table 4.6-2.

Table 4.6-2. City of Hesperia (Year 2009) Communitywide Greenhouse Gas Emissions Inventory

Community Sector	Total MT CO ₂ e/year	CO ₂ e (%) ¹
Transportation: Passenger Vehicles	199,414	31%
Transportation: Trucks	200,392	31%
Transportation: Other	7,454	1%
Natural Gas	34,507	5%
Electricity	135,824	21%
Solid Waste	28,394	4%
Wood Burning Fireplaces and Stoves	9,528	2%
Refrigerants	23,906	4%
Total	639,419	100%

Source: City of Hesperia 2010a.

Note: GHG = greenhouse gas; MT CO₂e = metric tons of carbon dioxide equivalent per year

¹ Totals may not sum due to rounding.

As shown on Table 4.6-2, approximately 63% of the City's GHG emissions in 2009 were attributed to transportation sources with the next highest attributed to electricity, which accounted for approximately 21%. All other sources each accounted for less than 5% of the City's GHG emissions in 2009.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Reflecting the long-term warming trend since pre-industrial times, observed global mean surface temperature for the decade 2006–2015 was 0.87 °C (likely between 0.75 °C and 0.99 °C) higher than the average over the 1850–1900 period (IPCC 2018). Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities are estimated to have caused approximately 1.0 °C (1.8 °F) of global warming above pre-industrial levels, with a likely range of 0.8 °C to 1.2 °C (1.4 °F to 2.2 °F) (IPCC 2018). Global warming is likely to reach 1.5 °C (2.7 °F) between 2030 and 2052 if it continues to increase at the current rate (IPCC 2018).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernible evidence that climate change is occurring in California and is having significant, measurable impacts in the state. Changes in the state's climate have been observed including an increase in annual average air temperature with record warmth from 2012 to 2016, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days, and an increase in variability of statewide precipitation (OEHHA 2018).

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers, and snowpack—upon which the state depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the state's annual water supply. Impacts of climate on physical systems have been observed such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in spring snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters (OEHHA 2018).

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing.

The California Natural Resources Agency (CNRA) has released four California Climate Change Assessments (2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming. To address local and regional governments' need for information to support action in their communities, the Fourth Assessment (CNRA 2018a) includes reports for nine regions of the state, including the Inland Deserts Region, which includes San Bernardino

County where the Project is located. Key projected climate changes for the Inland Desert Region include the following (CNRA 2018a):

- Continued future warming over the Inland Deserts region. Across the region, average maximum temperatures are projected to increase around 6°F to 10°F by the mid-century, and 8°F to 14°F by the late century.
- Extreme temperatures are also expected to increase. The hottest day of the year may be up to 9°F warmer for many locations across the Inland Deserts region by the late century under certain model scenarios. The number of extremely hot days is also expected to increase across the region.
- Despite small changes in average precipitation, dry and wet extremes are both expected to increase. By the late twenty-first century, the wettest day of the year is expected to increase across most of the Inland Deserts region, with some locations experiencing a 30% increase under certain model scenarios. The combination of more intense rainfall and drier soils in an already very dry region will increase the probability of flash floods.
- Projections indicate that wildfire may increase over Southern California, but there remains uncertainty in quantifying future changes of burned area over the Inland Deserts region.

4.6.2 Relevant Plans, Policies, and Ordinances

International

United Nations Framework Convention on Climate Change, Kyoto Protocol, and Paris Agreement

In 1992, numerous countries joined an international treaty—the United Nations Framework Convention on Climate Change (UNFCCC)—as a framework for international cooperation to combat climate change by limiting average global temperature increases and the resulting climate change, and coping with associated impacts. Currently, there are 197 Parties (196 states and 1 regional economic integration organization) in the UNFCCC (UNFCCC 2019).

By 1995, countries launched negotiations to strengthen the global response to climate change, and, 2 years later, adopted the Kyoto Protocol, which was the first international agreement to regulate GHG emissions. The Kyoto Protocol legally binds developed country Parties to emission reduction targets. The Protocol's first commitment period started in 2008 and ended in 2012. The second commitment period began on January 1, 2013, and will end in 2020. More than 160 countries signed the Kyoto Protocol (UNFCCC 2019). In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended the United States' involvement in the Kyoto Protocol. In 2015, At the COP21 sustainable development summit, held in Paris, all UNFCCC participants sign the "Paris Agreement" effectively replacing the Kyoto Protocol.

The 2015 Paris Agreement, adopted in Paris on December 12, 2015, marks the latest step in the evolution of the United Nations' climate change regime and builds on the work undertaken under the UNFCCC. The Paris Agreement charts a new course in the global effort to combat climate change. The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C (UNFCCC 2019). The Paris Agreement also aims to strengthen the ability of countries to deal with the impacts of climate change. The Paris Agreement requires all Parties to put forward their best efforts through nationally determined contributions and to strengthen these efforts in the years ahead.

The Paris Agreement entered into force on November 4, 2016, 30 days after the date on which at least 55 Parties to the UNFCCC (including the United States), accounting in total for at least an estimated 55% of the total global GHG emissions, deposited their instruments of ratification, acceptance, approval or accession with the Depositary (UNFCCC 2019). On November 4, 2019, the Trump Administration gave formal notice of the United States' intention to withdraw from the Paris Agreement, which was formally recognized on November 4, 2019. The Biden Administration re-joined the Paris Agreement on January 21, 2021, which was accepted by the United Nations, and the United States formally re-entered into the Paris Agreement on February 29, 2021.

Federal

Massachusetts v. EPA

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The administrator found that elevated concentrations of GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is the “endangerment finding.”
- The administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the “cause or contribute finding.”

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, includes the following, which aids in the reduction of national GHG emissions (EPA 2007):

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and directs National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy-efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling previously discussed, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In

2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016 (75 FR 25324–25728).

In 2010, the Obama Administration issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021 (77 FR 62624–63200). On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks (EPA 2017b).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018 (76 FR 57106–57513). The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6%–23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program applies to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards now in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2%–3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of 1°C by 2100 (EPA and NHTSA 2018). California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program (84 FR 51310), which became effective November 26, 2019. The Part One Rule revokes California’s authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the EPA and NHTSA issued the Part Two Rule, which will go into effect 60 days after being published in the Federal Register. The Part Two Rule sets CO₂ emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, the Biden Administration issued an Executive Order (EO) on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of Part One Rule by April 2021 and review of the Part Two Rule by July 2021 (The White House 2021).

Clean Power Plan and New Source Performance Standards for Electric Generating Units

On October 23, 2015, EPA published a final rule (effective December 22, 2015) establishing the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO₂ emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 FR 64661–65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the Clean Power Plan pending resolution of several lawsuits.

The Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The bill includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the U.S. by 40% as compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of electric vehicles (EVs), and includes measures that will make homes more energy efficient.

State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. The following text describes EOs, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

The State of California has taken a number of actions to address climate change. These include EOs, legislation, and CARB plans and requirements. These are summarized below.

EO S-3-05. EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill 32. In furtherance of the goals established in EO S-3-05, the legislature enacted Assembly Bill (AB) 32. The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multi-year program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

CARB's 2007 Statewide Limit. In 2007, in accordance with California Health and Safety Code, Section 38550, CARB approved a statewide limit on the GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO₂e).

CARB's Climate Change Scoping Plan. One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code, Section 38561[a]), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The Climate Change Scoping Plan: A Framework for Change (Scoping Plan) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS) (17 CCR 95480 et seq.).
6. Creating targeted fees, including a public goods charge on water use, fees on high-GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15% from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions (CARB 2014). The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050 including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level, using more recent GWPs identified by the IPCC, from 427 MMT CO₂e to 431 MMT CO₂e (CARB 2014).

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. Governor Jerry Brown called on California to pursue a new and ambitious set of strategies, in line with the five climate change

pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In the summer of 2016, the legislature affirmed the importance of addressing climate change through passage of SB 32 (Chapter 249, Statutes of 2016) (discussed below).

In December 2017, CARB adopted the 2017 Climate Change Scoping Plan Update (2030 Scoping Plan) (CARB 2017). The 2030 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target and define the state’s climate change priorities to 2030 and beyond. The strategies’ known commitments include implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the cap-and-trade program and a measure to reduce GHGs from refineries by 20%.

CARB released the *Draft 2022 Scoping Plan Update* in May 2022, which outlines the state’s plan to reach carbon neutrality by 2045 or earlier, while also assessing the progress the state is making toward reducing GHG emissions by at least 40 percent below 1990 levels by 2030, as is required by SB 32 and laid out in the Second Update. The carbon neutrality goal requires CARB to expand proposed actions from only the reduction of anthropogenic sources of GHG emissions to also include those that capture and store carbon (e.g., through natural and working lands, or mechanical technologies). The carbon reduction programs build on and accelerate those currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen³ (CARB 2022).

The *Draft 2022 Scoping Plan Update* also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state’s carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage (CCS) from anthropogenic point sources, where CO₂ is captured as it leaves a facility’s smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete); and carbon dioxide removal (CDR) from ambient air, through mechanical (e.g., direct air capture with sequestration [DACS]) or nature-based (e.g., management of natural and working lands) applications.

In July 2021, Governor Gavin Newsom directed CARB to accelerate efforts to achieve the state’s climate stabilization and GHG reduction goals, including to “identify a pathway for achieving carbon neutrality a full decade earlier than the existing target of 2045.”

CARB’s Regulations for the Mandatory Reporting of Greenhouse Gas Emissions. CARB’s Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that EPA promulgated in its Final Rule on Mandatory Reporting of Greenhouse Gases (CFR 40, Part 98). Specifically, Section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that EPA promulgated in the Federal Register on October 30, 2009; July 12, 2010; September 22, 2010; October 28,

³ Green hydrogen refers to hydrogen that is generated by renewable energy or from low-carbon power, and has significantly lower associated carbon emissions than grey hydrogen, which is produced using natural gas and makes up the majority of hydrogen production. For the purposes of the *Draft 2022 Scoping Plan*, the term “green hydrogen” is not limited to only electrolytic hydrogen produced from renewables.

2010; November 30, 2010; December 17, 2010; and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation that emit over 10,000 MT CO₂e per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MT CO₂e per-year threshold are required to have their GHG emission report verified by a CARB-accredited third party.

Executive Order B-18-12. EO B-18-12 (April 2012) directed state agencies, departments, and other entities under the governor’s executive authority to take action to reduce entity-wide GHG emissions by at least 10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also established goals for existing state buildings for reducing grid-based energy purchases and water use.

Senate Bills 605 and 1383. Senate Bill (SB) 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state, and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of short-lived climate pollutants (40% below 2013 levels by 2030 for CH₄ and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy in March 2017. The Short-Lived Climate Pollutant Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH₄, and fluorinated gases.

Executive Order B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for CARB to update the Scoping Plan to express the 2030 target in terms of MMT CO₂e. The EO also called for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

Senate Bill 32 and Assembly Bill 197. SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state’s climate policies. AB 197 also added two members of the Legislature to the CARB Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

Executive Order B-55-18. EO B-55-18 (September 2018) establishes a new statewide goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.” This EO directs CARB to “work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.”

Assembly Bill 1279. The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

Assembly Bill 1757. AB 1757 (September 2022) requires the CNRA to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions that reduce GHG emissions for future years 2030, 2038, and 2045. These targets are to be determined by no later than January 1, 2024, and are established to support the state’s goals to achieve carbon neutrality and foster climate adaptation and resilience.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California’s building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code [PRC] Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of “reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy” (PRC Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards will further reduce energy used and associated GHG emissions compared to prior standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018).

Title 24, Part 11. In addition to the CEC’s efforts, in 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as California’s Green Building Standards (CALGreen Code), and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2019 standards, which are the current standards, became effective January 1, 2020.

For nonresidential projects, some of the key mandatory CALGreen 2019 standards include the following (24 CCR, Part 11):

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors’ entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).

- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 of the CALGreen Code (5.106.5.2).
- EV charging stations. Construction shall comply with Section 5.106.5.3.1 (single charging space requirements) or Section 106.5.3.2 (multiple charging space requirements) to facilitate future installation of EV supply equipment (EVSE). The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. Table 5.106.5.3.3 of the CALGreen Code shall be used to determine if single or multiple charging space requirements apply for the future installation of EVSE (5.106.5.3).⁴
- Shade trees. Shade trees shall be planted to comply with Sections 5.106.12.1 (surface parking areas), 5.106.12.2 (landscape areas), and 5.106.12.3 (hardscape areas). Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6. (5.106.12).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
 - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
 - Showerheads. Single showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
 - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute/20 [rim space (inches) at 60 psi] (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle/20 [rim space (inches) at 60 psi] (5.303.3.4.5).
- Outdoor potable water use in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources (DWR) Model Water Efficient Landscape Ordinance (MWEL0), whichever is more stringent (5.304.1).
- Recycled water supply systems. Recycled water supply systems shall be installed in accordance with Sections 5.305.1.1 (outdoor recycled water supply systems), 5.305.1.2 (technical requirements for outdoor recycled water supply systems), and the California Plumbing Code (5.305.1).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1 (construction waste management plan). 5.405.1.2 (waste management company), or 5.408.1.3 (waste stream

⁴ Table 5.106.5.3.3 of the CALGreen Code establishes a range of EV charging space requirements based on the total number of parking places of a project. At the minimum, no EV charging spaces are required if the project has a total of 0 to 9 parking spaces. At the maximum, 6% of the total parking spaces are required to be EV charging spaces for projects with a total number of actual parking spaces of 201 and over.

reduction alternative); or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).

- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Commissioning. For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity (5.410.2).
- Outdoor Air Quality. Installations of HVAC, refrigeration, and fire suppression equipment shall comply with Section 5.508.1.1 (no CFCs) and Section 5.508.1.2 (no halons).

The CALGreen standards also include voluntary efficiency measures that are implemented at the discretion of local agencies and applicants.

The 2022 Title 24 standards will improve upon the 2019 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The CEC updates the Title 24 Energy Code every 3 years. The CEC adopted the 2022 Title 24 Energy Code in August 2021 and the California Building Standards Commission approved incorporating the updated code into the CALGreen Code in December 2021. The 2022 Energy Code will go into effect on January 1, 2023. The 2022 Energy Code focuses on four key areas in newly constructed homes and businesses:

- Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units.
- Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking, and EV charging options whenever they choose to adopt those technologies.
- Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the state's progress toward a 100% clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

The CALGreen Code instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The current code is the 2019 California Building Code. The mandatory standards require the following:

- In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for low-emitting, fuel-efficient and carpool/van pool vehicles.
- Construction shall facilitate future installation of EV supply equipment.
- Shade trees shall be planted to comply with specifications for surface parking areas, landscape areas, and hardscape areas.
- Water conserving plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with efficiency standards.
- Outdoor potable water use in landscaped areas shall comply with a local water efficient landscape ordinance or the current DWR Model Water Efficient Landscape Ordinance, whichever is more stringent.

- Outdoor recycled water supply systems shall be installed in accordance with applicable state codes.
- Installations of heating, ventilation, and air conditioning (HVAC); refrigeration; and fire suppression equipment shall comply with specified standards.

CALGreen standards also include voluntary efficiency measures that are implemented at the discretion of agencies and applicants.

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems.

Senate Bill 1. SB 1 (August 2006, "Go Solar California" or "Million Solar Roofs") established a \$3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. The goals included establishing solar energy systems as a viable mainstream option for both homes and businesses within 10 years of adoption, and placing solar energy systems on 50% of new homes within 13 years of adoption.

Assembly Bill 1470 (Solar Water Heating). This bill established the Solar Water Heating and Efficiency Act of 2007. The bill includes findings and declarations of the legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand.

Renewable Energy and Energy Procurement

Senate Bill 1078. SB 1078 (September 2002) established the Renewables Portfolio Standard (RPS) program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (EO S-14-08 and EO S-21-09).

Senate Bill 1368. SB 1368 (September 2006) required the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities.

Assembly Bill 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting, to reduce electricity consumption by 50% for indoor residential lighting and 25% for indoor commercial lighting.

Executive Order S-14-08. EO S-14-08 (November 2008) focused on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020.

Executive Order S-21-09 and Senate Bill X1-2. EO S-21-09 (September 2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. On September 23, 2010, CARB initially approved

regulations to implement a Renewable Electricity Standard. However, this regulation was not finalized because of subsequent legislation (SB X1-2, Simitian, Statutes of 2011) signed by Governor Brown in April 2011.

SB X1-2 expanded the RPS by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation (30 megawatts or less), digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. SB X1-2 applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators.

Senate Bill 350. SB 350 (October 2015, Clean Energy and Pollution Reduction Act) further expanded the RPS by establishing a goal of 50% of the total electricity sold to retail customers in California per year be from renewable energy sources by December 31, 2030. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (e.g., heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. Regarding mobile sources, as one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see California Public Utilities Code Section 740.12).

Senate Bill 100. SB 100 (2018) increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Senate Bill 1020. SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035, 95% by December 31, 2040, and 100% by December 31, 2045.

Mobile Sources

State Vehicle Standards (Assembly Bill 1493 and Executive Order B-16-12). AB 1493 (July 2002) was enacted in response to the transportation sector accounting for more than half of California's CO₂ emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. It ordered CARB, CEC, California Public Utilities Commission, and other relevant agencies to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This

directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare. As explained under the “Federal Vehicle Standards” description above, EPA and NHTSA approved the SAFE Vehicles Rule Part One and Two, which revoked California’s authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. As the Biden Administration issued an EO to review Part One and Part Two, this analysis continues to utilize the best available information at this time, as set forth in EMFAC.

Heavy Duty Diesel. CARB adopted the final Heavy-Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce particulate matter and NO_x emissions from heavy-duty diesel vehicles. The rule requires particulate matter filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule will require nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR 2485).

Executive Order S-1-07. EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining LCFS for GHG emissions measured in CO₂e grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). In September 2018, CARB approved amendments for the LCFS that require a 20% reduction in carbon intensity by year 2030. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered.

Senate Bill 375. SB 375 (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035 and to update those targets every 8 years. SB 375 requires each of the state’s 18 regional metropolitan planning organizations to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise an SCS to achieve the GHG reduction target, the metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a SCS does not (1) regulate the use of land; (2) supersede the land use authority of cities and counties; or (3) require that a city’s or county’s land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In September 2010, CARB adopted the first SB 375 targets for the regional metropolitan planning organizations. The targets for the Southern California Association of Governments (SCAG) are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of an SCS is the responsibility of the metropolitan planning organizations. SCAG adopted its first RTP/SCS in April 2012. The plan quantified a 9% reduction by 2020 and a 16% reduction by 2035 (SCAG 2012). In June 2012, CARB accepted SCAG’s quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. On April 4, 2016, the SCAG Regional Council adopted the 2016 RTP/SCS, which builds upon the progress made in the 2012

RTP/SCS. The updated RTP/SCS quantified an 8% reduction by 2020 and an 18% reduction by 2030 (SCAG 2016). In June 2016, CARB accepted SCAG's quantification of GHG reductions and its determination that the SCS, if implemented, would achieve SCAG targets. In March 2018, CARB approved SCAG's updated targets of an 8% reduction by 2020 and a 19% reduction by 2030, effective October 1, 2018, which are consistent with the reduction targets from the Connect SoCal (2020–2045 RTP/SCS). In September 2020, SCAG adopted its 2020–2045 RTP/SCS and CARB accepted the 2020–2045 RTP/SCS emission quantification in October 2020.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program. The Advanced Clean Cars Program (January 2012) is a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2012). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The Zero-Emissions Vehicle Program will act as the focused technology of the Advanced Clean Cars Program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid EVs in the 2018 to 2025 model years.

Assembly Bill 1236. AB 1236 (October 2015) required a city, county, or city and county to approve an application for the installation of EV charging stations, as defined, through the issuance of specified permits, unless the city or county makes specified written findings based upon substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provided for appeal of that decision to the planning commission, as specified. The bill provided that the implementation of consistent statewide standards to achieve the timely and cost-effective installation of EV charging stations is a matter of statewide concern. The bill required EV charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for EV charging stations, as specified. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt this ordinance by September 30, 2017.

Solid Waste

Assembly Bills 939, 341, and 1826. In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code, Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (Chapter 476, Statutes of 2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops and in August 2015 published a discussion document titled AB 341 Report to the Legislature, which identifies five priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020, legislative and regulatory recommendations, and an evaluation of program effectiveness (CalRecycle 2012).

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Water

Executive Order B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the DWR has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Executive Order B-37-16. Issued May 2016, EO B-37-16 directed the State Water Resources Control Board (SWRCB) to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the state. The SWRCB also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The SWRCB and DWR will develop new, permanent water use targets that build upon the existing state law requirements that the state achieve 20% reduction in urban water usage by 2020. EO B-37-16 also specifies that the SWRCB permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians. In November, 2021, the DWR and SWRCB submitted a report to the Legislature recommending that urban water suppliers achieve an indoor water use efficiency standard of 55 gallons per capita per day by 2023, declining to 47 gallons per day by 2025, and 42 gallons by 2030 and beyond. If adopted by the Legislature, the standards recommended by DWR and SWRCB would be implemented at the water supplier level and would not apply to individual customers.

Other State Actions

Senate Bill 97. SB 97 (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under the California Environmental Quality Act (CEQA) for the mitigation of GHG emissions. In 2008, the Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting

from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, but instead allow a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009a).

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should “make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a “model or methodology” to quantify the emissions or by relying on “qualitative analysis or other performance-based standards” (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

Executive Order S-13-08. EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009b), and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014 (CNRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the *Safeguarding California: Implementation Action Plans* followed in March 2016 (CNRA 2016). In January 2018, the CNRA released the *Safeguarding California Plan: 2018 Update*, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018b).

Local

The following local/regional regulations pertaining to GHGs would apply to the Project.

Mojave Desert Air Quality Management District

The Project is within the Mojave Desert Air Basin portion of San Bernardino County, which is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD has adopted GHG emissions thresholds in its CEQA Guidelines, but has not adopted a comprehensive strategy for reducing GHG emissions. The MDAQMD threshold is 100,000 tons of CO₂e per year, or approximately 90,718 MT CO₂e per year (MDAQMD 2016).

Southern California Association of Governments

SB 375 requires metropolitan planning organizations to prepare and include an SCS in their RTP. The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012 (SCAG 2012), the 2016–2040 RTP/SCS (2016

RTP/SCS) was adopted in April 2016, and the 2020-2045 RTP/SCS (2020 RTP/SCS or Connect SoCal) was adopted in September 2020. Please see Section 4.10, Transportation, for a discussion of SCAG's Connect SoCal, the 2020–2045 RTP/SCS. The 2012, 2016, and 2020 RTP/SCSs establish a development pattern for the region that, when integrated with the transportation network and other policies and measures, would reduce GHG emissions from transportation (excluding goods movement). The RTP/SCSs link the goals of sustaining mobility with the goals of fostering economic development; enhancing the environment; reducing energy consumption; promoting transportation-friendly development patterns; and encouraging all residents affected by socioeconomic, geographic, and commercial limitations to be provided with fair access. The RTP/SCSs do not require that local general plans, specific plans, or zoning be consistent with it but provide incentives for consistency for governments and developers.

General Plan

Policies pertaining to reducing GHGs are addressed in the Conservation Element of the General Plan (City of Hesperia 2010b). The following policies from the Conservation Element are applicable to the Project:

Goal CN-1. Conserve water resources within the Upper Mojave River Groundwater Basin.

Policy CN-1.1. Promote the use of desert vegetation with low water usage and drought tolerant materials in landscaped areas.

Policy CN-1.6. Encourage the use of low-water consumption fixtures in homes and businesses.

Goal CN-2. Establish building and development standards to maximize the reclamation of water resources.

Policy CN-2.2. Encourage the use of reclaimed water for irrigation and other non-potable uses.

Goal CN-6. Provide programs and incentives to encourage residents, businesses and developers to reduce consumption and efficiently use energy resources.

Policy CN-6.2. Encourage the use of green building standards and Leadership in Energy and Environmental Design (LEED) or similar programs in both private and public projects.

Goal CN-7. Develop, promote and implement policies to reduce and limit GHG emissions.

Policy CN-7.4. Promote the utilization of alternative energy resources such as wind and solar in new development.

Policy CN-7.5. Promote the utilization of environmentally sensitive construction materials to limit impacts on the ozone, global climate change and mineral resources.

Policy CN-7.7. Promote energy conservation through site layout, building design, natural light and efficient mechanical and electrical products in development.

Policy CN-7.8. Continue the existing recycling program and utilization of the material recovery facility program while exploring additional methods of reducing waste.

Policy CN-7.9. Promote sustainable principles in development that conserves such natural resources as air quality and energy resources.

Climate Action Plan

On July 20, 2010, the City of Hesperia adopted the Climate Action Plan (CAP), which provides a framework for reducing GHG emissions and managing resources to best prepare for a changing climate (City of Hesperia 2010b). The CAP recommends GHG emissions targets that are consistent with the reduction targets of the State of California and presents a number of strategies that will make it possible for the City to meet the recommended targets. Strategy CAP-1 specifies “projects that are consistent with this CAP could result in less than significant impacts regarding climate change” because GHG emissions from these projects are generally accounted for in this CAP and would be consistent with this CAP reduction target. To be consistent with this CAP, CEQA projects must implement the applicable implementation strategies listed in Section 4.2 of the CAP. Per CAP Implementation Action 1.5 (CAP- 1.5), projects that require a discretionary approval shall reduce operational GHG emissions by at least 12% without accounting for regulations discussed in the CAP.

4.6.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to greenhouse gases/climate change are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to greenhouse gas emissions would occur if the Project would:

- A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- B. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- C. Result in cumulatively considerable impacts with regard to greenhouse gas emissions.

The City has not adopted a numeric significance threshold for determining significant impacts associated with GHG emissions. Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. Although air districts will also address some of these issues on a project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues (SCAQMD 2008). While the Project is located within the jurisdiction of the MDAQMD, both MDAQMD and the South Coast Air Quality Management District (SCAQMD) recommended thresholds are discussed below. Because SCAQMD’s thresholds are more stringent and are backed by substantial evidence from an expert agency, the SCAQMD’s recommended thresholds are utilized for determining the potential significance of impacts for the Project, as discussed below.

On May 13, 2010, EPA finalized the GHG Tailoring Rule (75 FR 31514, June 3, 2010). The Tailoring Rule sets major source emissions thresholds that define when federal operating permits under Prevention of Significant Deterioration (PSD) or Title V are required. The Tailoring Rule establishes a threshold of 100,000 tons per year or 90,719 MT per year of GHGs from new sources above which sources are considered major sources requiring a federal operating permit. As such, the MDAQMD has adopted a significance threshold for GHGs of 100,000 tons per year. More specifically, 100,000 tons per year of GHG emissions from a single facility constitutes major sources that require a federal operating permit. Similarly, the MDAQMDs NO_x significance threshold of 25 tons per year is equal to the major source threshold applicable to areas designated severe non-attainment for ozone. As such, use of the EPA’s determination of whether a Project is a major source and consequently establishing a threshold based on that is supported by substantial evidence.

The SCAQMD, which oversees the adjacent South Coast Air Basin, has recommended more stringent numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects; however, these thresholds were not adopted. The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

- Tier 1** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2** Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3** Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO₂e per year threshold for industrial uses and stationary projects would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO₂e per year), commercial projects (1,400 MT CO₂e per year), and mixed-use projects (3,000 MT CO₂e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO₂e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4** Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO₂e per service population for project level analyses and 6.6 MT CO₂e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5** Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Based on the supporting analysis outlined in SCAQMD's draft GHG guidance and meeting notes, this 3,000 MT CO₂e per year level would capture 90 percent of GHG emissions from new residential or commercial projects in the region (SCAQMD 2008). This type of market capture analysis captures a substantial fraction of the GHG emissions from future development to accommodate for future population and job growth and excludes small development projects that would contribute a relatively small fraction of the cumulative statewide GHG emissions.

While the City has not adopted a numeric significance threshold, the City has previously relied on use of the 3,000 MT CO₂e per year threshold to evaluate the potential for the Project to result in a significant GHG emissions impact under CEQA because it has been recommended by SCAQMD and SCAQMD is an expert agency in the Southern California region. Further, the SCAQMD provides substantial evidence that the thresholds are consistent with policy goals and 2050 GHG emissions reduction targets set by the State. Specifically, the thresholds were set at levels

that capture 90% of the GHG emissions from the above-described uses, consistent with EO S-3-05 target of reducing GHGs to 80% below 1990 levels by 2050.

Methodology

Emissions from construction and operation of the Project and existing land uses were estimated using the CalEEMod Version 2020.4.0.⁵ Notably, the latest version of CalEEMod uses vehicle emission rates obtained from the Emissions FACTor model (EMFAC) 2017 web database (CAPCOA 2021). EMFAC2017 emission rates of all vehicle categories are based on aggregated model year and aggregated speed for all counties, air basins, air districts and statewide average for 31 scenario years that each includes three seasons (annual, summer, and winter).

Construction

Construction of the Project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 4.2.3 (Methodology, Construction Emissions subsection) of Section 4.2, Air Quality, are also applicable for the estimation of construction-related GHG emissions. See Section 4.2.3 for a discussion of construction emissions calculation methodology and assumptions used in the GHG emissions analysis.

Operation

Project operations would generate CO₂, CH₄, and N₂O emissions. Primary emissions sources would include:

- Area Source (landscape and site maintenance activities)
- Energy Source (combustion emissions associated with natural gas and electricity)
- Mobile Source (vehicles)
- On-Site Equipment Emissions
- Solid Waste
- Water Supply, Treatment, and Distribution

Area Source Emissions. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

Energy Source Emissions. GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO₂ and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use

⁵ CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with the construction and operational activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the Project land use type and size and construction schedule were based on information provided by the Project applicant, or default model assumptions if Project specifics were unavailable.

emissions do not include street lighting.⁶ GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. GHG emissions associated with the natural gas and electricity usage associated with the Project were calculated by CalEEMod using default parameters.

Mobile Source Emissions. All details for criteria air pollutants discussed in Section 4.2, Air Quality, are also applicable for the estimation of operational mobile source GHG emissions. It was assumed that the warehouse would operate 7 days per week; therefore, 365 days of vehicle emissions were assumed. Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the NHTSA and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the Project's motor vehicles. The effectiveness of fuel economy improvements was evaluated to the extent it was captured in the EMFAC2017 emission factors for motor vehicles in 2024.

On-Site Equipment Source Emissions. It is common for industrial buildings to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment forklifts, pallet jacks and yard trucks which are designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors, hustlers, yard hostlers, and yard tractors. The cargo handling equipment is assumed to have a horsepower (hp) range of approximately 175 hp to 215 hp. For this particular Project, based on the maximum square footage of building space permitted by the Project, on-site modeled operational equipment includes a total of 50, electric-powered forklifts (forklifts and pallet jacks) and 2 electric-powered yard tractors operating at 8 hours a day for 365 days of the year. See Appendix B-2 for detail calculations.

Solid Waste. Industrial land uses will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the Project were calculated by CalEEMod using default parameters.

Water Supply, Treatment, and Distribution. Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. GHG emissions associated with Project water consumption were calculated by CalEEMod using default parameters.

Project Design Features

The Project incorporates and expresses the following Project design features (PDFs) and attributes promoting energy efficiency and sustainability. Because these PDFs/attributes are integral to the Project, and/or are regulatory requirements, they are not considered to be mitigation measures. In addition, PDF-AQ-1, Zero-Emissions Off-Road Equipment has attributes promoting energy efficiency and sustainability.

⁶ The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

PDF-GHG-1, **Water Conservation**. To reduce water demands and associated energy use, subsequent development proposals within the Project site would be required to implement a Water Conservation Strategy and demonstrate a minimum 20% reduction in indoor and outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). To implement this PDF, prior to the issuance of building permits for the Project, the Project applicant shall provide building plans that include the following water conservation measures:

- Install low-water use appliances and fixtures
- Restrict the use of water for cleaning outdoor surfaces and prohibit systems that apply water to non-vegetated surfaces
- Implement water-sensitive urban design practices in new construction
- Install rainwater collection systems where feasible.

PDF-GHG-2, **Solid Waste Reduction**. In order to reduce the amount of waste disposed at landfills, the Project would implement a 75% waste diversion program. To implement this PDF, prior to the issuance of building permits for the Project, the Project applicant shall provide building plans that include the following solid waste reduction measures:

- Provide storage areas for recyclables and green waste in new construction, and food waste storage, if a pick-up service is available.
- Evaluate the potential for onsite composting.

4.6.4 Impacts Analysis

Threshold A: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Significant and Unavoidable Impact. MDAQMD follows the SCAQMD recommendation in calculating the total GHG emissions for construction activities by amortizing the emissions over the life of a project. This is done by dividing construction-period GHG emissions by a 30-year Project life then adding that number to the annual operational phase GHG emissions. As such, Project construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 4.6-3.

Table 4.6-3. Estimated Annual Construction GHG Emissions

Year	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
2023	623.75	0.08	0.03	633.34
<i>Amortized Construction Emissions</i>				<i>21.11</i>

Notes: GHG = greenhouse gas; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent. See Appendix C-1 for complete results.

As shown in Table 4.6-3, total estimated GHG emissions generated during construction of the Project are approximately 633 MT CO₂e. Estimated Project-generated construction emissions amortized over 30 years would be approximately 21 MT CO₂e per year.

Long-term operations of the Project would result in GHG emissions through mobile sources and on-site equipment, area sources (landscape maintenance equipment); energy use (natural gas and generation of electricity consumed by the Project); generation of electricity associated with wastewater treatment and with water supply, treatment, and distribution; and solid waste disposal. Annual GHG emissions from these sources were estimated using CalEEMod.

As explained in Section 4.6.2, the Project would be required to comply with all mandates imposed by the State of California and the MDAQMD. Not all of the applicable regulatory measures would directly lead to quantifiable emissions reductions for the Project. Therefore, not all of the above regulatory measures were quantified in this analysis. As discussed above in Section 4.6.3, in the Project Design Features, the regulatory measures that were quantified include the Renewable Portfolio Standards, Title 24 building code, the Pavley Fuel Efficiency Standards and reductions associated with PDF-GHG-1 and PDF-GHG-2. The Project's estimated annual GHG emissions with regulatory requirements and PDFs in place are shown in Table 4.6-4.

Table 4.6-4. Estimated Annual Operational GHG Emissions

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
Area Source	0.02	<0.01	0.00	0.02
Energy Source	652.81	0.04	0.01	656.39
Mobile Sources	5,016.14	0.05	0.51	5,170.66
On-Site Equipment Sources	143.52	0.01	<0.01	144.21
Solid Waste	22.00	1.30	0.00	54.51
Water/Wastewater	206.67	2.52	0.06	287.7
<i>Annual construction-related emissions amortized over 30 years</i>				<i>21.11</i>
Total Project Emissions				6,334.60

Notes: GHG = greenhouse gas; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent; PDFs = Project design features.

See Appendix I for complete results.

As shown in Table 4.6-4, with applicable regulatory requirements and PDFs, the Project would result in approximately 6,335 MT CO₂e per year, which would exceed the SCAQMD GHG threshold of 3,000 MT CO₂e per year. Therefore, the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and this would represent a cumulatively potentially significant impact. Mitigation measures would be required that would reduce Project-generated construction and operational GHG emissions. Mitigation measures MM-GHG-1 through MM-GHG-4 would reduce construction and operation-related GHG emissions. However, the effectiveness of the required mitigation measures cannot be accurately quantified at this time. No other feasible mitigation is available to further reduce GHG emissions from the Project. Therefore, Project-generated GHG emissions would still exceed the applied threshold of 3,000 MT CO₂e per year and impact would be significant and unavoidable.

Threshold B: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less-than-Significant Impact. As previously stated, pursuant to 15604.4 of the CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the Project's consistency with SB 32 (2017 Scoping Plan) and the City's CAP, is discussed below. It should be noted that the Project's consistency with the 2017 Scoping Plan also satisfies consistency with AB 32 since the 2017 Scoping Plan is based on the overall targets established by AB 32. Consistency with the 2008 Scoping Plan is not necessary, since the target year for the 2008 Scoping Plan was 2020, and the Project's buildout year is 2024. As such, the 2008 Scoping Plan does not apply and consistency with the 2017 Scoping Plan is relevant.

2017 Scoping Plan Consistency

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Table 4.6-5 summarizes the Project's consistency with the 2017 Scoping Plan. As summarized in Table 4.6-7, the Project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories.

Table 4.6-5. Consistency with 2017 Scoping Plan

Action	Responsible Parties	Consistency
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	California Public Utilities Commission, California Energy Commission (CEC), California Air Resources Board (CARB)	Consistent. The Project would use energy from Southern California Edison (SCE). SCE has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct SCE energy source diversification efforts.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		Consistent. The Project would be constructed in compliance with the current California Building Code requirements at the time of construction. Specifically, new buildings must achieve compliance with the applicable 2019 or 2022 Building and Energy Efficiency Standards and the 2019 or 2022 California Green Building Standards requirements. The Project includes energy efficient field lighting and fixtures that meet the current Title 24 Standards throughout the Project Site and would be a modern development with energy efficient boilers, heaters, and air conditioning systems.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		

Table 4.6-5. Consistency with 2017 Scoping Plan

Action	Responsible Parties	Consistency
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plug-in hybrid light-duty EVs by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2025 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
At least 4.2 million zero emission and plug-in hybrid light-duty EVs by 2030.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2030 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
Medium- and Heavy-Duty GHG Phase 2.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO _x standard.		Not applicable. This measure is not within the purview of this Project.

Table 4.6-5. Consistency with 2017 Scoping Plan

Action	Responsible Parties	Consistency
Last Mile Delivery: New regulation that would result in the use of low NO _x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.		Not applicable. This Project would not obstruct or interfere with implementation of SB 375 and would therefore not conflict with this measure.
Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.”		Not applicable. This Project would not obstruct or interfere with implementation of SB 375 and would therefore not conflict with this measure.
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	Not applicable. This Project would not obstruct or interfere with implementation of SB 375 and would therefore not conflict with this measure.
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).	CalSTA, SGC, OPR, CARB, Governor’s Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	Consistent. The Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions and increase competitiveness of transit and active transportation modes.

Table 4.6-5. Consistency with 2017 Scoping Plan

Action	Responsible Parties	Consistency
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	Consistent. The Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	Consistent. This measure would apply to all trucks accessing the Project sites, including existing trucks or new trucks that are part of the statewide goods movement sector. The Project would not obstruct or interfere with agency efforts to improve freight system efficiency.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		Not applicable. This measure is not within the purview of this Project.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	Consistent. When adopted, this measure would apply to all fuel purchased and used by the Project in the state. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.
Implement the Short-Lived Climate Pollutant Reduction Strategy by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, California State Water Resource Control Board (SWRCB), Local Air Districts	Not applicable. This measure is not within the purview of this Project.
50% reduction in black carbon emissions below 2013 levels.		
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	Not applicable. This measure is not within the purview of this Project.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	Not applicable. The Project would not obstruct or interfere agency efforts to implement the post-2020 Cap-and-Trade Program.

Table 4.6-5. Consistency with 2017 Scoping Plan

Action	Responsible Parties	Consistency
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	Not applicable. The Project involves the conversion of vacant land to developed land. However, the Project site is not an identified property that needs to be conserved.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity		Not applicable. This measure is not within the purview of this Project.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments		Consistent. To the extent appropriate for the proposed industrial buildings, wood products would be used in construction, including for the roof structure.
Establish scenario projections to serve as the foundation for the Implementation Plan		Not applicable. This measure is not within the purview of this Project.
Implement Forest Carbon Plan	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA and Departments Within	Not applicable. This measure is not within the purview of this Project.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies and Local Agencies	Not applicable. This measure is not within the purview of this Project.

Source: CARB 2017.

As shown above, the Project would not conflict with any of the *2017 Scoping Plan* elements as any regulations adopted would apply directly or indirectly to the Project. Further, recent studies show that the state's existing and proposed regulatory framework will allow the state to reduce its GHG emissions level to 40% below 1990 levels by 2030.

Consistency with the CAP

As previously stated, the CAP presents a number of strategies that will make it possible for the City to meet the recommended GHG emissions targets that are consistent with the reduction targets of the state. The Project's consistency with applicable CAP strategies are presented in Table 4.6-6.

Table 4.6-6. Climate Action Plan Strategy Consistency Analysis

CAP Strategy		Project Consistency
CAP-1.5	Projects that require a discretionary approval shall reduce operational GHG emissions by at least 12%, without accounting for regulations discussed in the CAP. The project inventory should include all potential sources, including but not limited to those identified in this CAP.	Consistent. The inventory prepared in this report includes all applicable sources of GHG emissions including area, mobile, water use, wastewater, and solid waste. With the inclusion of Project design features, the Project would reduce GHG emissions by 18%, which is 12% above what is required by the CAP.

Source: City of Hesperia 2010a.

To effectively analyze operational GHG emissions associated with the Project for CAP-1.5 consistency, two scenarios were modeled. Table 4.6-7 presents the operational scenario that represents Project emissions without regulatory measures and PDFs (shown as “unmitigated” emissions in CalEEMod), which estimates Project emissions absent federal, state, and local measures and without Project features intended to reduce GHG emissions upon Project buildout. The second scenario, see Table 4.6-6, (shown as “mitigated” emissions in CalEEMod) represents Project emissions with implementation of applicable federal, state, and local GHG reduction measures and Project features. Note that the designation of the second scenario as “mitigated” is a function of how the scenario is necessarily designated in CalEEMod and should not be confused with the application of mitigation measures, as defined under CEQA.

Only certain regulatory measures can be effectively quantified or removed from the Without Regulatory Requirement Scenario. For energy source emissions, reductions associated with the Renewable Portfolio Standard regulations were revised by updating the CO₂ intensity factor for Southern California Edison to the 2009 Year and utilizing historic Title 24 energy demand values. For mobile sources, non-Pavley CO₂ emission factors were utilized in the Without Regulatory Requirements” scenario as provided in the CalEEMod User guide (CAPCOA 2020).

The estimated operational GHG emissions without regulatory requirements and PDFs from the Project are shown in Table 4.6-7. Details of the emission calculations are provided in Appendix I.

Table 4.6-7. Estimated Annual Operational GHG Emissions - Without Regulatory Requirements and PDFs

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
Area Source	0.02	<0.01	0.00	0.02
Energy Source	988.11	0.04	0.01	991.69
Mobile Sources	5,635.20	0.05	0.51	5,789.71
On-Site Equipment Sources	143.52	0.01	<0.01	144.21
Solid Waste	88.01	5.20	0.00	218.04
Water/Wastewater	460.51	3.14	0.08	561.79
Annual construction-related emissions amortized over 30 years				21.11
Total Project Emissions				7,726.57

Notes: GHG = greenhouse gas; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent; PDFs = Project design features.

See Appendix C-1 for complete results.

As shown in Table 4.6-7, without accounting for applicable regulatory requirements and PDFs, the Project would result in approximately 7,727 MT CO₂e per year.

The Project's emissions without regulatory requirements and PDFs as compared to the Project's emissions with regulatory requirements and PDFs are shown on Table 4.6-8. The Project's emissions without accounting for regulatory requirements and PDFs would be 7,727 MT CO₂e per year. After implementation, Project GHG emissions would be reduced to 6,335 MT CO₂e per year. This yields a reduction of approximately 18%, which meets the City's CAP target of a 12% reduction. As such, the Project would be consistent with the City's CAP.

Table 4.6-8. Climate Action Plan Emissions Reduction Goal Consistency Analysis

Project GHG Emissions	CO ₂ e (Metric Tons per Year)
Total Project Emissions without Regulatory Requirements and PDFs	7,726.57
Total Project Emissions with Regulatory Requirements and PDFs	6,334.60
Percent Reduction	18%

Notes: GHG = greenhouse gas; CO₂e = carbon dioxide equivalent; PDFs = project design features. See Appendix I for complete results.

The Project demonstrates consistency with the CARB's Scoping Plan and would not conflict with other regulations regarding reductions to GHG emissions including AB 32, Title 24 and SB 32. Additionally, the Project would meet the emission reduction target outlined in the City's CAP. Furthermore, mitigation measures would be required that would reduce Project-generated construction and operational GHG emissions. MM-GHG-1 through MM-GHG-4 would further reduce operation-related GHG emissions.

Potential to Conflict with SCAG's RTP/SCS

The SCAG 2020–2045 RTP/SCS is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375. In addition to demonstrating the Region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020–2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use.

The following strategies are intended to be supportive of implementing the 2020–2045 RTP/SCS and reducing GHGs: focus growth near destinations and mobility options; promote diverse housing choices; leverage technology innovations; support implementation of sustainability policies; and promote a green region (SCAG 2020). The strategies that pertain to residential development and SCAG's support of local jurisdiction sustainability efforts would not apply to the Project. The Project's compliance with the remaining applicable strategies is presented below (also see Table 5.2, Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis, within Section 5, Effects Found Not to be Significant).

- Focus Growth Near Destinations and Mobility Options.** The Project's compliance with this strategy of the 2020–2045 RTP/SCS is supported because the Project would introduce new jobs proximate to existing housing which would reduce vehicle miles traveled. As discussed in Section 3.3, Project Objectives, the Project would be located in area with a low job to housing ratio. The Project's proximity to existing freeways also helps to reduce vehicle miles traveled and local truck traffic congestion.

- **Leverage Technology Innovations.** One of the technology innovations identified in the 2020–2045 RTP/SCS that would apply to the Project is the promotion and support of low emission technologies for transportation, such as alternative fueled vehicles to reduce per capita GHG emissions. For this particular project, based on the maximum square footage of building space permitted by the Project, on-site modeled operational equipment includes a total of 50 electric-powered forklifts (forklifts and pallet jacks) and 2 electric-powered yard tractors.
- **Promote a Green Region.** The third applicable strategy within the 2020–2045 RTP/SCS for individual developments such as the Project, involves promoting a green region through efforts such as supporting local policies for renewable energy production and promoting more resource efficient development (e.g., reducing energy consumption) to reduce GHG emissions. A key means that the Project would use to support this strategy is by including rooftop solar and energy star appliances into the Project design as a part of MM-GHG-2.

Based on the analysis above, the Project would be consistent with the SCAG 2020–2045 RTP/SCS.

Threshold C: Would the Project result in cumulatively considerable impacts with regard to greenhouse gas emissions?

Significant and Unavoidable Impact. As previously discussed in Section 4.6.1, Existing Conditions, GHG emissions impacts are inherently cumulative in nature. As shown in Table 4.6-7, the Project would result in GHG emissions in exceedance of the SCAQMD significance threshold. Therefore, Project GHG emissions would be cumulatively considerable and significant.

4.6.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The Project would result in potentially significant impacts with regard to generating GHG emissions. The following mitigation measures would reduce operation-related GHG emissions:

MM-GHG-1 The Project shall implement the following measures in order to reduce construction equipment GHG emissions to the extent feasible

- Provide infrastructure for zero-emission off-road construction equipment if the contractors selected to construct the Project plan to use zero-emission off-road construction equipment.
- Provide electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills, and compressors. In applicable bid documents and contracts with contractors selected to construct the Project, include language requiring all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during Project construction to be electric.
- Require construction equipment to be turned off when not in use.
- Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.

MM-GHG-2 The Project shall implement the following measures in order to reduce operational mobile source GHG emissions to the extent feasible:

- Prior to tenant occupancy, provide documentation to the City of Hesperia demonstrating that occupants/tenants of the Project site have been provided documentation that:
 - For occupants with more than 250 employees, require the establishment of a transportation demand management program to reduce employee commute vehicle emissions.
- Include contractual language in tenant lease agreements requiring that any facility operator shall:
 - Ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at California Air Resources Board-approved courses (such as the free, one-day Course #512);
 - Be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. The building manager or their designee shall be responsible for enforcing these requirements; and
 - Be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), and the Statewide Truck and Bus Regulation.
- Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and (3) telephone numbers of the building facilities manager and CARB to report violations. Prior to the issuance of an occupancy permit, the City of Hesperia shall conduct a site inspection to ensure that the signs are in place.
- Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the City of Hesperia demonstrating that occupants/tenants of the Project site have been provided documentation on funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment.
- In anticipation of a transition to zero emissions truck fleets during the lifetime of the Project, install at least four heavy-duty truck vehicle charging stations on site by 2030.
- Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle (EV) charging stations on site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) EV charging stations for 25% of the employee parking spaces required.
- Conduit shall be installed to tractor trailer parking areas in logical locations determined by the Project Applicant during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available.

MM-GHG-3 The Project shall implement the following measure in order to reduce operational energy source GHG emissions to the extent feasible:

- Commit to on-site solar generation sufficient to meet at least 75% of the Project's total operational energy requirements from within the building envelope.
- Install Energy Star-rated heating, cooling, lighting, and appliances.
- Provide information on energy efficiency, energy-efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future tenants of the Project.
- Structures shall be equipped with outdoor electric outlets in the front and rear of the structures to facilitate use of electrical lawn and garden equipment.
- Require no construction or operation of cold storage within the project facilities.
- Provide documentation to the City of Hesperia demonstrating that the Project could achieve Leadership in Energy and Environmental Design (LEED) certification and meet or exceed California Green Building Standards Code (CALGreen) Tier 2 standards in effect at the time of building permit application.

MM-GHG-4 The Project shall include the following language within tenant lease agreements in order to reduce operational GHG emissions to the extent feasible:

- Require tenants to use the cleanest technologies available and to provide the necessary infrastructure to support zero-emission vehicles, equipment, and appliances that would be operating on site. This requirement shall apply to equipment such as handheld landscaping equipment, office appliances, etc.
- Require future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans, when economically feasible.
- Tenants shall be in, and monitor compliance with, all current air quality regulations for on-road trucks including the California Air Resources Board's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation.

Implementation of MM-GHG-1 through MM-GHG-4 would reduce the Project's GHG emissions impacts; however, the effectiveness of the mitigation and the associated emission reductions cannot be accurately quantified at this time. No other feasible GHG-specific mitigation is feasible. As such, impacts would remain **significant and unavoidable**.

Threshold B: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The Project would not conflict with applicable plans, policies or regulations related to GHGs. Impacts are less than significant and no mitigation is required.

Threshold C: Would the Project result in cumulatively considerable impacts with regard to greenhouse gas emissions?

The Project would result in potentially significant impacts with regard to GHG emissions. Implementation of MM-GHG-1 through MM-GHG-4 would reduce the Project's GHG impacts; however, impacts would remain **significant and unavoidable**.

4.6.6 References Cited

- CalRecycle (California Department of Resources Recycling and Recovery). 2012. *AB 341 Final Statement of Reasons: Mandatory Commercial Recycling Regulations*. <http://www.calrecycle.ca.gov/laws/rulemaking/archive/2012/MCR/RuleDocs/FSOR.pdf>.
- CAPCOA (California Air Pollution Control Officers Association). 2020. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2020.4.0*. Prepared by Trinity Consultants and the California Air Districts. May 2021. <http://www.caleemod.com/>.
- CARB (California Air Resources Board). 2008. *Climate Change Scoping Plan: A Framework for Change*. December 2008. Accessed May 2019. https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.
- CARB. 2012. "California Air Resources Board Approves Advanced Clean Car Rules." January 27, 2012. <https://www.arb.ca.gov/newsrel/newsrelease.php?id=282>.
- CARB. 2014. *First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006*. May 2014. Accessed May 2019. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.
- CARB. 2017. *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target*. November 2017. Accessed May 2019. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.
- CARB. 2018. "Glossary of Terms Used in Greenhouse Gas Inventories." Last reviewed June 22, 2018. http://www.arb.ca.gov/cc/inventory/faq/ghg_inventory_glossary.htm.
- CARB. 2019. *California Greenhouse Gas Emissions for 2000 to 2017*. Accessed April 2020. <https://ww2.arb.ca.gov/ghg-inventory-data>.
- CARB 2022 CARB Draft 2022 Scoping Plan Update, May 2022. <https://ww2.arb.ca.gov/resources/documents/2022-scoping-plan-documents>
- CEC (California Energy Commission). 2018. 2019 Building Energy Efficiency Standards – Frequently Asked Questions. March 2018. Accessed May 2019. https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.
- City of Hesperia. 2010a. Climate Action Plan.
- City of Hesperia. 2010b. *City of Hesperia General Plan 2010*. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.
- CNRA (California Natural Resources Agency). 2009a. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97*. December 2009. Accessed May 2019. http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf.

- CNRA. 2009b. *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*. Accessed May 2019. http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf.
- CNRA. 2014. *Safeguarding California: Reducing Climate Risk: An Update to the 2009 California Climate Adaptation Strategy*. July 2014. Accessed May 2019. http://resources.ca.gov/docs/climate/Final_Safeguarding_CA_Plan_July_31_2014.pdf.
- CNRA. 2016. *Safeguarding California: Implementation Action Plans*. March 2016. Accessed May 2019. <http://resources.ca.gov/docs/climate/safeguarding/Safeguarding%20California-Implementation%20Action%20Plans.pdf>.
- CNRA. 2018a. *California's Fourth Climate Change Assessment – Inland Deserts Region Report*. https://www.energy.ca.gov/sites/default/files/2019-11/Reg_Report-SUM-CCCA4-2018-008_InlandDeserts_ADA.pdf.
- CNRA. 2018b. *Safeguarding California Plan: 2018 Update: California's Climate Adaptation Strategy*. January 2018. Accessed May 2019. <http://resources.ca.gov/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf>.
- EPA (U.S. Environmental Protection Agency). 2007. *Energy Independence and Security Act of 2007*. <https://www.epa.gov/greeningepa/energy-independence-and-security-act-2007>
- EPA. 2016. "Glossary of Climate Change Terms." September 29, 2016. https://19january2017snapshot.epa.gov/climatechange/glossary-climate-change-terms_.html.
- EPA. 2017a. "Climate Change." Last updated January 19, 2017. Accessed May 2019. https://19january2017snapshot.epa.gov/climatechange_.html.
- EPA. 2017b. *Carbon Pollution Standards for Cars and Light Trucks to Remain Unchanged Through 2025*. January 13, 2017. <https://www.epa.gov/newsreleases/carbon-pollution-standards-cars-and-light-trucks-remain-unchanged-through-2025>.
- EPA. 2020. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990–2018*. EPA 430-R-20-002. April 2020. <https://www.epa.gov/sites/production/files/2020-04/documents/us-ghg-inventory-2020-main-text.pdf>.
- EPA and NHTSA (U.S. Environmental Protection Agency and National Highway Traffic Safety Administration). 2016. *EPA and NHTSA Adopt Standards to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond*. August 2016. Accessed May 2019. <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P7NL.PDF?Dockey=P100P7NL.PDF>.
- EPA and NHTSA. 2018. *The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule for Model Years 2021-2026 Passenger Vehicles and Light Trucks*. Proposed Rule August 2018. Accessed May 2019. <https://www.govinfo.gov/content/pkg/FR-2018-08-24/pdf/2018-16820.pdf>.
- IPCC (Intergovernmental Panel on Climate Change). 1995. *Climate Change 1995: A Report of the Intergovernmental Panel on Climate Change*. IPCC Second Assessment.

- IPCC. 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Edited by S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller. Cambridge, United Kingdom, and New York, New York: Cambridge University Press. Accessed May 2019. http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4_wg1_full_report.pdf.
- IPCC. 2013. *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Edited by T.F. Stocker, D. Qin, G.K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P.M. Midgley. Cambridge, United Kingdom, and New York, New York: Cambridge University Press. Accessed May 2019. <http://www.ipcc.ch/report/ar5/wg1>.
- IPCC. 2014. *Climate Change 2014 Synthesis Report: A Report of the Intergovernmental Panel on Climate Change*. Contribution of Working Groups I, II and III to the *Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Accessed May 2019. <http://www.ipcc.ch/report/ar5/syr/>.
- IPCC. 2018. “Summary for Policymakers.” In *Global Warming of 1.5 °C. An IPCC Special Report on the Impacts of Global Warming of 1.5 °C above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*. Accessed July 2019. https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf.
- MDAQMD (Mojave Desert Air Quality Management District). 2016. “MDAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines.” MDAQMD, Planning, Rule Making and Grants Section, Air Monitoring Section. August 2016.
- OEHHA (Office of Environmental Health Hazard Assessment). 2018. *Indicators of Climate Change in California*. May 9, 2018. Accessed June 25, 2020. <https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf>.
- OPR (California Governor’s Office of Planning and Research). 2008. “Technical Advisory—CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review.” June 19, 2008. Accessed May 2019. <http://opr.ca.gov/docs/june08-ceqa.pdf>.
- SCAG (Southern California Association of Governments). 2012. *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy*. Adopted April 2012. Accessed March 2020. <http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf>.
- SCAG. 2016. *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy*. Adopted April 7, 2016. Accessed March 2020. <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>.
- SCAG. 2020. *The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Connect SoCal*. Accessed May 2020. <https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx>.
- SCAQMD. 2008. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. October 2008.

SCAQMD. 2010. “Greenhouse Gases CEQA Significance Thresholds Working Group Meeting No. 15.” September 28, 2010. Accessed August 2016. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2).

UNFCCC (United Nations Framework Convention on Climate Change). 2019. “History of the Convention.” Accessed July 2019. <https://unfccc.int/process/the-convention/history-of-the-convention>.

The White House. 2021. Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. January 20. <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/>

INTENTIONALLY LEFT BLANK

4.7 Hazards, Hazardous Materials, and Wildfire

This section describes the existing hazards, hazardous materials, and wildfire conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to the implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2 of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following sources:

- Phase I Environmental Site Assessment performed on 17.87-Acre Tract (Undeveloped), prepared by Consolidated Consulting Group LLC, in October 2020 (Appendix F)

4.7.1 Existing Conditions

Project Site Conditions

The Project consists of two contiguous parcels of vacant, undeveloped land. Ground surface cover consists of moderate native brush and shrub growth, with occasional juniper and Joshua trees located throughout the site. The site is subject to disturbance as a result of illegal dumping and trespassing. These unpermitted activities have led to areas of exposed bare soils (where trails have formed) and several debris piles. The Project site's surface elevation ranges between approximately 3,600 and 3,630 feet above mean sea level (amsl). The Project site and immediate surrounding area is relatively flat with a slight slope (less than 2%) from the southwestern to northeastern corner.

The Project site is underlain by alluvial soils, consisting of loose to very dense silty fine to coarse gravel, traces of clay, and occasional cobbles. On-site exploratory drilling did not encounter groundwater within 30 feet below ground surface. In addition, the nearest groundwater monitoring well is located 4,400 feet northwest of the site. Water level readings within this monitoring well indicate a groundwater level of approximately 600 feet below ground surface (Appendix E-2).

Phase I Environmental Site Assessment Findings

A Phase I Environmental Site Assessment (ESA) was conducted to identify potential or existing environmental contamination on the site. During the preparation of the Phase I ESA, Consolidated Consulting Group LLC searched both state and federal hazardous materials as a result of existing or past uses. A regulatory database report for the Project site, prepared by Environmental Risk Information Services (ERIS), is included as Appendix 7.2 of the Phase I ESA (Appendix F). In addition to the database report, Consolidated Consulting Group contacted several local and regional agencies involved in regulating and keeping records of hazardous materials for any information connected to the Project site, including the City of Hesperia (City) and County of San Bernardino (County) Department of Health/Environmental Division, the City of Hesperia Fire Department, the City of Hesperia Planning and Zoning Department, and the City of Hesperia Building Permit/Inspection Department (Appendix F).

As the Phase I ESA was completed in 2020, and sites can be added to regulatory databases on a regular basis, an updated environmental regulatory database search was completed for this EIR. A search was completed for both Cortese List sites, pursuant to Government Code Section 65962.5, and non-Cortese List sites, such as voluntary cleanup sites or landfills. Table 4.7-1 summarizes the databases reviewed.

Table 4.7-1. Online Database Listings

Database	Details
Cortese List database https://calepa.ca.gov/sitecleanup/corteselist/	Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to compile a list of hazardous waste and substances sites (Cortese List). While no longer maintained as a single list, this website provides links to multiple data resources that meet the Cortese List requirement.
California Environmental Protection Agency (CalEPA) https://siteportal.calepa.ca.gov/nsite/	The CalEPA Regulated Site Portal is a website that combines data about environmentally regulated sites and facilities in California into a single, searchable database and interactive map. Data sources include California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxics Release Inventory (TRI).
Department of Toxic Substances Control (DTSC) EnviroStor https://www.envirostor.dtsc.ca.gov/	The DTSC's data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons for further investigation.
Regional Water Quality Control Board (RWQCB) GeoTracker http://geotracker.waterboards.ca.gov/	The California RWQCB's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, various unregulated projects, and permitted facilities. Sites include LUSTs, Department of Defense, Cleanup Program, Irrigated Lands, Oil and Gas Production, Permitted USTs, and Land Disposal Sites.
National Pipeline Mapping System (NPMS) https://www.npms.phmsa.dot.gov/	The NPMS Public Map Viewer is a web-based application designed to assist the general public with displaying and querying data related to gas transmission and hazardous liquid pipelines, liquefied natural gas plants, and breakout tanks under Department of Transportation Pipeline and Hazardous Material Safety Administration jurisdiction.
California Geologic Energy Management Division (CalGEM) Well Finder Database https://www.conservation.ca.gov/calgem/Pages/Wellfinder.aspx	The CalGEM online mapping application presents California's oil and gas industry information from a geographic perspective. The database provides information on oil and gas wells, related facilities, and well fields.
CalRecycle Solid Waste Information System (SWIS) https://www2.calrecycle.ca.gov/SolidWaste/Activity	The SWIS database contains information on solid waste facilities, operations, and disposal sites throughout the State.

Project Site

The Project site was not identified on government databases pertaining to the storage and/or disposal of petroleum products and/or hazardous materials/hazardous waste.

The site reconnaissance of the Project site identified numerous refuse piles/dumpsites located throughout the subject properties. Observed refuse generally consisted of municipal waste (paper, plastic, etc.) and construction debris (lumber, concrete, asphalt/gravel, etc.); however, materials of specific environmental concern, including scrap truck tires, and empty retail-sized containers of automotive fluids were also observed. No staining or other evidence of a release was observed. Consolidated Consulting Group considers the used tire/oil containers and associated staining to represent a de minimis¹ condition in connection with the Project site (Appendix F).

Surrounding Areas

The Phase I ESA did not identify off-site facilities that represented an environmental concern to the Project site. Four sites adjoining the Project site were identified in the California Environmental Protection Agency's Regulated Site Portal database in the 2022 regulatory database search (see Table 4.7-1). These sites, all adjoining to the south, have permitted chemical storage on site associated with business practices. One site is also a hazardous waste generator. Hazardous material and waste storage activities are regulated by the local Certified Unified Program Agency (CUPA), which for the Project site and surrounding area is San Bernardino County Fire Department (SBCFD). Based on available documentation, there is no evidence of release of hazardous materials which would impact the Project site. No other sites were identified in the databases listed in Table 4.7-1 that have the potential to impact the Project site.

The Phase I ESA did not identify any environmental concerns within current or past adjoining sites (Appendix F). Land uses surrounding the Project site primarily consists of vacant land, along with some scattered residential, commercial, light industrial, and utility uses. As reported in the Phase I ESA, specific land uses located in the immediate vicinity of the Project site include the following:

- **North:** Vacant undeveloped land and Sultana Street (a dirt road)
- **East:** Mesa Linda Street and undeveloped land
- **South:** Poplar Street and undeveloped land; a retail strip shopping center and flex warehouses are located to the southwest
- **West:** Three Flags Avenue/Lassen Road (a dirt road) and undeveloped land

Existing Fire Environment

Wildfire is a continuous threat in Southern California and is particularly concerning in the wildland-urban interface (WUI), the geographic area where urban development either abuts or intermingles with wildland or vegetative fuels. The City contains several miles of WUI, where established development meets or is interspersed with the open desert landscape, as well as foothills and mountains in the southern portion of the City. Fire hazard mapping, fire history, vegetation communities, topography, and climate, weather, and wind are all important factors to consider when evaluating the existing fire environment and potential risks related to wildfire. The following subsections provide details regarding the existing fire environment in the City and on the Project site.

Fire Hazard Mapping

The California Department of Forestry and Fire Protection (CAL FIRE) database also includes map data documenting areas of significant fire hazard throughout the state. These maps designate geographic areas as fire hazard severity

¹ De minimis conditions are defined by ASTM E1527-13 as environmental conditions that "generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

zones (FHSZs). CAL FIRE uses FHSZs to classify anticipated fire-related hazards for the entire state. FHSZs are ranked as Moderate, High, or Very High, and are also differentiated by Federal Responsibility Areas (FRAs), State Responsibility Areas (SRAs), and Local Responsibility Areas (LRAs), which delineate areas where federal, state, or local government agencies are financially responsible for fire protection and prevention. CAL FIRE data include proposed FHSZ Maps for SRA lands and separate draft Very High FHSZ Maps for LRA lands. Fire hazard severity classifications take into account vegetation, topography, weather, crown fire production, and ember production and movement.

According to CAL FIRE, the Project site is designated as being within a moderate FHSZ within the LRA (CAL FIRE 2008). The nearest Very High FHSZ in the City is located approximately 8 miles south, and the nearest Very High FHSZ in the SRA is located approximately 5 miles south. Additionally, the City has adopted these recommendations for Very High FHSZs within the City's LRA, per Exhibit SF-2 of the City's General Plan (City of Hesperia 2010). However, as shown in Figure 4.7-1, Fire Hazard Severity Zones, the Project site is located adjacent to SRA lands to the west and south. These SRA lands are designated as High FHSZ to the west and Moderate FHSZ to the south.

Fire History

Fire history data provides valuable information regarding fire spread, fire frequency, ignition sources, and vegetation/fuel mosaics across a given landscape. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and therefore may provide a tactical defense position, what type of fire burned on the site, and how a fire may spread. The fire history information presented below comes from CAL FIRE's Fire and Resources Assessment Program (FRAP) database. The FRAP database summarizes multi-agency fire perimeter data since the late 1800s. For CAL FIRE, timber fires 10 acres or greater, brush fires 30 acres and greater, and grass fires 300 acres or greater are included. For the U.S. Forest Service, there is a 10-acre minimum for fires since 1950 (CAL FIRE 2020).

Although this data is incomplete as it is limited to larger fires, the data provides a summary of recorded fires and can be used to show whether large fires have occurred in the Project area, which indicates whether they may be possible in the future. Fire history recorded for the Project area is presented in Figure 4.7-2, Wildfire History. In addition to these fires, dozens of small vegetation fires, typically less than 1 acre in size, are reported in the Hesperia area annually (City of Hesperia 2010). According to available data from CAL FIRE in the FRAP database, 35 fires have burned within a 5-mile radius of the Project site since the beginning of the historical fire data record. Recorded wildfires within 5 miles of the Project site range from 16 acres (1968) to 36,266 acres (2016), and the average fire size is 6,517 acres (not including smaller fires excluded from the data) (CAL FIRE 2020). The most recent large fire to occur near the Project site was the Blue Cut Fire (approximately 36,266 acres), which occurred in 2016 in the foothills and mountains and burned to approximately 4 miles southwest of the Project site (CAL FIRE 2020). The nearest fire to the Project site occurred in 1945 and burned 8,388 acres approximately 1.2 miles to the west of the site (CAL FIRE 2020).

As shown in Figure 4.7-2, Wildfire History, several historical wildland fires have occurred primarily in the southern portion of the City and the foothills and mountains to the south, and no fires have burned onto or adjacent to the Project site.

Vegetation Communities and Land Covers

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf

size, branching patterns), and overall fuel loading. For example, non-native grass-dominated plant communities become seasonally prone to ignition and produce lower intensity, higher spread rate fires. In comparison, California sagebrush scrub can produce higher heat intensity and higher flame lengths under strong, dry wind patterns, but does not typically ignite or spread as quickly as light, flashy grass fuels.

It is important to consider the dynamic nature of vegetation communities. Fire presence and absence at varying cycles or regimes affect plant community succession. The succession of plant communities, most notably the gradual conversion of shrublands to grasslands with high-frequency fires and grasslands to shrublands with fire exclusion, is highly dependent on the fire regime. Further, biomass and associated fuel loading will increase over time if disturbance or fuel reduction efforts are not diligently implemented.

The City is in the lower Mojave section of the Southeastern Deserts Bioregion. The predominant vegetation assemblages in this area include desert scrub, creosote bush scrub, and succulent scrub. Other important vegetation types include Joshua tree woodland, shad-scale scrub, blackbrush scrub, and desert scrub-steppe. About one-third of the desert floor in the Mojave section is devoid of vegetation, limiting the amount of surface fuel loads available to burn (City of Hesperia 2010).

As discussed in Section 4.3, Biological Resources, the land cover type on the Project site and the surrounding area is considered Joshua tree woodland.

Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread up slope and slower spread down slope. Terrain that forms a funneling effect—such as chimneys, chutes, or saddles—on the landscape can result in especially intense fire behavior, including faster spread and higher intensity. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by vegetation and wind.

The topography in the City is relatively flat, containing modest variations in elevation. The central and northern portions of the City lie upon a moderate to gentle slope with elevations ranging from 2,900 feet to 4,200 feet amsl. As previously discussed, the Project site is relatively flat, with elevations ranging from 3,600 feet amsl to 3,630 feet amsl. The Project site has a local topographic gradient of less than 2% downward toward the northeast (see Figure 3-5, Topographic Map).

Weather, Climate, and Wind

The annual average high temperature in Hesperia is 77.5°F, with daily highs in the summer months (June–September) exceeding 91°F. Precipitation typically occurs from November through March, with an average annual rainfall of 5.52 inches (WRCC 2020).

The Project site, like much of Southern California, is influenced by prevailing wind patterns. Prevailing winds are winds that blow from a single direction over a specific area of the Earth. The prevailing wind pattern in the City varies throughout the year, but occurs most often from the west from February through November, and from the north from November through February. The highest wind speeds are reached from January through July, with average wind speeds exceeding 7.5 mph and wind gusts exceeding 14 mph. For the remainder of the year, average wind speeds reach approximately 6.4 mph (Weather Spark 2020). The wind experienced at any given location is highly dependent on local topography and other factors, and instantaneous wind speed and direction vary more widely than the averages presented above.

Fire Protection

The City is served by the SBCFD (City of Hesperia 2010). Currently, there are three fire stations within the City: Stations 302, 304, and Station 305. Fire Station 305 (8331 Caliente Road) is located approximately 1.1 miles south of the Project site; Fire Station 304 (15660 Eucalyptus Street) is located approximately 4.6 miles to the northeast; and Fire Station 302 (17288 Olive Street) is located approximately 5.84 miles to the east (City of Hesperia 2020). The staffing and apparatus available at each station are shown in Table 4.7-2.

Table 4.7-2. Hesperia Fire Station Staffing and Apparatus

Station No.	Staffing	Apparatus
302	7 people daily	1 paramedic engine 1 brush engine 2 paramedic ambulances
304	5 people daily	1 paramedic engine 1 ladder truck 1 paramedic ambulance 1 water truck 1 chief vehicle 1 heavy rescue vehicle
305	4 people and 1 battalion chief daily	1 paramedic fire engine 1 paramedic ambulance 1 water tender 1 brush patrol 2 reserve engines

Source: City of Hesperia 2020.

4.7.2 Relevant Plans, Policies, and Ordinances

Federal

Hazards and Hazardous Materials

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as “Superfund,” was enacted by Congress on December 11, 1980. This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled a revision of the National Contingency Plan. The National Contingency Plan provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List, which is a list of contaminated sites warranting further investigation by the U.S. Environmental Protection Agency (EPA). The Superfund Amendments and Reauthorization Act amended CERCLA on October 17, 1986.

The Federal Toxic Substances Control Act of 1976 and Resource Conservation and Recovery Act of 1976

The Federal Toxic Substances Control Act of 1976 and Resource Conservation and Recovery Act (RCRA) established a program administered by the EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle-to-grave” system of regulating hazardous wastes. The Hazardous and Solid Waste Act specifically prohibited the use of certain techniques for the disposal of some hazardous wastes.

National Pollutant Discharge Elimination System Permit Program

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. Discharge from any point source is unlawful unless the discharge is in compliance with an NPDES permit. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

Wildland Fire

National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. National Fire Protection Association standards are recommended guidelines and nationally accepted good practices in fire protection but are not laws or codes unless adopted as such or referenced as such by the California Fire Code (CFC) or the local fire agency.

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995, updated in 2001, and again in 2009 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgment of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles, found in the Guidance for Implementation of Federal Wildland Fire Management Policy (National Wildfire Coordinating Group 2009):

- Firefighter and public safety is the priority in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.

- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire Management Plans and activities are based upon the best available science.
- Fire Management Plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal wildland fire management agencies is an ongoing objective.

National Fire Plan

The National Fire Plan, officially titled *Managing the Impacts of Wildfire on Communities and the Environment: A Report to the President in Response to the Wildfires of 2000*, was a presidential directive in 2000 as a response to severe wildland fires that had burned throughout the United States. The National Fire Plan focuses on reducing fire impacts on rural communities and providing assurance for sufficient firefighting capacity in the future. The plan addresses five key points: firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability. The plan provides technical, financial, and resource guidance and support for wildland fire management across the United States. The U.S. Forest Service and the Department of the Interior are working to successfully implement the key points outlined in the plan (USFS and DOI 2000).

International Fire Code

Created by the International Code Council, the International Fire Code (IFC) addresses a wide array of conditions hazardous to life and property, including fire, explosions, and hazardous materials handling or usage (although not a federal regulation, but rather the product of the International Code Council). The IFC emphasizes prescriptive and performance-based approaches to fire prevention and fire protection systems. Updated every 3 years, the IFC uses a hazards classification system to determine the appropriate measures to be incorporated to protect life and property (these measures often include construction standards and specialized equipment). The IFC uses a permit system (based on hazard classification) to ensure that required measures are instituted (International Code Council 2017).

State

Hazards and Hazardous Materials

Cortese List/Government Code 65962.5

California Government Code Section 65962.5 requires that information regarding environmental impacts of hazardous substances and wastes be maintained and provided at least annually to the Secretary for Environmental Protection. Commonly referred to as the Cortese List, this information must include the following: sites impacted by hazardous wastes, public drinking water wells that contain detectable levels of contamination, underground storage tanks with unauthorized releases, solid waste disposal facilities from which there is migration of hazardous wastes, and all cease and desist and cleanup and abatement orders. This information is maintained by various agencies, including the Department of Toxic Substances Control, State Department of Health Services, State Water Resources Control Board, and local CUPAs. As each of the regulatory agencies typically now maintains these records in an electronic format, those requesting a Cortese List for a particular site are directed to the individual regulatory agencies. Typically, records searches are conducted via a regulatory database search company, such as the records search from EDR included in the Phase I ESA for the Project. Database search companies usually conduct searches

in accordance with ASTM Standard of Practice E 1527-13 Standard Practice for ESAs. The list of databases that are searched during this process is more comprehensive than the Cortese List. As such, the database search conducted for the Project includes the Cortese List but is not limited to this list.

California Hazardous Waste Control Act, Title 22 of the California Code of Regulations and Hazardous Waste Control Law, Chapter 6.5

The Department of Toxic Substances Control is responsible for the enforcement of the Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.), which creates the framework under which hazardous wastes are managed in California. The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or in some cases more stringent than federal requirements. The Hazardous Waste Control Act lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

California Health and Safety Code

In California, the handling and storage of hazardous materials are regulated by Division 20, Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan (HMBP), which contains basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state.

Chapter 6.95 of the Health and Safety Code establishes minimum statewide standards for HMBPs. Each business shall prepare a HMBP if that business uses, handles, stores a hazardous material (including hazardous waste), or an extremely hazardous material in disclosable quantities greater than or equal to the following:

- 500 pounds of a solid substance
- 55 gallons of a liquid
- 200 cubic feet of compressed gas
- a hazardous compressed gas in any amount (highly toxic with a threshold limit value of 10 parts per million or less)
- extremely hazardous substances in threshold-planning quantities

In addition, in the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California Health and Safety Code, facilities are also required to prepare a risk management plan and an accidental release plan. These plans provide information on the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and to mitigate potential impacts. Based on the Project land uses (i.e., industrial, commercial), an HMBP may be required (e.g., due to storage of pool chemicals); however, it is unlikely that a risk management plan and accidental release plan would be required, due to a probable lack of acutely hazardous materials. The SBCFD Hazardous Materials Division would make a final determination regarding the appropriate plan(s) to be completed.

Occupational Safety and Health Act

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337–340). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program was created in 1993 by Senate Bill 1082 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities of environmental and emergency management programs. The program is implemented at the local government level by CUPAs. In the City of Hesperia, the SBCFD is the CUPA. The program consolidates, coordinates, and makes consistent the following hazardous materials and hazardous waste programs (program elements):

- Hazardous waste generation (including on-site treatment under Tiered Permitting)
- Aboveground petroleum storage tanks (only the spill prevention, control, and countermeasure plan)
- Underground storage tanks
- Hazardous material release response plans and inventories
- California Accidental Release Prevention Program
- Uniform Fire Code HMBPs and inventories

Wildland Fire

California Department of Forestry and Fire

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. The Office of the State Fire Marshal supports CAL FIRE's mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

California Government Code

California Government Code Sections 51175 through 51189 guide the classification of lands in California as fire hazard areas and include requirements for management of property within those lands. CAL FIRE is responsible for classifying FHSZs based on statewide criteria and makes the information available for public review. Further, local agencies must designate, by ordinance, Very High FHSZs within their jurisdiction based on the recommendations of CAL FIRE.

Section 51182 sets forth requirements for maintaining property within fire hazard areas, such as defensible space, vegetative fuels management, and building materials and standards. Defensible space around structures in fire hazard areas must consist of 100 feet of fuel modification on each side of a structure, but not beyond the property line unless findings conclude that the clearing is necessary to significantly reduce the risk of structure ignition in the event of a wildfire. Clearance on adjacent property shall only be conducted following written consent by the adjacent owner. Further, trees must be trimmed from within 10 feet of the outlet of a chimney or stovepipe, vegetation near buildings must be maintained, and roofs of structures must be cleared of vegetative materials. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

California Code of Regulations

Title 14 Natural Resources

Title 14, Division 1.5, Chapter 7, Subchapter 3, Fire Hazard, also sets forth requirements for defensible space if the distances specified above cannot be met. For example, options that have similar practical effects include noncombustible block walls or fences, 5 feet of noncombustible material horizontally around the structure, installing hardscape or reducing exposed windows on the side of the structure with a less-than-30-foot setback, or additional structure hardening such as those required in the California Building Code (CBC), California Code of Regulations Title 24, Part 2, Chapter 7A.

Title 24 California Building Standards Code

California Building Code

Part 2 of Title 24 contains the CBC. Chapter 7A of the CBC regulates building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a fire hazard area. Fire hazard areas as defined by the CBC include areas identified as an FHSZ within an SRA or a WUI fire area. The purpose of Chapter 7A is to establish minimum standards for the protection of life and property by increasing the ability of structures located in a fire hazard area to resist the intrusion of flames or burning embers projected by a wildfire and to contribute to a systematic reduction in structural losses from a wildfire. New buildings located in such areas must comply with the ignition-resistant construction standards outlined in Chapter 7A.

California Fire Code

Part 9 of Title 24 contains the CFC, which incorporates by adoption the IFC with necessary California amendments. The purpose of this code is to establish the minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. Chapter 49 of the CFC contains minimum standards for development in the WUI and fire hazard areas.

The CFC and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC is updated and published every 3 years by the California Building Standards Commission. The 2019 CFC took effect on January 1, 2020. The City has adopted the 2019 CFC with local amendments.

California Public Resources Code

Fire Hazard Severity Zones

California Public Resources Code (PRC) Sections 4201–4204 and Government Code Sections 51175–89 direct CAL FIRE to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as FHSZs, define the application of various mitigation strategies to reduce the risk associated with wildland fires.

PRC Section 4290 requires minimum fire safety standards related to defensible space that apply to residential, commercial, and industrial building construction in SRA lands and lands classified and designated as Very High FHSZs. These regulations include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements. It should be noted that these regulations do not supersede local regulations that equal or exceed minimum regulations required by the state.

PRC Section 4291 requires a reduction of fire hazards around buildings located adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered in flammable material. It requires 100 feet of defensible space to be maintained around all sides of a structure, but not beyond the property line unless required by state law, local ordinance, rule, or regulations. Further, PRC Section 4291 requires the removal of dead or dying vegetative materials from the roof of a structure, and trees and shrubs must be trimmed from within 10 feet of the outlet of a chimney or stovepipe. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

In September of 2020, Assembly Bill 3074 amended PRC Section 4291 to require stricter standards for fuel reduction. The amendment stipulates that within the 100 feet of defensible space, more intense fuel reduction is to occur between 5 to 30 feet around the structure and within 5 feet of the structure is to be the ember-resistant zone. This amendment will go into effect on or before January 1, 2023.

Senate Bill 1241

In 2012, Senate Bill 1241 added Section 66474.02 to Title 7 Division 2 of the California Government Code, commonly known as the Subdivision Map Act. The statute prohibits subdivision of parcels designated Very High Fire Hazard, or that is in an SRA unless certain findings are made before approval of the tentative map. The statute requires that a city or county planning commission make three new findings regarding fire hazard safety before approving a subdivision proposal. The three findings are, in brief: (1) the design and location of the subdivision and its lots are consistent with defensible space regulations found in PRC Section 4290-91, (2) structural fire protection services will be available for the subdivision through a publicly funded entity, and (3) ingress and egress road standards for fire equipment are met per any applicable local ordinance and PRC Section 4290.

2018 State Hazard Mitigation Plan

Approved by the Federal Emergency Management Agency in September 2018, as an Enhanced State Mitigation Plan, the 2018 SHMP update continues to build upon California’s commitment to reduce or eliminate the impacts of disasters caused by natural, technological, accidental, and adversarial/human-caused hazards, and further identifies and documents progress made in hazard mitigation efforts, new or revised state and federal statutes and regulations, and emerging hazard conditions and risks that affect the State of California. Resilience depends on the whole community and is a shared responsibility for all levels of government, private and nonprofit sectors, and individuals.

Fire Hazard Severity Zones

CAL FIRE maps FHSZs based on fuel loading, slope, fire history, weather, and other relevant factors as directed by PRC Sections 4201–4204 and California Government Code Sections 51175–51189. FHSZs are ranked from moderate to very high and are categorized for fire protection within an FRA, SRA, or LRA under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively. As shown in Figure 4.7-1, Fire Hazard Severity Zones, the Project site is located in a Moderate FHSZ in the LRA (CAL FIRE 2008). The nearest Very High FHSZ in the City is located approximately 8 miles south, and the nearest Very High FHSZ in the SRA is located approximately 5 miles south. As shown in Figure 4.7-1, Fire Hazard Severity Zones, the Project site is located adjacent to SRA lands to the west and south, which are designated as High and Moderate FHSZs, respectively.

California Strategic Fire Plan

The 2018 Strategic Fire Plan for California reflects CAL FIRE's focus on fire prevention and suppression activities to protect lives, property, and ecosystem services, and natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. The Strategic Fire Plan for California provides a vision for a natural environment that is more fire resilient, buildings and infrastructure that are more fire-resistant, and a society that is more aware of and responsive to the benefits and threats of wildland fire, all achieved through local, state, federal, tribal, and private partnerships (CAL FIRE 2018). Plan goals include the following:

1. Identify and evaluate wildland fire hazards and recognize life, property, and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
2. Promote and support local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities.
3. Support and participate in the collaborative development and implementation of local, county, and regional plans that address fire protection and landowner objectives.
4. Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
5. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.
6. Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
7. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
8. Implement post-fire assessments and programs for the protection of life, property and natural resource recovery.

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its personnel and facilities but can give and receive help whenever needed.

Local

City of Hesperia Municipal Code

Section 15.04.010 of the City's Municipal Code adopts the 2019 California Fire Code, which sets forth requirements for fire-safe construction, such as fire-resistive building materials, automatic fire sprinklers, fire hydrants and fire-flow.

City of Hesperia General Plan

The Safety Element of the General Plan identifies, establishes, and sets forth policies to address hazards within the municipality. Goals or policies related to hazards, hazardous materials and wildfire in the General Plan (City of Hesperia 2010) include the following:

Goal SF-3. Reduce the risk of death, injury, property damage and economic loss due to vegetation and structure fires.

Policy SF-3.1. The City shall continue to require that all new habitable structures be designed in accordance with the most recent California Fire Code with local amendments adopted by the City, including the use of fire sprinklers in residential structures.

Policy SF-3.2. The City will continue to conduct regular inspections of parcels throughout the city, and will direct property owners to bring their property into compliance with fire inspection standards. This includes enforcing the weed abatement and notification program, to reduce the potential for vegetation fires to occur in vacant or poorly maintained lots, and encouraging homeowners to follow fire-safe practices, including maintaining a fire-safe landscape and keeping combustibles (such as fire wood) a safe distance away from all structures.

Policy SF-3.7. The City, in cooperation with the San Bernardino County Fire Department, will ensure, to the maximum extent possible, that fire services, such as firefighting equipment and personnel, infrastructure, and response times, are adequate for all sections of the City. To that end, the City will continue to regularly evaluate specific fire hazard areas, and adopt reasonable safety standards, such as adequacy of nearby water supplies, fire-retardant roofing materials, fire-equipment accessible routes, clarity of addresses, street signage, and street maintenance.

Policy SF-3.10. The City will adopt the most recent version of the Wildland-Urban Interface Code and Chapter 7A of the California Building Code for use in the City where the Insurance Services Offices (ISO) number exceeds 5 (greater than 5).

Goal SF-4. Reduce the potential for hazardous materials contamination in Hesperia.

Policy SF 4.1. The City, in cooperation with the San Bernardino County Fire Department, Hazardous Materials Division, will continue to enforce disclosure laws that require all users, generators, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use or transport, and to notify the appropriate City, county, state and federal agencies of a change in quantity or type of materials, and in the event of a violation.

Policy SF 4.2. The City, in cooperation with the San Bernardino County Fire Department, will ensure that they can continue to respond safely and effectively to a hazardous materials incident in the City, whether it is a spill at a permitted facility, or the result of an accident along a section of the freeway or railroads that extend across the City. To do this, the City will continue to coordinate with regional providers of emergency services, including the County's Fire and Sheriff Departments, to ensure that all residents, workers, and visitors to Hesperia are protected from exposure to hazardous materials and wastes.

Policy SF 4.3. The City will identify roadways along which hazardous materials are routinely transported. If critical facilities, such as schools, medical facilities, child care centers or other facilities with special evacuation needs are located along these routes, the City, together with these facilities, will identify emergency response plans that can be implemented in the event of a roadway accident nearby that results in the unauthorized release of hazardous materials.

Policy SF 4.4. The City will continue to reduce or eliminate the use of hazardous materials by using instead non-toxic, safer alternatives that do not pose a threat to the environment, or buying and using only the smallest amount of a hazardous substance to get the intended job done. The City will encourage residents and businesses in the City to do the same.

Policy SF 4.5. Proposed new facilities that will be involved in the production, use, storage, transport or disposal of hazardous materials will not be allowed within the 100-year floodplain, or near existing land uses that may be adversely impacted by such activities. Conversely, new sensitive facilities (like schools, child care centers, and nursing homes) will not be allowed to be located near existing sites that use, store, or generate hazardous materials.

Policy SF 4.6. The City will continue to support the operation of programs and recycling centers that accept hazardous substances, such as paint, paint thinner, used waste oil, etc., such as the City's Drop-Off facility.

Policy SF 4.7. The City will work with the Hesperia Water District to monitor the potential presence of perchlorate in well water. If perchlorate continues to be detected at measurable concentrations, programs to find and eradicate the source of this contaminant, and to clean up the perchlorate already in the water will have to be developed.

Erosion and Sediment Control Plan

For projects that would include soil disturbance during construction, project applicants must submit an erosion and sediment control plan for approval to the City of Hesperia. The City will not issue grading or building permits until the erosion and sediment control plan for the Project is approved.

The purpose of the erosion and sediment control plan is to (1) identify potential pollutant sources that may affect the quality of stormwater runoff and prevent non-stormwater discharges from the construction site; (2) document the best management practices (BMPs) that will be implemented to prevent, to the maximum extent practicable, construction site pollutants from leaving the site during all phases of construction; and (3) document erosion control, sediment control, and good housekeeping BMPs that shall be implemented year-round as appropriate based on construction activities.

4.7.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to hazards, hazardous materials, and wildfire are based on California Environmental Quality Act (CEQA) Guidelines Appendix G. According to CEQA Guidelines Appendix G, a significant impact related to the Project would occur if the Project would:

- A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- D. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- E. Be located within an airport land use plan, be within two miles of a public airport, and would result in a safety hazard or excessive noise for people residing or working in the Project area.
- F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.
- H. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, substantially impair an adopted emergency response plan or emergency evacuation plan.
- I. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- J. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
- K. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.
- L. Result in a cumulatively considerable impact with regard to hazards, hazardous materials, or wildfire.

Thresholds C, D, E, and F were analyzed in the Initial Study (Appendix A) and were not carried forward for further analysis in this EIR. See Chapter 5, Effects Found Not To Be Significant, for additional detail.

4.7.4 Impacts Analysis

Threshold A: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant with Mitigation Incorporated. During construction, a variety of hazardous substances and wastes would be stored, used, and generated on the Project site, including fuels for machinery and vehicles, new and used motor oils, cleaning solvents, paints, and storage containers. Accidental spills, leaks, fires, explosions, or

pressure releases involving hazardous materials represent a potential threat to human health and the environment if not properly treated. Provisions to properly manage hazardous substances and wastes during construction are typically included in construction specifications and are under the responsibility of the construction contractors. For example, construction contractors would be required to comply with Cal/OSHA regulations concerning the use of hazardous materials, including requirements for safety training, exposure warnings, availability of safety equipment, and preparation of emergency action/prevention plans. Adherence to the construction specifications and applicable regulations regarding hazardous materials and hazardous waste, including disposal, would ensure that Project construction would not create a significant hazard to the public or the environment during the construction phase of the Project.

While soil staining was not observed during the site reconnaissance of the Phase I ESA (Appendix F), the Phase I ESA notes the following:

CCG [the environmental consultant preparing the Phase I ESA] recommends that the observed debris/wastes be removed from the subject property, and properly disposed of in accordance with all applicable local, state, and federal guidelines. If during future development activities visually impacted soils are identified, impacted soils should be excavated, removed, and properly disposed of. Confirmatory soil samples should be collected during excavation to ensure that the extent of impacted soils has been removed.

This recommendation was made in response to multiple scrap truck tires and several empty retail-sized containers of automotive fluids observed on the Project area. While no direct staining was observed, the recommendation indicates there is a potential to encounter shallow soil contamination due to the observed dumping on the Project site, especially automotive fluid containers and tires. Mitigation Measure (MM) HAZ-1 (see Section 4.7.5) requires the removal and disposal of on-site debris, including tires and automotive fluid containers, from the Project area in accordance with all applicable local, state, and federal guidelines. In the event soil staining, odors, or other evidence of contamination is identified during excavation and grading activities, or excavation and grading is completed in areas under large debris piles, a qualified environmental professional shall screen soils in the identified area prior to excavation and grading based on the nature of the potential contamination. In the event that potential contamination is encountered, the contamination shall be evaluated by a qualified environmental professional using the appropriate collection and sampling techniques as determined by the environmental professional based on the nature of the contamination. The nature and extent of contamination shall be determined and the appropriate handling, disposal, and/or treatment shall be implemented in accordance with applicable regulatory requirements.

Furthermore, adherence to all emergency response plan requirements set forth by the SBCFD would be required throughout the duration of Project construction. Therefore, based on compliance with existing regulations and with incorporation of MM-HAZ-1, short-term construction impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

Upon completion of Project construction, the Project would involve the operation and maintenance of the industrial/warehouse facilities. Operation of the Project would likely involve the use of industrial-grade chemicals and commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available products during the day-to-day operation of the facilities. While these materials could be stored on the Project site, storage would be required to comply with the guidelines established by the manufacturer's recommendations. Consistent with federal, state, and local requirements, the transport, removal, and disposal of hazardous materials from the Project site would be conducted by a permitted and licensed service

provider. Any handling, transport, use, or disposal must comply with all applicable federal, state, and local agencies and regulations, including the EPA, Department of Toxic Substances Control, Cal/OSHA, RCRA, and the SBCFD.

Although the future tenants are not known yet, in the event that a future tenant's operations require them to transport, use, or dispose of quantities of hazardous materials identified by the state, pursuant to the Health and Safety Code and in accordance with SBCFD's CUPA requirements, the owner/operator must complete and submit a HMBP to the California Environmental Reporting System. An HMBP is a document containing detailed information on the inventory of hazardous materials at a facility; emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material; training for all new employees and annual training, including refresher courses, for all employees in safety procedures in the event of a release or threatened release of a hazardous material; and a site map that contains north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, evacuation staging areas, hazardous material handling and storage areas, and emergency response equipment. The HMBP provides basic information necessary for use by first responders to prevent or mitigate damage to the public health and safety and the environment from a release or threatened release of hazardous materials, and to satisfy federal and state Community Right-To-Know laws. In addition, should oil storage exceed 1,320 gallons aboveground or 42,000 gallons belowground, a spill prevention, control, and countermeasure plan (SPCC Plan) would also be prepared in accordance with Title 40 of the Code of Federal Regulations (CFR), Section 112. The SPCC Plan includes a summary of oil containing equipment, inspection requirements, spill response procedures, and employee training guidelines. While not required to be submitted, the SPCC Plan is required to remain onsite and be available for inspection by the local regulatory agency, in this case the SBCFD's CUPA. Therefore, long-term operational impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

In summary, the Project would result in potentially significant impacts with regard to the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. MM-HAZ-1 would be implemented, and Project impacts would be less than significant with mitigation incorporated.

Threshold B: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant with Mitigation Incorporated. During construction, hazardous materials such as fuels and lubricants would be transported to and used on site in construction vehicles and equipment. Construction waste is a potential pollutant source of concern for the Oro Grande Wash and Mojave River, which are located hydrologically down gradient of the Project site. Concrete, paint, and other materials that are also used on construction sites are major contributors to habitat pollution, in the event that such materials exit a construction site. However, the potential for the use of these materials to result in significant hazards to the public or the environment would be low for the reasons described below.

The Project contractor and construction crews would be required to comply with all applicable regulations governing the storage, handling, and disposal of hazardous materials and waste. As discussed in Section 4.8, Hydrology and Water Quality, prior to issuance of grading permits, the City of Hesperia requires the submittal, review, and approval of an erosion and sediment control plan. Implementation of an erosion and sediment control plan would ensure that construction-related BMPs are enacted to prevent, to the maximum extent practicable, construction site pollutants from leaving the site during all phases of construction. The Project would also be required to comply with the NPDES Municipal Separate Storm Sewer System (MS4) Permit, including the regulation of surface water quality. Under the NPDES MS4 Permit, the development of 1.0 acres or more of land must file a notice of intent with the State Water Resources Control Board to comply with the state NPDES General Construction Permit. Implementation

of this Permit would require the development of a site-specific stormwater pollution prevention plan (SWPPP) for construction activities. The SWPPP is required to identify BMPs that protect stormwater runoff and ensure avoidance of substantial degradation of water quality. Typical BMPs that could be incorporated into the SWPPP to minimize the off-site runoff of pollutants would include the following:

- Diverting off-site runoff away from the construction site
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Using drop inlet protection (filters and sandbags or straw wattles), with sandbag check dams within paved areas
- Implementing specifications for construction waste handling and disposal
- Using contained equipment wash-out and vehicle maintenance areas
- Training, including for subcontractors, on general site housekeeping

Incorporation of required BMPs would help control the use of hazardous substances during construction and would minimize the potential for such substances to leave the site. As a result, there would be reduced potential for the public and environment to be exposed to hazardous chemicals and materials as a result of construction activities. The implementation of applicable construction BMPs and adherence to applicable hazardous materials and waste regulations would minimize the risk and exposure of the release of hazardous materials to the public and environmental to less than significant levels.

Based on the Phase I ESA, no on-site historical recognized environmental conditions, controlled recognized environmental conditions, recognized environmental conditions, or business recognized environmental conditions were identified.

Due to dumping on the Project site, Project grading and excavation could encounter soils impacts by petroleum hydrocarbons, resulting in potentially significant health and safety impacts to construction personnel, as well as potential off-gassing of petroleum from impacted soil excavations and associated soil stockpiles. However, MM-HAZ-1 would require the removal and disposal of on-site debris, including tires and automotive fluid containers, from the Project area in accordance with all applicable local, state, and federal guidelines. For excavation and grading activities that occur in areas with the potential for residual contamination, a qualified environmental professional shall screen soils in the identified area prior to excavation and grading activities based on the nature of the potential contamination. If potential contamination is encountered, the contamination shall be evaluated by a qualified environmental professional based on the nature of the contamination. The nature and extent of contamination shall be determined and the appropriate handling, disposal, and/or treatment shall be implemented in accordance with applicable regulatory requirements. Therefore, based on compliance with applicable regulations and with the incorporation of MM-HAZ-1, short-term construction impacts associated with creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions would be less than significant with mitigation incorporated.

Upon completion of Project construction, routine operation of the Project facilities would likely involve use of industrial grade chemicals and commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available products. These materials would be used for the day-to-day operation of the facilities and may involve the use of hazardous materials.

As previously discussed in Threshold A, the future tenants are not known yet. In the event that a future tenant's operations require them to transport, use, or dispose of quantities of hazardous materials identified by the state, pursuant to the Health and Safety Code and in accordance with SBCFD's CUPA requirements, or store quantities of

oil that trigger the SPCC Plan regulations, the owner/operator must complete and submit an HMBP to the California Environmental Reporting System and/or prepare an SPCC Plan. Completion of an HMBP and SPCC Plan would ensure that an emergency spill response and containment plan is in place in the event of hazardous spills.

Furthermore, the use, storage, and transport of hazardous materials and wastes would be subject to applicable federal, state, and local health and safety regulations (e.g., RCRA and the Hazardous Waste Control Act “cradle to grave” requirements). All hazardous materials generated and/or used on the Project site would be managed in accordance with all relevant federal, state, and local laws, including the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Moreover, compliance with Cal/OSHA workplace and work practices requirements would avoid the exposure of persons and the environment to hazardous materials.

In addition to the regulations and practices described above, the following requirements would apply to storage and handling of hazardous wastes at the Project site:

1. Hazardous materials are required to be stored in designated areas designed to prevent accidental release in accordance with state law, including the California Hazardous Waste Control Act and the California Health and Safety Code.
2. Cal/OSHA requirements prescribe safe work environments for workers working with materials that present a moderate explosion hazard, high fire, or physical hazard or health hazard.
3. Federal and state laws related to the storage of hazardous materials would be complied with to maximize containment and provide for prompt and effective clean-up in case of an accidental release.
4. Hazardous materials inventory and response planning reports would be filed with the City in accordance with Unified Program Permit requirements.

Compliance with applicable regulations involving hazardous materials during operation would ensure that such materials are transported, used, stored, and disposed of in a manner that minimizes the potential for upset and accidental conditions resulting in the release of hazardous materials into the environment. Due to the existing regulations that are required, it is not expected that the Project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions would be less than significant.

In summary, the Project would result in potentially significant impacts with regard to the creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. MM-HAZ-1 would be implemented, and Project impacts would be less than significant with mitigation incorporated.

Threshold G: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Less-than-Significant Impact. Construction of the Project would introduce potential ignition sources to the Project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. However, the Project would be required to comply with City and state requirements for fire safety practices, to reduce the possibility of fires during construction activities. The Project would comply with CFC Section 3304 for precautions against fire during construction activities. Access for firefighting would be maintained throughout construction per CFC Section 3310.1. Any motorized equipment within the site would comply with fire protection regulations outlined in CFC Section 3316. Further, vegetation would be removed from the site prior to the start of construction. Adherence to City and state regulatory standards during Project construction would reduce the risk of

wildfire ignition and spread during construction activities. In the case of accidental ignition, the site is required to have no less than one portable extinguisher at each level where combustible materials have accumulated, in every storage or construction shed, and where any additional hazards exist (CFC Section 3315). Therefore, short-term construction impacts associated with exposing people or structures to a significant risk of loss, injury, or death involving wildland fires would be less than significant.

During operation, the Project would adhere to the City's Municipal Code and the CFC. Additionally, the proposed structures have a low ignitability, and the Project would implement fire-resistant, irrigated landscaping. Further, during its operation, the Project would be required to have and maintain fire protection and life safety systems (CFC Chapter 9) and automatic fire sprinklers (City of Hesperia Municipal Code Chapter 15, Section 15.04.030). The Project would not facilitate wildfire spread or exacerbate wildfire risk or expose people or structures, indirectly or directly, to significant wildfire risk. Given that surrounding off-site fuels consist of moderately spaced vegetation, and as shown in Figure 4.7-2, Wildfire History, wildfires in the immediately surrounding area are not common, and it is unlikely that Project occupants would be exposed to the uncontrolled spread of a wildfire or prolonged pollutant concentrations in the event of a wildfire. It is not anticipated that the Project, due to slope, prevailing winds, and other factors, would exacerbate wildfire risks or expose Project occupants to pollutant concentrations from a wildfire, the uncontrolled spread of a wildfire, or significant risks associated with wildfires. Therefore, long-term operational impacts associated with exposing people or structures to a significant risk of loss, injury, or death involving wildland fires would be less than significant.

Threshold H: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less-than-Significant Impact. The Project site is not located in SRA lands or lands classified as Very High FHSZ. However, SRA lands classified as Moderate and High FHSZs are located immediately south and west of the Project site, respectively. As further discussed in Section 4.10, Transportation, access to the Project site would be provided by four driveways. These driveways have been designed such that adequate emergency access would be provided and in accordance with emergency apparatus access requirements. These driveways are depicted in Figure 3-13, Vehicular Circulation Access Plan, and listed below.

- Driveway A via Lassen Road north – 45-foot-wide, full-access (passenger cars/trucks) driveway with stop sign
- Driveway B via Mesa Linda Street north – 45-foot-wide, full-access (passenger cars/trucks) driveway with stop sign
- Driveway C via Lassen Road south – 30-foot-wide, full-access (passenger cars only) driveway with stop sign
- Driveway D via Mesa Linda Street south – 30-foot-wide, full-access (passenger cars only) driveway with stop sign

The City of Hesperia Emergency Preparedness Program serves as a resource for residents and businesses to plan for emergencies. Further, the City's Hazard Mitigation Plan includes resources and information to assist City residents, public and private sector organizations, and others interested in participating in planning for natural hazards (City of Hesperia 2017). The Hazard Mitigation Plan identifies wildfire as one of the natural hazards faced by the City and establishes the goal to “reduce the risk of death, injury, property damage and economic loss due to vegetation and structure fires.” As they relate to the Project, the mitigation objectives and actions outlined in the Hazard Mitigation Plan would require that the Project be designed and constructed in accordance with the most recent CBC and CFC (and local amendments), and regular fire safety inspections would ensure that the Project is in compliance with fire inspection standards, and provides adequate fire protection and weed abatement to reduce the potential for vegetation fires (City of Hesperia 2017). The Project would comply with all City and state

requirements related to fire safety, and the Project would comply with all requirements outlined in the Hazard Mitigation Plan.

In the event of a wildfire, the City, in cooperation with the SBCFD, would use the City's public notification systems and provide evacuation instructions. Exhibit SF-4 of the City's General Plan identifies potential shelters and emergency evacuation routes within the City. There are two potential evacuation routes nearest to the Project site: Interstate (I) 15, Highway 395, and Phelan Road/Main Street. I-15 is located east of the Project site and serves as a major transportation corridor providing a direct connection to other major interstates and highways. Highway 395 is located west of the Project site and serves as a secondary north-south highway leading north off I-15. Phelan Road/Main Street is a major east-to-west arterial road north of the Project site (City of Hesperia 2010). The Project would not impede access to I-15, Highway 395, and Phelan Road/Main Street or otherwise impact the functionality of the road to operate as a potential evacuation route. The Project would construct four access driveways into the Project site from Mesa Linda Street, and Lassen Road, as well as frontage improvements along Mesa Linda Street, Poplar Street, and Lassen Road Street that would improve operations on surrounding roads.

Further, as shown in Figure 4.7-2, Wildfire History, wildfires in the City and surrounding area typically start in the mountains or foothills to the south. In the event that prevailing winds fan a fire so that it moves north into the WUI, evacuation of the potentially affected communities may be required. In general, evacuees would take roads leading north, toward the more developed areas of the City. Several of these roads are identified on Exhibit SF-3 in the City's General Plan, and include Summit Valley Road, Santa Fe Avenue, 11th Avenue, Maple Avenue, and the I-15 (City of Hesperia 2010). By complying with City and SBCFD requirements, the Project would not conflict with or impair implementation of the Hazard Mitigation Plan, nor would the Project impair use of potential evacuation routes in the City, and impacts would be less than significant.

Threshold I: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less-than-Significant Impact. As discussed in Section 4.7.1, the Project site is not located in SRA lands or lands classified as Very High FHSZ. The nearest Very High FHSZ in the City is located approximately 8 miles south, and the nearest Very High FHSZ in the SRA is located approximately 5 miles south. However, SRA lands classified as Moderate and High FHSZs are located immediately south and west of the Project site, respectively (Figure 4.7-1, Fire Hazard Severity Zones). The Project could exacerbate wildfire risk and expose Project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of a wildfire if the Project, combined with the climatic, topographic, vegetation, weather conditions, and other factors, would increase the risk of a wildfire occurring and increase the severity of such an occurrence.

Short-Term Construction Impacts

Construction of the Project would introduce potential ignition sources to the Project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. However, the Project would be required to comply with City and state requirements for fire safety practices, to reduce the possibility of fires and accidental ignitions during construction activities, as discussed above under Threshold G. Further, vegetation would be removed from site prior to the start of construction, and during construction access to the Project site for emergency vehicles would be maintained. Adherence to City and state regulatory standards during Project construction would reduce the risk of wildfire ignition and spread during construction activities. Thus, short-term construction impacts associated with exacerbating wildfire risk would be less than significant.

Long-Term Operational Impacts

Slope

As previously discussed in Section 4.7.1, Existing Conditions, the Project site, and the surrounding area are relatively flat. The Project site elevation ranges from 3,600 feet amsl to 3,630 feet amsl, with a slope gradient of less than 2% downward towards the northeast. Upon Project implementation, the portions of the site that would be developed would be graded to a flat, level surface. The Project site and surrounding area do not contain slopes typical of exacerbating wildfire risk, and once developed, the Project would not result in steep slopes typical of exacerbating wildfire risk.

Prevailing Winds

Prevailing winds are winds that blow from a single direction over a specific area. As previously discussed in Section 4.7.1, the predominant average hourly wind speed and direction in the City varies throughout the year. From February through November, the wind primarily blows from the west, and from the north from November through February. Average wind speeds vary from approximately 6.4 mph to 7.5 mph, with wind gusts reaching up to 14 mph during the windiest time of the year (January through July) (Weather Spark 2020). High wind velocities that could exacerbate wildfire risk are generally associated with downslope, canyon, and Santa Ana winds. As discussed above, the Project site is predominantly flat and does not include topography that would create unusual weather conditions. Further, as shown in Figure 4.7-2, Wildfire History, wildfires in the City and surrounding area typically start in the mountains or foothills to the south. Given that the prevailing wind direction during the summer months when fire risk is highest is from the west, it is not anticipated that prevailing winds would exacerbate wildfire risks on site.

Other Factors

Other factors such as vegetation, building materials, setbacks, and proposed on-site activities can also contribute to wildfire risk.

Vegetation

The vegetation cover on site and in the surrounding area consists of Joshua tree woodland. Vegetation in the Project area is generally spaced out, and consistent with the Mojave Desert Bioregion, limiting the amount of surface fuel loads available to burn, which inhibits fire spread (City of Hesperia 2010b). Further, the Project would convert vacant land with moderate vegetation cover into development consisting of a large warehouse building, paved surface parking, and maintained landscape areas. As depicted in Figure 3-16, Landscape Plan, of EIR Chapter 3, landscaping for the Project is proposed for the parking areas, portions of the building, and the site frontages. Landscaping would consist of a mixture of trees, shrubs, and groundcover, which would be implemented according to Chapter 16.20 of the City's Municipal Code, and would consist of vegetation found in the surrounding desert environment. Highly flammable vegetation would not be used in Project landscaping.

Building Materials and Setbacks

The Project building would be required to comply with the City's Municipal Code, which adopts the 2019 CFC and includes provisions for fire safety and fire-resistive construction. Further, compliance with required setbacks would allow for space between Project building and off-site vegetation. Studies indicate that given certain assumptions (e.g., 10 meters of low-fuel landscape, no open windows), wildfire is unlikely to spread to buildings unless the fuel and heat requirements of the building are sufficient for ignition and continued combustion (Alexander et al. 1998;

Cohen 1995). Construction materials and methods can prevent or minimize ignitions. According to previous research, post-fire assessments conducted in San Diego County indicate that updated building codes have shown success in preventing structural loss (IBHS 2008). The distance between a wildfire that is consuming wildland fuel and a building is the primary factor for structure ignition (not including burning embers) (Cohen 2000). Low-ignitability buildings provide the option of reducing the wildland fire threat to structures without extensive wildland fuel reduction. The Project would be required to comply with construction methods outlined in the City's Municipal Code, the CFC, and the CBC, which specify requirements for materials and construction methods for fire safety. The proposed building materials for Project structures include concrete, metal, aluminum entrance front framing, glass, and other fire-resistant materials. If structures have sufficiently low ignitability, such as the Project's structure, buildings can survive exposure to wildfire without major fire destruction.

Proposed Activities

Project activities would introduce new potential sources of ignition to the Project site. Tenants for the Project have not been identified; however, operations would likely include storage of materials within the warehouse building, ingressing and egressing of trucks within designated truck courts/loading areas, loading and unloading of trucks/trailers, internal and external movement of materials around the Project site via forklifts, pallet jacks, and similar equipment and passenger vehicles accessing the site. Given that the proposed use would not exacerbate fire risk, and given that vegetation on site would consist of fire-resistant and irrigated landscaping, the likelihood of a fire starting on site and spreading to off-site areas would be minimal.

Summary

With adherence to the City's Municipal Code, the low ignitability of the proposed structures, and implementation of fire-resistant, irrigated landscaping, the Project would not facilitate wildfire spread or exacerbate wildfire risk or expose people or structures, indirectly or directly, to significant wildfire risk. Further, given that surrounding off-site fuels consist of moderately spaced vegetation, and as shown in Figure 4.7-2, Wildfire History, wildfires in the immediately surrounding area are not common, it is unlikely that Project occupants would be exposed to the uncontrolled spread of a wildfire or prolonged pollutant concentrations in the event of a wildfire. It is not anticipated that the Project, due to slope, prevailing winds, and other factors, would exacerbate wildfire risks or expose Project occupants to pollutant concentrations from a wildfire, the uncontrolled spread of a wildfire, or significant risks associated with wildfires, and impacts would be less than significant.

Threshold J: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less-than-Significant Impact. The Project involves the development of an undeveloped site with an industrial/warehouse building, surface parking, and loading areas. The Project would include installation and maintenance of associated infrastructure including driveways and surface parking, and connections to service utilities (e.g., water, wastewater, sanitary sewer, stormwater drainage, electric power, natural gas, and telecommunications services). The majority of the associated infrastructure and utility connections would occur on site or adjacent to the site and would not result in off-site environmental impacts or exacerbate wildfire risk. However, the Project would also include limited off-site improvements and utility connections. In particular, the Project would include installation of new and upsizing of existing domestic water lines and sewer lines in the Project vicinity (collectively, the Off-Site Sewer Alignment and the Off-Site Water Alignment are referred to as the Off-Site

Utilities Alignments). The Project would also include off-site frontage and pedestrian improvements along Mesa Linda Street, Poplar Street, and Lassen Road.

Given that the Project includes connecting utilities from their current locations to the Project site and the new off-site improvements that would require ground disturbance and the use of heavy machinery associated with trenching, the installation of these utility service lines could potentially result in temporary or ongoing impacts to the environment and could exacerbate wildfire risk by introducing new potential sources of ignition, such as the use of heavy machinery, welding, or other hot work. However, as previously discussed, vegetation would be removed from the site before the start of construction, and the site would be graded to a flat, level surface, which would reduce the likelihood of fire ignition during installation and connection of utilities.

The installation and maintenance of roads, service utilities, drainage and water quality improvements, and vegetation removal are part of the Project analyzed herein. As such, any potential temporary or ongoing environmental impacts related to these components of the Project have been accounted for and analyzed in this EIR as part of the impact assessment conducted for the entirety of the Project. Additionally, the Project would be required to comply with all regulatory requirements and mitigation measures outlined within this EIR for the purposes of mitigating impacts associated with trenching, grading, site work, and the use of heavy machinery. No adverse physical effects specifically related to wildfire or beyond those already disclosed throughout this EIR would occur as a result of implementation of the Project's associated infrastructure. Therefore, the installation and maintenance of associated infrastructure would not exacerbate wildfire risk or result in impacts to the environment beyond those already disclosed in this EIR, and impacts would be less than significant.

Threshold K: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less-than-Significant Impact. The Project site is located within the Mojave River Watershed. The Mojave River is the primary geologic or hydrologic feature in the watershed and is primarily fed by precipitation and snowmelt in the San Bernardino Mountains. The Mojave River is located approximately 9 miles east of the Project site. The Project site is not within areas mapped as susceptible to subsidence, landslides, or liquefaction as shown in Exhibit SF-2 of the City's General Plan (City of Hesperia 2010). As further discussed in Section 4.8, the Project site is located in Zone X, an area of minimal flood hazard (FEMA n.d.). This area is higher in elevation than the 0.2% annual chance of flood (i.e., 500-year flood). Further, the Project site and surrounding area consist of relatively flat land that is not typically susceptible to landslides or downslope or downstream flooding. Although internal drainage patterns would be somewhat altered as a result of Project development, the Project would maintain adequate stormwater conveyance and would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off-site. Further, according to available wildfire history (see Figure 4.7-2, Wildfire History), wildfires have not burned onto or adjacent to the Project site, precluding the risk of post-fire slope instability. Therefore, due to the proposed grading of the site, the relatively flat surrounding lands, and the fact that the site would be developed and paved, the likelihood for downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes would be minimal, and impacts would be less than significant.

Threshold L: Would the Project result in cumulatively considerable impacts with regard to hazards, hazardous materials, or wildfire?

Hazards and Hazardous Materials

Less than Significant with Mitigation Incorporated. The geographic scope of the cumulative hazards and hazardous material analysis is the immediate Project area, including surrounding land uses and other nearby properties. Adverse effects of hazards and hazardous materials tend to be localized; therefore, impacts from nearby projects would be limited, if any, and the Project site would be primarily affected by Project activities.

During construction, hazardous materials such as fuels and lubricants would be transported to and used on site in construction vehicles and equipment. In addition, Project excavations could encounter shallow soil contaminants as a result of on-site used automotive fluid containers and tires. These contaminants, if improperly handled, could expose the public environment to pollutants. However, water quality enhancement components of the Project, including the implementation of an erosion and sediment control plan, a SWPPP, stormwater BMPs, and MM-HAZ-1, would minimize the potential release of construction-related pollutants on and off site.

Post-development, routine operation of the Project would include the use of various hazardous materials, including chemical reagents, solvents, fuels, paints, and cleaners. These materials would be used for day-to-day operations as well as building and landscaping maintenance. However, compliance with applicable regulations involving hazardous materials during operation would ensure that such materials are transported, used, stored, and disposed of in a manner that minimizes the potential for upset and accident conditions resulting in the release of hazardous materials into the environment. In addition, the owner/operator must complete and submit an HMBP to the California Environmental Reporting System and complete an SPCC Plan in the event oil storage is above thresholds outlined in 40 CFR 112. This would ensure that in the event that an emergency spill response and containment plan is in place in the event of hazardous spills or releases. As such, it is not expected that the Project would create a significant hazard to the public or the environment through routine operations or reasonably foreseeable upset and accident conditions or result in the release or exposure of hazardous materials into the environment. Therefore, cumulative hazards and hazardous materials impacts would be less than significant with mitigation incorporated.

Wildland Fire

Less-than-Significant Impact. The cumulative context considered for wildfire impacts is San Bernardino County, and more specifically, the Mojave River watershed, which encompasses 4,500 square miles. As discussed in Section 4.7.1, CAL FIRE has mapped areas of fire hazards in the state based on fuels, terrain, weather, and other relevant factors. As described above, the Project site is located in a moderate FHSZ but is adjacent to SRA lands designated as Moderate and High FHSZs. The Project, combined with other projects in the region, would increase the population and/or activities and potential ignition sources in the area, which may increase the potential of a wildfire and increase the number of people and structures exposed to the risk of loss, injury, or death from wildfires. Individual projects located within the County would be required to comply with applicable fire and building codes, which have been increasingly strengthened as a result of severe wildfires that have occurred in the last two decades. The fire and building codes include fire prevention and protection features that reduce the likelihood of a fire igniting in a specific project and spreading to off-site vegetated areas. Further, any related projects located in fire hazard areas would be required to comply with vegetation clearance requirements, as outlined in the applicable fire and building codes. These codes also protect projects from wildfires that may occur in the area through the implementation of brush management and fuel management zones, ensuring adequate water supply, preparation of fire protection plans, and other measures.

The Project area is relatively flat, and it is not anticipated that related projects would combine to result in significant wildfire impacts related to slope, prevailing winds, downstream flooding or landslide, slope instability, or drainage changes. Further, all related projects would be required to avoid conflict with the City's Emergency Preparedness Plan and potential emergency evacuation routes in the area. The applicable CFC and CBC, along with Project-specific needs assessments and fire prevention plan requirements, ensure that every project approved for construction includes adequate emergency access. Roads for all proposed projects are required to meet minimum widths, have all-weather surfaces, and be capable of supporting the imposed loads of responding emergency apparatus. The Project and all other future development projects in the service area would be subject to review by the SBCFD and would be required to comply with the County Fire Code and other relevant County Code requirements and other applicable local codes (e.g., City of Hesperia Municipal Code) and regulations related to fire safety, building construction, access, fire flow, and fuel modification. Therefore, because all projects are required to comply with these requirements, cumulative impacts related to increased wildfire hazards and emergency response and access would be less than significant.

4.7.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The Project would result in potentially significant impacts with regard to the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. MM-HAZ-1 would be implemented, and Project impacts would be less than significant with mitigation incorporated.

MM-HAZ-1 Prior to the issuance of a grading permit, the Project Applicant shall retain a qualified environmental specialist that has documented experience in the identification, characterization, and removal of hazardous materials, such as a California licensed professional engineer, geologist, or hydrogeologist, to remove and dispose of all refuse located on the Project site, including but not limited to, the illegally dumped tires and oil containers currently found on site. The removal, transport, and disposal of refuse shall be done in accordance with all applicable local, state, and federal guidelines related to hazardous materials handling. Prior to the removal of refuse deposits from the site, the environmental specialist shall inspect each refuse pile for indications that the refuse may contain, or may have once contained, hazardous materials, including, but not limited to, motor oil, solvents, paints, and/or other petroleum products. In addition, the environmental specialist shall inspect the soils surrounding each refuse deposit for evidence of any contamination (staining) or volatilization of contaminants (odors).

If contamination indicators are identified, work shall stop in the immediate proximity of the potential contamination. The Project Applicant and/or their construction contractor shall be responsible for engaging a qualified environmental specialist to design and perform an investigation to verify the presence and extent of contamination on the Project site. Subsurface investigation shall determine appropriate worker protection and hazardous material and disposal procedures appropriate for the Project site. Contaminated soil or groundwater determined to be hazardous shall be removed by personnel who have been trained through the Occupational Safety and Health Administration-recommended 40-hour safety program with an approved plan for

groundwater extractions, soil excavation, control of contaminant releases to the air, and off-site transport or on-site treatment.

Threshold B: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The Project would result in potentially significant impacts with regard to the creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. MM-HAZ-1 would be implemented, and Project impacts would be less than significant with mitigation incorporated.

Threshold G: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The Project would result in less-than-significant impacts associated with exposing people or structures to a significant risk of loss, injury, or death involving wildland fires. No mitigation is required.

Threshold H: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

The Project would not conflict with or impair implementation of the Hazard Mitigation Plan, nor would the Project impair use of potential evacuation routes in the City, and impacts would be less than significant. No mitigation is required.

Threshold I: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project, due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The Project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks or expose Project occupants to pollutant concentrations from a wildfire, the uncontrolled spread of a wildfire, or significant risks associated with wildfires, and impacts would be less than significant. No mitigation is required.

Threshold J: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Project would result in less-than-significant impacts associated with the installation and maintenance of Project-associated infrastructure that may exacerbate wildfire risk or result in temporary or ongoing impacts to the environment. No mitigation is required.

Threshold K: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Project would result in less-than-significant impacts associated with the exposure of people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No mitigation is required.

Threshold L: Would the Project result in cumulatively considerable impacts with regard to hazards, hazardous materials, or wildfire?

Hazards and Hazardous Materials

The Project would result in potentially significant cumulative impacts with regard to hazards and hazardous materials. MM-HAZ-1 would be implemented, and cumulative Project impacts would be less than significant with mitigation incorporated.

Wildland Fire

The Project would result in less-than-significant cumulative impacts associated with wildfire. No mitigation is required.

4.7.6 References Cited

- Alexander et al. 1998. The International Crown Fire Modeling Experiment: An Overview and Progress Report. In: Proceedings of the Second Symposium on Fire and Forest Meteorology. January 12–14, 1998; Phoenix, Arizona. Boston, Massachusetts: American Meteorological Society, 20–23.
- CAL FIRE (California Department of Fire and Forestry Protection). 2008. Fire Hazard Severity Zones Maps. Map: Very High Fire Hazard Severity Zones in the LRA – Hesperia. Accessed May 15, 2020. <https://osfm.fire.ca.gov/media/5945/hesperia.pdf>.
- CAL FIRE. 2018. *2018 Strategic Fire Plan for California*. August 22, 2018.
- CAL FIRE. 2020. Fire and Resource Assessment Program (FRAP): Fire Perimeters [digital GIS data]. <https://frap.fire.ca.gov/mapping/gis-data/#panel-6ebba334-7394-403e-8d3b-cfd53fc81dcf>.
- City of Hesperia. 2010a. *City of Hesperia General Plan 2010*. Accessed May 6, 2020. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>
- City of Hesperia. 2017. *Hazard Mitigation Plan 2017 Plan Update*. Accessed October 21, 2021. <http://www.cityofhesperia.us/DocumentCenter/View/14830/2017-Hazard-Mitigation-Plan?bidId=>.
- City of Hesperia. 2020. “Fire Stations.” Accessed May 5, 2020. <https://www.cityofhesperia.us/183/Fire-Stations>.
- Cohen, J.D. 1995. “Structure Ignition Assessment Model (SIAM).” In *Proceedings of the Biswell Symposium: Fire Issues and Solutions in Urban Interface and Wildland Ecosystems*, technical coordination provided by D.R. Weise and R.E. Martin, 85 – 92. February 15–17, 1994; Walnut Creek, CA. Gen. Tech. Rep. PSW-GTR-158. Albany, California: U.S. Forest Service, Pacific Southwest Research Station.
- Cohen, J.D. 2000. “Preventing Disaster: Home Ignitability in the Wildland-Urban Interface.” *Journal of Forestry* 98(3): 15–21.
- FEMA (Federal Emergency Management Agency). n.d. “FEMA Flood Map Service Center: Search By Address.” Accessed September 2018. <https://msc.fema.gov/portal/search#searchresultsanchor>.
- IBHS (Institute for Business and Home Safety). 2008. *Mega Fires: The Case for Mitigation*. Accessed October 21, 2021. https://ibhs.org/wp-content/uploads/wpmembers/files/Mega-Fires-The-Case-for-Mitigation_IBHS.pdf.

International Code Council. 2021. *2021 International Fire Code*. July 7, 2021.

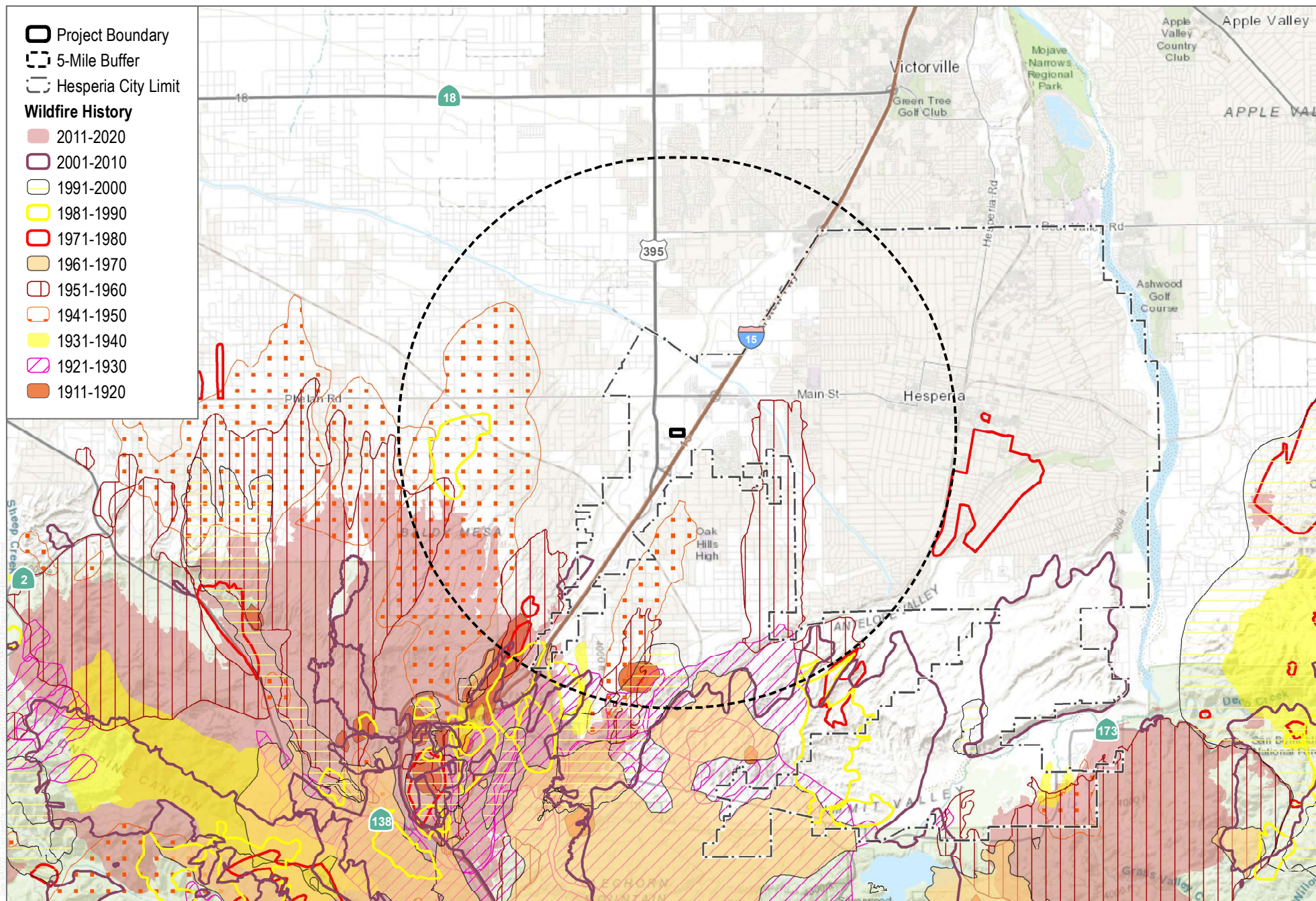
National Wildfire Coordinating Group. 2009. *Guidance for Implementation of Federal Wildland Fire Management Policy*. February 13, 2009.

Weather Spark. 2020. "Average Weather in Hesperia." Accessed June 11, 2020. <https://weatherspark.com/y/1943/Average-Weather-in-Hesperia-California-United-States-Year-Round>.

WRCC (Western Regional Climate Center). 2020. "Recent Climate in The West. Period of Record Monthly Climate Summary: Victorville Pump Pt, California." Accessed June 10, 2020. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9325>.



INTENTIONALLY LEFT BLANK



SOURCE: Esri; HERE; Garmin; CAL FIRE 2020

FIGURE 4.7-2
Wildfire History
 Poplar 18 Project

INTENTIONALLY LEFT BLANK

4.8 Hydrology and Water Quality

This section describes the existing hydrology and water quality conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7, Documents Incorporated by Reference, of Chapter 2, Introduction, of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following sources:

- Preliminary Drainage Report, prepared by WestLAND Group Inc. in September 2022 (Appendix G-1)
- Preliminary Water Quality Management Plan, prepared by WestLAND Group in May 2022 (Appendix G-2)
- Water Supply Assessment Report, prepared by KEC Engineers, Inc. in August 2022 Appendix G-3)

4.8.1 Existing Conditions

Regional Watershed

The Project site lies within the Mojave River Watershed, an approximately 4,500-square-mile watershed located entirely within San Bernardino County. Elevations within the watershed range from 1,400 feet at Afton Canyon to 8,500 feet above mean sea level (amsl) at Butler Peak in the San Bernardino Mountains (County of San Bernardino 2003). The primary geographic and surface hydrologic feature of the watershed is the Mojave River, the headwaters of which are located in the San Bernardino Mountains, and which annually receive greater than 40 inches of precipitation at the highest elevations. Much of the winter precipitation in the San Bernardino Mountains falls in the form of snow, which subsequently provides spring recharge to the Mojave River system due to snowmelt. The Mojave River channel transects the watershed for approximately 120 miles until it reaches Silver Dry Lake near the community of Baker. Some reaches of the Mojave River flow underground in the confined riverbed channel. The Mojave River channel is typically dry downstream of the Mojave Forks Dam except in select locations where groundwater is forced to the surface by geologic structures (County of San Bernardino 2003). The Mojave River is located approximately 8.4 miles to the east of the Project site.

The Mojave River Watershed has been subdivided into a number of subwatersheds by the San Bernardino Flood Control District, that include the Upper Mojave, Middle Mojave, Lower Mojave, and Mojave–Baker watersheds. The Project site is located within the Upper Mojave River Watershed (County of San Bernardino 2003). The U.S. Geological Survey Watershed Boundary Dataset delineates watersheds according to hydrologic units, which are nested within one another according to the scale of interest. In a regional context, the U.S. Geological Survey has established that the City of Hesperia is located within the Mojave Watershed Hydrologic Unit, which includes 4,580 square miles. Within this greater watershed, the City of Hesperia is located within the Upper Mojave Hydrologic Area (Hydrologic Sub-Area 628.20), encompassing 870 square miles (Figure 4.8-1, Hydrologic Sub-Areas) (City of Hesperia 2010a).

At its closest point, the Oro Grande Wash is located approximately 0.5 miles to the northwest of the Project site (Figure 4.8-2, Major Surface Waters). The Oro Grande Wash is a major tributary of the Mojave River and drains from the bluffs in Cajon Pass. The wash starts in Oak Hills, between Interstate 15 and Phelan, and flows approximately 40 miles north and northeast before emptying into the Mojave River. The Oro Grande Wash generally forms a natural

buffer to the light industrial, commercial, and residential uses along U.S. Highway 395 and Interstate 15. In addition, the Oro Grande Wash serves as a natural habitat, a channel for storm runoff, and a potential place for recreation.

Topography and Drainage

The Project consists of a 17.87-acre, rectangular site that consists of vacant, undeveloped land with poor vegetative cover. Surface elevation within the Project site is relatively flat, ranging between 3,615 feet amsl at the southwestern corner of the site to a low point of approximately 3,590 feet amsl in the northeast corner of the site. Stormwater runoff occurs as sheet flow in a mostly southwest to northeast direction across the Project site. There are no current stormwater collection facilities on the Project site.

The San Bernardino County Hydrology Manual requires that a storm drain conveyance system be designed for the 2-year, 10-year, and 100-year storm for a 24-hour storm event (Appendix G-1). The existing peak flows and volumes of the 10-, 25-, and 100-year, 24-hour storm event for the two Drainage Areas delineated on the Project site (essentially the eastern half and western half; see Figure 4.8-1) is shown in Table 4.8-1, Existing Hydrology Summary.

Table 4.8-1. Existing Hydrology Summary

Drainage Area No.	Q10	Q25	Q100	Volume of 100-Year, 24-Hour Storm Event (Cubic Feet)
Area A – Western half (9.61 acres)	9.60	13.61	22.51	163.224
Area B – Eastern half (8.25 acres)	10.28	14.28	22.79	140.350
Total	19.88	27.89	45.30	303.574

Notes: Q – peak storm flow in cubic feet per second (cfs); Q10 = 10-year storm; Q25 = 25-year storm; 100-year storm.

Source: Appendix G-1.

Surface Water Quality

Beneficial Uses and Total Maximum Daily Loads

Stormwater runoff is a significant contributor to local and regional pollution. Urban stormwater runoff is the largest source of unregulated pollution in the waterways of the United States. Federal, state, and regional regulations require the City of Hesperia to control the discharge of pollutants to the storm drain system, including the discharge of pollutants from construction sites and areas of new development.

In accordance with state policy for water quality control, the Lahontan Regional Water Quality Control Board (Lahontan RWQCB) regulates water quality, among various other agencies, within the Mojave River Region. Water quality objectives, plans, and policies for the surface waters within this region are established in the Mojave River Basin Plan Amendment of the Lahontan Basin Plan. The Basin Plan for the Mojave River Region has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. The existing and proposed beneficial uses of the Upper Mojave Hydrologic Area includes the following (Lahontan RWQCB 2019):

- Municipal and Domestic Supply
- Agricultural Supply
- Groundwater Recharge
- Fresh Water Replenishment
- Hydropower Generation
- Water Contact Recreation

- Noncontact Water Recreation
- Commercial and Sport Fishing
- Warm Freshwater Habitat
- Cold Freshwater Habitat
- Wildlife Habitat
- Preservation of Biological Habitats of Special Significance
- Migration of Aquatic Organisms
- Spawning, Reproduction, and/or Early Development
- Water Quality Enhancement
- Flood Water Storage

Under the Clean Water Act (CWA) Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. The U.S. Environmental Protection Agency (EPA) has approved a 303(d) list of water quality impairments for water bodies located downstream of the Project site, which includes the Mojave Forks Reservoir Outlets to the Upper Narrows segment of the Mojave River (SWRCB 2018). This segment of the Mojave River has been identified as impaired with fluoride, sodium, and sulfates.

Once a water body has been listed as impaired on the 303(d) list, a total maximum daily load (TMDL) for the constituent of concern (pollutant) must be developed for that water body. A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standards. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. In general, dischargers within each watershed are collectively responsible for meeting the required reductions and other TMDL requirements by the assigned deadline. A TMDL for the Mojave Forks Reservoir Outlet to the Upper Narrows segment of the Mojave River is required but has not yet been completed for fluoride, sodium, and sulfates but a scheduled completion date of 2031 has been established (SWRCB 2018).

General Watershed Water Quality

The Mojave River was selected as a priority or “focus” watershed by the State Water Resources Control Board (SWRCB) because of numerous water quality and quantity issues. Historically known for its agriculture, industrial, and military uses, Victor Valley has significantly changed during the last several decades into a satellite of Southern California’s urbanization. Urban growth has substantially modified the areas of waste discharges that could potentially affect water quality, including stormwater and wastewater treatment. There are also numerous water quality issues associated with past and current agricultural, industrial, and military land uses throughout the watershed.

Water quality problems in the Mojave River Watershed are primarily related to non-point sources, including erosion (from construction, timber harvesting, and livestock grazing), stormwater, acid drainage from inactive mines, and individual wastewater disposal systems. There are relatively few point-source discharges. Some types of discharges may be considered either point source or non-point source, depending on site-specific circumstances. For example, stormwater that enters one lake through a pipe may be regulated as a point source, while stormwater that enters a lake via sheet flow is considered a non-point-source discharge (RWQCB 2019).

In the early 1970s, the Lahontan RWQCB evaluated existing surface water quality data for the Mojave River Watershed. Based on these data, the RWQCB adopted numerical water quality objectives for inorganic constituents in surface waters of the Mojave River and several of its tributaries in the San Bernardino Mountains. These numerical standards generally represented native or background water quality. For the purpose of evaluating the

water quality objectives, the RWQCB has assembled two groups of stakeholders. The first group is focused on surface water upstream of the Mojave Forks Dam, which is located near the City of Hesperia. The second group is focused on groundwater of the Mojave River floodplain aquifer downstream of the Mojave Forks Dam, and the few downstream locations where groundwater is forced to the surface of the Mojave River floodplain by geologic structures. The overall goal of the sampling effort is to compare existing surface water quality to the water quality objectives that were developed in the 1970s (Lahontan RWQCB 2002).

The RWQCB assembled a stakeholder group (the Mojave River Watershed Group), including the communities of Town of Apple Valley, the Cities of Hesperia and Victorville, and the County of San Bernardino, to address water quality concerns associated with stormwater. The Mojave River Watershed Group was responsible for developing and implementing a regional stormwater management plan as required by the Phase II Small Municipal Separate Storm Sewer System (MS4) Permit. Identification of critical areas of stormwater flow and the full list of constituents of concern are the primary goals of the Lahontan RWQCB (Lahontan RWQCB 2002).

The Mojave River Watershed Group publishes an annual report summarizing the results of their Phase II Small MS4 General Permit program, which is intended to minimize or eliminate adverse surface water quality impacts by instituting controls on those MS4 discharges that have the greatest potential to cause environmental degradation. Discharges to, or from, the MS4 are of concern because they may contain pollutants, including trash, debris, sediments, fertilizers, oil, grease, metals, and pesticides. These discharges can result in the loss of surface water beneficial uses and contaminate local drinking water supplies. Among other annual tasks, the stakeholder group has developed a Construction Site Storm Water Runoff Control Program and a Post-Construction Site Storm Water Control Program, which are intended to develop, implement, and enforce programs to prevent the discharge of construction site and post-construction pollutants as well as minimize or eliminate negative impacts on the beneficial uses of receiving waters (Mojave River Watershed Group 2014).

Water Supply

The City's water system is managed by the Hesperia Water District, which is a subsidiary special district of the City. The Hesperia Water District provides utility service for the water and sewer system within the City and operates as a self-sustaining utility business enterprise. With minor exceptions, the Hesperia Water District's service area matches the City's boundaries and covers approximately 74 square miles.

In the 2015 Urban Water Management Plan (UWMP), Hesperia Water District estimated that it receives approximately 88.0% of its water from groundwater, 5.5% from purchased water, and 6.5% from recycled water (Hesperia Water District 2016). Regarding the portion of the District's water supply that originates as groundwater, the District receives water from fifteen active wells within the City, the entirety of which is located within Alto Subarea sub basin of the Mojave River Groundwater Basin. The Mojave Water Agency serves as the entity responsible for managing the use, replenishment, and protection of the groundwater basin. The Mojave River Ground Water Basin is an adjudicated basin and thus has a managed groundwater extraction rate, reducing the potential for over-extraction to occur (Hesperia Water District 2016). The Adjudication Judgment allocated a Base Annual Production (BAP) amount to each producer in the Mojave River Groundwater Basin using more than 10 acre-feet per year, based on historical production. A Production Safe Yield (PSY) was also determined for each subarea within the Mojave River Groundwater Basin for each year. The PSY in each subarea is assumed to equal the average net natural water supply plus the expected return flow from the previous year's water production. Users are assigned a variable Free Production Allowance (FPA), which is a uniform percentage of BAP set for each subarea, as an annual maximum amount of water a producer can withdraw without incurring a fine. This percentage is reduced over time until total FPA comes into balance with PSY (Hesperia Water District 2021).

Historically, Hesperia Water District has been able to reliably serve customers' water supply needs from year-to-year. To maintain this reliability in water supply, the Hesperia Water District 2020 UWMP contains a Water Shortage Contingency Plan, which includes the stages of response to a water shortage, such as drought, that occur over a period of time, as well as catastrophic supply interruptions that occur suddenly. The primary objective of the Water Shortage Contingency Plan is to ensure that the Hesperia Water District has in place the necessary resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during water supply shortages and interruptions. This plan involves implementing mandatory water reduction from its customers as well as implementing fines and penalties for those who exceed their allocated water usage (Hesperia Water District 2021).

Pursuant to the requirements of Senate Bill (SB) 610, a Water Supply Assessment (WSA) was not required for the proposed Project as an industrial project that is less than 650,000 square feet. However, one was prepared and is included as Appendix G-3. The WSA concluded that the total projected water supplies available to the Hesperia Water District during normal, single-dry, and multiple-dry water years over the next 20 years will be sufficient to meet the projected water demands of the proposed project.

Groundwater

The Mojave River Groundwater Basin overlies a broad hydrologic region throughout San Bernardino County. The Mojave River Groundwater Basin is essentially a closed basin, as very little groundwater enters or exits the basin. However, within the basin, groundwater movement occurs between the different subareas, as well as between groundwater and surface water. Groundwater is recharged into the basin predominantly by the infiltration of water from the Mojave River, which accounts for approximately 80 of the total basin natural recharge. Other sources of recharge include infiltration of storm runoff from the mountains, and recharge from human activities such as irrigation return flows, wastewater discharge, and enhanced recharge with imported water. Over 90% of the basin groundwater recharge originates in the San Gabriel and San Bernardino Mountains. Groundwater is discharged from the basin primarily by well pumping, evaporation through the soil, transpiration by plants, seepage into dry lakes where accumulated water evaporates, and seepage into the Mojave River (Hesperia Water District 2016).

The California Department of Water Resources (DWR) has subdivided the Mojave River Groundwater Basin into three groundwater subbasins based on local hydrologic and geologic characteristics. The three basins consist of the Upper Mojave River Groundwater Basin, the Middle Mojave River Groundwater Basin, and the Lower Mojave River Groundwater Basin (DWR 2013). Based on DWR's Bulletin 118, the Project site is underlain by the Upper Mojave River Valley Groundwater Basin (Hesperia Water District 2016). This Basin is bounded on the north by a roughly east-west line from basement rock outcrops near the Shadow Mountains. The southern boundary is the contact between Quaternary sedimentary deposits and unconsolidated basement rocks of the San Bernardino Mountains. The basin is bounded on the southeast by the Helendale Fault, and on the east by basement exposures of the mountains surrounding Apple Valley. In the west, the boundary is marked by a surface drainage divide between this basin and El Mirage Valley Basin, and contact between alluvium and basement rocks that form the Shadow Mountains (DWR 2004).

As discussed in further detail in Section 4.8.2, Relevant Plans, Policies, and Ordinances, the Sustainable Groundwater Management Act (SGMA) requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. In accordance with the SGMA, DWR has classified the Upper Mojave River Valley Groundwater Basin as having a very low priority in regard to prioritizing completion of a Groundwater Sustainability Plan (DWR 2019). In addition, the groundwater basin is adjudicated and thus has a managed groundwater extraction rate, reducing the potential for over-extraction to occur (Hesperia Water District 2016).

Groundwater Quality

A Phase I Environmental Site Assessment for the Project site was performed in 2020 by Consolidated Consulting Group LLC (CCG) (Appendix F). During the site reconnaissance of the Project site, CCG identified numerous debris piles/dumpsites and scattered windblown debris on the site which it considered de minimis conditions. Otherwise, no recognized environmental conditions were discovered that could adversely affect groundwater quality.

Flood Hazards

Flooding is a significant problem in Hesperia. Historically, the City has been subject to flooding during periods of heavy rainfall, falling primarily between the months of October through April, which causes streams and drainage canals to become overwhelmed and overflow their banks and/or inundate storm drainage systems. Occasionally, overbank flows in Hesperia have resulted in the flooding of residential properties, road blockages, and traffic disruptions. In urbanizing areas, the increase in paved areas associated with new development decreases the amount of open land available to absorb rainfall and runoff, thus increasing the volume of water that must be carried away from by waterways. Flooding has damaged or destroyed commercial and residential structures, flooded bridges and streets and caused stream channels and flood control works to erode (City of Hesperia 2017).

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 06071C6475H, effective August 28, 2008, indicates that the Project site is located in an area designated as Zone X, an area of minimal flood hazard (FEMA 2022). This area is higher in elevation than the 0.2% annual chance flood (i.e., 500-year flood). As such, the potential for flooding within the Project boundaries is low.

4.8.2 Relevant Plans, Policies, and Ordinances

Federal

Clean Water Act

Increasing public awareness and concern for controlling water pollution led to the enactment of the federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA; 33 USC 1251 et seq.). The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

National Flood Insurance Program

The National Flood Insurance Act of 1968 established the National Flood Insurance Program to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The National Flood Insurance Act also requires the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those areas. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing FIRMs that delineate the areas of known special flood hazards and their risk applicable to the community. The National Flood Insurance Program encourages the adoption and enforcement by local communities' floodplain management ordinances that reduce flood risks. In support of the National Flood Insurance Program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

Federal Antidegradation Policy

The Federal Antidegradation Policy (40 CFR 131.12) requires states to develop and implement statewide antidegradation policies. Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods must, at a minimum, (1) protect and maintain existing in-stream water uses; (2) protect and maintain existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses (unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area); and (3) protect and maintain water quality in waters considered an outstanding national resource.

State

National Pollutant Discharge Elimination System

Direct discharges of pollutants into waters of the United States are not allowed, except in accordance with the National Pollutant Discharge Elimination System (NPDES) program, established in Section 402 of the CWA. A stormwater pollution prevention plan (SWPPP) prepared in compliance with an NPDES permit describes erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect construction sites before and after storms to identify stormwater discharge from construction activity and to identify and implement controls, where necessary.

California Porter–Cologne Water Quality Control Act

Since 1973, the California SWRCB and its nine RWQCBs have been delegated the responsibility for administering permitted discharge into the waters of California. The Project falls within the jurisdiction of the Lahontan RWCQB. The Porter–Cologne Water Quality Control Act (California Water Code Section 13000 et seq.; 23 CCR, Chapters 3 and 15) provides a comprehensive water quality management system for the protection of California waters. Under this act, “any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state” must file a report of the discharge with the appropriate RWQCB. Pursuant to the act, the RWQCB may then prescribe “waste discharge requirements” that add conditions related to control of the discharge. The Porter–Cologne Water Quality Control Act defines “waste” broadly, and the term has been applied to a diverse array of materials, including non-point-source pollution. When regulating discharges that are included in the federal CWA, the state essentially treats Waste Discharge Requirements and NPDES regulations as a single permitting vehicle. In April 1991, the SWRCB and other state environmental agencies were incorporated into the California Environmental Protection Agency.

The RWQCB regulates urban runoff discharges under the NPDES permit regulations. NPDES permitting requirements cover runoff discharged from point (e.g., industrial outfall discharges) and non-point (e.g., stormwater runoff) sources. The RWQCB implements the NPDES program by issuing construction and industrial discharge permits.

Under the NPDES permit regulations, best management practices (BMPs) are required. EPA defines BMPs as “schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States.” BMPs include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage (40 CFR 122.2).

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High-Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state (e.g., includes isolated wetlands and groundwater), not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality must be maintained, and discharges to that water body must not unreasonably affect present or anticipated beneficial uses of such water resources.

CALGreen Code

Formerly known as the California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations, the CALGreen Code is designed to improve public health, safety, and general welfare by utilizing design and construction methods that reduce the negative environmental impact of development and to encourage sustainable construction practices. CALGreen provides mandatory direction to developers of all new construction and renovations of residential and non-residential structures with regard to all aspects of design and construction, including, but not limited to, site drainage design, stormwater management, and water use efficiency. Required measures are accompanied by a set of voluntary standards designed to encourage developers and cities to aim for a higher standard of development.

Section 303 of the Clean Water Act (Beneficial Uses and Total Maximum Daily Loads)

The Lahontan RWQCB is responsible for the protection of the beneficial uses of waters within the Project area in San Bernardino County. The Lahontan RWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Lahontan Basin Plan to implement plans, policies, and provisions for water quality management.

In accordance with state policy for water quality control, the RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Lahontan Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. Beneficial uses of waters within the Mojave River Watershed are addressed in the Mojave River Basin Plan Amendment of the Lahontan Basin Plan.

Under CWA Section 303(d), California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The Lahontan RWQCB has developed TMDLs for select reaches of water bodies.

California Toxics Rule

EPA has established water quality criteria for certain toxic substances via the California Toxics Rule. The California Toxics Rule established acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries, that are designated by each RWQCB as having beneficial uses protective of aquatic life or human health.

California Water Code

The California Water Code includes 22 kinds of districts or local agencies with specific statutory provisions to manage surface water. Many of these agencies have statutory authority to exercise some forms of groundwater management. For example, a Water Replenishment District (Water Code Section 60000 et seq.) is authorized to establish groundwater replenishment programs and collect fees for that service, and a Water Conservation District (Water Code Section 75500 et seq.) can levy groundwater extraction fees. Through special acts of the Legislature, 13 local agencies have been granted greater authority to manage groundwater. Most of these agencies, formed since 1980, have the authority to limit export and control some in-basin extraction upon evidence of overdraft or the threat of an overdraft condition. These agencies can also generally levy fees for groundwater management activities and for water supply replenishment.

Assembly Bill 3030 – Groundwater Management Act

In 1992, Assembly Bill 3030 was passed, which increased the number of local agencies authorized to develop a groundwater management plan and set forth a common framework for management by local agencies throughout California. These agencies could possess the same authority as a water replenishment district to “fix and collect fees and assessments for groundwater management” (Water Code Section 10754), provided they receive a majority of votes in favor of the proposal in a local election (Water Code Section 10754.3).

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—Assembly Bill 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley)—collectively known as SGMA. SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the DWR provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans for crucial groundwater basins in California.

Urban Water Management Plans

Pursuant to the California Urban Water Management Act (California Water Code Sections 10610–10656), urban water purveyors are required to prepare and update a UWMP every 5 years. UWMPs are prepared by California’s urban water suppliers to support long-term resource planning and ensure adequate water supplies. Every urban water supplier that either delivers more than 3,000 acre-feet per year of water annually or serves more than 3,000 connections are required to assess the reliability of its water sources over a 20-year period under normal-year, dry-year, and multiple-dry-year scenarios in a UWMP. UWMPs must be updated and submitted to the DWR every 5 years for review and approval. The Project site is within the area addressed by the 2020 Hesperia Water District UWMP.

Senate Bill 610 and Senate Bill 221: Water Supply Assessments

SB 610 and SB 221, amended into state law effective January 1, 2002, improve the linkage between certain land-use decisions made by cities and counties and water supply availability. The statutes require detailed information regarding water availability and reliability with respect to certain developments to be included in the administrative

record, to serve as the evidentiary basis for an approval action by the City or County on such projects. Under Water Code Section 10912(a), projects subject to the California Environmental Quality Act (CEQA) that require a WSA include (1) residential development of more than 500 dwelling units; (2) shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; (3) commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; (4) hotel, motel or both, having more than 500 rooms; (5) industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area; (6) mixed-use projects that include one or more of the projects specified; or (7) a project that would demand an amount of water equivalent to or greater than the amount required by a 500 dwelling unit project. A fundamental source document for compliance with SB 610 is the UWMP, which can be used by the water supplier to meet the standard for SB 610. SB 221 applies to the Subdivision Map Act, conditioning a tentative map on the applicant to verify that the public water supplier has sufficient water available to serve the proposed development. Otherwise, as the Project is under 650,000 square feet, a project specific WSA is not required.

Regional

Mojave River Watershed Water Quality Management Plan

The 2013 Phase II Small MS4 Permit, adopted by the SWRCB, and issued statewide, requires all new development projects covered by this Order to incorporate low-impact development (LID) BMPs to the maximum extent practicable. In San Bernardino County, the Phase II MS4 Permit is applicable within the Mojave River Watershed. In addition, the Order also requires the development of a standard design and post-development BMP guidance for incorporation of site design/LID, source control, treatment control BMP (where feasible and applicable), and hydromodification mitigation measures to the maximum extent practicable to reduce the discharge of pollutants to receiving waters. The purpose of this technical guidance document for the Water Quality Management Plan (WQMP) is to provide direction to project proponents on the regulatory requirements applicable to a private or public development activity, from project conception to completion. This technical guidance document is intended to serve as a living document, which will be updated as needed to remain applicable beyond the current Phase II MS4 Permit term. Any non-substantive updates to the technical guiding document and WQMP template will be provided in the annual report. Future substantive updates shall be submitted to the Lahontan RWQCB for review and approval, prior to implementation.

Mojave Storm Water Management Program

The NPDES General Permit NO. CAS000004, Waste Discharge Requirements for stormwater discharges from Small MS4s requires that Permittees develop a stormwater management program (SWMP). The purpose of this SWMP is to keep the Mojave River clean to the maximum extent practicable using BMPs. These practices would reduce stormwater runoff and non-storm water runoff flowing to the river. BMPs would also serve to keep contaminations, including sediment, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons, pesticides, herbicides, and trash from entering the storm drain system.

Local

City of Hesperia General Plan

The Conservation Element of the City of Hesperia General Plan identifies, establishes, and sets forth policies to promote the sustainability and environmental integrity of natural resources throughout the City. In addition, the Safety Element of the General Plan identifies, establishes, and sets forth policies to address hydrological hazards within the municipality, including flooding hazards. Goals or policies related to hydrology and water quality in the General Plan include the following (City of Hesperia 2010b):

Conservation Element

Goal CN-1. Conserve water resources within the Upper Mojave River Groundwater Basin.

Policy CN 1.1. Promote the use of desert vegetation with low water usage and drought-tolerant materials in landscaped areas.

Policy CN 1.2. Educate residents on water conservation methods with best practices and tips.

Policy CN 1.3. Promote reduced use of high nitrate fertilizers, herbicides, pesticides and other chemicals in landscaping areas that can contaminate the quality of the groundwater.

Policy CN 1.4. Limit the disturbance of natural water hydrology by minimizing the creation of impervious surface area and continued utilization of underground retention/detention facilities to recharge groundwater.

Policy CN 1.5. Work with local agencies and jurisdictions to provide a coordinated effort to ensure a safe and constant water supply for the region.

Policy CN 1.6. Encourage the use of low-water consumption fixtures in homes and businesses.

Policy CN 1.7. Require new development to use new technology, features, equipment, and other methods to reduce water consumption.

Goal CN-2. Establish building and development standards to maximize the reclamation of water resources.

Policy CN 2.1. Minimize impacts to washes that convey drainage by prohibiting development within drainage corridors that are not consistent with the Master Plan of Drainage.

Policy CN 2.2. Encourage the use of reclaimed water for irrigation and other non-potable uses.

Policy CN 2.3. Protect open space areas used for recharging groundwater basins.

Policy CN 2.4. Continue to implement the use of reclaimed water through the City's "purple pipe" ordinances and regulations to further the use of reclaimed and treated water.

Policy CN 2.5. Implement the state and City laws and policies to develop retention basins for the replenishment of the underground water supply.

Policy CN 2.6. Coordinate City policies and activities with the Victor Valley Wastewater Reclamation Authority.

Goal CN-3. Minimize development and set aside necessary open space near and along the surface waters as well as those washes and other water passageways located in the City, to preserve and protect plant and animal species and their natural habitat dependent on such surface waters and waterways.

Policy CN 3.1. Monitor the development impacts on these surface water resources within the City.

Policy CN 3.2. Preserve areas within the Oro Grande Wash and un-named wash #1 that exhibit ideal native habitat in a natural state.

Safety Element

Goal SF-2. Minimize injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.

Policy SF 2.1. The City shall continue enforcing the City's Municipal Code provisions for flood hazard reduction (Title 8: Safety, Chapter 8.28: Flood Hazard Protection and Regulations). This code, which applies to new construction and existing projects undergoing substantial improvements, provides construction standards that address the major causes of flood damage and includes provisions for anchoring, placement of utilities, raising floor elevations, using flood-resistant construction materials, and other methods to reduce flood damage.

Policy SF 2.2. The City will require that new discretionary development proposals include, as a condition of approval, hydrological studies prepared by a state-certified engineer with expertise in this area, that assess the impact that the new development will have on the flooding potential of existing development down-gradient. The studies shall provide mitigation measures to reduce this impact to an acceptable level. Single-family residences on existing lots shall be exempt.

Policy SF 2.3. The City shall continue participation in the National Flood Insurance Program and require that all owners of properties located within the 100-year floodplain (Zones A and AE), and repeat-flood properties in Zone X purchase and keep flood insurance for those properties.

Policy SF 2.4. The City will continue to participate in the Storm Ready Program with the National Weather Service, including the monitoring of precipitation and snow levels on the mountains to the south, providing storm watches and warnings in real-time, and issuing evacuation notices for affected neighborhoods in a timely manner, such as with a citizen notification or similar system.

Policy SF 2.5. The City will not permit any new facilities that use or store hazardous materials in quantities that would place them in the State's TRI or SQG databases to be located in the flood zone (Zones A, AE, and X), unless all standards of elevation, anchoring, and flood-proofing have been implemented to the satisfaction of the City's Building Department and the San Bernardino County Fire Department. The hazardous materials shall be stored in watertight containers that are not capable of floating or similar flood-proof receptacles or tanks.

Policy SF 2.6. The City will require all essential and critical facilities (including but not limited to essential City offices and buildings, medical facilities, schools, child care centers, and nursing homes) in or within 200 feet of Flood Zones A, AE and X, or the dam inundation pathways, to develop disaster response and evacuation plans that address the actions that will be taken in the event of flooding or inundation due to catastrophic failure of a dam.

Policy SF 2.7. The City will regulate development in drainages, especially in Flood Zones A and AE, pursuant to FEMA regulations.

Policy SF 2.8. The City will continue to maintain, and improve where needed, the storm drain systems, with an emphasis on those areas of the City that flood repeatedly. This entails maintaining and regularly cleaning the storm drains and other flood-control structures in low-lying areas, as necessary, such that floodwaters can be effectively conveyed away from structures.

Policy SF 2.9. The City will identify repetitive flood properties in the City and develop feasible mitigation options for these sites. Funding to implement the mitigation measures may be available through FEMA Hazard Mitigation Grant and Flood Mitigation Assistance Programs and their Pre-disaster Mitigation Program.

Policy SF 2.10. The City will encourage the development of areas in the floodplains as parks, nature trails, equestrian parks, golf courses, or other types of recreational facilities that can withstand periodic inundation, and will offer incentives to developers to retain these areas as open space.

Goal: SF-5. Plan for emergency response and recovery from natural disasters, especially from flooding, fire, and earthquakes, and from civil unrest that may occur following a natural disaster.

Policy SF 5.1. The City will maintain, update and adopt on a regular basis, as mandated by FEMA, a Local Hazard Mitigation Plan.

Erosion and Sediment Control Plan

For projects that would include soil disturbance during construction, project applicants must submit an erosion and sediment control plan (ESCP) for approval to the City of Hesperia. The City will not issue a grading or building permits until the ESCP for the project is approved. The goals of the ESCP are as follows:

1. Identify potential pollutant sources that may affect the quality of stormwater runoff and prevent non-stormwater discharges from the construction site.
2. Document the BMPs that will be implemented to prevent, to the maximum extent practicable, construction site pollutants from leaving the site during all phases of construction.
3. Document erosion control, sediment control, and good housekeeping BMPs that shall be implemented year-round as appropriate based on construction activities.

4.8.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to hydrology and water quality are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to the Project would occur if the Project would:

- A. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
- B. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.
- C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. result in substantial erosion or siltation on or off-site.
 - ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.
 - iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
 - iv. impede or redirect flood flows.
- D. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- E. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.
- F. Result in cumulatively considerable hydrological or water quality impacts.

Based on Project site location and characteristics, Threshold D was analyzed in the Initial Study (Appendix A) and was not carried forward for further analysis in this EIR. See Chapter 5, Effects Found Not to Be Significant, for additional detail.

4.8.4 Impacts Analysis

Threshold A: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Short-Term Construction Impacts

Less-than-Significant Impact. Construction activities associated with the Project site would involve ground disturbing activities and the use of various hazardous construction materials (e.g., fuels, oils, paint, and solvents), that are commonly used in building construction or for the purpose of heavy equipment maintenance. Earthwork activities can expose soils to the effects of wind and water erosion resulting off-site transport of sediments that could potentially adversely affect water quality of receiving waters. Inadvertent release of hazardous materials or wastes could also adversely affect water quality if not handled appropriately.

Construction of the Project would disturb more than 1-acre and therefore would be subject to NPDES permit requirements. The City of Hesperia is a co-permittee under the San Bernardino County Municipal NPDES MS4 permit. The NPDES MS4 Permit requires the City to implement a Construction Site Stormwater Runoff Control

Program in accordance with the regional SWMP for the Mojave River Watershed (County of San Bernardino 2003). The SWMP requires permittees to implement and enforce measures to reduce pollutants from construction activities that result in a land disturbance of greater than or equal to 1-acre (City of Hesperia 2010a). To comply with the regulatory requirements of the SWMP, the City requires the implementation of an ESCP for projects that include soil disturbance during construction within the City. Implementation of an ESCP would ensure that construction-related BMPs are enacted to prevent, to the maximum extent practicable, construction site pollutants from leaving the site during all phases of construction. In addition to an ESCP, implementation of a WQMP in accordance with the Mojave River Watershed Technical Guidance Document for Water Quality Management Plans (Mojave River WQMP Guidance; County of San Bernardino 2016), would ensure that stormwater treatment and conveyance would be sufficient prior to Project build-out (Appendix G-2). Submittal, review, and approval of both the WQMP and ESCP by the City are necessary prior to the issuance of grading permits for Project development.

Under the NPDES MS4 Permit, the development of 1-acre or more of land must file a notice of intent with the SWRCB to comply with the State NPDES General Construction Permit. Implementation of this Permit would require the development of a site-specific SWPPP for construction activities. The SWPPP is required to identify BMPs that protect stormwater runoff and ensure avoidance of substantial degradation of water quality. Typical BMPs that could be incorporated into the SWPPP to protect water quality include the following:

- Diverting off-site runoff away from the construction site
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Placing perimeter straw wattles to prevent off-site transport of sediment
- Using drop inlet protection (filters and sandbags or straw wattles), with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during construction
- Implementing specifications for construction waste handling and disposal
- Using contained equipment wash-out and vehicle maintenance areas
- Maintaining erosion and sedimentation control measures throughout the construction period
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto adjoining roadways
- Training, including for subcontractors, on general site housekeeping

Incorporation of required BMPs for materials and waste storage and handling, and equipment and vehicle maintenance and fueling would reduce the potential discharge of polluted runoff from construction sites, consistent with the State NPDES General Construction Permit, the Hesperia Municipal Code, and CALGreen requirements. Compliance with existing regulations would prevent violation of water quality standards and minimize the potential for contributing sources of polluted runoff. Compliance with existing regulations would ensure that the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface quality from construction activities. Therefore, short-term construction impacts associated with water quality standards and waste discharge requirements would be less than significant.

Long-Term Operational Impacts

Less-than-Significant Impact. As previously discussed, the Project site currently consists of undeveloped land. Implementation of the Project would result in the construction of two industrial/warehouse buildings (totaling 414,700 square feet) and associated improvements. Construction of the Project would introduce new impervious surfaces that could contribute pollutants to stormwater runoff in the long term from vehicle use in uncovered parking areas (through small fuel and/or fluid leaks), uncovered refuse storage/management areas, landscape/

open space areas (if pesticides/herbicides and fertilizers are improperly applied), and general litter/debris (e.g., generated during facility loading/unloading activities). During storm events, the first few hours of moderate to heavy rainfall could wash a majority of pollutants from the paved areas where, without proper stormwater controls and BMPs, those pollutants could enter the municipal storm drain system before eventually being discharged into the Oro Grande Wash and eventually the Mojave River. Between periods of rainfall, surface pollutants tend to accumulate, and runoff from the first significant storm of the year (“first flush”) would likely have the largest concentration of pollutants.

The NPDES MS4 Permit requires the City to implement a post-construction SWMP in accordance with the regional SWMP. This Program sets limits of pollutants being discharged into waterways and requires all new development to incorporate structural and non-structural BMPs to improve water quality. To meet the requirements of the SWMP, the City requires the incorporation of LID features into new development and redevelopment projects as specified in the Mojave River WQMP Guidance. In accordance with the NPDES permit, the City is responsible for monitoring WQMPs, which address stormwater pollution from new private development. Site-specific WQMPs for individual projects must incorporate the SWRCB required minimum runoff capture BMPs. In addition, the WQMP specifies the minimum required LID features, as well as the BMPs that must be used for a designated project.

Project design, construction, and operation would be completed in accordance with the NPDES MS4 permit and the Mojave River WQMP Guidance, with the goal of reducing the number of pollutants in stormwater and urban runoff. A Project-specific Preliminary WQMP for the proposed Project (Appendix G-2) determined that the infiltration/detention basins would be sufficient to address on-site stormwater water quality-related issues consistent with permit requirements.

Post-construction, the Project area would be designed to collect stormwater runoff by nearby catch basins and convey it to the two proposed above ground and one underground detention basins via a storm drain system. Prior to entering the detention basins, runoff would be pretreated via filter inserts placed in the catch basins and then again further downstream by a baffle box. Runoff will then be released into the above ground basin where it will collect and infiltrate into the soil. Further downstream within the storm drain system, the runoff will be further pretreated via a CDS hydrodynamic separator unit prior to entering the underground CMP system. After pretreatment, runoff will be routed to the designated infiltration/detention BMP. Runoff in Drainage Area A will be routed to the above ground basin to the northwest where it will collect and infiltrate into the soil. Runoff from Drainage Areas B and C will be routed to underground corrugated metal pipe (CMP) infiltration/detention system, which will also connect to an aboveground basin to outlet excess flows (Figure 4.8-2). The basins are sized and designed to prevent flooding from a 100-year storm while also accommodating the required retention volume for water quality purposes.

In accordance with the San Bernardino County Hydrology Manual, the detention basin system would be designed to treat water quality for a 2-year, 24-hour storm event, and sized to accommodate the volumes and flow rates of a 100-year, 24-hour storm event. Two aboveground stormwater detention basins would be located northwest and northeast corners of the Project site, with the underground corrugated metal pipe retention/infiltration system located just west of the aboveground basin on the northeast corner of the site. The stormwater drainage system basins would be sized and designed to prevent flooding from a 100-year storm while also accommodating the required retention volume for water quality purposes. The basins would be designed to capture the entire volume generated from a 100-year storm, meaning no runoff would be discharged off site (Appendix G-1).

Non-structural BMPs would include the regular sweeping and cleaning of existing trash enclosures, docking areas, and paved areas throughout the Project site, the training of all maintenance contractors in stormwater BMP implementation, and the monthly inspection of all catch basins during the rainy season (October through May) as well as before and after each storm to ensure efficient operation. The on-site catch basin inspections would be done by a qualified landscape contractor, who would inspect and clean out any accumulation of trash, litter, and sediment from the basins as well as would check for evidence of illegal dumping of waste materials into on-site drains (Appendix G-2).

Implementation of these LID features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); improper management of hazardous materials; trash and debris; and improper management of portable restroom facilities (e.g., regular service), in accordance with all relevant local and state development standards.

With respect to groundwater quality, stormwater to be collected and treated in retention basins would be able to meet retention time requirements for water quality purposes in accordance with San Bernardino County requirements. All pervious areas that would remain at the Project site would be below adjacent impervious areas to maximize natural infiltration as well as allowing for infiltration with the proposed underground retention basins. Therefore, with adherence to NPDES MS4 permit and San Bernardino County Hydrology Manual standards, long-term operational impacts associated with water quality standards and waste discharge requirements would be less than significant.

Threshold B: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Groundwater Recharge

Less-than-Significant Impact. The Project site is underlain by the Upper Mojave River Valley Groundwater Basin. Currently, the Project site is undeveloped and pervious which allows for groundwater recharge. The development of the Project site would result in a substantial increase in impermeable surfaces, which could impede groundwater recharge. However, the Project would incorporate LID features, including infiltration/retention systems designed to retain at least 95% of the difference of volume produced between post- and pre-developed conditions of on-site stormwater runoff during a 10-year, 24-hour storm event (Table 4.8-2, Proposed Hydrology Summary). Detained stormwater would infiltrate through the bottom of the infiltration basins and into the underlying soils. In addition, the infiltration basins would be sized to exceed 95% of the difference in stormwater of the existing and proposed conditions such that there would be no substantial change in on-site infiltration rates. As shown in Table 4.8-2, the total system storage volume well exceeds the 10-year 24-hour storm event. Because the Project would meet and exceed infiltration requirements, stormwater would continue to be able to infiltrate soils and recharge the underlying Upper Mojave River Valley Groundwater Basin. Therefore, impacts associated with groundwater recharge would be less than significant.

Table 4.8-2. Proposed Hydrology Summary

Drainage Area (acreage)	Q10	Volume of 10-year 24-hour Storm Event (Cubic Feet)	Q100	Volume of 100-Year, 24-Hour Storm Event (Cubic Feet)
Area A (9.61 acres)	8.95	24,616	15.55	46,143
Area B (11.64 acres)	31.95	119,280	55.90	223,550

Table 4.8-2. Proposed Hydrology Summary

Drainage Area (acreage)	Q10	Volume of 10-year 24-hour Storm Event (Cubic Feet)	Q100	Volume of 100-Year, 24-Hour Storm Event (Cubic Feet)
Area B (3.82)	5.86	38,964	10.68	72,946
Total	46.76	182,860	82.13	342,639
<i>Storage Volume of Above Ground Basins Combined</i>	—	50,160	—	—
<i>Storage Volume of Underground</i>	—	182,860	—	—
Total System Storage Volume	—	233,020	—	—

Source: Appendix G-1 and G-2

Groundwater Supply

Less-than-Significant Impact. In the 2015 UWMP, Hesperia Water District estimated that it would source approximately 88.0% of its water supply from groundwater, 5.5% from purchased water, and 6.5% from recycled water (Hesperia Water District 2016). Regarding the portion of the District's water supply that originates as groundwater, the District receives water from sixteen active wells within the City, the entirety of which is located within Alto Subarea sub basin of the Mojave River Groundwater Basin. The Mojave River Ground Water Basin is an adjudicated basin and thus has a managed groundwater extraction rate (Hesperia Water District 20). The Mojave Water Agency serves as the entity responsible for managing the use, replenishment, and protection of the groundwater basin. The Mojave Water Agency and other retail water purveyors, including Hesperia Water District, use imported State Water Project water to replenish the Upper Mojave Water Basin as part of the Regional Recharge and Recovery Project (also referred to as the "R3" project). This practice further assists regional water providers in sustainable management of the Mojave Groundwater Basin.

According to the 2020 UWMP for the Hesperia Water District, the total projected water supplies available to the District during normal, single-dry, and multiple-dry water years until 2045 (Hesperia Water District 2021). This assessment includes projections for growth within the District's service area consistent with the General Plan projections. In addition, as long-term water supply is a significant concern in California, Hesperia Water District has planned projects to meet future water demands for its service area. For example, to improve water efficiency and conserve vital potable water resources, such as groundwater, Hesperia Water District, in cooperation with Victor Valley Water Reclamation Agency plans to expand the local water recycling facility's treatment capacity as well as plans to build an additional water recycling facility. The City of Hesperia also plans to construct multiple recharge basins in cooperation with Mojave Water Agency to deliver and recharge State Water Project water into underlying groundwater basins within the Hesperia Water District's service area (Hesperia Water District 2021). These activities would act to further ensure continued sustainable management of the basin within Hesperia Water District's service area. These projects, when coupled with regional groundwater management plans and the regulatory bindings of the groundwater basin, would ensure that the service area as a whole attains sustainable groundwater management. In addition, as also concluded in the WSA that was prepared for the proposed Project, the City of Hesperia has reliable water supplies to meet its retail customer demands in normal, single dry year, and multiple (5) consecutive dry years and is projected to continue to enhance reliability through the numerous current and planned projects in the Mojave Basin (Appendix G-3). As a result, the Project would not substantially decrease

groundwater supplies and would not impede sustainable groundwater management of the basin. Therefore, impacts associated with groundwater supplies would be less than significant.

Threshold C: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

Threshold C(I): result in substantial erosion or siltation on or off-site;

Less-than-Significant Impact. As previously discussed, the Project site currently consists of undeveloped land. The Project would result in the construction of new paved surfaces, warehouse buildings, and landscape areas. Once developed, the Project site would include buildings, paved surfaces, and other on-site improvements that would stabilize and help retain on-site soils. The remaining portions of the Project site containing pervious surfaces would primarily consist of landscape areas. These landscape areas would include a mix of trees, shrubs, plants, and groundcover that would help retain on-site soils while preventing wind and water erosion from occurring. Moreover, the Project's new engineered stormwater drainage system would feature structural BMPs such as retention facilities to treat and manage on-site storm water flows. The stormwater drainage system basins would be sized and designed to prevent flooding from a 100-year storm while also accommodating the required retention volume for water quality purposes. The basins would be designed to capture the entire volume generated from a 100-year storm, meaning no runoff would be discharged off site (Appendix G-1).

Threshold C(II): substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

Less-than-Significant Impact. Construction of the proposed Project would alter the existing drainage patterns through the introduction of new impervious surfaces. However, as discussed above, the Project would maintain adequate stormwater conveyance through compliance with existing drainage control standards. As previously discussed, the Project site would be designed to convey runoff as sheet flows away from buildings, and allow on-site infiltration through the remaining landscaped pervious areas as well as the subsurface infiltration retention basins. The proposed drainage system would be designed in accordance with the 2013 Phase II Small MS4 Permit, which requires all new development projects covered by this Order to incorporate LID BMPs to the maximum extent practicable and includes limitations on peak storm flows that can be discharged from the site.

The Project-specific Preliminary Drainage Reports (Appendix G-1) include analysis of existing hydraulic conditions during peak storm events and proposed condition hydrologic analysis to determine whether the post-construction runoff would have any impact on receiving waterways (i.e., Oro Grande Wash, Mojave River). In accordance with the San Bernardino County Hydrology Manual, the rational method and unit hydrograph were used to calculate the 2-year, 10-year, 25-year, and 100-year, 24-hour storm peak discharges for the existing and Project conditions.¹

The stormwater drainage system basins would be sized and designed to prevent flooding from a 100-year storm. The basins would be designed to capture the entire volume generated from a 10-year storm, meaning no runoff would be discharged off site (Appendix G-1). In addition, for the 100-year peak runoff flow rates, the pre-development condition has a rate of 27.89 cubic feet per second and in the post-

¹ Note that the peak storm flows for the 25-year event are not calculated for the post-development condition as it does not factor into meeting the drainage control requirements.

development condition that rate would be reduced to 17.87. Therefore, the proposed drainage system has been sized and designed in accordance with the San Bernardino County Hydrology Manual, which requires the Project site to meet volume retention and flow attenuation rates in the post-developed condition to prevent adverse effects downstream of the project site. Once the required volume is retained, the flow rates from excess stormwater runoff would be attenuated by the weir structures within the above ground basins and discharged into the public right of way. Basin 1 would discharge onto Mesa Linda Street and Basin 2 would discharge onto Lassen Road. To comply with hydromodification requirements, the flow rates being discharged would not exceed more than five percent of the pre-development conditions for a 10-year storm as required in the San Bernardino County Hydrology Manual. In addition, for flood protection purposes, the flow rates for a 100-year storm would exceed no more than the predevelopment conditions for a 25-year storm. The results demonstrate that the proposed above ground retention basins for this project would comply with the flood protection requirements of the City of Hesperia and County of San Bernardino.

Therefore, because the Project improvements would be designed to meet and exceed the stormwater requirements set forth in the San Bernardino County Hydrology Manual, the Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site. Therefore, impacts associated with flooding on or off site would be less than significant.

Threshold C(III): create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less-than-Significant Impact. As previously discussed under Threshold A, the proposed drainage system would be designed to convey runoff in compliance with the City of Hesperia and the County of San Bernardino WQMP and SWMP requirements. In addition, the Project would incorporate LID features, including on-site infiltration/retention basins and ongoing maintenance requirements to ensure continued successful operation. Collectively, these LID features would lower the potential of the incidental releases of contaminants to the environment such as oil, grease, nutrients, heavy metals, and certain pesticides, including legacy pesticides. As a result, the Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, impacts associated with stormwater drainage systems capacity and polluted runoff sources would be less than significant.

Threshold C(IV): impede or redirect flood flows?

Less-than-Significant Impact. The Project site is located in Zone X, an area of minimal flood hazard per the FEMA FIRM panel 06071C6490H effective August 28, 2008. This area is higher in elevation than the 0.2% annual chance flood (i.e., 500-year flood). In addition, as previously discussed, although internal drainage patterns would be somewhat altered as a result of Project development, the Project would maintain adequate stormwater conveyance as to not result in an increase of surface runoff that would result in flooding on- or off-site associated with the 100-year, 24-hour storm event. Therefore, impacts associated with impeding or redirecting flood flows would be less than significant.

Threshold E: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less-than-Significant Impact. As previously discussed, the Project would comply with applicable water quality regulatory requirements, including implementation of a SWPPP, stormwater BMPs, and LID design, which would

minimize potential off-site surface water quality impacts and contribute to a reduction in water quality impacts within the overall Mojave River Watershed. In addition, through compliance with these regulatory requirements, the Project would reduce potential water quality impairment of surface waters such that existing and potential beneficial uses of key surface water drainages throughout the jurisdiction of the Mojave River Basin Plan Amendment of the Lahontan Basin Plan would not be adversely impacted. As a result, the Project would not conflict with or obstruct the Lahontan Basin Plan.

With respect to groundwater management, SGMA empowers local agencies to form GSAs to manage basins sustainably, and requires those GSAs to adopt Groundwater Sustainability Plans for crucial groundwater basins in California. No GSA has been established for the Upper Mojave River Valley Groundwater Basin, because it is not considered a medium or high priority basin. However, the basin is adjudicated, regulating the amount of groundwater extracted, reducing the potential for over-extraction. Further, the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge and would not conflict with or obstruct a water quality control plan or sustainable groundwater management plan. Therefore, impacts associated with water quality control plans and sustainable groundwater management plans would be less than significant.

Threshold F: Would the Project result in cumulatively considerable hydrological or water quality impacts?

Water Quality

Less-than-Significant Impact. The geographic context for the analysis of cumulative impacts associated with water quality is the encompassing Mojave River Watershed. Cumulative development in the watershed could add new sources of stormwater runoff. Construction activities associated with the Project could temporarily increase the number of exposed surfaces that could contribute to sediments in stormwater runoff. Additionally, materials associated with construction activities could be deposited on surfaces and carried to receiving waters in stormwater runoff. However, all cumulative development in the watersheds would be subject to the existing regulatory requirements to protect water quality and minimize increases in stormwater runoff. For example, Part 1, Section I of the Municipal NPDES Permit requires the City of Hesperia to effectively prohibit non-stormwater discharges from within its boundaries, into that portion of the MS4 that it owns or operates. Part 2, Section 1.E of the Municipal NPDES Permit requires the City to control discharges to and from municipal sewer systems, so as to comply with the Municipal NPDES permit and to specifically prohibit certain discharges identified in the Municipal NPDES Permit.

Every two years, the Lahontan RWQCB must re-evaluate water quality within its geographic region and identify those water bodies not meeting water quality standards. For those impaired water bodies, a TMDL must be prepared and implemented to reduce pollutant loads to levels that would not contribute to a violation of water quality standards. All developments within the Mojave River Watershed are subject to the water quality standards outlined in the Mojave River Basin Plan and must comply with any established TMDLs. The continuing review process would ensure that cumulative development within the watershed would not substantially degrade water quality.

The County and cities located within San Bernardino County are co-permittees under the San Bernardino County Municipal NPDES stormwater permit. The NPDES permit sets limits on pollutants being discharged into waterways and requires that the project designer and/or contractor of all new development projects that fall under specific project categories develop a WQMP that includes LID design requirements related to water quality. The LID design requirements would address long-term effects on water quality within the San Bernardino County watersheds and ensure that BMPs and LID designs minimize potential water quality concerns to the maximum extent practicable. Therefore, impacts associated with water quality standards and polluted runoff in the watersheds would be minimized, and the Project's contribution to cumulative impacts would be less than significant.

Water Supply

Less-than-Significant Impact. The development of the Project would increase water demand compared to existing conditions. The Project would be served by Hesperia Water District for which the 2020 UWMP estimated an annual water demand in 2025 of 15,250 acre-feet and 16,290 acre-feet by 2030. The UWMP states that Hesperia Water District and other water agencies in Southern California have planned provisions for regional water for the growing population, including drought scenarios for its service area. This plan includes a new water demand forecast prepared for the major categories of demand and uses regional population, demographic projections, the dry climate, historical water use to develop these forecasts. As such, the Project would not be expected to result in increased water usage causing the need for new entitlements, resources, and/or treatment facilities that are not already being planned to accommodate regional growth forecasts.

In addition, the 2020 UWMP and the WSA that was prepared for the proposed Project concluded that the total projected water supplies available to Hesperia Water District during normal, single-dry, and multiple-dry water years until 2045 will be sufficient to meet the projected water demands of the projected growth in the service area. These projections consider land use, water development programs and projects, and water conservation. For example, Hesperia Water District, in coordination with the VVWRA, plans on expanding the Hesperia Subregional Water Recycling Facility water treatment capacity from 1.0 million gallons per day (mgd) to 2.0 mgd by 2030 as well as build a second water recycling facility within the City that would be able to treat 2.6 mgd of wastewater by 2040. Additionally, the City plans to construct multiple recharge basins in cooperation with Mojave Water Agency to deliver and recharge State Water Project water into underlying groundwater basins within the Hesperia Water District's service area. Collectively, these additional programs would enable water supply to exceed water demand now and into the future. Therefore, due to water planning efforts and water conservation standards, impacts would be less than significant, and the Project's contribution to cumulative impacts would not be cumulatively considerable.

Stormwater Drainage

Less-than-Significant Impact. The geographic context for the analysis of cumulative impacts related to storm drainage is the Mojave River Watershed, which is moderately urbanized with impervious surfaces. Cumulative development within the County could potentially increase the number of impervious surfaces that could cause or contribute to storm drain system capacity exceedance or alter the existing stormwater flow rates that result in adverse effects downstream on a water quality or quantity basis. New development within the watershed would be subject to the environmental review process that would analyze potential impacts associated with stormwater runoff to the storm drain system. New development would be subject to the completion of drainage analyses to ensure that excessive on- or off-site flooding and runoff would not occur as was done for the proposed Project. The post-development condition of the Project would reduce peak storm flow rates and therefore could not contribute to a significant cumulative effect. Therefore, since all cumulative projects are required to adhere to these same existing regulatory drainage control measures, the potential cumulative impact would be less than significant.

4.8.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The Project would result in less-than-significant impacts associated with water quality standards and waste discharge requirements. No mitigation is required.

Threshold B: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

The Project would result in less-than-significant impacts with regard to decreasing groundwater supplies or impeding sustainable groundwater management of the basin. No mitigation is required.

Threshold C: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

Threshold C(I): result in substantial erosion or siltation on or off-site;

The Project would result in less-than-significant impacts related to erosion and siltation off-site.

Threshold C(II): substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

The Project would result in less-than-significant impacts with regard to increasing the rate or amount of surface runoff in a manner which would result in flooding on or off site. No mitigation is required.

Threshold C(III): create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

The Project would result in less-than-significant impacts with regard to creating or contributing runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. No mitigation is required.

Threshold C(IV): impede or redirect flood flows?

The Project would result in less-than-significant impacts with regard to impeding or redirecting flood flows. No mitigation is required.

Threshold E: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project would result in less-than-significant impacts with regard to conflicting or obstructing implementation of a water quality control plan or sustainable groundwater management plan. No mitigation is required.

Threshold F: Would the Project result in cumulatively considerable hydrological or water quality impacts?

The Project would result in less-than-significant cumulative impacts with regard to resulting in a cumulative considerable hydrology and water quality. No mitigation is required.

4.8.6 References Cited

- City of Hesperia. 2010a. *Draft Environmental Impact Report for the City of Hesperia General Plan Update*. Accessed June 2, 2022. <https://www.cityofhesperia.us/DocumentCenter/View/1588/Hesperia-2010-GPU-Draft-EIR-121610?bidId=>.
- City of Hesperia. 2010b. *City of Hesperia General Plan*. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.
- City of Hesperia. 2014. *Hesperia Main Street and Freeway Corridor Specific Plan*. Accessed January 29, 2020. <https://www.cityofhesperia.us/DocumentCenter/View/15940/MSFCSP-update>.
- City of Hesperia. 2017. *Hazard Mitigation Plan 2017 Plan Update*. Accessed January 8, 2020. <https://www.cityofhesperia.us/DocumentCenter/View/14830/2017-Hazard-Mitigation-Plan?bidId=>.
- County of San Bernardino. 2003. *Storm Water Management Program (SWMP) for the Mojave River Watershed*. Accessed June 2, 2022. <https://www.cityofhesperia.us/DocumentCenter/View/529/MojaveSWMPAug2003?bidId=>.
- County of San Bernardino. 2016. *Mojave River Watershed Technical Guidance Document for Water Quality Management Plans*. Accessed February 4, 2020. <https://www.cityofhesperia.us/DocumentCenter/View/15165/Technical-Guidance-for-WQMPPCMP>.
- DWR (California Department of Water Resources). 2004. *Upper Mojave River Valley Groundwater Basin*. Accessed June 2, 2022. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-B118-Basin-Descriptions/B118_2003_BasinDescription_6_042.pdf.
- DWR. 2013. *South Lahontan Hydrologic Region*. Accessed June 4, 2022. https://water.ca.gov/LegacyFiles/waterplan/docs/cwpu2013/Final/Vol2_SouthLahontanRR.pdf.
- DWR. 2019. *Sustainable Groundwater Management Act 2019 Basin Prioritization*. Accessed June 2, 2022. <https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization>.
- FEMA (Federal Emergency Management Agency). 2022. “FEMA Flood Map Service Center,” FIRM panel 0607106475H. Effective August 28, 2008. Accessed June 2, 2022 https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/j3edad29bc6d04bfa9e76bb7980f6396e/scratch/FIRMETTE_65b875e3-5c14-48e6-b86d-586048c4090a.pdf.
- Hesperia Water District. 2016. *2015 Urban Water Management Plan*. June 7, 2016.
- Hesperia Water District. 2021. *2020 Urban Water Management Plan*, August 3, 2021.

Lahontan RWQCB (Regional Water Quality Control Board, Lahontan Region). 2002. *Lahontan Regional Water Quality Control Board Watershed Management Initiative*.

Lahontan RWQCB. 2019. *Water Quality Control Plan for the Lahontan Region, North and South Basins*. Effective March 31, 1995; includes amendments effective August 1995 through October 29, 2019.

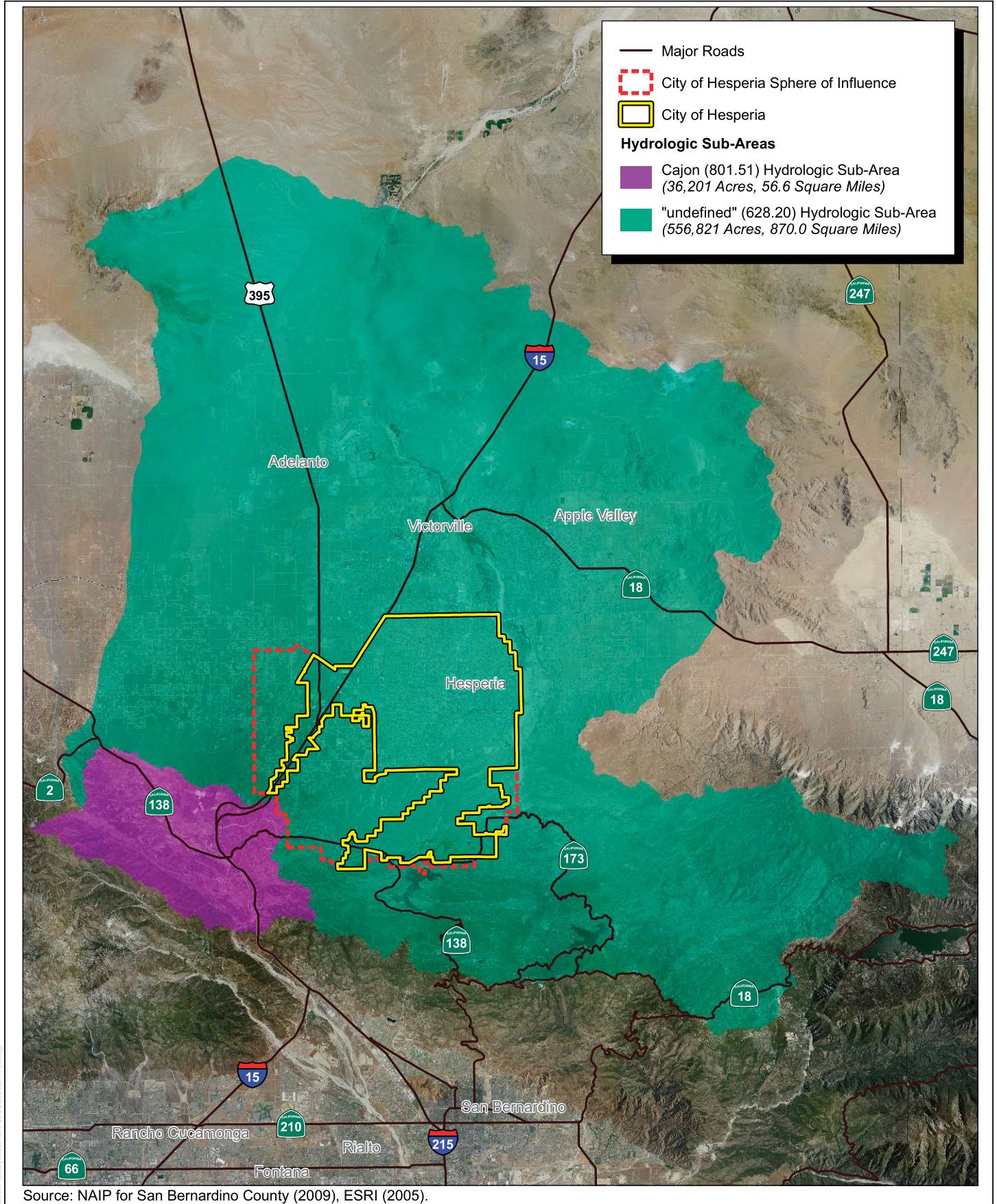
Lahontan RWQCB. 2019. *Mojave River Basin Plan Amendment*. Accessed June 2, 2022.

https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/mojave_river/mojave_bpa_final_20190621.pdf.

Mojave River Watershed Group. 2014. *Small Municipal Separate Storm Sewer System General Permit, Permit Year 1 Annual Report*. WDID Nos. 6B36M2000165, Town of Apple Valley; 6B36M2000180, City of Hesperia; 6B36M2000207, City of Victorville; and 6B36M2000166, County of San Bernardino. Prepared by CWE for the California Regional Water Quality Control Board, Lahontan Region. October 15, 2014. Accessed December 9, 2016. <http://www.mojaveriver.org/files/managed/Document/174/14-10-15%20MRWG%20Annual%20Report%20Final.pdf>.

SWRCB (Statewide Regional Control Board). 2018. *Category 5 2018 California 303(d) List of Water Quality Limited Segments*. Accessed June 2, 2022. https://www.waterboards.ca.gov/water_issues/programs/tmdl/2018state_ir_reports_final/apx_d_cat_reports/category5_report.shtml.

INTENTIONALLY LEFT BLANK



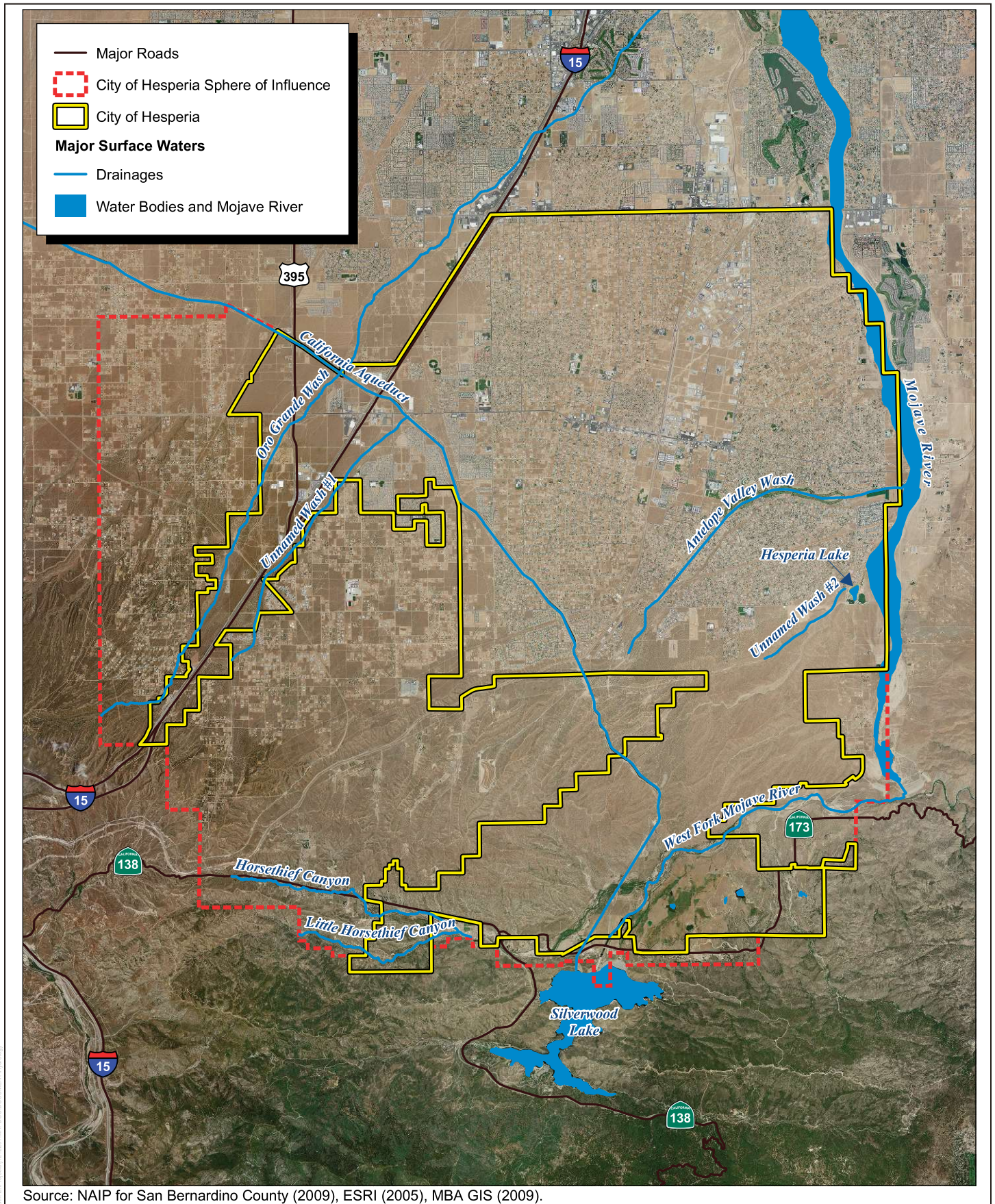
SOURCE: Michael Brandman Associates 2010

FIGURE 4.8-1

Hydrologic Sub-Areas

Poplar 18 Project

INTENTIONALLY LEFT BLANK



SOURCE: Michael Brandman Associates 2010

FIGURE 4.8-2

Major Surface Waters

Poplar 18 Project

INTENTIONALLY LEFT BLANK

4.9 Noise

This section describes the existing noise conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2 of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following source:

the following analysis is based, in part, on the following sources:

- Field Noise Data, prepared by Dudek in October 2022 (Appendix H-1)
- Construction Noise Modeling Data, prepared by Dudek in October 2022 (Appendix H-2)
- Traffic Noise Modeling Data, prepared by Dudek in October 2022 (Appendix H-3)
- On-Site Noise Modeling Data, prepared by Dudek in October 2022 (Appendix H-4)
- Transportation Attachments, prepared by Dudek in May 2022 (Appendix I)

4.9.1 Existing Conditions

Noise and Vibration Characteristics

Noise

Sound may be described in terms of level or amplitude (measured in decibels [dB]), frequency or pitch (measured in hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear. Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period (L_{eq}), the statistical sound level (L_n), the day-night average noise level (L_{dn}), and the community noise equivalent level (CNEL). Each of these descriptors uses units of dBA. Table 4.9-1 provides examples of A-weighted noise levels from common sounds. In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable; a change of 5 dB is clearly noticeable; and a change of 10 dB is perceived as doubling or halving of the sound level.

Table 4.9-1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
—	110	Rock band
Jet flyover at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—
Diesel truck at 15 meters (50 feet), at 80 kph (50 mph)	80	Food blender at 1 meter (3 feet) Garbage disposal at 1 meter (3 feet)

Table 4.9-1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Noisy urban area, daytime gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural night time	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013.

Notes: dBA = A-weighted decibels; kph = kilometers per hour; mph = miles per hour.

L_{eq} is a sound energy level averaged over a specified period (typically no less than 15 minutes for environmental studies). L_{eq} is a single numerical value that represents the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors (see below for definition of sensitive receptors). L_{max} is the greatest sound level measured during a designated time interval or event.

Unlike the L_{eq} metrics, L_{dn} and CNEL metrics always represent 24-hour periods, usually on an annualized basis. L_{dn} and CNEL also differ from L_{eq} because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). “Time weighted” refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dB. L_{dn} differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 dB to 1 dB, and as such are often treated as equivalent to one another.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

Several different methods are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square amplitude is most frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Vibration decibel notation (VdB) is commonly used to measure root mean square. VdB acts to compress the range of numbers required to describe vibration.

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise.

Sensitive receptors in the vicinity of the Project site include several tracts of single-family residential uses to the north (along the north side of Main Street), and two motels (i.e., transient residential uses) located to the north-northwest (also along the north side of Main Street). These sensitive receptors represent the nearest residential land uses with the potential to be impacted by construction and operation of the Project.

Existing Noise Conditions

Currently, the Project site is vacant and undeveloped, bound to the west by Lassen Road, to the east by Mesa Linda Street, and to the south by Poplar Street. It should be noted that Lassen Road has not yet been constructed but is a planned arterial road in the City's Circulation Element (City of Hesperia 2010). Thus, little to no noise is currently generated on site. However, the surrounding area is subject to traffic noise associated with adjacent roadways, including Main Street, Poplar Street, Cataba Road, Mesa Linda Road, U.S. Highway 395, and Interstate (I) 15, as well as noise from the adjacent industrial/commercial uses.

Noise measurements were conducted on and near the Project Site on January 5 and 6, 2021, to characterize the existing noise levels. The measurements were made using calibrated SoftdB Piccolo integrating sound level meters. The sound level meters meet the current American National Standards Institute standard for a Type 2 (general purpose) sound level meter. The accuracy of the sound level meters was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Three short-term noise measurement locations (ST) that represent existing sensitive receivers were selected near the Project site. These locations are depicted as receivers ST1–ST3 on Figure 4.9-1, Noise Measurement and Modeling Locations. The measured energy-averaged (L_{eq}) and maximum (L_{max}) noise levels are provided in Table 4.9-2. The primary noise sources at the measurement sites consisted of traffic along adjacent roadways;

distant conversation and nearby mechanical noise (air conditioning equipment) represented secondary noise sources. As shown in Table 4.9-2, the measured sound levels ranged from approximately 59 dBA L_{eq} at ST2 to 69 dBA L_{eq} at ST1. The field noise data sheets are provided in Appendix H.

Table 4.9-2. Measured Noise Levels

Receptors ¹	Location	Date	Time	L_{eq} (dBA)	L_{max} (dBA)
ST1 ²	North of Project site, adjacent to Main Street; south of Willow Creeks Estates Mobile Home Park (12550 Main Street)	1/5/2021	1:46 p.m. – 2:01 p.m.	68.5	83.8
ST2	North of Project site, adjacent to Main Street and West Main Villas housing tract (9800 Mesa Linda Street)	1/5/2021	2:19 p.m. – 2:34 p.m.	59.3	69.3
ST3	North-northwest of Project site, adjacent to Main Street and Motel 6 (9757 Catapa Road)	1/5/2021	3:13 p.m. – 3:29 p.m.	63.7	77.6

Source: Appendix H-1.

Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dBA = A-weighted decibels.

¹ Corresponds with Figure 4.9-1, Noise Measurement and Modeling Locations.

² ST1 was conducted on the Main Street side of the existing residential boundary wall surrounding the mobile home park, because access to the property could not be obtained. Noise levels on the other side of the approximately 6-foot high wall would be lower.

In addition, one long-term, unattended 24-hour noise measurement was taken from January 5–6, 2021. This measurement was intended to determine the existing noise levels in the Project vicinity near noise-sensitive land uses throughout a typical daytime/evening/nighttime cycle, resulting from traffic or from other sources. As shown in Table 4.9-3, the long-term hourly average noise levels ranged from approximately 54 dBA L_{eq} (from 2:00 a.m. to 3:00 a.m.) to approximately 63 dBA L_{eq} (from 7:00 a.m. to 8:00 a.m.). The 24-hour weighted average noise level at LT1 was approximately 65 dBA CNEL. The primary noise source was traffic on the local roadways.

Table 4.9-3. Measured Long-Term (LT1) Noise Levels January 5, 2021, to January 6, 2021

Time Interval	dBA L_{eq}
3:00 p.m. – 4:00 p.m.	58.5
4:00 p.m. – 5:00 p.m.	59.0
5:00 p.m. – 6:00 p.m.	58.1
6:00 p.m. – 7:00 p.m.	59.2
7:00 p.m. – 8:00 p.m.	59.7
8:00 p.m. – 9:00 p.m.	59.8
9:00 p.m. – 10:00 p.m.	59.5
10:00 p.m. – 11:00 p.m.	57.9
11:00 p.m. – 12:00 a.m.	56.9
12:00 a.m. – 1:00 a.m.	58.0
1:00 a.m. – 2:00 a.m.	55.7
2:00 a.m. – 3:00 a.m.	54.0
3:00 a.m. – 4:00 a.m.	57.8
4:00 a.m. – 5:00 a.m.	62.0
5:00 a.m. – 6:00 a.m.	59.3

Table 4.9-3. Measured Long-Term (LT1) Noise Levels January 5, 2021, to January 6, 2021

Time Interval	dBA L_{eq}
6:00 a.m. – 7:00 a.m.	58.5
7:00 a.m. – 8:00 a.m.	62.9
8:00 a.m. – 9:00 a.m.	56.8
9:00 a.m. – 10:00 a.m.	56.9
10:00 a.m. – 11:00 a.m.	56.8
11:00 a.m. – 12:00 p.m.	54.9
12:00 p.m. – 1:00 p.m.	57.4
1:00 p.m. – 2:00 p.m.	55.7
2:00 p.m. – 3:00 p.m.	61.3
Lowest Hourly Average Noise Level: 54 dBA L_{eq} at 2:00 a.m.	
Highest Hourly Average Noise Level: 63 dBA L_{eq} at 7:00 a.m.	
24-Hour Average Noise Level: 59 dBA L_{eq} 24-Hr)	
24-Hour Weighted-Average Noise Level: 65 dBA CNEL	

Source: Appendix H-1.

Notes: dBA = A-weighted decibel; L_{eq} = equivalent continuous sound level; CNEL = community equivalent noise level. The location of LT1 is depicted on Figure 4.9-1, Noise Measurement and Modeling Locations.

4.9.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal noise standards that would directly regulate noise during construction and operation of the Project. The following is provided because guidance summarized herein is used or pertains to the analyses for construction noise, as well as for analysis of what constitutes a substantial increase from transportation noise.

Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment Manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period (FTA 2018) when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a binding regulation, it is provided here for comparison purposes and to establish a quantitative threshold of significance for construction noise, in the absence of such limits at the state and local jurisdictional levels.

Federal Interagency Committee on Noise

In 1992 the Federal Interagency Committee on Noise (FICON) assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. Although the FICON recommendations were developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to roadway traffic, as detailed in Section 4.9.3, Thresholds of Significance.

State

Government Code Section 65302(g)

California Government Code Section 65302(g) requires the preparation of a Noise Element in a General Plan, which shall identify and appraise the noise problems in the community. The Noise Element shall also recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services and shall quantify, to the extent practicable, current and projected noise levels for the following sources:

- Highways and freeways
- Primary arterials and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Aviation and airport-related operations
- Local industrial plants
- Other ground stationary noise sources contributing to the community noise environment

California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research, provides guidance for the acceptability of specific land use types within areas of specific noise exposure. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. The guidelines are advisory in nature. Local jurisdictions, including the City of Hesperia, have the responsibility to set specific noise standards based on local conditions.

California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual, the California Department of Transportation (Caltrans) recommends a vibration velocity threshold of 0.2 inches per second (ips) PPV (Caltrans 2020) for assessing "annoying" vibration impacts to occupants of residential structures. Although this Caltrans guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the local jurisdictional level. Similarly, thresholds to assess building damage risk due to construction vibration vary with the type of structure and its fragility but tend to range between 0.3 ips and 0.4 ips PPV for typical residential structures (Caltrans 2020).

Local

City of Hesperia General Plan

Applicable policies and standards governing environmental noise in the City are contained in the City of Hesperia General Plan Noise Element (City of Hesperia 2010). The City's Noise Element specifies the maximum allowable unmitigated exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the Noise Element identifies goals and policies to minimize the impacts of excessive noise levels throughout the community and establishes noise level requirements for all land uses. To limit the exposure of City residents to excessive noise, the City of Hesperia General Plan Noise Element contains the following two goals:

NS-1. To achieve and maintain an environment which is free from excessive or harmful noise through identification, control, and abatement.

NS-2. To achieve and maintain an environment which is free from excessive vibration.

To satisfy goals NS-1 and NS-2, the City's Noise Element identifies the following implementation policies:

NS-1.2. Control and abate undesirable sounds through the use of the land use compatibility criteria shown in Exhibit NS-1, Table NS-3, and the Municipal Code Section 16.20.125(B).

NS-1.5. Require the design and construction of commercial, industrial, office and mixed-use structures developments with noise attenuation methods to minimize excessive noise upon noise-sensitive land uses.

NS-1.9. Encourage commercial, industrial, office and mixed-use developments to locate loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noisier components away from noise-sensitive land uses.

NS-1.10. Limit the hours of construction activity in, and around, residential areas in order to reduce the intrusion of noise in the early morning and late evening hours and on weekends and holidays.

NS-1.11. Limit delivery hours for businesses with loading areas or docks fronting, siding, or bordering or gaining access on driveways adjacent to noise-sensitive areas.

NS-1.12. Implement nighttime and daytime on-site noise level limits to address noise generated by commercial and industrial uses where it affects abutting residential and other noise-sensitive land uses.

The State of California's Land Use Compatibility Plan (Exhibit NS-1 in the City's General Plan Noise Element, provided here as Table 4.9-4) lists land use categories and the acceptable and unacceptable levels of community noise exposure. The compatibility criteria shown in Table 4.9-4 provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. According to these categories of transportation-related noise compatibility, industrial land uses such as the Project are considered normally acceptable with unmitigated exterior noise levels below 75 dBA CNEL and conditionally acceptable with noise levels between 70 dBA CNEL and 80 dBA CNEL. For conditionally acceptable land use, "new construction or development should be undertaken only after a detailed analysis of noise reduction requirements are made."

Table 4.9-4. City of Hesperia/State of California Land Use Compatibility Plan

Land Use Category	Community Noise Exposure (dBA CNEL)			
	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Clearly Unacceptable ⁴
Residential–Low Density Single Family, Duplex, Mobile Home	50–60	55–70	70–75	75–85
Residential–Multiple Family	50–65	60–70	70–75	75–85
Transient Lodging–Motels, Hotels	50–65	60–70	70–80	80–85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50–65	60–70	70–80	80–85
Amphitheater, Concert Hall, Auditorium, Meeting Hall	N/A	50–70	N/A	65–85

Table 4.9-4. City of Hesperia/State of California Land Use Compatibility Plan

Land Use Category	Community Noise Exposure (dBA CNEL)			
	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Clearly Unacceptable ⁴
Sports Arenas, Outdoor Spectator Sports	NA	50–75	N/A	70–85
Playgrounds, Neighborhood Parks	50–70	N/A	67.5–75	72.5–85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50–75	N/A	70–80	80–85
Office Buildings, Business Commercial and Professional	50–70	67.5–77.5	75–85	N/A
Industrial, Manufacturing, Utilities, Agriculture	50–75	70–80	75–85	N/A

Source: City of Hesperia 2010.

Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level; N/A = not applicable.

- ¹ Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- ² Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
- ³ Normally Unacceptable: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- ⁴ Clearly Unacceptable: New construction or development should generally not be undertaken.

City of Hesperia Municipal Code

To analyze noise impacts originating from a designated fixed location or private property such as the Project, stationary-source (operational) noise such as the expected mechanical equipment, loading dock activity, and parking lot noise are typically evaluated against standards established under a jurisdiction's Municipal Code.

Section 16.20.125 of the City of Hesperia Municipal Code establishes the noise level standards for stationary noise sources and establishes noise level limits for affected land uses. Since the Project land use will potentially impact a combination of non-noise-sensitive and noise sensitive uses in the Project study area, this noise study relies on the exterior noise level standards for all land uses identified by the City of Hesperia Municipal Code.

For non-noise sensitive industrial uses, the maximum exterior noise level shall not exceed 70 dBA L_{eq} at any time, while the maximum exterior noise level at non-noise sensitive commercial uses shall not exceed 65 dBA L_{eq} at any time. For noise sensitive residential properties, the maximum exterior noise level shall not exceed 60 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and 55 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.). In addition, except for the nighttime hours from 10:00 p.m. to 7:00 a.m.) the maximum permissible noise levels due to wind noise may be adjusted so that it is no greater than 5 dBA above the ambient noise level.

Based upon Section 16.20.125 subsection E(3), construction activities are exempt from the noise standards provided they take place between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, and not on Sundays or federal holidays.

Section 16.20.130 of the City's Municipal Code identifies an operational vibration level threshold of 0.2 ips PPV, which is used in this report to evaluate potential impacts due to on-site Project-related operational vibration level activities at nearby receiver locations. According to Section 16.20.130.C.2, temporary construction, maintenance, or demolition activities are considered exempt provided that construction vibration activity is limited to the hours between 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, and not on Sundays or federal holidays.

4.9.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to noise are based on California Environmental Quality Act (CEQA) Appendix G. According to CEQA Guidelines Appendix G, a significant impact related to noise would occur if the Project would:

- A. Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- B. Result in generation of excessive groundborne vibration or groundborne noise levels.
- C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels.
- D. Result in cumulatively considerable noise impacts.

Quantitative thresholds of significance have been established for the purposes of this analysis based on the local policies and regulations described in Section 4.9-2 as well as those of federal agencies and are listed below.

- **Construction Noise:** In the absence of quantifiable local regulations for construction noise, this analysis is based on the FTA's guidance for maximum noise during construction. During construction activities, an exceedance of the FTA's 80 dBA L_{eq} 8-hour threshold is considered a significant noise impact.
- **Traffic Noise:** Guidance regarding the determination of a substantial permanent increase in transportation noise levels in the Project vicinity above existing levels is provided by the 1992 findings of FICON, which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn} (and, by extension, CNEL¹). The changes in noise exposure that are shown in Table 4.9-5 are expected to result in equal changes in annoyance at sensitive land uses. Although the FICON recommendations were specifically developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to all transportation noise sources.²

¹ As discussed in Section 4.9-1, the L_{dn} and CNEL noise metrics are very similar and often used interchangeably.

² Traffic noise and other transportation noise sources are similar to aircraft/airport noise in that all of these noise sources can and do operate throughout the daytime and nighttime hours. The FICON recommendations use a weighted 24-hour noise metric, in which noise occurring during nighttime hours has a penalty applied to account for the increased sensitivity of persons to noise at night. Additionally, the graduated levels of the FICON guidance for substantial increase account for the diminishing tolerance of

Table 4.9-5. Measures of Substantial Increase for Transportation Noise Sources

Ambient Noise Level Without Project ($L_{dn}/CNEL$)	Significant Impact Assumed to Occur if the Project Increases Ambient Noise Levels by:
<60 dBA	+ 5 dB or more
60–65 dBA	+ 3 dB or more
>65 dBA	+ 2 dB or more

Source: FICON 1992.

Notes: L_{dn} = day–night average noise level; CNEL = community noise equivalent level; dBA = A-weighted decibel; dB = decibel.

- **On-Site Project-Attributed Stationary Noise:** A noise impact would be considered significant if noise from typical operation of heating, ventilation, and air conditioning (HVAC) and other electromechanical systems or other on-site operational noise associated with the Project (such as parking lot and loading dock activities noise) if the applicable City Municipal Code standards are exceeded as detailed in Section 4.9.2.
- **Construction Vibration:** Groundborne vibration from construction and operation of the Project would be considered significant if the Project resulted in vibration levels exceeding the Caltrans recommendations (for construction) or the City's Municipal Code (for operation), as detailed in Section 4.9.2.

4.9.4 Impacts Analysis

Threshold A: *Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Short-Term Construction Impacts

Less-than-Significant Impact. Construction activities would take place during permitted hours (between 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays), and would not occur on Sundays or federal holidays as specified in the City of Hesperia Municipal Code. Construction of the Project would generate noise that could expose nearby receptors to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction, distance between the noise source and receiver, and intervening structures. The following discussion addresses the noise levels estimated to result from construction of the Project at nearby sensitive receptors (i.e., residences).

Construction – Equipment Inventory

Consistent with the Project's air quality/greenhouse gas analyses, the California Emissions Estimator Model (CalEEMod) was used to identify the construction equipment anticipated for development of the Project. Based on this information, CalEEMod identified the anticipated equipment for each phase of Project construction, listed in Table 4.9-6.

the typical person to noise increases as ambient noise levels are increased. Such is the case whether the dominant noise source is aircraft, or some other transportation source.

Table 4.9-6. Construction Equipment by Phase

Construction Phase	Equipment	
	Equipment Type	Quantity
Site Preparation	Rubber-tired dozers	1
	Tractors/loaders/backhoes	1
Grading	Excavators	2
	Graders	1
	Rubber-tired dozers	1
	Scrapers	2
	Tractors/loaders/backhoes	2
Building Construction	Cranes	1
	Forklifts	3
	Generator sets	1
	Tractors/loaders/backhoes	3
	Welders	1
Paving	Pavers	2
	Paving equipment	2
	Rollers	2
Architectural Coating	Air compressors	1

Source: Table 4.2-5 (Section 4.2, Air Quality).

Construction Noise – Project Site Assessment

With the construction equipment noise sources identified in Table 4.9-6, a noise analysis was performed using the Federal Highway Administration's Roadway Construction Noise Model (RCNM) (FHWA 2008). Input variables for RCNM consist of the receiver/land use types, the equipment type (e.g., backhoe, grader, scraper), the number of equipment pieces, the duty cycle for each piece of equipment (i.e., percentage of time the equipment typically works in a given time period), and the distance from the noise-sensitive receiver to the construction zone. The RCNM has default duty cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty cycle values were utilized for this analysis. Refer to Appendix H-2 for the inputs used in the RCNM model and the detailed results.

Sensitive receptors in the vicinity of the Project site include residential uses to the north, and two motels (i.e., transient residential uses) located to the north-northwest. These sensitive receptors represent the nearest residential land uses with the potential to be impacted by construction and operation of the Project. Non-sensitive land uses (commercial and industrial) exist in proximity to the Project site, and construction noise levels at these receptors were also estimated for informational purposes. Project construction would take place both near and far from existing land uses. For example, construction would take place as near as approximately 3,500 feet from residential land uses north of the Project boundary, but (because of the Project's size) construction work for Building 1 would also take place as far as 4,000 feet from the same residential uses. Most construction activities associated with the Project would occur at an average distance of approximately 3,700 feet from the residential uses to the north, which represents activities both near and far, as is typical for construction projects. Similarly, the construction noise estimates for the other modeled receptors in the Project vicinity were calculated for both the nearest construction activity/receiver distances and for typical construction activity/receiver distances.

The results of the Project site construction noise analysis using the RCNM are summarized in Table 4.9-7. As shown, the noise levels from construction are predicted to range from approximately 37 dBA $L_{eq\ 8-hr}$ (during the architectural coating phase) to 51 dBA $L_{eq\ 8-hr}$ (during the grading phase) at the nearest noise-sensitive receivers (single family residences approximately 3, 500 feet from the nearest construction work). Typical construction noise levels would be lower. Construction noise levels at the other noise-sensitive receivers would be slightly lower as well. These noise levels would be less than measured ambient noise levels in the area and would be lower than the 80 dBA $L_{eq\ 8-hr}$ FTA construction noise standard. Therefore, noise from Project site construction would be less than significant. No noise mitigation is necessary.

Estimated construction noise levels for the non-noise sensitive receivers are also provided in Table 4.9-7 for informational purposes. As shown, at the nearest existing land use (commercial uses to the southwest of the Project site), noise levels would range from approximately 58 dBA $L_{eq\ 8-hr}$ (during the architectural coating phase) to 71 dBA $L_{eq\ 8-hr}$ (during the grading phase) when construction occurs at and near the Project boundary. More typically, construction noise levels would be lower, ranging from approximately 49 dBA $L_{eq\ 8-hr}$ (during the architectural coating phase) to 63 dBA $L_{eq\ 8-hr}$ (during the grading phase) at the nearest existing land use.

Table 4.9-7. On-Site Construction Noise Analysis Summary

Land Use	Off-Site Receptor Location	Distance from Construction Activity to Noise Receptor (feet)	Estimated Construction Noise Levels (dBA L_{eq} 8-hr)					Applicable Noise Standard ¹	Applicable Noise Standard Exceeded?
			Site Preparation	Grading	Building Construction	Paving	Architectural Coating		
Residential	North of the Project	Nearest Construction Activity/Receiver Distance (3,550)	42	51	46	44	37	80	No
		Typical Construction Activity/Receiver Distance (3,850)	42	50	46	44	36	80	No
Residential	North of the Project	Nearest Construction Activity/Receiver Distance (3,500)	43	51	46	45	37	80	No
		Typical Construction Activity/Receiver Distance (3,700)	42	51	46	44	37	80	No
Transient Residential (Motel)	North of the Project	Nearest Construction Activity/Receiver Distance (4,000)	41	50	45	43	36	80	No
		Typical Construction Activity/Receiver Distance (4,500)	40	49	44	43	35	80	No
Commercial	Northeast of the Project	Nearest Construction Activity/Receiver Distance (2,050)	47	55	50	49	42	n/a	n/a

Table 4.9-7. On-Site Construction Noise Analysis Summary

Land Use	Off-Site Receptor Location	Distance from Construction Activity to Noise Receptor (feet)	Estimated Construction Noise Levels (dBA L_{eq} 8-hr)					Applicable Noise Standard ¹	Applicable Noise Standard Exceeded?
			Site Preparation	Grading	Building Construction	Paving	Architectural Coating		
		Typical Construction Activity/Receiver Distance (2,700)	45	53	49	47	39	n/a	n/a
Commercial	Southwest of the Project	Nearest Construction Activity/Receiver Distance (250)	65	71	66	65	58	n/a	n/a
		Typical Construction Activity/Receiver Distance (900)	54	63	58	57	49	n/a	n/a
Industrial	Southwest of the Project	Nearest Construction Activity/Receiver Distance (1,150)	52	60	55	54	46	n/a	n/a
		Typical Construction Activity/Receiver Distance (1,800)	48	57	52	51	43	n/a	n/a
Commercial	North of the Project	Nearest Construction Activity/Receiver Distance (3,000)	44	52	47	46	38	n/a	n/a
		Typical Construction Activity/Receiver Distance (3,350)	43	51	47	45	37	n/a	n/a

Source: Appendix H-2.

Note: dBA = A-weighted decibel; L_{eq} = equivalent continuous sound level (time-averaged sound level).

¹ Applicable noise standard per Federal Transit Administration guidance, as discussed in Section 4.9.2.

Construction Noise – Off-Site Street and Utilities Assessment

As shown in Figure 3-12 (Detailed Site Plan), provided in EIR Chapter 3, the Project would include off-site street and utilities construction activities. Similar to the noise assessment for on-site construction work as summarized above, the resulting noise from off-site construction activities was assessed using the RCNM. The nearest noise-sensitive receivers to the off-site construction activities (and thus the receivers the most affected) would be the residences north of Main Street, during utilities installation within the Main Street alignment, specifically the residences adjacent to measurement location ST1. Noise levels at other locations would be lower because they would be further from the construction work. Utilities installation would occur during the building construction phase. The building construction scenario includes several pieces of equipment, but only a few pieces would be necessary for the utilities installation. Equipment that is anticipated to be used for utility installation includes a backhoe, a forklift, a generator, a crane, and a welder. Because of the linear nature of the work, the amount of time that construction work would occur adjacent to any one noise-sensitive receiver would generally be relatively short (typically, one to two days for open-trench pipeline installation). The resulting noise levels are summarized in Table 4.9-8. As shown, the worst-case noise level from utilities installation is estimated to be approximately 68 dBA L_{eq} 8-hr at the nearest noise-sensitive receivers (single-family residences approximately 130 feet from the nearest construction work). The levels shown in Table 4.9-8 do not include the additional noise reduction that would be provided by the existing property boundary wall at the residences represented by ST1. The wall would reduce the noise level from construction noise by a minimum of 5 decibels³; thus, received construction noise at the nearest residences would be approximately 63 dBA L_{eq} 8-hr or less.

Typically, utilities installation would take place further away (an average distance of approximately 2,000 feet from the residences to the north) and thus construction noise levels would be substantially lower at approximately 46 dBA L_{eq} 8-hr. These noise levels would be lower than the 80 dBA L_{eq} 8-hr FTA construction noise standard. Also, other off-site Project components (such as roadway construction) would be considerably further from noise-sensitive receivers and thus the associated noise levels would be lower than shown in Table 4.9-8.

Therefore, noise impacts from off-site construction activities would be less than significant. No noise mitigation is necessary.

Table 4.9-8. Off-Site Construction Noise Analysis Summary

Off-site Receptor Location	Distance from Construction Activity to Noise Receptor (feet)	Estimated Construction Noise Levels (dBA L_{eq} 8-hr)	Applicable Noise Standard ¹	Applicable Noise Standard Exceeded?
		Utilities Installation		
North of the Project	Nearest Construction Activity/ Receiver Distance (130)	68	80	No
	Typical Construction Activity/ Receiver Distance (2,000)	46	80	No

Source: Appendix H-2.

Note: dBA = A-weighted decibel; L_{eq} 8-hr = equivalent continuous sound level (time-averaged sound level).

¹ Applicable noise standard per Federal Transit Administration guidance, as discussed in Section 4.9.2.

³ Based upon the fundamentals of sound and noise barrier mechanics, a solid barrier that just barely breaks the direct path between source and receiver will achieve a noise reduction of approximately 5 decibels (Caltrans 2013). The existing 6-foot high residential property line barriers at the residential uses to the north are anticipated to break the line of sight between the residences and the off-site construction work.

Construction Noise – Project-Related Construction Vehicles (On-Road)

Based upon the construction scenario assumptions from Table 4.2-5 (in the Air Quality section), during construction the highest average daily number of one-way worker trips would be 328 (i.e., 164 round trips), occurring during the building construction phase. The highest average daily number of vendor one-way trips would be 128 (64 round trips), also occurring during building construction; and there would be no haul truck trips. Project-related trucks would be restricted to the City-authorized truck routes, and (like the project sites) would be relatively far from residential or other noise-sensitive areas. It is anticipated that most of the construction-related trips in the Project vicinity would occur on U.S. Highway 395. Based upon Table 3.15-4 of the Hesperia General Plan Update's Draft EIR transportation section (City of Hesperia 2010), U.S. Highway 395 has an average daily traffic volume of 19,446. The incremental increase in local traffic from the project would be approximately 2%. Based upon the fundamentals of acoustics, a doubling (a 100% increase) would be needed to result in a 3 dB increase in noise levels, which is the level corresponding to an audible change to the typical human listener (Caltrans 2013a). The resultant traffic noise increase would be much less than 1 dB, and thus would not result in an audible change on an hourly or daily basis.

Therefore, noise related to project-related construction vehicles on local roadways would not result in new significant impacts. No additional mitigation measures are required.

Long-Term Operational Impacts

Traffic Noise

Less-than-Significant Impact. The Project has the potential to result in significant noise impacts from Project-related traffic at nearby noise-sensitive land uses. Based on information consistent with the assumptions in the EIR's transportation analysis (Appendix I), the Project would generate 1,281 daily trips. During the AM peak-hour, implementation of the Project would result in a total of 84 passenger vehicles and 24 trucks. During the PM peak-hour, implementation of the Project would result in a total of 74 passenger vehicles and 21 trucks. All truck trips would access and exit the Project site to the west, via Poplar Street to U.S. Highway 395, where the majority of the truck trips would enter and leave the Project area from and to the south via U.S. Highway 395 and the I-15 on- and off-ramps. No trucks would utilize Main Street, north of the Project site, or other local streets not designated as truck routes.

Potential noise effects from vehicular traffic were assessed using the Federal Highway Administration's Traffic Noise Model Version 2.5 (FHWA 2004). Information used in the model included the Existing, Existing plus Project, Year 2040, and Year 2040 plus Project traffic volumes. Noise levels were modeled at representative noise-sensitive receivers (i.e., the nearest residences and transient residences (i.e., motels) located to the north of the Project site) as well as at adjacent commercial and industrial uses for informational purposes. The receivers were modeled to be 5 feet above the local ground elevation. The measured and modeled receiver locations are shown in Figure 4.9-1.

The information provided from this modeling, along with the results from ambient noise survey measurements, was compared to the noise impact significance criteria to assess whether Project-related traffic noise would cause a significant impact and, if so, where these impacts would occur. The results of the comparisons for the off-site noise-sensitive land uses are presented in Table 4.9-9. The input and output files for the Traffic Noise Model are provided in Appendix H-3.

Table 4.9-9. Summary of Off-Site Existing and Future (Year 2040) Traffic Noise Levels (dBA CNEL)

Modeled Receptor	Existing	Existing plus Project	Future (Year 2040)	Future (Year 2040) plus Project	Maximum Project-Related Noise Level Increase (dB)	Applicable Noise Standard ¹	Applicable Noise Standard Exceeded?
ST1 ² North of Project site, adjacent to Main Street, south of Willow Creeks Estates Mobile Home Park (outside of existing property boundary wall)	71	71	73	73	0	N/A	N/A
ST2 North of Project site, adjacent to Main Street and West Main Villas housing tract	62	62	64	64	0	70	No
ST3 North-northwest of Project site, adjacent to Main Street and Motel 6	66	66	68	68	0	70	No
M1 East of Project site, adjacent to Cataba Road and nearest adjacent commercial use	73	73	73	73	0	77.5	No
M2 South of Project site, adjacent to Poplar Street and nearest adjacent commercial use	60	62	69	69	2	77.5	No
M3 South of Project site, adjacent to U.S. Highway 395 and nearest industrial use along U.S. Highway 395	72	73	76	76	1	80	No

Table 4.9-9. Summary of Off-Site Existing and Future (Year 2040) Traffic Noise Levels (dBA CNEL)

Modeled Receptor	Existing	Existing plus Project	Future (Year 2040)	Future (Year 2040) plus Project	Maximum Project-Related Noise Level Increase (dB)	Applicable Noise Standard ¹	Applicable Noise Standard Exceeded?
M4 North of Project site, at Willow Creeks Estates Mobile Home Park (north of existing property boundary wall)	63	63	65	65	0	70	No

Source: Appendix H-3.

Note: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel; N/A = not applicable.

Traffic noise levels are rounded to the nearest whole numbers.

Modeled CNEL traffic noise levels shown represent the provided peak-traffic hour volumes plus 2 dB, consistent with the results of the long-term noise measurement data LT-1, shown in Table 4.9-3.

¹ Applicable noise standard per City of Hesperia General Plan Noise Element compatibility standards, shown in Table 4.9-4.

² Measurement location ST1 was conducted on the south side (i.e., the side with a direct exposure to Main Street) of the existing residential boundary wall surrounding the mobile home park, because access to the property could not be obtained. Noise levels on the north side of the approximately 6-foot-high wall would be lower. Modeled receiver M4 represents the mobile home park residents located on the north side of the wall.

As Table 4.9-9 shows, the Project would increase the traffic noise levels along the nearby arterial roadways by 0 to 2 dB (when rounded to whole numbers). A change (either an increase or a decrease) of 2 dB or less is not a readily audible change in the context of community noise (i.e., outside of a controlled test environment). Furthermore, as shown in Table 4.9-9, the Project would not cause noise levels to exceed applicable City noise standards. The Project is not anticipated to result in significant traffic noise increases or cause an exceedance of applicable traffic noise standards. Therefore, impacts associated with off-site traffic noise would be less than significant.

On-Site Operational Noise

Less-than-Significant Impact. The implementation of the Project would result in changes to existing noise levels on the Project site by developing new stationary sources of noise, including introduction of outdoor HVAC equipment, and vehicle parking lot and truck loading dock activities. These sources may affect noise-sensitive vicinity land uses off the Project site. The following analysis evaluates noise from exterior mechanical equipment and activities associated with vehicle parking lots and truck loading docks. The analysis is based on in-house spreadsheets, which incorporate standard industry calculations for the sum of noise from multiple sources, outdoor attenuation with distance from the noise source(s), and attenuation from barrier placement between source(s) and receiver(s), as provided in Appendix H-4.

Outdoor Mechanical Equipment

The proposed warehouse space overall would not be served by heating or air conditioning equipment. However, the floor plan includes an office space at each corner of the building. Office space within the building would total approximately 20,000 square feet. Based on information provided by the Project Applicant, it is anticipated that the office space would be equipped with single-packaged rooftop HVAC units with air-handling capacity of 20 to 60 nominal tons. For the analysis of noise from HVAC equipment operation, a Carrier WeatherMaker A HVAC unit was used as a reference.

Noise level data provided by the manufacturer was used to determine the noise levels which would be generated by the HVAC equipment. The Carrier WeatherMaker A package HVAC unit has a sound level rating of 77 dBA at 10 feet (Carrier Corporation 2019). Based on the warehouse/office roof design provided, there would be a 6-foot-high parapet extending along the perimeter of the office roof.

The combined noise levels from the HVAC equipment at the Project property lines, the nearest adjacent land uses, and the nearest residential uses were calculated and are presented in Table 4.9-10. As shown, the maximum hourly noise level (assuming the equipment would run continuously) for the HVAC equipment operating at each examined location would range from approximately 26 dBA L_{eq} at the residential uses to the north to 43 dBA L_{eq} at the Project's western, and eastern property boundaries. These levels are less than the City's Municipal Code noise standards and are well below the measured ambient noise levels in the Project area. The results of the mechanical equipment operations noise analysis indicate that the Project would comply with the City of Hesperia Municipal Code noise ordinance. Mechanical equipment operation would result in noise at the Project site property boundaries/nearest noise-sensitive receiver boundaries that are less than the applicable noise standards and are thus less than significant.

Table 4.9-10. Mechanical Equipment (HVAC) Noise

Equipment	Noise Level at Specified Location		Applicable Noise Standard ¹ (dBA L_{eq})	Applicable Noise Standard Exceeded?
	Location	Average Noise Level (dBA L_{eq})		
HVAC	Northern Property Line	40	70	No
HVAC	Eastern Property Line	43	70	No
HVAC	Western Property Line	43	70	No
HVAC	Southern Property Line	41	70	No
HVAC	Commercial Use to the East	30	65	No
HVAC	Commercial Use to the South	37	65	No
HVAC	Industrial use to the South	32	70	No
HVAC	Commercial Use to North	27	65	No
HVAC	Residential Uses to the North	26	55	No

Source: Appendix H-4.

Notes: HVAC = heating, ventilation, and air conditioning; dBA = A-weighted decibel; L_{eq} = equivalent continuous sound level (time-averaged sound level).

¹ Applicable noise standard per City of Hesperia Municipal Code Section 16.20.125, as described in Section 4.9.2.

Parking Lot Activity

A comprehensive study of noise levels associated with surface parking lots was published in the Journal of Environmental Engineering and Landscape Management (Baltrėnas et al. 2004). The study found that average noise levels during the peak period of use of the parking lot (generally in the morning with arrival of commuters, and in the evening with the departure of commuters), was 47 dBA at 1 meter (3.28 feet) from the outside

boundary of the parking lot. The parking area would function as a point source for noise, which means that noise would attenuate at a rate of 6 dB with each doubling of distance. The nearest employee parking lot to the noise-sensitive receivers (residences to the north) is proposed to be situated on the east and west sides of the building, approximately 3,650 feet from the residential property boundary. At a distance of 3,650 feet, parking lot noise levels would be approximately zero (0) dBA and would not be audible.

Truck Loading Dock / Truck Yard Activity

The parking lot study (Baltrėnas et al. 2004) also examined noise levels associated with cargo truck delivery activity. The study concluded that average noise levels from truck loading/unloading areas was 96 dBA at 1 meter (3.28 feet) from the boundary of the truck activity area. Truck loading docks would be located not closer than 3,600 feet from the nearest noise-sensitive receivers (residences to the north). Using the outdoor attenuation rate of 6 dBA with each doubling of distance, truck loading activity at residences to the north would produce noise levels of approximately 35 dBA L_{eq} . Thus, the loading dock noise at the nearest residences would be well below the City of Hesperia's residential exposure limits of 60 dBA L_{eq} daytime (7:00 a.m. to 10:00 p.m.) and 55 dBA L_{eq} nighttime (10:00 p.m. to 7:00 a.m.).

In summary, the Project would have operational noise levels less than the applicable noise standards. Consequently, operational noise impacts would be less than significant.

Threshold B: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

Less-than-Significant Impact. During operation, no major sources of groundborne vibration are anticipated. Construction activities that might expose persons to excessive groundborne vibration or groundborne noise could cause a potentially significant impact. Groundborne vibration information related to construction activities (including demolition) has been collected by Caltrans (Caltrans 2020). Information from Caltrans indicates that continuous vibrations with a PPV of approximately 0.1 ips begin to annoy people. The heavier pieces of construction equipment, such as bulldozers, would have PPVs of approximately 0.089 ips or less at a distance of 25 feet (FTA 2018). Groundborne vibration is typically attenuated over short distances. At the distance from the nearest vibration-sensitive receivers (residences located to the north) to where construction activity would be occurring on the Project site (approximately 3,500 feet), and with the anticipated construction equipment, the PPV vibration level would be approximately 0.0001 ips. At the closest sensitive receptors, vibration levels would be well below the vibration threshold of potential annoyance of 0.1 ips; therefore, impacts associated with vibration-generated annoyance would be less than significant.

The major concern with regards to construction vibration is related to building damage, which typically occurs at vibration levels of 0.5 ips or greater for buildings of reinforced-concrete, steel, or timber construction. As discussed above, the highest anticipated vibration levels at vibration-sensitive uses from with on-site Project construction would be approximately 0.0001 ips, which would be well below the threshold of 0.5 ips for building damage. Therefore, impacts associated with vibration-produced damage would be less than significant.

Threshold C: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels.

No Impact. The Project site is not located within the vicinity of a private airstrip. Additionally, the closest public airport to the Project site is the Hesperia Airport, which is located approximately 5 miles southeast of the Project

site. According to the San Bernardino County Airport Land Use Commission, the Project is not located within the airport land use plan for this or other nearby airports (San Bernardino ALUC 1991). Therefore, no impacts associated with airport and aircraft noise would occur.

Threshold D: Would the Project result in cumulatively considerable noise impacts?

Less-than-Significant Impact. The cumulative context for traffic noise is the traffic volume increases on roadways within Hesperia as a result of buildout of the City's 2010 General Plan and the anticipated increase in traffic volumes along these roadways. The Project transportation analysis considered the addition of traffic trips from cumulative projects as identified by the City.

Non-transportation noise sources (e.g., Project operation) and construction noise impacts are typically project-specific and highly localized (i.e., these do not generally affect the community noise level at distances beyond several hundred feet). Construction activities associated with proposed or future development within the area would contribute to cumulative noise levels, but in a geographically limited and temporary manner. As other development occurs in the area, noise from different types of uses (e.g., traffic, aircraft, and fixed noise sources) would continue to combine, albeit on a localized basis, to cause increases in overall background noise conditions within the area. As a result, such sources do not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

The analysis of off-site Project-related traffic noise levels included an evaluation of traffic volumes and resulting roadway traffic noise levels from cumulative (i.e., Year 2040) projects. Table 4.9-9 shows that the maximum noise level increase for the Year 2040 versus Year 2040 plus Project scenario would be 2 dB or less at every studied road segment. A change (either an increase or a decrease) of 2 dB or less is not a readily audible change in the context of community noise (i.e., outside of a controlled test environment). Furthermore, as shown in Table 4.9-9, the Project would not cause noise levels to exceed applicable City noise standards. Because the existing and planned future land uses along this roadway are commercial and industrial and thus not noise-sensitive, noise impacts would be less than significant. Traffic noise would not be cumulatively considerable.

4.9.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Short-Term Construction Impacts

The Project would result in less-than-significant impacts with regard to short-term construction noise. No mitigation is required.

Long-Term Operational Impacts

The Project would result in less-than-significant on-site operational impacts as well as less-than-significant off-site operational traffic noise impacts. As such, no mitigation is required.

Threshold B: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

The Project would result in **less-than-significant impacts** with regard to groundborne vibration and groundborne noise levels. No mitigation is required.

Threshold C: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels.

The Project would result in **no impact** with regard to excessive airport noise levels. No mitigation is required.

Threshold D: Would the Project result in cumulatively considerable noise impacts?

The Project **would not result** in cumulatively considerable noise or vibration impacts. As such, no mitigation is required.

4.9.6 References Cited

- Baltrėnas, P., D. Kazlauskas, and E. Petraitis. 2004. "Testing on Noise Levels Prevailing at Motor Vehicle Parking Lots and Numeral Simulation of its Dispersion." *Journal of Environmental Engineering and Landscape Management* 12 (2): 63–70.
- Caltrans (California Department of Transportation). 2013. *Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol*. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. September 2013.
- Caltrans. 2020. *Transportation and Construction Vibration Guidance Manual*. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. Sacramento, California. April 2020.
- Carrier Corporation. 2020. Product Data, Weathermaker Packaged Rooftop Units, 20 to 60 Nominal Tons.
- City of Hesperia Municipal Code. Section 16.20.125; Section 16.20.130.
- City of Hesperia. 2010. *City of Hesperia General Plan Update*. Accessed October 18, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.
- FHWA (Federal Highway Administration). 2004. FHWA Traffic Noise Model, Version 2.5. Office of Environment and Planning. February 2004.
- FHWA. 2008. Roadway Construction Noise Model (RCNM), Software Version 1.1. U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division. December 2008.
- FICON (Federal Interagency Committee on Noise). 1992. *Federal Agency Review of Selected Airport Noise Analysis Issues*. August 1992. Accessed October 21, 2021. https://fican1.files.wordpress.com/2015/10/reports_noise_analysis.pdf.

FTA (U.S. Department of Transportation, Federal Transit Administration). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

San Bernardino ALUC (San Bernardino County Airport Land Use Commission). 1991. *Comprehensive Land Use Plan for Hesperia Airport*. Adopted January 1991. Accessed August 2020. <http://www.sbcounty.gov/Uploads/lus/Airports/Hesperia.pdf>.

INTENTIONALLY LEFT BLANK

4.10 Transportation

This section describes the existing transportation conditions of the Project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, cumulative impacts, and identifies mitigation measures related to implementation of the proposed Project. This section analyzes the potential impacts of the Project based on the California Environmental Quality Act (CEQA) Guidelines Section 15064.3(b), which focuses on newly adopted criteria (vehicle miles traveled [VMT]) for determining the significance of transportation impacts. Pursuant to Senate Bill (SB) 743, the focus of transportation analysis changed from level of service (LOS) or vehicle delay to VMT. The related updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. This new methodology was required to be used statewide beginning July 1, 2020.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2, Introduction, of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following source, which is found in Appendix I of this Draft EIR:

- Poplar 18 Transportation Impact Analysis prepared by Dudek in October 2022 (Appendix I)

4.10.1 Relevant Plans, Policies, and Ordinances

The following section describes state and local regulations, plans, policies, and ordinances relevant to the study area. There are no transportation-specific federal regulations applicable to the Project.

State

Senate Bill 743

On September 27, 2013, Governor Brown signed SB 743, which became effective on January 1, 2014. SB 743 streamlines the review under the CEQA process for several categories of development projects, including the development of infill projects in transit priority areas to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas (GHG) emissions. SB 743 adds Chapter 2.7: Modernization of Transportation Analysis for Transit Oriented Infill Projects to the CEQA Statute (California Public Resources Code Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metric(s) for determining impacts relative to transportation shall be developed to replace the use of LOS in CEQA documents.

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity such as widening a roadway or the size of an intersection, which in turn encourages more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative forms of transportation such as biking and walking. SB 743 directed the California Governor's Office of Planning and Research (OPR) to develop an alternative metric(s) for analyzing transportation impacts in CEQA documents. The alternative shall promote the state's goals of reducing GHG emissions and traffic-related air pollution, promote the development of multimodal transportation system, and provide clean, efficient access to destinations.

Pursuant to SB 743, OPR released the draft revised CEQA Guidelines in November 2017, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released Updates to Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) to provide guidance on VMT analysis. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their jurisdictions. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance ... recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (14 CCR 15064.7[c]).

In December 2018, the CEQA Guidelines were updated to add the new Section 15064.3, Determining the Significance of Transportation Impacts, that describes specific considerations for evaluating a project's transportation impacts using the VMT methodology.

CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

1. **Land Use Projects.** Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
2. **Transportation Projects.** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a Regional Transportation Plan (RTP) EIR, a lead agency may tier from that analysis as provided in Section 15152.
3. **Qualitative Analysis.** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
4. **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

OPR's regulatory text indicates that the guidelines must be implemented statewide by July 1, 2020. However, the OPR Technical Advisory allows local agencies to retain their congestion-based LOS standards in general plans and for project planning purposes. This EIR relies on VMT as the basis for evaluating transportation impacts under CEQA, as detailed in Appendix I, and the Project's LOS effects have been documented in the Transportation Impact Analysis (TIA) prepared for the proposed Project and provided to the City.

Sustainable Communities Strategies: Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board (CARB) sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the state's metropolitan planning organizations (MPOs). CARB will periodically review and update the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its RTP. The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP. The Project is within the Southern California Association of Governments (SCAG) MPO, which has adopted Connect SoCal (2020–2045 RTP/SCS) as their SCS, as discussed below.

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the alternative planning strategy. Developers can get relief from certain CEQA requirements if their new residential and mixed-use projects are consistent with a region's SCS (or alternative planning strategy) that meets the targets (see California Public Resources Code Sections 21155, 21155.1, 21155.2, 21159.28).

California Department of Transportation

As the owner and operator of the State Highway System, the California Department of Transportation (Caltrans) implements established state planning priorities in all functional plans, programs, and activities. Caltrans has the responsibility to coordinate and consult with local jurisdictions when proposed local land use planning and development may impact state highway facilities. To comply with SB 743 implementation, the Caltrans Transportation Impact Study Guide (Caltrans 2020a), replaced the Guide for the Preparation of Traffic Impact Studies (Caltrans 2002). Per the 2020 Transportation Impact Study Guide, Caltrans' primary review focus is VMT, replacing LOS as the metric used in CEQA transportation analyses. Caltrans recommends use of OPR's recommended thresholds and guidance on methods of VMT assessment found in OPR's Technical Advisory (OPR 2018). In addition to VMT, Caltrans has developed an Interim Local Development and Intergovernmental Review Safety Review Practitioners Guidance (December 2020) which may request a targeted operational and safety analysis to address a specific geometric or operational issue related to the State Highway System and connections with the State Highway System (Caltrans 2020b). To comply with this requirement, an assessment of queuing at I-15 off-ramps and U.S. Highway 395 (US Hwy 395) intersections in the Project study area has been included in the EIR.

Regional

Southern California Association of Governments RTP/SCS

SCAG's 2020–2045 RTP/SCS (also known as the Connect SoCal Plan) was made available in March 2020 and presents the land use and transportation vision for the region through the year 2045, providing a long-term investment framework for addressing the region's challenges (SCAG 2020). Connect SoCal is a long-range visioning

plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The SCAG RTP/SCS lays the framework for sustainable development in the SCAG region, which includes the City of Hesperia. Priorities of the plan include increasing investment in transit and investing in transportation strategies and projects that will result in improved air quality, public health, and reduced GHG emissions. The Proposed Final Connect SoCal Plan was adopted by SCAG's Regional Council on September 3, 2020.

Regional Funding Mechanisms – Measure “I” Funds

In 2004, the voters of San Bernardino County approved the 30-year extension of Measure “I,” a one-half of one percent sales tax on retail transactions, through the year 2040, for transportation projects including, but not limited to, infrastructure improvements, commuter rail, public transit, and other identified improvements. The Measure “I” extension requires that a regional traffic impact fee be created to ensure development is paying its fair share. A regional Nexus study was prepared by San Bernardino County Transportation Authority (SBCTA) and concluded that each jurisdiction should include a regional fee component in their local programs to meet the Measure “I” requirement. The regional component assigns specific facilities and cost sharing formulas to each jurisdiction and was most recently updated in September 2017. Revenues collected through these programs are used in tandem with Measure “I” funds to deliver projects identified in the Nexus Study.

While Measure “I” is a self-executing sales tax administered by SBCTA, the funds raised through Measure “I” have funded in the past, and will continue to fund, new transportation facilities in San Bernardino County, including within the City of Hesperia.

Local

City of Hesperia General Plan Circulation Element

The General Plan Circulation Element outlines the City's plans to provide a transportation network system that allows the movement of people, goods, and services easily and safely throughout the city (City of Hesperia 2010). It also outlines the city's goals and implementation policies to provide a safe and efficient transportation system strategy, including non-motorized modes such as bicycle, pedestrian, and transit modes. It also designates the Specific Plan to cover all freeway frontages within the City as well as the commercial and industrial areas parallel to the freeway corridor. The goals, policies, and development standards applicable to the Project are also found in the Main Street and Freeway Corridor Specific Plan (MSFCSP).

Goal CI-1. Develop a safe, efficient, convenient, and attractive transportation system throughout the community, providing links within the City and with neighboring regions, and accommodating automobile, truck, pedestrian, recreational, equestrian, rail, air, and public transit needs which will meet current and future development requirements within the planning area.

Policy CI-1.10. Ensure that new development provides for adequate road improvements to serve internal circulation needs, as well as to mitigate impacts of increased traffic on the existing road system.

Goal CI-2. Develop and implement a City-wide Congestion Management Plan

Policy CI-2.5. Maintain the City's development impact fee program for future development which includes improvements to roadways to mitigate of the impact of the new development.

Policy CI-2.7. Review and monitor street improvements to ensure that improvements optimize traffic flow efficiency.

Policy CI-2.8. Reduce trip generation through development and implementation of Transportation Demand Management Programs.

Goal CI-4. Provide a circulation system that facilitates the movement of goods and services throughout the City while protecting residences, sensitive land uses, and pedestrians from activities along rail and truck corridors

Policy CI-4.2. Locate new development and their access points in such a way that traffic is not encouraged to utilize local residential streets for access to the development and its parking.

Policy CI-4.3. Discourage non-local traffic from using neighborhood streets through project design and traffic control measures.

Policy CI-4.4. Develop an efficient and effective truck route system that is compatible with land uses and street improvement standards, and provide monitoring to ensure compatibility.

Main Street and Freeway Corridor Specific Plan

The MSFCSP establishes a framework for the Main Street and freeway corridors and is intended to facilitate and support development and improvements along these corridors. The regulations of the MSFCSP replace those set forth in the planning and zoning provisions of the City's Development Code, and any other applicable ordinances. The CIBP zone falls within three land use districts, Main Street/I-15 District, US Hwy 395/I-15 District, and Industrial District. The Main Street/I-15 and US Hwy 395/I-15 Districts provide enhanced vehicular, truck, and rail accessibility by taking advantage of their location along the I-15 corridor with its connection to US Hwy 395, and its linkage to the Southern California Logistics Airport. The Project site falls within the Main Street/I-15 District and the US Hwy 395/I-15 District. The MSFCSP has following goals related to circulation (City of Hesperia 2021):

Goal C-1. Increase freeway access to Interstate-15, for purposes of conveying regional traffic into and out of the community.

Goal C-2. Explore and provide the highest level of access for all modes of transportation and maintains efficient circulation in the Specific Plan area throughout the day.

Policy C-2.1. Preserve the traffic-carrying capacity of arterial streets by implementing policies that include the promotion of shared access locations among multiple properties or establishments, reciprocal access agreements, shared parking, and the use of side streets to provide access to parcels, if possible.

Policy C-2.2. Increase trip reduction efforts.

Policy C-2.3. Provide truck route designations for specific facilities in the City.

Policy C-2.4. Reduce the number of median openings to only those intersections that are signalized.

Policy C-2.6. Encourage present and future public transit use.

Policy C-2.7. Identify activity centers that would benefit from increased transit access and work with Victor Valley Transit Authority (VVTa) to enhance service to these centers.

Policy C-2.8. Facilitate bicycle use and circulation within the Specific Plan area.

Policy C-2.9. Promote a safe and attractive pedestrian environment to encourage pedestrian traffic within and across the districts, especially in the City Center District, where wider sidewalks for pedestrians are desirable.

City of Hesperia Development Impact Fee Program

The City of Hesperia has created its own local development impact fee (DIF) program to impose and collect fees from new residential, commercial, and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. The City's DIF includes a Regional Circulation System Fee to comply with Measure "I" and a Local Circulation System Fee to address transportation improvements which are locally noteworthy. The City of Hesperia DIF facilities list has been provided by City staff.

The Project applicant will be subject to the City's DIF fee program and will pay the requisite City DIF fees at the rates then in effect. The Project applicant's payment of the requisite DIF fees at the rates then in effect pursuant to the DIF Program will reduce its deficiencies to DIF-funded facilities. After the City's DIF fees are collected, they are placed in a separate interest-bearing account pursuant to the requirements of Government Code Section 66000 et seq. The timing to use the DIF fees is established through periodic capital improvement programs which are overseen by the City's Public Works Department.

Fair-Share Contribution

Project improvements may include a combination of fee payments to established programs (e.g., DIF), construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City of Hesperia's discretion).

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair-share contribution or require the development to construct improvements. Improvements included in a defined program and constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate.

4.10.2 Existing Conditions

This section provides a summary of the existing circulation network, bicycle and pedestrian facilities, transit service, and truck routes in the study area. It also provides a summary of the baseline VMT for projects in the City of Hesperia using SBCTA's San Bernardino Transportation Analysis Model (SBTAM).

Existing Circulation Network

The Project site is located between I-15 and US Hwy 395, south of Main Street and north of Poplar Street, on the western side of the City. The study area includes 12 existing and future intersections, as shown in Figure 4.10-1, Project Site Location and Traffic Study Area. Regional access to the Project site is available from the I-15/Joshua

Street interchange (#8 and #9) to the south of the site. Local access to the Project site is proposed along Poplar Street, Lassen Road, and Mesa Linda Street. Four Project access driveways would be provided, as shown in Figure 4.10-1, Project Site Location and Traffic Study Area. Two driveways are proposed on the western side of the site off Lassen Road and two driveways are proposed on the easternmost side of the Project site along Mesa Linda Street. Paved passenger vehicle parking areas would be provided along the east and west side of the building, while tractor-trailer stalls and loading docks would be provided on the north side of the building.

Each roadway within the City is designated with a classification depending on its role in the overall circulation network and its relationship to surrounding uses. The City's Circulation Element consists of 10 street classifications. Within the study area, US Hwy 395 is designated as a Special Street, which represents streets with specialized hybrid cross-sections designed for unique road situations. US Hwy 395 is used to convey local traffic to I-15 and provide access to cities in the region, including Adelanto and Phelan. Main Street, west of I-15 and Phelan Road are Major Arterials. Mesa Linda Street, south of Main Street, and Sultana Street, west of Mesa Linda Street, are Arterials. Poplar Street, between US Hwy 395 and Lassen Road is a Secondary Arterial. East of Lassen Road, Poplar Street is a Major Arterial. Joshua Street, within the city limits, is a Secondary Arterial. Catapa Road is not designated with a specific roadway classification in the Circulation Element (City of Hesperia 2008).

Bicycle and Pedestrian Facilities

The City of Hesperia's non-motorized transportation plan is shown in Figure 4.10-2, City of Hesperia Non-Motorized Transportation Plan. There are no existing bicycle facilities within the study area. A Class I bike path (dedicated, separated path) is proposed along Main Street, east of I-15, and a Class II bike route (on-street striped bicycle lane) is proposed along Mariposa Avenue, between Mojave Street and the southern City limits, and on Joshua Street, east of Mariposa Street. A Class III bike facility (signed only bike route) is also proposed along Joshua Street, between US Hwy 395 and Mariposa Street (City of Hesperia 2018). The Project site is in a less developed area of the City, with limited pedestrian facilities provided. Where new development has occurred, sidewalks are typically provided along site frontages. Some pedestrian facilities, including curbs and sidewalks, are present along Poplar Street, Mesa Linda Street, and Lassen Road near existing commercial, industrial, and manufacturing facilities located to the south and east of the Project site.

Transit Service

Transit service in the City of Hesperia is primarily served by VVTA, which provides regional and local services throughout Victor Valley. Regionally, the City is served by passenger rail services offered by the National Railroad Passenger Corporation (Amtrak). Victor Valley and its neighboring communities are also expected to benefit from the development of Brightline West, a high-speed passenger rail system that will connect Los Angeles with Las Vegas and will include a stop in Victor Valley (Brightline West 2021). A brief description of each service provider is provided below.

Victor Valley Transit Authority

VVTA provides local bus service for the communities of Adelanto, Apple Valley, Hesperia, Victorville, and unincorporated areas of San Bernardino County. VVTA operates five bus routes in Hesperia, providing bus connections between shopping centers and the Mall of Victor Valley, hospitals, schools and colleges, and residential areas. VVTA also offers paratransit services for persons with special needs on any paved street within Hesperia as long as it is within their service boundaries. The VVTA paratransit services do not travel a fixed route and provide a flexible alternative to the fixed bus routes (City of Hesperia 2010b).

Routes 21P/W, 25, 64, and 68, shown in Figure 4.10-3, Existing Transit Routes, are the closest bus routes to the Project site, with bus stops on Main Street, Escondido Avenue, and Live Oak Street (VVTA 2021), as described below.

- **Route 21P/W** serves Victor Valley, Pinon Hills, and Wrightwood. The 21W route provides service between the Wrightwood Community Center and the Victor Valley Mall, and the 21P route provides service between the Pinon Hill Community Center and Cataba Road/Main Street. The Cataba Road and Main Street bus stop would serve as the nearest bus stop to the Project site, located approximately $\frac{1}{4}$ mile to the northwest of the Project site. Route 21P/W provides 1.25-hour weekday peak service headways (VVTA 2021).
- **Route 25** serves Escondido Avenue, Ranchero Road, Oak Hills High School, Mariposa Road, and San Joaquin Valley College. The Cataba Road and Main Street bus stop would serve as the nearest bus stop to the Project site, located approximately $\frac{1}{4}$ mile to the northwest of the Project site. Route 25 provides 2-hour weekday peak service headways (VVTA 2021).
- **Route 64** serves High County, North Star Ranch, Hesperia High School, Hesperia Junior High School, Hesperia Civic Center, Mojave High School, Sultana High School, and Hesperia Transfer Point. The Cataba Road and Main Street bus stop would serve as the nearest bus stop to the Project site, located approximately $\frac{1}{4}$ mile to the northwest of the Project site. Route 64 provides 45 minutes to 1 hour and 15-minute weekday peak service headways (VVTA 2021).
- **Route 68** serves Hesperia Transfer Point, Hesperia Civic Center, Hesperia High School, Super Target, and the Mall of Victor Valley. The Cataba Road and Main Street bus stop would serve as the nearest bus stop to the Project site, located approximately $\frac{1}{4}$ mile to the northwest of the Project site. Route 68 provides 1-hour weekday peak service headways (VVTA 2021).

Amtrak

Amtrak is a national rail operator, with 21,000 route miles in 46 states, the District of Columbia, and three Canadian Provinces. Amtrak operates more than 300 trains each day at speeds up to 150 mph to more than 500 destinations. Amtrak is the chosen operator for state-supported corridor services in 17 states and four commuter rail agencies (Amtrak 2021). The closest Amtrak station to the Project site is the Victorville Amtrak Station, which is located approximately 16 miles to the north. The Victorville Amtrak Station is part of the Southwest Chief Route, an east-west rail line extending from Los Angeles, California, to Chicago, Illinois (Amtrak 2021b).

Brightline West

As noted above, Brightline West is a proposed high-speed passenger rail system that would be designed to connect the extended communities of Los Angeles, Palmdale, Cajon Pass, Victor Valley with Las Vegas through 200 to 300 miles of rail. Once developed, an estimated 50 million one-way trips are expected to be made between California and Las Vegas. Moreover, vehicle trips are expected to be reduced by more than 3 million vehicles annually once in operation (Brightline 2021).

Truck Routes

The City has adopted enforceable truck routes as shown in Figure 4.10-4, Local Truck Routes. Within the study area, designated truck routes include the entire length of I-15 and US Hwy 395 within the City limits, Phelan Road, east of US Hwy 395, and Joshua Street, between Caliente Road and Mariposa Road. Main Street east of US Hwy 395 is no longer designated as a City truck route; therefore, all Project truck traffic traveling to and from I-15 will be routed through the Joshua Street interchange.

Baseline VMT

The SBTAM travel forecasting model was used to measure VMT performance. The SBTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. For land use projects such as the Project, model-based approach (tour- or trip- based travel demand models) offer the best methods for assessing VMT and for comparing those assessments to VMT thresholds. The origin–destination (OD) VMT per service population was used as it provides the most representative and conservative analysis for the proposed Project. Table 4.10-1 presents the County’s baseline for OD VMT per service population (based on the travel demand model). As shown in Table 4.10-1, the County’s baseline for OD VMT per service population is 28.9.

Table 4.10-1. Baseline Vehicle Miles Traveled for County of San Bernardino

VMT Metric	2016 Countywide Average
OD VMT per Service Population	28.9

Source: Appendix I

Note: VMT = vehicle miles traveled; OD = origin–destination

4.10.3 Thresholds of Significance

The significance criteria used to evaluate the Project’s impacts to transportation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to transportation would occur if the Project would:

- A. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- B. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
- C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- D. Result in inadequate emergency access.
- E. Result in cumulatively considerable transportation impacts.

Methodology

This section describes the methodology used to analyze the potential impacts of the Project per each CEQA transportation threshold.

Program, Plan, Ordinance and Policy

The programs, plans, ordinances, and policies listed in Section 4.10.1, Relevant Plans, Policies, and Ordinances, were analyzed for their applicability to the proposed Project under Threshold A.

Vehicle Miles Traveled

The methodology contained in the City of Hesperia Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment (LOS) (City TIA Guidelines; City of Hesperia 2020) was used to analyze the Project under Threshold B. This includes the following general steps:

1. **VTM Screening & Qualitative Review:** The first step is to determine when a VMT analysis is required. Consistent with OPR's Technical Advisory, projects that meet certain screening thresholds based on their size, location and land use may be presumed to result in a less than significant transportation impact. For example, projects located within a Transit Priority Area or a low VMT generating traffic analysis zone (TAZ) (subject to additional secondary screening criteria) and absent substantial evidence to the contrary are anticipated to result in a less than significant impact and can be screened from further analysis.
2. **VTM Analysis Methodology:** If a project is not screened from requiring a project-level VMT analysis, the San Bernardino Transportation Analysis Model (SBTAM) model is used to estimate a project's VMT. This analysis includes the project-generated VMT and project effect on VMT estimates for the project TAZ.
3. **VTM Impact Thresholds:** The City uses VMT per service population for its impact threshold. A project would result in a significant impact if the baseline project-generated VMT per service population exceeds the San Bernardino County regional average baseline of 32.7% VMT per service population, or the cumulative project-generated VMT per service population exceeds the San Bernardino County regional average baseline of 32.7% VMT per service population.¹ The project's effect on VMT would be considered significant if it resulted in either of the following conditions to be satisfied:
 - The baseline link-level boundary (County of San Bernardino) VMT per service population increases under the plus project condition compared to the no project condition, or
 - The cumulative link-level boundary (County of San Bernardino) VMT per service population increases under the plus project condition compared to the no project condition.
4. **VTM Mitigation:** The types of mitigation that affect VMT are those that reduce the number of single-occupant vehicles generated by a project. Mitigation can be accomplished by altering the proposed land uses, by implementing transportation demand management (TDM) measures, or participating in a VMT fee program and/or VMT mitigation exchange/banking program.

Hazardous Features (Queuing and Safety Analysis)

Threshold C requires an evaluation of whether the Project substantially increases hazards due to a geometric design feature or incompatible use. Based on the City's General Plan consistency requirement and Caltrans Interim Local Development Intergovernmental Review Safety Review Practitioners Guide (December 2020), an operational analysis of Joshua Street at US Hwy 395 and at the I-15 ramps was conducted. For the off-ramp locations, a potentially significant safety impact is identified if the addition of project vehicle trips would result in an off-ramp queue that extends onto the freeway mainline. An off-ramp queue that extends onto the freeway mainline causes a potential safety concern if a significant speed differential exists between the off-ramp queue vehicles and the freeway mainline vehicles.

Emergency Access

The emergency access analysis was evaluated under Threshold C and evaluates whether the Project would comply with the City's emergency access and/or evacuation requirements including those imposed by the Fire Department.

¹ The City's TIA guidelines state the current County of San Bernardino VMT threshold is 32.7 VMT/Service Population. However, the screening tool identifies the County baseline as 33.2 VMT/Service Population and the project-specific travel demand model run identified the baseline as 28.9 (as presented in Table 4.10-1).

Project Trip Generation

Project trip generation estimates used in the Project's TIA are based on daily and AM and PM peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual 10th Edition (ITE 2017) and the Transportation Uniform Mitigation Fee (TUMF) High-Cube Warehouse Trip Generation Study (WSP, January 29, 2019). The layout of the building is most representative of a high-cube warehousing land use. However, as a specific end-user is not in place for the proposed Project, a 35% General Light Industrial and 65% High-Cube Warehousing split of the total building square footage, consistent with the splits used in the Hesperia Commerce Center II Traffic Impact Analysis (July 2, 2020), is applied to provide a conservative analysis. Therefore, the General Light Industrial trip rates were used to obtain trip generation estimates for 35% of the Project (totaling approximately 145,145 square feet) and the High-Cube Fulfillment Center Warehouse trip rates were used to obtain trip generation estimates for 65% of the Project (totaling approximately 269,555 square feet). Additionally, passenger car equivalent (PCE) factors were applied to the trip generation estimates to account for truck traffic. While trip generation is not used in the EIR for the purpose of determining impacts based on traffic delay or congestion, it is helpful in assessing issues such as access and traffic hazards. Trip generation also plays an important role in evaluating mobile emissions and noise impacts. The ITE-based daily trip estimates used in the Project's TIA are shown in Appendix I of this report.

4.10.4 Impacts Analysis

Threshold A: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less-than-Significant Impact. The Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, as discussed below. Impacts would be less than significant.

Regional Transportation Plan/Sustainable Communities Strategy

The Project would be consistent with the 2020–2045 RTP/SCS as analyzed in Table 4.9-1, Consistency with 2020–2045 RTP/SCS Goals, in Section 4.9, Land Use and Planning.

City of Hesperia General Plan Circulation Element and Main Street and Freeway Corridor Specific Plan

The Project would be consistent with the applicable goals and policies of the General Plan Circulation Element and the MSFCSP. The Project would not hinder the City's ability to develop a safe, efficient, convenient, and attractive transportation system throughout the community. The Project would include on and off-site roadway improvements to serve internal circulation needs, as well as to mitigate impacts of increased traffic on the existing road system. The Project would also participate in the City's development impact fee program. The Project is also located in an area that would not encourage traffic to utilize local residential street for access or parking needs. Consistent with the Main Street/I-15 and US Hwy 395/I-15 Districts, the Project location takes advantage of the location along the I-15 corridor with its connection to US Hwy 395.

Transit, Bicycle, and Pedestrian Facilities

The Project would not conflict with any plans or policies regarding existing or proposed bicycle and pedestrian facilities in the study area and would be consistent with the City of Hesperia General Plan Non-Motorized Transportation Plan (Figure 4.10-3). Currently, there are no sidewalks along the Project frontage and the intersections adjacent to the Project site do not currently have pedestrian crosswalks. As such, it is recommended that the Project applicant work in conjunction with the City to improve pedestrian facilities and connectivity along the Project frontage by constructing sidewalks and pedestrian crossings at intersections adjacent to the Project site.

VVTA Routes 25, 64, and 68 are the closest transit service routes to the Project and the closest bus stop is approximately $\frac{1}{4}$ mile to the northwest of the Project site at Catapa Road and Main Street. The VVTA Routes could potentially serve the Project in the future. Transit service is reviewed and updated by VVTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. As such, it is recommended that the Project applicant work in conjunction with VVTA to potentially provide bus service to the site.

Based on analysis provided above, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and its impact to transportation plans and programs would be less than significant.

Threshold B: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less-than-Significant Impact. CEQA Guidelines Section 15064.3(b) focuses on VMT for determining the significance of transportation impacts. As shown in the following analysis, the Project is estimated to generate VMT per service population below the county regional average for this metric. The Project would be consistent with CEQA Guidelines Section 15064.3(b); therefore, impacts would be less than significant.

VMT Screening

The City TIA Guidelines (City of Hesperia 2020) provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed analysis. A land use project need only to meet one of the below screening thresholds to result in a less-than-significant impact.

- **TPA Screening:** Consistent with guidance identified in the Technical Advisory and City's Guidelines, projects located within a Transit Priority Area (TPA) (e.g., within $\frac{1}{2}$ mile of an existing "major transit stop" or an existing stop along a "high-quality transit corridor") may be presumed to have a less than significant impact absent substantial evidence to the contrary. Based on the Screening Tool results presented in Appendix I, the Project site is not located within $\frac{1}{2}$ mile of an existing major transit stop, or along a high-quality transit corridor.
- **Low VMT Area Screening:** As noted in the Technical Advisory and the City's Guidelines, residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT. The Screening Tool uses the sub-regional SBTAM to measure VMT performance within individual TAZs within the region. The Project's physical location based on parcel number was input into the Screening Tool to determine the TAZ's VMT as compared to the County average. A parcel within the Project site was selected and the Screening Tool was run for VMT per service population (e.g., population and employment) measure of VMT. Based on the Screening Tool results (see Appendix I), the VMT per service population for the project TAZ is 95.1, and the County of San Bernardino

VTM per service population is 33.2.2 Therefore, the TAZ would be 186.4% above the County's threshold, which would not meet the required baseline screening criteria established in the City's guidelines. The Project would not qualify as residing in a low VMT area.

- **Project-Type Screening:** The City's Guidelines states that projects that are consistent with the current SCS or general plan, and that generate fewer than 110 daily vehicle trips be presumed to have a less-than-significant impact on VMT. The Project would generate 1,281 daily vehicle trips (1,634 passenger car equivalents) (see Appendix I for the detailed Project trip generation estimates) and would not be eligible to screen out based on project type screening.

As outlined above, the Project does not meet the screening criteria identified in the City's guidelines. Therefore, the Project's potential impact on VMT was evaluated and is summarized below.

VTM Analysis Approach

Project VMT has been calculated using the most current version of SBTAM. The OPR Technical Advisory (2018) provides technical assistance and recommendations for the analysis of VMT. The methodology recommendations for the VMT analysis include a discussion on vehicle types. An excerpt from the OPR Technical Advisory regarding vehicle types is below:

Vehicle Types. Proposed Section 15064.3, subdivision (a), states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT). For an apples-to-apples comparison, vehicle types considered should be consistent across project assessment, significance thresholds, and mitigation.

Per Section 21099 of the Public Resource Code, the selection of the VMT criteria for determining the significance of transportation impacts was intended to promote reductions of GHG emissions; to develop multimodal transportation networks; and to diversify land uses. As mentioned in the OPR's Technical Advisory, there are various legislative mandates and state policies that establish quantitative GHG emission reduction targets. Pursuant to Senate Bill 375, the CARB GHG emissions reduction targets for MPOs call for reductions in GHG emissions only from cars and light trucks. Therefore, a custom model run using the SBTAM was conducted to estimate VMT from automobiles (i.e., cars and light trucks) only, and the Project's VMT and the threshold VMT were extracted only for automobile VMT. This allows for an apples-to-apples comparison of VMT generated by vehicle types across project assessment, significance thresholds, and mitigation (if any). While the abovementioned OPR Technical Advisory allows for heavy-duty truck VMT to be included in modeling, it is important to note that this allowance was provided for modeling convenience and ease of calculation; however, in keeping with the intent of Section 21099 of the California Public Resources Code and Section 15064.3, subdivision (a) of the CEQA Guidelines (which specify that automobile VMT is the primary metric that should be evaluated), the extra step of removing heavy truck VMT from SBTAM was undertaken to provide for a project-level analysis that most appropriately meets the intent of SB 743. Additionally, as noted during an informational question-and-answer session conducted by OPR to provide information and guidance on conducting project-level VMT analysis (OPR 2020), it is automobile VMT (i.e., cars and light-duty trucks) that needs to be quantified for all land uses, including warehouses. Therefore, a custom model

² The City's TIA guidelines state the current County of San Bernardino VMT threshold is 32.7 VMT/Service Population. However, the screening tool identifies the County baseline as 33.2 VMT/Service Population.

run using the SBTAM was conducted to estimate VMT from automobiles (i.e., cars and light trucks) only, and the Project's VMT and the threshold VMT were extracted only for automobile VMT.

Per standard travel demand modeling procedure, two model runs were conducted to estimate Project's VMT. The first model run included the existing land uses for the area with no changes. While the base year VMT is available from the SBCTA Screening Tool (i.e., 33.2 VMT per service population as described in the screening discussion), the first model run was conducted to set the thresholds and to present an apples-to-apples comparison of only automobile VMT. The model run included both the baseline conditions (2016) and cumulative conditions (2040). The second model run was conducted with socio-economic data from the proposed Project and provided the Project generated VMT per service population, as shown in Table 4.10-2. Roadway (or link-level boundary) VMT was also calculated for all vehicles to estimate Project's effect on VMT as shown in Table 4.10-3. Detailed calculations and model outputs are included in Appendix I.

VMT Per Service Population

The Project generated VMT is defined as the VMT attributed to automobile trips to and from the Project. Based on the City thresholds, if a project-generated VMT per service population exceeds the baseline County of San Bernardino average VMT per service population, the project has a significant impact under CEQA. Table 4.10-2 summarizes the findings of this evaluation.

Table 4.10-2. Summary of OD VMT Per Service Population (Automobile only)

Metric	Baseline Conditions (Year 2016)		Cumulative Conditions (Year 2040)	
	Project	San Bernardino County	Project	San Bernardino County
Population	—	2,140,539	—	2,721,775
Employment	657	790,400	657	1,027,872
Service Population (SP)	657	2,930,939	657	3,749,647
VMT	16,825	84,840,769	16,825	112,779,783
VMT per SP	25.6	28.9	25.7	30.1
Is Project OD VMT per SP below regional baseline?	Yes		Yes	
Significant Impact	No		No	

Source: SBTAM Model Results (Appendix I).

Note: OD = origin-destination VMT = vehicle miles traveled.

As shown in the table, the County average automobile VMT is 28.9 VMT per service population under baseline (Year 2016) conditions. The Project generated VMT is 25.6 VMT per service population under baseline (Year 2016) conditions, which is below the baseline threshold. Under the cumulative (Year 2040) conditions, the County average automobile VMT is 30.1 VMT per service population. The Project generated VMT is 25.7 VMT service population under cumulative conditions, which is also below the cumulative baseline threshold. Therefore, based on the City's thresholds, the Project generated VMT would have a less than significant impact.

Project Effect on VMT

The Project effect on VMT evaluates the change in roadway (or link-level boundary) VMT within the County streets due to the proposed Project. Based on the City thresholds, if the link-level boundary VMT per service population increases Countywide under the plus Project condition compared to the no Project condition, the Project would have a significant impact per Project effect on VMT criteria. Table 4.10-3 shows the roadway (or link-level) VMT per service population for the County without and with Project conditions for both the baseline and Cumulative (2040) conditions.

Table 4.10-3. Roadway (or Link-Level Boundary) VMT (County of San Bernardino)

Metric	Baseline Conditions (Year 2016)		Cumulative Conditions (Year 2040)	
	Without Project	With Project	Without Project	With Project
Roadway (or link level) VMT	57,484,358	57,453,875	88,660,625	88,380,178
Service Population (SP)	2,891,240	2,891,897	3,699,498	3,700,155
VMT per SP	19.9	19.9	24.0	23.9
Would the Project increase VMT per SP?	No		No	
Significant Impact	No		No	

Source: SBTAM Model Results; Appendix I.

Note: VMT = vehicle miles traveled.

As shown in Table 4.10-3, with the proposed Project, the VMT per service population within the County (19.9 VMT per service population) will stay the same under the baseline conditions. Under the cumulative conditions, with the proposed Project, the VMT per service population within the County will decrease from 24.0 VMT per service population to 23.9 VMT per service population. Because the Project would not increase the roadway (or link-level boundary) VMT per service population in either the baseline or cumulative conditions, the Project's effect on VM would be less than significant.

VMT Per Service Population (with Heavy Trucks)

While not required by CEQA, a model run using the SBTAM was also conducted to estimate VMT from both automobiles and trucks. This information is provided for informational purposes only and a detailed evaluation can be found in Appendix B. The County average VMT (including automobiles and heavy trucks) is 30.6 VMT per service population under baseline (Year 2016) conditions. The Project generated VMT is 37.0 VMT per service population under baseline (Year 2016) conditions, which exceeds the baseline threshold. Under the cumulative (Year 2040) conditions, the County average VMT (including automobiles and heavy trucks) is 32.1 VMT per service population. The Project generated VMT is 36.6 VMT service population under cumulative conditions, which also exceeds the cumulative baseline threshold.

VMT Impact Determination

As determined from the VMT analysis summarized above, under the baseline conditions, the Project generated OD VMT for automobiles is 25.6 VMT per service population, which is less than the baseline threshold of 28.9 VMT per service population (established for automobiles only VMT from the Project specific model run). Under cumulative conditions, the Project generated OD VMT for automobiles is 25.7 VMT per service population, which is also less than the cumulative threshold of 30.1 VMT per service population. The roadway (or link level boundary) VMT within the County of San Bernardino is 19.9 VMT per service population without Project conditions which will stay the

same under Project conditions. Therefore, based on City's thresholds, the Project generated VMT and the Project's effect on VMT would have a less than significant impact. The Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Threshold C: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Significant and Unavoidable Impact. The following discussion describes the potential for increased hazards as a result of geometric design features of the Project, and/or as a result of the addition of Project traffic to adjacent roadways and Caltrans facilities.

Project Site Access

Vehicular and truck traffic access will be provided via the following driveways:

- Driveway A via Lassen Road north – full access; passenger cars/trucks
- Driveway B via Mesa Linda Street north – full access; passenger cars/trucks
- Driveway C via Lassen Road south – full access; passenger cars
- Driveway D via Mesa Linda Street south – full access; passenger cars

Proposed Site Access Improvements

All roadway improvements required as part of the Project, whether located on or off site, would be designed and constructed in accordance with all applicable local, state, and federal roadway standards and practices. The following assumptions are made for all “plus Project” conditions included in this analysis upon review of applicable improvements, and the extension and build-out of the rights-of-way (ROWs) of adjacent streets:

- Lassen Road would be built to a 50-foot half width with development of the Poplar 18 Project, located on the western side of the roadway. Lassen Road would be built to its ultimate ROW (100 feet) with development of this Project east of the roadway, constructing the remaining 50-foot half width.
- The Project would provide frontage improvements along Poplar Street, between Lassen Road and Mesa Linda Street, and would provide a 50-foot half width. Although this is not consistent with the major arterial classification of this section of Poplar Street in the Circulation Element (120-foot ROW, with a 92-foot curb-to-curb width, assuming no bike lane), previous discussions with the City have indicated that a 50-foot half width would be acceptable along this segment. The ultimate ROW and curb-to-curb buildout of Poplar Street would occur with development adjacent to the southern boundary of the roadway.
- The Project would provide frontage improvements along Mesa Linda Street, north of Poplar Street to the Project boundary, and would provide a 50-foot half width. Although this segment of Mesa Linda Street is not designated a roadway classification per the City's Circulation Element, a 50-foot half width would be consistent with the arterial designation of Mesa Linda Street, north of Sultana Street.

The Project driveway intersections along Lassen Road and Mesa Linda Street have been analyzed as unsignalized intersections with stop control at the driveway egress (#9–#12), and will be improved and designed per local standards to accommodate Project traffic. Figure 4.10-5, Truck Turning Templates (Driveway), shows the proposed travel paths at each truck access driveway, and Figure 4.10-6, Truck Turning Templates (Internal), shows the truck inbound and outbound path at the Project driveways. As shown, the Project driveways are anticipated to accommodate the wide turning radius of trucks as currently designed.

These improvements would be overseen by the applicable lead agency and their qualified traffic engineers. This approach would ensure compliance with all applicable roadway design requirements. As such, no hazardous design features would be part of the Project's roadway improvements or site access.

Off-Site Queuing Analysis

A queuing analysis was performed for US Hwy 395 from Main Street to Joshua Street to assess vehicle queues along the roadways. A queuing analysis was also performed for the southbound off-ramp at I-15 and Joshua Street to assess vehicle queues for the off ramp that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-15 mainline. The queuing analysis was performed for the Existing plus Project, Opening Year (2024) plus Project, and Horizon Year (2040) plus Project conditions, as summarized below.

Existing Plus Project Conditions

As shown in Table 4.10-4, Peak-Hour Queuing Summary for Existing Plus Project Conditions, the following intersection turning movements are anticipated to experience periodic queuing issues during the peak hours based on the 95th percentile peak hour traffic flows for the Existing plus Project traffic conditions:

- #1: US Hwy 395/Phelan Road/Main Street northbound left; southbound left – AM and PM peak hours
- #5: US Hwy 395/Three Flags Road northbound left; northbound right – PM peak hour
- #6: US Hwy 395/Joshua Street northbound right – PM peak hour

There are no off-ramp movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak hours under Existing plus Project traffic conditions.

Opening Year (2024) Plus Project Conditions

As shown in Table 4.10-5, Peak-Hour Queuing Summary for Opening Year (2024) Plus Project Conditions, the following intersection turning movements are anticipated to experience periodic queuing issues during the peak hours based on the 95th percentile peak hour traffic flows for the Opening Year (2024) plus Project traffic conditions:

- #1: US Hwy 395/Phelan Road/Main Street northbound left; southbound left – AM and PM peak hours
- #3: US Hwy 395/Poplar Street westbound left; westbound right – AM and PM peak hours
- #5: US Hwy 395/Three Flags Road northbound left – PM peak hour
- #5: US Hwy 395/Three Flags Road northbound right – AM and PM peak hours
- #6: US Hwy 395/Joshua Street northbound left – AM peak hour
- #6: US Hwy 395/Joshua Street northbound right – PM peak hour
- #6: US Hwy 395/Joshua Street; southbound left – AM and PM peak hours
- #7: I-15 Southbound Ramps/Joshua Street southbound left – AM and PM peak hours

Horizon Year (2040) Plus Project Conditions

As shown in 4.10-6, Peak-Hour Queuing Summary for Horizon Year (2040) Plus Project Conditions, the following intersection turning movements are anticipated to experience periodic queuing issues during the peak hours based on the 95th percentile peak hour traffic flows for the Horizon Year (2040) plus Project traffic conditions:

- #1: US Hwy 395/Phelan Road/Main Street northbound left; southbound left – AM and PM peak hours
- #3: US Hwy 395/Poplar Street westbound left; westbound right – AM and PM peak hours
- #3: US Hwy 395/Poplar Street southbound left – AM and PM peak hour
- #5: US Hwy 395/Three Flags Road northbound right – PM peak hour
- #6: US Hwy 395/Joshua Street northbound right – AM and PM peak hour
- #6: US Hwy 395/Joshua Street southbound left – PM peak hour
- #7: I-15 Southbound Ramps/Joshua Street southbound left – AM and PM peak hours
- #7: I-15 Southbound Ramps/Joshua Street southbound right – PM peak hour

Improvement measures required to mitigate Project's impact would include fair-share contribution to Intersections #1, #3, #5, #6, and #7. Since the City does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy. Therefore, the Project's impact to increase in hazardous conditions (i.e., queuing) would be significant and unavoidable.

Level of Service Analysis

Although not required under CEQA, the results of the LOS analysis conducted for the proposed Project are summarized below for full disclosure and informational purposes only. Per the City's Guidelines, the LOS analysis included all major intersections (intersections of collector, or higher, streets) where the Project would add more than 50 peak hour Project trips, as well as intersections adjacent to the Project site. Twelve intersections were analyzed for the Existing, Opening Year (2024), and the Horizon Year (2040) conditions, with and without the Project.

As shown in 4.10-7, Existing and Existing plus Project Peak Hour Intersection Level of Service, all study area intersections are forecast to continue to operate with satisfactory LOS under Existing plus Project conditions during both peak hours, with exception of the following intersection:

- #3 (US Hwy 395/Poplar Street) – LOS F in AM and PM peak hours (*unsignalized*)

As shown in Table 4.10-8, Opening Year (2024) and Opening Year (2024) Plus Project Peak Hour Intersection Level of Service, all study area intersections are forecast to continue to operate with satisfactory LOS under Opening Year (2024) plus Project conditions during both peak hours, with the exception of following intersections:

- #1 (US Hwy 395/Phelan Road–Main Street) – LOS F in AM and PM peak hours (*signalized*)
- #3 (US Hwy 395/Poplar Street) – LOS F in AM and PM peak hours (*unsignalized*)
- #4 (Lassen Road/Poplar Street) – LOS E in AM peak hour (*unsignalized*)
- #7 (I-15 SB Off-Ramp/Joshua Street) – LOS F in AM peak hour (*unsignalized*)

As shown in Table 4.10-9, Horizon Year (2040) and Horizon Year (2040) plus Project Peak Hour Intersection Level of Service, all study area intersections are forecast to continue to operate with satisfactory LOS under Horizon Year (2040) plus Project conditions during both peak hours, with the exception of the following intersections:

- #1 (US Hwy 395/Phelan Road–Main Street) – LOS F in AM and PM peak hours (*signalized*)
- #3 (US Highway 395/Poplar Street) – LOS F in AM and PM peak hours (*unsignalized*)
- #4 (Lassen Road/Poplar Street) – LOS F in AM and PM peak hours (*unsignalized*)
- #5 (US Hwy 395/Three Flags Avenue) – LOS F in PM peak hour (*signalized*)
- #6 (US Hwy 395/Joshua Street–I-15 ramps) – LOS F in AM and PM peak hour (*signalized*)

Peak hour signal warrants were performed at the unsignalized intersections (#3 and #4). The warrant is met in both peak hours at both intersections. As such, a signal would be warranted at the US Hwy 395/Poplar Street and Lassen Road/Poplar Street intersections under Horizon Year (2040) plus Project conditions.

Table 4.10-10, Proposed Intersection Improvement Measures identifies 9 intersection improvements that would be necessary to bring the intersection LOS back to acceptable levels under Opening Year (2024) and Horizon Year (2040) plus Project conditions at all intersections operating at unsatisfactory levels of service.

Threshold D: Would the Project result in inadequate emergency access?

Less-than-Significant Impact. As mentioned above, the Project has four access driveways, and in the event of an emergency all the driveways would enable vehicles to enter/exit the Project site. All street improvements will be designed with adequate width, turning radius, and grade to facilitate access by City’s firefighting apparatus, and to provide alternative emergency ingress and egress. The site plan would be subject to plan review by the City’s Fire Department to ensure proper access for fire and emergency response is provided and required fire suppression features are included. Therefore, the Project’s impact due to inadequate emergency access would be less than significant.

Threshold E: Would the Project result in cumulatively considerable transportation impacts?

Significant and Unavoidable Impact. As discussed above in Threshold C, the Project may increase a hazardous condition due to queuing impacts at the intersections #1, #3, #5, #6, and #7 under the Horizon Year (2040) plus Project analysis scenario. Since the City does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project’s occupancy. Therefore, Project’s impact to increase in hazardous conditions (e.g., queuing) would be significant and unavoidable, and thus, the Project could contribute to a cumulatively considerable impact associated with queuing and hazardous design features.

Table 4.10-4. Peak-Hour Queuing Summary for Existing Plus Project Conditions

No.	Intersection	Movement	Available Stacking Distance (Feet)	Existing (2021)				Existing plus Project			
				95th Percentile Queue (Feet)		Acceptable? ¹		95th Percentile Queue (Feet)		Acceptable? ¹	
				AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
1	US Hwy 395 & Phelan Rd./Main St.	NBL ²	280	401	403	No	No	398	403	No	No
		SBL	240	310	324	No	No	302	322	No	No
3	US Hwy 395 & Poplar St.	WBL	540	0	24	Yes	Yes	59	462	Yes	Yes
		WBR	540	29	39	Yes	Yes	27	148	Yes	Yes
		SBL	375	49	34	Yes	Yes	60	35	Yes	Yes
5	US Hwy 395 & Three Flags Rd.	NBL ²	190	47	212	Yes	No	45	197	Yes	No
		NBL ²	190	35	891	Yes	No	35	724	Yes	No
		SBL	225	39	58	Yes	Yes	34	62	Yes	Yes
		SBR	225	23	23	Yes	Yes	21	25	Yes	Yes
6	US Hwy 395 & Joshua St.	NBL	190	126	126	Yes	Yes	11	135	Yes	Yes
		NBR	330	350	350	Yes	No	1	341	Yes	No
		SBL	220	107	107	Yes	Yes	90	149	Yes	Yes
7	I-15 SB Ramps & Joshua St.	SBL	25	26	26	Yes	No ³	13	24	Yes	Yes
		SBR	1,500	43	43	Yes	Yes	44	45	Yes	Yes
8	I-15 NB Ramps & Joshua St.	EBLT ⁴	1,000	29	29	Yes	Yes	30	32	Yes	Yes

Source: Appendix I.

Notes: NBL = northbound left; NBR = northbound right; NBTR = northbound thru-right; SBL = southbound left; SBR = southbound right; WBL = westbound left; WBT = westbound thru; WBR = westbound right; EBL = eastbound left; EBLT = eastbound left thru.

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

² 95th percentile volume exceeds capacity; queue may be longer.

³ Queue extends past available pocket length for movement, but does not extend into freeway mainline lanes.

⁴ Available stacking distance measured from the I-15 SB Off-Ramp/Joshua Street intersection.

Table 4.10-5. Peak-Hour Queuing Summary for Opening Year (2024) Plus Project Conditions

No.	Intersection	Movement	Available Stacking Distance (Feet)	Opening Year (2024)				Opening Year (2024) plus Project			
				95th Percentile Queue (Feet)		Acceptable? ¹		95th Percentile Queue (Feet)		Acceptable? ¹	
				AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
1	US Hwy 395 & Phelan Rd./Main St.	NBL ²	280	403	394	No	No	387	405	No	No
		SBL	240	298	269	No	No	303	270	No	No
3	US Hwy 395 & Poplar St.	WBL	540	735	624	No	No	702	624	No	No
		WBR	540	687	842	No	No	843	847	No	No
5	US Hwy 395 & Three Flags Rd.	SBL	375	66	44	Yes	Yes	75	48	Yes	Yes
		NBL ²	190	186	244	Yes	No	159	233	Yes	No
6	US Hwy 395 & Joshua St.	NBR ²	190	1278	1338	No	No	1258	1328	No	No
		SBL	225	39	40	Yes	Yes	35	37	Yes	Yes
7	I-15 SB Ramps & Joshua St.	SBR	225	24	16	Yes	Yes	20	18	Yes	Yes
		NBL	190	204	183	No	No	171	233	No	Yes
8	I-15 NB Ramps & Joshua St.	NBR	330	305	457	Yes	No	341	449	Yes	No
		SBL	220	186	278	No	No	197	280	No	No

Source: Appendix I.

Notes: NBL = northbound left; NBR = northbound right; NBTR = northbound thru-right; SBL = southbound left; SBR = southbound right; WBL = westbound left; WBT = westbound thru; WBR = westbound right; EBL = eastbound left.

- 1 Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.
- 2 95th percentile volume exceeds capacity; queue may be longer.
- 3 Queue extends past available pocket length for movement, but does not extend into freeway mainline lanes.
- 4 Available stacking distance measured from the I-15 SB Off-Ramp/Joshua Street intersection

Table 4.10-6 Peak-Hour Queuing Summary for Horizon Year (2040) Plus Project Conditions

No.	Intersection	Movement	Available Stacking Distance (Feet)	Horizon Year (2040)				Horizon Year (2040) plus Project			
				95th Percentile Queue (Feet)		Acceptable? ¹		95th Percentile Queue (Feet)		Acceptable? ¹	
				AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
1	US Hwy 395 & Phelan Rd./Main St.	NBL ²	280	374	388	No	No	355	402	No	No
		SBL	240	337	268	No	No	341	271	No	No
3	US Hwy 395 & Poplar St.	WBL	540	646	561	No	No	631	618	No	No
		WBR	540	841	637	No	No	808	624	No	No
		SBL	375	346	376	Yes	No	418	436	No	No
5	US Hwy 395 & Three Flags Rd.	NBL ²	190	130	221	Yes	No	114	186	Yes	Yes
		NBR ²	190	95	1289	Yes	No	83	1351	Yes	No
		SBL	225	81	120	Yes	Yes	84	136	Yes	Yes
		SBR	225	20	146	Yes	Yes	18	16	Yes	Yes
6	US Hwy 395 & Joshua St.	NBL	190	188	210	Yes	No	177	183	Yes	Yes
		NBR	330	246	368	Yes	No	336	428	No	No
		SBL	220	149	234	Yes	No	158	238	Yes	No
7	I-15 SB Ramps & Joshua St.	SBL	25	43	62	No ³	No	49	69	No ³	No
		SBR	1,500	157	1973	Yes	No	188	2008	Yes	No
8	I-15 NB Ramps & Joshua St.	EBLT ⁴	1,000	39	218	Yes	Yes	42	125	Yes	Yes

Source: Appendix I.

Notes: NBL = northbound left; NBR = northbound right; NBTR = northbound thru-right; SBL = southbound left; SBR = southbound right; WBL = westbound left; WBT = westbound thru; WBR = westbound right; EBL = eastbound left; EBLT = eastbound left thru.

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

² 95th percentile volume exceeds capacity; queue may be longer.

³ Queue extends past available pocket length for movement, but does not extend into freeway mainline lanes.

⁴ Available stacking distance measured from the I-15 SB Off-Ramp/Joshua Street intersection.

Table 4.10-7. Peak-Hour Queuing Summary for Horizon Year (2040) Plus Project Conditions

No.	Intersection	Movement	Available Stacking Distance (Feet)	Horizon Year (2040)				Horizon Year (2040) plus Project			
				95th Percentile Queue (Feet)		Acceptable? ¹		95th Percentile Queue (Feet)		Acceptable? ¹	
				AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
1	US Hwy 395 & Eucalyptus St.	NBL	475	69	36	Yes	Yes	71	37	Yes	Yes
		NBR	345	31	28	Yes	Yes	31	28	Yes	Yes
		SBL	440	215	313	Yes	Yes	282	294	Yes	Yes
		SBR	300	383	264	No	Yes	380	264	No	Yes
4	US Hwy 395 & Phelan Rd./Main St.	NBL ²	280	336	388	No	No	354	391	No	No
		SBL	240	322	268	No	No	331	269	No	No
8	I-15 SB Ramps & Main St.	SBL	1,750	2061	2202	No	No	1924	2126	No	No
		SBL	1,100	1363	1318	No	No	1344	1275	No	No
		SBR	530	555	692	No	No	556	645	No	No
9	I-15 NB Ramps & Main St.	NBL	1,790	944	1444	Yes	Yes	1219	1396	Yes	Yes
		NBTR	1,100	888	2135	Yes	No	2256	2105	No	No
		NBR	615	407	888	Yes	No	710	874	No	No
13	US Hwy 395 & Poplar St.	WBL	540	588	561	No	No	249	303	Yes	Yes
		WBR	540	747	637	No	No	263	582	Yes	No
		WBR	540	N/A	N/A	N/A	N/A	213	738	Yes	No
		SBL	375	371	376	Yes	No	231	289	Yes	Yes
21	US Hwy 395 & Three Flags Rd.	NBL ²	190	101	221	Yes	No	197	220	No	No
		NBR ²	190	87	1289	Yes	No	920	1337	No	No
		SBL	225	81	120	Yes	Yes	88	137	Yes	Yes
		SBR	225	18	146	Yes	Yes	19	18	Yes	Yes
22	US Hwy 395 & Joshua St.	WBL ³	100	106	258	No	No	90	252	Yes	No
		WBT ³	100	191	207	No	No	208	113	No	No
		WBR ³	100	137	500	No	No	312	496	No	No
		NBL	190	199	210	No	No	201	197	No	No
		NBR	330	252	368	Yes	No	440	461	No	No

Table 4.10-7. Peak-Hour Queuing Summary for Horizon Year (2040) Plus Project Conditions

No.	Intersection	Movement	Available Stacking Distance (Feet)	Horizon Year (2040)				Horizon Year (2040) plus Project			
				95th Percentile Queue (Feet)		Acceptable? ¹		95th Percentile Queue (Feet)		Acceptable? ¹	
				AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
		SBL	220	147	234	Yes	No	189	290	Yes	No
23	I-15 SB Ramps & Joshua St.	SBL	25	45	62	No ⁴	No	55	57	No ⁴	No
		SBR	1,500	163	1973	Yes	No	594	1964	Yes	No
24	I-15 NB Ramps & Joshua St.	EBLT ⁴	1,000	43	218	Yes	Yes	42	143	Yes	Yes

Source: Appendix I.

Notes: NBL = northbound left; NBR = northbound right; NBTR = northbound thru-right; SBL = southbound left; SBR = southbound right; WBL = westbound left; WBT = westbound thru; WBR = westbound right; EBL = eastbound left; EBLT = eastbound left thru.

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

² 95th percentile volume exceeds capacity; queue may be longer.

³ Westbound approach queues included per City request to determine stacking distance into the adjacent Outpost Road & Pilot Travel Center intersection/driveway.

⁴ Queue extends past available pocket length for movement, but does not extend into freeway mainline lanes.

⁵ Available stacking distance measured from the I-15 SB Off-Ramp/Joshua Street intersection.

Table 4.10-8. Existing and Existing plus Project Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	Satisfactory LOS	Existing				Existing plus Project				Inconsistent with LOS Standards?	
				AM Peak		PM Peak		AM Peak		PM Peak			
				Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	AM	PM
1	US Hwy 395/ Phelan Road - Main Street	City of Hesperia; Caltrans ³	E	52.8	D	69.1	E	52.8	D	71.3	E	No	No
2	Mesa Linda Street/Main Street	City of Hesperia	E	11.6	B	12.0	B	21.2	C	19	B	No	No
3	US Hwy 395/ Poplar Street	City of Hesperia; Caltrans	E	81.7	F	110.8	F	141.2	F	>300	F	Yes	Yes
4	Lassen Road/ Poplar Street	City of Hesperia	D	9.3	A	9.1	A	10.6	B	9.5	A	No	No
5	US Hwy 395/ Three Flags Avenue	City of Hesperia; Caltrans	E	13.3	B	12.3	B	13.4	B	12.3	B	No	No
6	US Hwy 395/ Joshua Street-I-15 ramps	City of Hesperia; Caltrans	E	11.4	B	12.6	B	12.1	B	13.9	B	No	No
7	I-15 SB Off-Ramp/Joshua Street	City of Hesperia; Caltrans	E	9.6	A	10.1	B	9.8	A	10.5	B	No	No
8	I-15 NB On-Ramp/Joshua Street	City of Hesperia; Caltrans	E	N/A ⁶									
9	Lassen Road/ Driveway North	City of Hesperia	D	Does Not Exist				8.7	A	8.7	A	No	No
10	Mesa Linda Street/Driveway North	City of Hesperia	D	Does Not Exist				8.9	A	8.9	A	No	No

Table 4.10-8. Existing and Existing plus Project Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	Satisfactory LOS	Existing				Existing plus Project				Inconsistent with LOS Standards?	
				AM Peak		PM Peak		AM Peak		PM Peak			
				Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	AM	PM
11	Lassen Road/ Driveway South	City of Hesperia	D	Does Not Exist				8.9	A	8.8	A	No	No
12	Mesa Linda Street/Driveway South	City of Hesperia	D	Does Not Exist				9.3	A	9.5	A	No	No

Source: Appendix I.

Notes: HCM = Highway Capacity Manual; TWSC = Two-Way Stop-Controlled; X = Unsatisfactory operating conditions/LOS.

¹ Acceptable LOS determined from Goal CI-2 of the City of Hesperia Circulation Element.

² Delay in seconds per vehicle.

³ Level of Service (LOS).

⁴ SBCTA CMP Intersection.

⁵ TWSC in baseline conditions; signalized in all plus Project conditions.

⁶ HCM 6th Edition expects at least one 'Stop' controlled approach at the intersection; delay cannot be where no stop-control exists.

Table 4.10-9. Opening Year (2024) and Opening Year (2024) Plus Project Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	Satisfactory LOS	Opening Year (2024)				Opening Year (2024) plus Project				Inconsistent with LOS Standards?	
				AM Peak		PM Peak		AM Peak		PM Peak		AM	PM
				Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²		
1	US Hwy 395/Phelan Road - Main Street	City of Hesperia; Caltrans ³	E	161.1	F	226.6	F	163.4	F	230.3	F	Yes	Yes
2	Mesa Linda Street/Main Street	City of Hesperia	E	40.6	D	35.7	D	41.6	D	39.0	D	No	No
3	US Hwy 395/Poplar Street	City of Hesperia; Caltrans	E	>300	F	>300	F	>300	F	>300	F	Yes	Yes
4	Lassen Road/Poplar Street	City of Hesperia	D	29.5	D	13.9	B	48.5	E	16.0	C	Yes	No
5	US Hwy 395/Three Flags Avenue	City of Hesperia; Caltrans	E	25.1	C	20.0	C	27.9	C	20.8	C	No	No
6	US Hwy 395/Joshua Street-I-15 ramps	City of Hesperia; Caltrans	E	46.3	D	54.1	D	57.7	E	61.3	E	No	No
7	I-15 SB Off-Ramp/Joshua Street	City of Hesperia; Caltrans	E	36.8	E	20.4	C	51.9	F	21.8	C	Yes	No
8	I-15 NB On-Ramp/Joshua Street	City of Hesperia; Caltrans	E	N/A ⁶									
9	Lassen Road/Driveway North	City of Hesperia	D	Does Not Exist				9.4	A	9.4	A	No	No

Table 4.10-9. Opening Year (2024) and Opening Year (2024) Plus Project Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	Satisfactory LOS	Opening Year (2024)				Opening Year (2024) plus Project				Inconsistent with LOS Standards?	
				AM Peak		PM Peak		AM Peak		PM Peak		AM	PM
				Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²		
10	Mesa Linda Street/Driveway North	City of Hesperia	D	Does Not Exist				11.3	B	11.6	B	No	No
11	Lassen Road/Driveway South	City of Hesperia	D	8.4 ⁷	A ⁷	8.7 ⁷	A ⁷	10.2	B	9.5	A	No	No
12	Mesa Linda Street/Driveway South	City of Hesperia	D	Does Not Exist				14.7	B	14.6	B	No	No

Source: Appendix I.

Notes: X – Unsatisfactory operating conditions/LOS.

¹ Acceptable LOS determined from Goal CI-2 of the City of Hesperia Circulation Element.

² Delay in seconds per vehicle.

³ Level of Service (LOS).

⁴ SBCTA CMP Intersection.

⁵ TWSC in baseline conditions; signalized in all plus Project conditions.

⁶ HCM 6th Edition expects at least one 'Stop' controlled approach at the intersection; delay cannot be where no stop-control exists.

⁷ Project driveway does not exist; however, cumulative Project traffic is routed through this intersection at the proposed Poplar 18 Project driveway, which serves as the western leg of this driveway intersection.

Table 4.10-10. Horizon Year (2040) and Horizon Year (2040) plus Project Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	Satisfactory LOS	Horizon Year (2040)				Horizon Year (2040) plus Project				Inconsistent with LOS Standards?	
				AM Peak		PM Peak		AM Peak		PM Peak		AM	PM
				Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²		
1	US Hwy 395/Phelan Road–Main Street	City of Hesperia; Caltrans ³	E	>300	F	>300	F	>300	F	>300	F	Yes	Yes
2	Mesa Linda Street/Main Street	City of Hesperia	E	12.6	B	21.9	C	18.1	B	32.8	C	No	No
3	US Hwy 395/Poplar Street	City of Hesperia; Caltrans	E	169.7	F	>300	F	212.9	F	>300	F	Yes	Yes
4	Lassen Road/Poplar Street	City of Hesperia	D	>300	F	>300	F	>300	F	>300	F	Yes	Yes
5	US Hwy 395/Three Flags Avenue	City of Hesperia; Caltrans	E	37.5	D	89.6	F	42.1	D	90.1	F	No	Yes
6	US Hwy 395/Joshua Street–I-15 ramps	City of Hesperia; Caltrans	E	41.8	D	106.2	F	51.5	D	113.1	F	No	Yes
7	I-15 SB Off-Ramp/Joshua Street	City of Hesperia; Caltrans	E	15.7	C	24.8	C	17.6	B	26.7	C	No	No
8	I-15 NB On-Ramp/Joshua Street	City of Hesperia; Caltrans	E	N/A ⁶									
9	Lassen Road/Driveway North	City of Hesperia	D	Does Not Exist				10.0	B	9.5	A	No	No
10	Mesa Linda Street/Driveway North	City of Hesperia	D	Does Not Exist				14.3	B	13.3	B	No	No

Table 4.10-10. Horizon Year (2040) and Horizon Year (2040) plus Project Peak Hour Intersection Level of Service

No.	Intersection	Jurisdiction	Satisfactory LOS	Horizon Year (2040)				Horizon Year (2040) plus Project				Inconsistent with LOS Standards?	
				AM Peak		PM Peak		AM Peak		PM Peak		AM	PM
				Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²		
11	Lassen Road/ Driveway South	City of Hesperia	D	Does Not Exist				10.4	B	9.5	A	No	No
12	Mesa Linda Street/Driveway South	City of Hesperia	D	Does Not Exist				20.7	C	18.6	B	No	No

Source: Appendix I.

Notes: X – Unsatisfactory operating conditions/LOS.

¹ Acceptable LOS determined from Goal CI-2 of the City of Hesperia Circulation Element.

² Delay in seconds per vehicle.

³ Level of Service (LOS).

⁴ SBCTA CMP Intersection.

⁵ TWSC in baseline conditions; signalized in all plus Project conditions.

⁶ HCM 6th Edition expects at least one 'Stop' controlled approach at the intersection; delay cannot be where no stop-control exists.

Table 4.10-11. Proposed Intersection Improvement Measures

No.	Intersection	Jurisdiction	Satisfactory LOS	Opening Year plus Project		Horizon Year plus Project	
				Intersection Improvement	LOS with Improvements	Intersection Improvement	LOS with Improvements
1	US Hwy 395/ Phelan Road - Main Street	City of Hesperia; Caltrans	E	#1 Add a 2nd NBL turn lane Add a 3rd NBT lane Add a 2nd SBL turn lane Add a 3rd EBT lane Add a WBR turn lane Modify the traffic signal to implement overlap phasing for the WBR turn lane	AM Peak hour: 67.0/E PM Peak Hour: 65.5/E	#3 Same + Add a 4th NBT lane Add two (2) WBR turn lanes Add a 3rd SBT lane Add a 3rd WBT lane Add an EBR turn lane	AM Peak hour: 78.8/E PM Peak Hour: 69.7/E
3	US Hwy 395/ Poplar Street	City of Hesperia; Caltrans	E	#2 Install a traffic signal (CA MUTCD Peak Hour Signal Warrant is met under AM and PM peak hours) and re-stripe WB lanes to include: a WBR, a WBT, and a WBL turn lane ² Add a west leg, including an EB left-turn lane and an EB right through lane, along with a NB left-turn lane ²	AM Peak hour: 49.2/D PM Peak Hour: 65.8/E	#4 Same + Add a 3rd NBT lane Add a NBR turn lane Add a 2nd SBL turn lane Add a 2nd SBT lane Convert WB through lane to a shared WB left-	AM Peak hour: 58.2/E PM Peak Hour: 71.9/E

Table 4.10-11. Proposed Intersection Improvement Measures

No.	Intersection	Jurisdiction	Satisfactory LOS	Opening Year plus Project		Horizon Year plus Project	
				Intersection Improvement	LOS with Improvements	Intersection Improvement	LOS with Improvements
4	Lassen Road/ Poplar Street	City of Hesperia	D	#5 Add stop signs on the eastbound and westbound approaches, converting the intersection from two-way stop-control (TWSC) to an all-way stop-control (AWSC) Add an EBL turn lane	AM Peak hour: 24.3/C PM Peak Hour: 14.8/B	through-right turn lane #6 Install a traffic signal (CA MUTCD Peak Hour Signal Warrant is met under AM and PM peak hours) Add a NBL turn lane, and maintain a NB through-right lane Add a WBL turn lane, and maintain a WB through-right lane Add an EBT lane Add an EBL turn lane Add an EBR turn lane	AM Peak hour: 44.0/D PM Peak Hour: 39.7/D
5	US Hwy 395/Three Flags Avenue	City of Hesperia; Caltrans	E	None	N/A	#7 Add a 3rd NBT lane Add a 3rd SBT lane	AM Peak hour: 25.0/C PM Peak Hour: 47.3/D

Table 4.10-11. Proposed Intersection Improvement Measures

No.	Intersection	Jurisdiction	Satisfactory LOS	Opening Year plus Project		Horizon Year plus Project	
				Intersection Improvement	LOS with Improvements	Intersection Improvement	LOS with Improvements
6	US Hwy 395/ Joshua Street– I-15 ramps	City of Hesperia; Caltrans	E	None	N/A	#8 Add a 3rd NBT lane Add a 3rd SBT lane Add a 2nd EBT lane Add a 2nd EBL turn lane Add a 2nd WBR lane	AM Peak hour: 27.0/C PM Peak Hour: 70.6/E
7	I-15 SB Off- Ramps/Joshua Street	City of Hesperia; Caltrans	E	#9 Add free SBR turn channelized lane on the off-ramp to Joshua Street	AM Peak hour: 13.1/B PM Peak Hour: 21.8/C	N/A Same	AM Peak hour: 11.2/B PM Peak Hour: 17.3/B

Source: Appendix I.**Notes:** NBL= Northbound left; NBT= Northbound through; NBR= Northbound right; SBL= Southbound left; SBT= Southbound through; SBR= Southbound right; WBL= Westbound left; WBT= Westbound through; WBR= Westbound right; EBL= Eastbound left; EBT= Eastbound through; EBR= Eastbound right; N/A = not applicable.

4.10.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The Project would have a less-than-significant impact and no mitigation is required.

Threshold B: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The Project would have a less-than-significant impact and no mitigation is required.

Threshold C: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Project could result in potentially significant impacts associated with increasing hazards due to a geometric design feature related to queuing. Improvement measures required to mitigate Project's impact would include fair-share contribution to Intersections #1, #3, #5, #6, and #7. Since the City does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy. Therefore, the Project's impact related to an increase in hazardous conditions (i.e., queuing) would be significant and unavoidable.

Threshold D: Would the Project result in inadequate emergency access?

The Project would have a less-than-significant impact and no mitigation is required.

Threshold E: Would the Project result in cumulatively considerable transportation impacts?

The Project could result in potentially significant impacts with regard to cumulatively considerable transportation impacts. The Project may increase a hazardous condition due to queuing impacts at the intersections #1, #3, #5, #6, and #7 under the Horizon Year (2040) plus Project analysis scenario. Since the City does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy. Therefore, Project's impact to increase in hazardous conditions (i.e., queuing) would be significant and unavoidable, and the Project could thereby contribute to a cumulatively considerable impact associated with queuing and hazardous design features.

4.10.6 References Cited

Caltrans (California Department of Transportation). 2002. Guide for the Preparation of Traffic Impact Studies. December 2002.

Caltrans. 2020a. Transportation Impact Study Guide. Vehicles Miles Traveled-Focused. May 20, 2020.

Caltrans. 2020b. Traffic Safety Bulletin 20-02-R1: Interim Local Development and Intergovernmental Review Safety Review Practitioners Guidance. December 18, 2020.

City of Hesperia. 2021. Hesperia Main Street and Freeway Corridor Specific Plan. MSFCSP-update (cityofhesperia.us)

City of Hesperia. 2020. City of Hesperia Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment (LOS).

City of Hesperia. 2018. City of Hesperia Non-Motorized Transportation Plan. Non-Motorized_Transportation_Plan_24x36 (cityofhesperia.us)

City of Hesperia. 2010. City of Hesperia General Plan. City of Hesperia General Plan 2010 - 10-21-10.pdf

ITE (Institute of Transportation Engineers). 2017. The Trip Generation Manual, 10th ed. Washington DC: ITE.

ITE. 2019. High-Cube Warehouse Trip Generation Study. January 29, 2019.

OPR (California Governor's Office of Planning and Research). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. Accessed May 2020. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

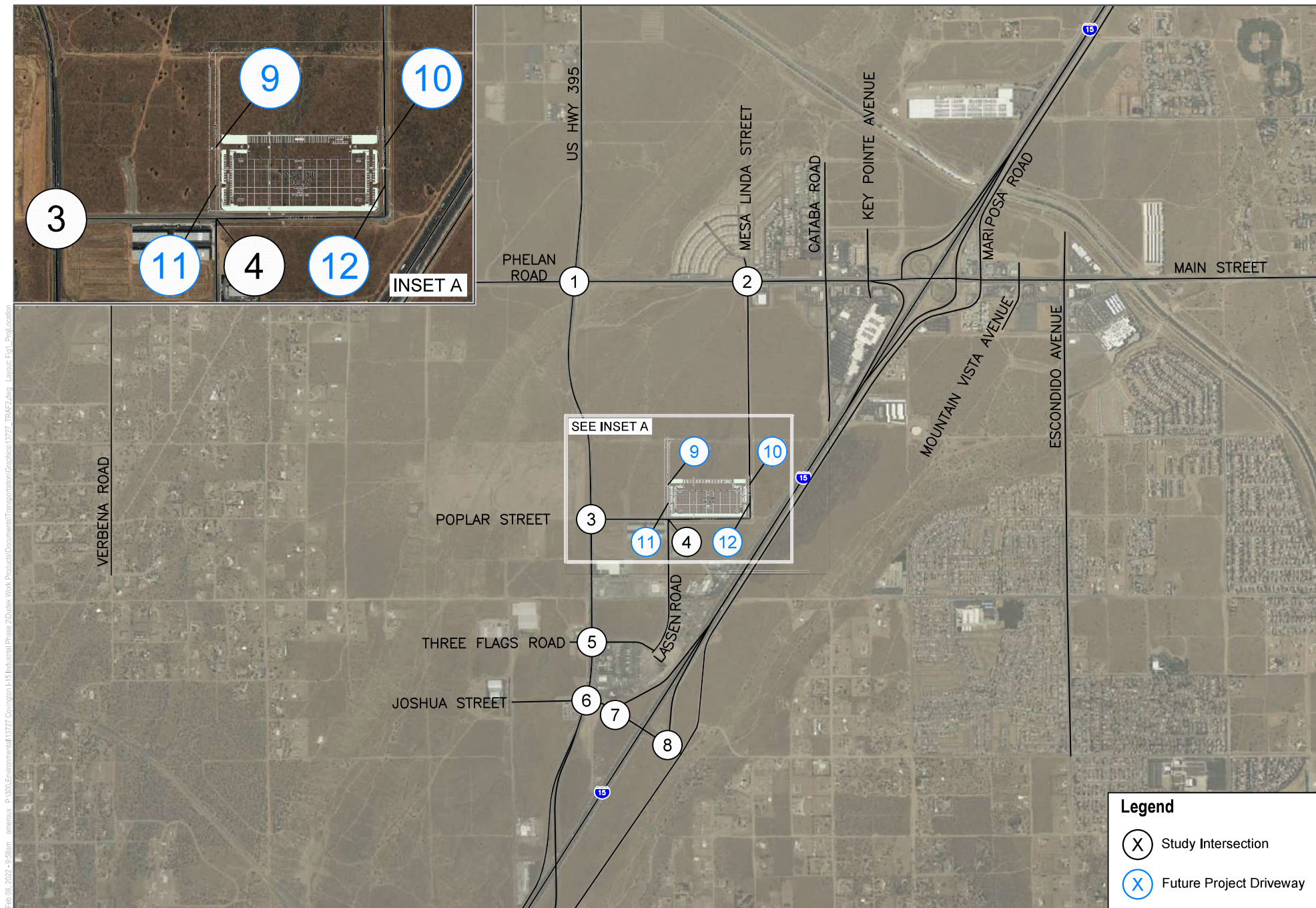
SANBAG (San Bernardino Associated Governments). 2016. San Bernardino County Congestion Management Program. June 2016.

SBCTA (San Bernardino County Transportation Authority). 2019. Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.

SCAG (Southern California Association of Governments). 2001. Employment Density Study. October 2001.

SCAG. 2020. Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy). http://scagrtpscscs.net/Documents/2020/2020RTPSCS_LocalInputProcessFS.pdf.

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps; RGA 2021

DUDEK

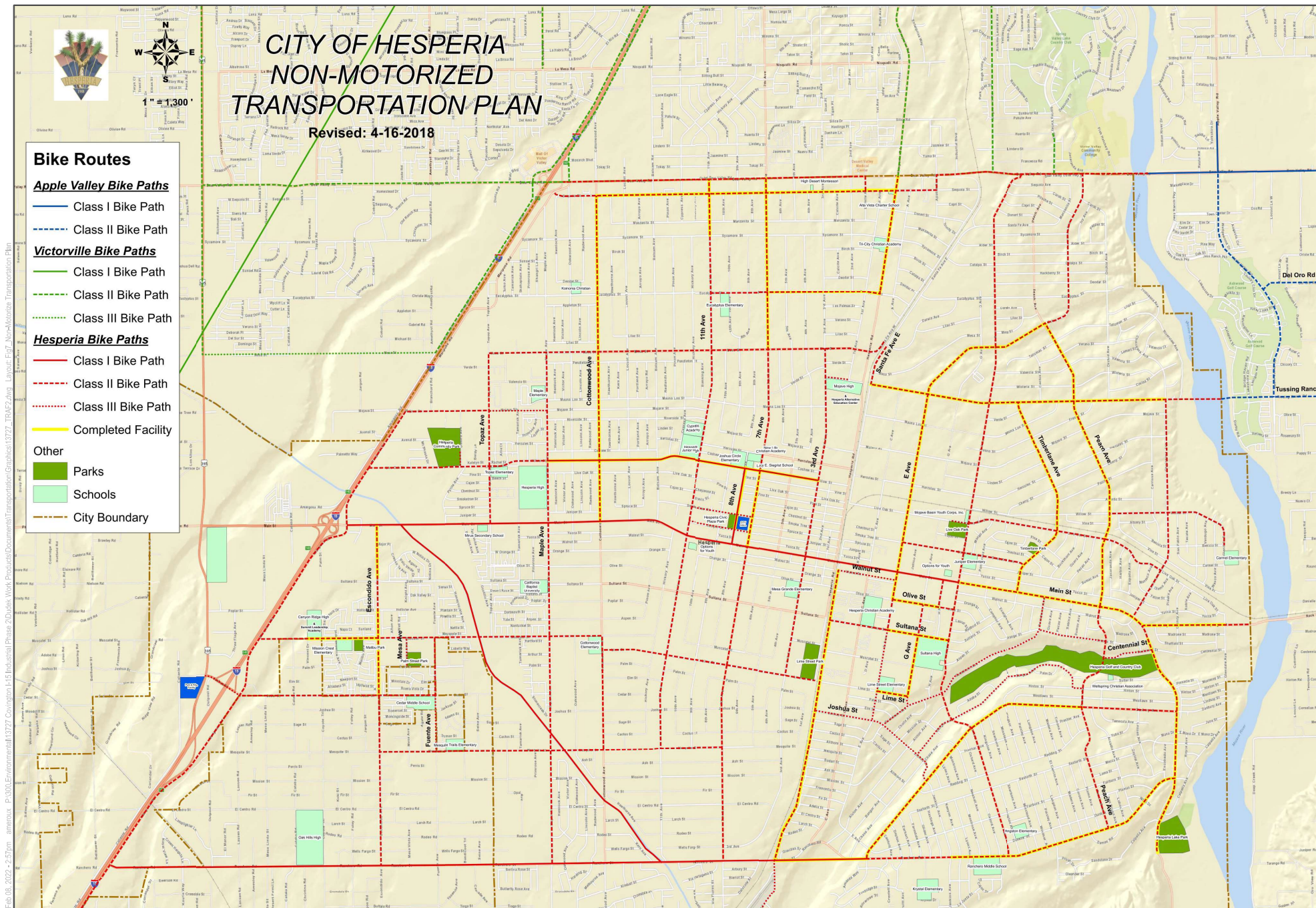


NOT TO SCALE

FIGURE 4.10-1
Project Location and Study Area

Poplar 18 Project

INTENTIONALLY LEFT BLANK



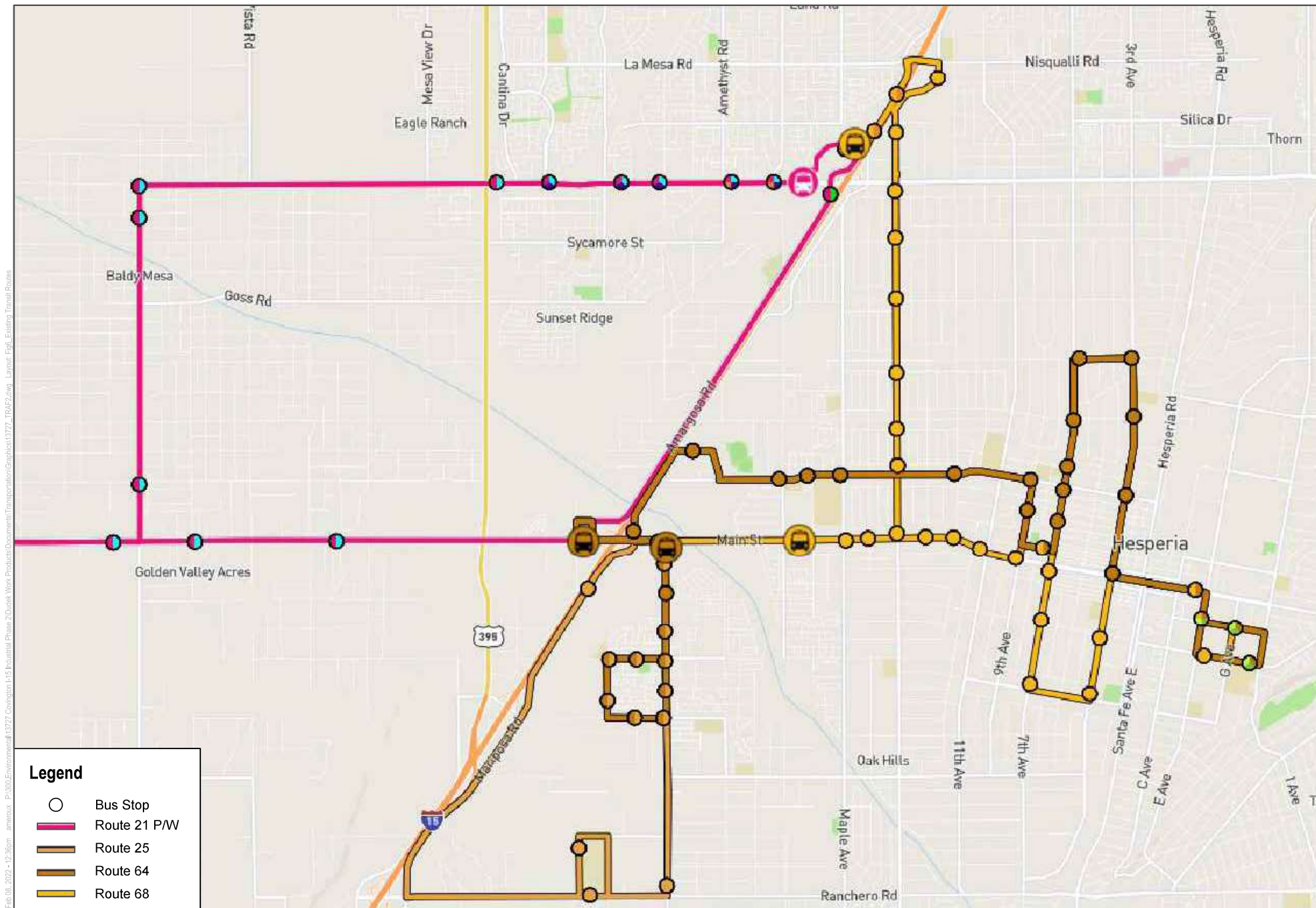
SOURCE: City of Hesperia 2018

FIGURE 4.10-2

City of Hesperia Non-motorized Transportation Plan

Poplar 18 Project

INTENTIONALLY LEFT BLANK

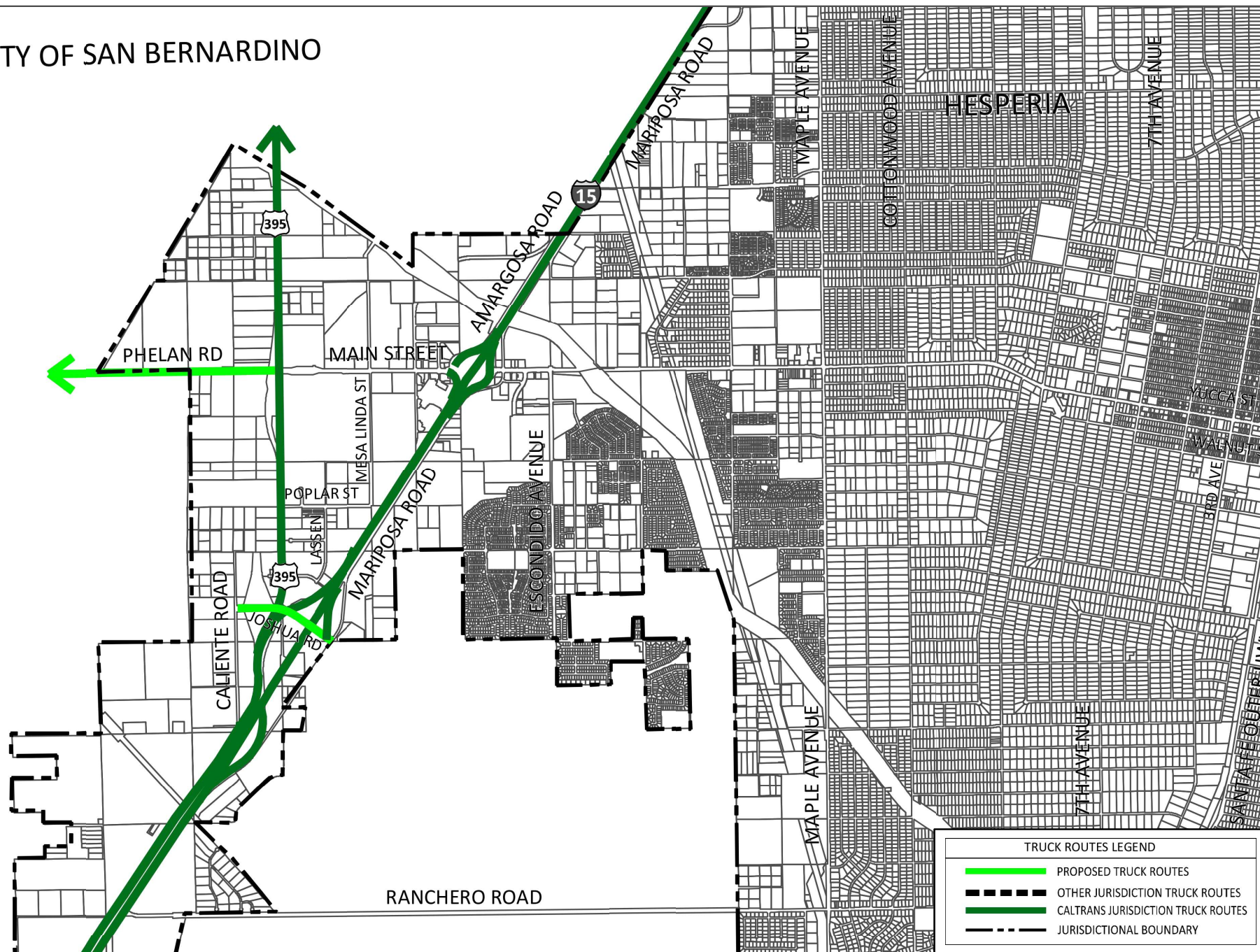


SOURCE: WTA 2021

FIGURE 4.10-3
Existing Transit Routes

INTENTIONALLY LEFT BLANK

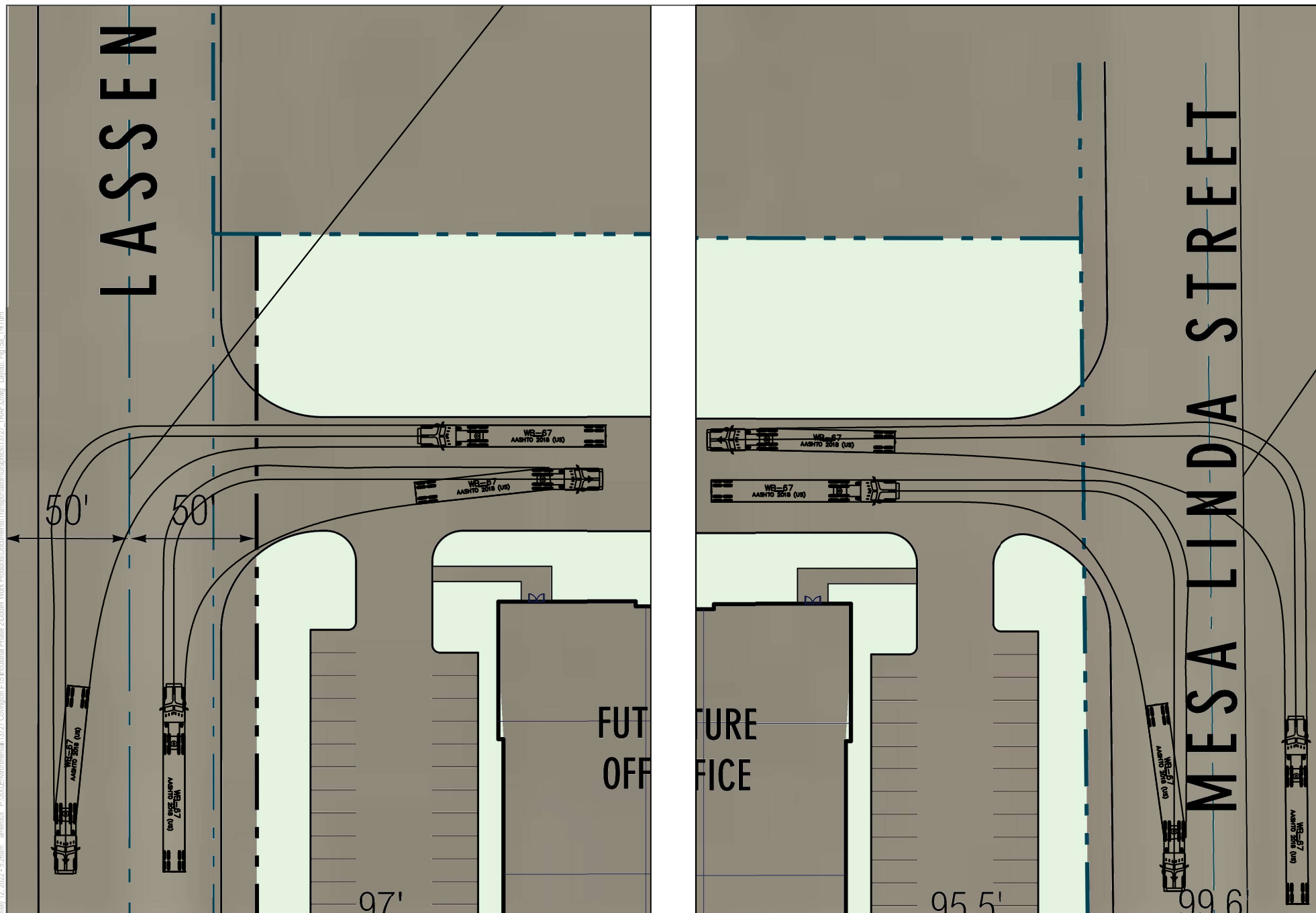
COUNTY OF SAN BERNARDINO



SOURCE: City of Hesperia 2010

FIGURE 4.10-4
Local Truck Routes

INTENTIONALLY LEFT BLANK

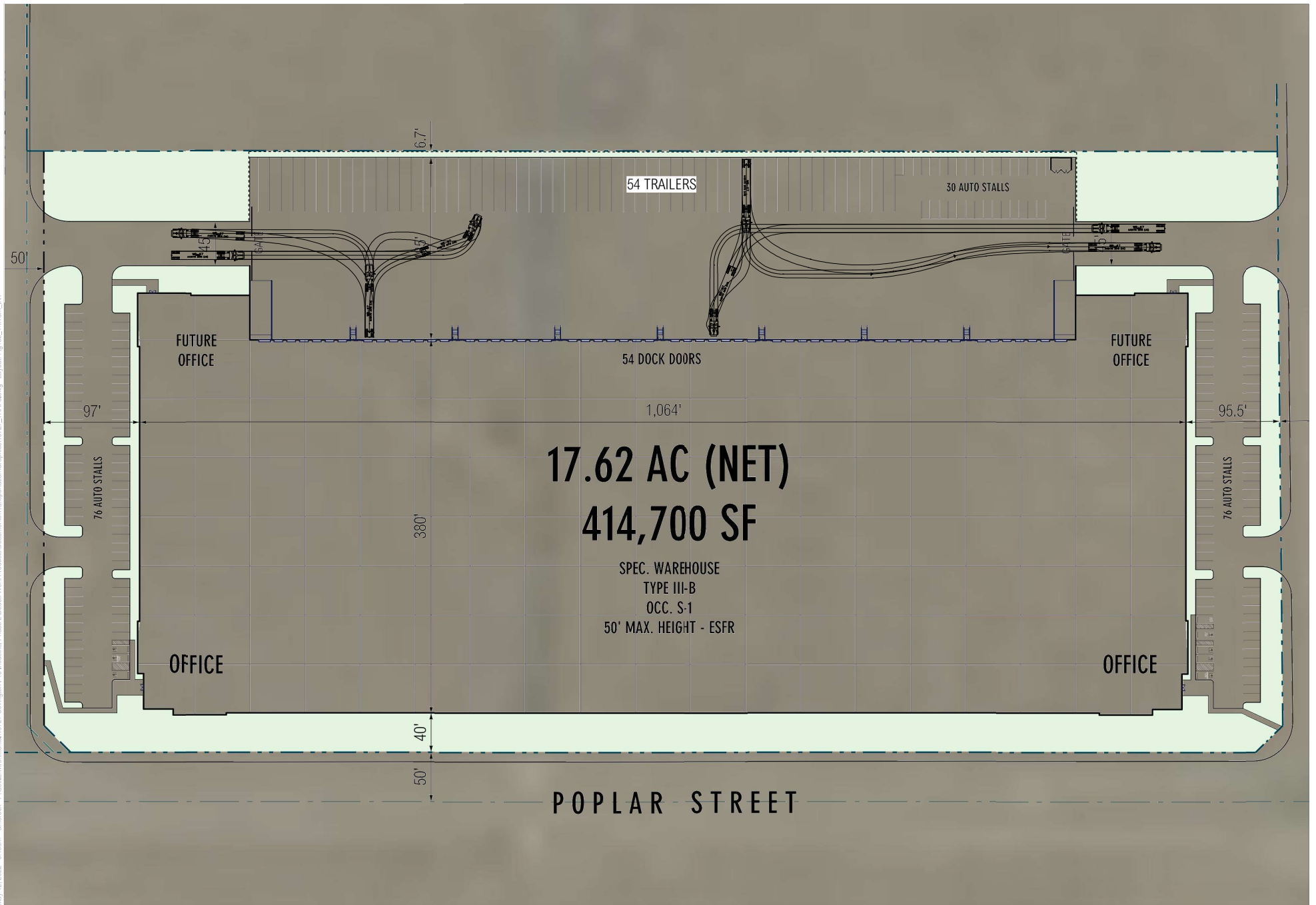


SOURCE: Bing Maps; RGA 2021; AASHTO 2018

FIGURE 4.10-5
Truck Turning Templates (Driveway)

INTENTIONALLY LEFT BLANK

May 12, 2024 - 6:18am amrcou P:\300\Environmental\13727 Covington I-15 Industrial Phase 2\Draws Work Products\Documents\Transportation\Graphics\13727_TPAF3.dwg Layout: Plt19a_Tk11m.dwt



SOURCE: Bing Maps; RGA 2021; AASHTO 2018

DUDEK



NOT TO SCALE

FIGURE 4.10-6
Truck Turning Templates (Internal)

Poplar 18 Project

INTENTIONALLY LEFT BLANK

4.11 Utilities and Service Systems

This section describes the existing utility conditions of the Poplar 18 Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to the implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2 of this Environmental Impact Report [EIR]), the following analysis is based, in part, on the following sources:

- Preliminary Drainage Report, prepared by WestLAND Group Inc. in September 2022 (Appendix G-1)
- Preliminary Water Quality Management Plan (WQMP), prepared by WestLAND Group in May 2022 (Appendix G-2)
- Water Supply Assessment Report, prepared by KEC Engineers, Inc. in August 2022 Appendix G-3)

4.11.1 Existing Conditions

Water

Water Supply

The City's water system is managed by the Hesperia Water District, which is a subsidiary special district of the City. The Hesperia Water District provides utility service for the water and sewer system within the City and operates as a self-sustaining utility business enterprise. With minor exceptions, the Hesperia Water District's service area matches the City's boundaries and covers approximately 74 square miles.

In the 2015 Urban Water Management Plan (UWMP), Hesperia Water District estimated that it receives approximately 88.0% of its water from groundwater, 5.5% from purchased water, and 6.5% from recycled water (Hesperia Water District 2016). Regarding the portion of the District's water supply that originates as groundwater, the District receives water from fifteen active wells within the City, the entirety of which is located within Alto Subarea sub basin of the Mojave River Groundwater Basin. The Mojave Water Agency serves as the entity responsible for managing the use, replenishment, and protection of the groundwater basin. The Mojave River Ground Water Basin is an adjudicated basin and thus has a managed groundwater extraction rate, reducing the potential for over-extraction to occur (Hesperia Water District 2021). The Upper Mojave River Ground Water Basin is also classified by the California Department of Water Resources (DWR) as having a very low priority in regard to prioritizing the completion of a Groundwater Sustainability Plan (DWR 2019) (see Section 4.11.2, Relevant Plans, Policies, and Ordinances, for additional detail).

In addition to relying on groundwater, the Hesperia Water District purchases imported State Water Project water. However, the Hesperia Water District does not directly resell State Water Project water to retail customers. Rather, the Hesperia Water District partners with the Mojave Water Agency and other retail water purveyors to use imported State Water Project water to replenish the Upper Mojave Water Basin as part of the Regional Recharge and Recovery Project (also referred to as the "R3" project) which is managed by the Mojave Water Agency. Hesperia Water District can then purchase the rights to recover banked water and distribute it as a potable supply. This practice further assists regional water providers in sustainable management of the Mojave Groundwater Basin.

Lastly, the Hesperia Water District also receives recycled water from the Hesperia Subregional Water Recycling Facility in Hesperia, which is owned and operated by the Victor Valley Wastewater Reclamation Authority

(VWRA). This facility receives, treats, and recycles a portion of the City's wastewater and distributes recycled water to a select number of customers within the City (City of Hesperia 2021).

Pursuant to the Urban Water Management Planning Act, Hesperia Water District prepares a UWMP on a 5-year basis to evaluate current and projected water supplies and demands amongst other water planning issues. Hesperia Water District's most recent UWMP, prepared in 2016, includes plans for provision of water (including drought scenarios) for its service area. The plan uses regional population, land use plans, and projections of future growth as the basis of planning for future water supply and demonstrating compliance with state water conservation goals and policies. Hesperia Water District comprehensively updates its UWMP every 5 years to refine population projections and include all new land use patterns and development but has not yet released.

According to the Hesperia Water District UWMP, Hesperia Water District has the supply needed to meet current and projected water demands through 2045 during normal-, historic single-dry-, and historic multiple-dry-year periods, as shown in Table 4.11-1, which presents the supplies and demands, as estimated for the 2020 report, for the various drought scenarios for the projected planning period of 2025–2045 in 5-year increments. Demands are shown with the effects of assumed urban demand reduction (conservation) measures that would be implemented during drought conditions.

Table 4.11-1. Supply and Demand Comparison (Acre-Feet per Year)

Supply and Demand		2025	2030	2035	2040	2045
Average Year						
Supply totals		15,250	16,290	16,990	17,740	18,420
Demand totals		15,250	16,290	16,990	17,740	18,420
Difference		0	0	0	0	0
Single-Dry Year						
Supply totals		15,250	16,290	16,990	17,740	18,420
Demand totals		15,250	16,290	16,990	17,740	18,420
Difference		0	0	0	0	0
Multiple Dry Years Supply and Demand Comparison						
First Year	Supply totals	15,250	16,290	16,990	17,740	18,420
	Demand totals	15,250	16,290	16,990	17,740	18,420
	Difference	0	0	0	0	0
Second Year	Supply totals	15,460	16,430	17,140	17,880	18,540
	Demand totals	15,460	16,430	17,140	17,880	18,540
	Difference	0	0	0	0	0
Third Year	Supply totals	15,670	16,570	17,290	18,020	18,660
	Demand totals	15,670	16,570	17,290	18,020	18,660
	Difference	0	0	0	0	0
Fourth Year	Supply totals	15,880	16,710	17,440	18,160	18,780
	Demand totals	15,880	16,710	17,440	18,160	18,780
	Difference	0	0	0	0	0

Table 4.11-1. Supply and Demand Comparison (Acre-Feet per Year)

Supply and Demand		2025	2030	2035	2040	2045
Fifth Year	Supply totals	16,090	16,850	17,590	18,300	18,900
	Demand totals	16,090	16,850	17,590	18,300	18,900
	Difference	0	0	0	0	0

Source: Hesperia Water District 2021.

Existing Water Use

The Project consists of vacant, undeveloped land. As such, there is no existing water demand on site.

Water Infrastructure

The City's existing water distribution system includes approximately 550 miles of underground pipelines. In addition, the distribution system includes a number of water reservoirs, referred to as Plants, to store water to help equalize fluctuations between supply and demand, to supply sufficient water for firefighting, and to meet demands during an emergency or an unplanned outage of a major source of supply.

Within the immediate vicinity of the Project site, existing water lines include water lines within Poplar Street and Mesa Linda Street.

Wastewater

Sewer Infrastructure

The City owns, operates, and maintains a wastewater collection system, including approximately 128 miles of gravity sewer pipe, 2,407 manholes, 704 cleanouts, one operational lift station, and one force main. The primary sources of wastewater in the City's system includes sanitary flow from residential, commercial, and industrial sources. As of 2016, approximately 11% of the City of Hesperia's geographical area was served by sewers. The remaining area is either undeveloped or served by on-site septic tanks (Hesperia Water District 2022).

The portion of the City's wastewater that is not treated by on-site septic tanks is conveyed to and treated and recycled at the Hesperia Subregional Water Recycling Facility which is owned and operated by VVWRA. Currently, this facility is capable of treating up to 1.0 million gallons per day (mgd) of wastewater that is expandable to 4.0 mgd. The water recycling facility is a "scalping plant," meaning that only wastewater is treated here. No solid waste is treated at this site. Solid waste is returned to the sewer line where it continues via VVWRA's 3-mile interceptor to the VVWRA Regional Wastewater Treatment Plant (RWWTP) in Victorville. When measured in 2016, the RWWTP treated on average 12.5 mgd of wastewater and had a maximum treatment capacity of 18.0 mgd (City of Hesperia 2016, 2022; Hesperia Water District 2016, 2021).

Within the immediate vicinity of the Project site, there is a gravity line starting east of Highway 395 in line with Sultana Street, and a 10-inch line going from east to west along Poplar Street.

Existing Wastewater Generation

The Project site is undeveloped and vacant. As such, no wastewater is currently generated.

Stormwater Drainage

The Project site consists of 17.87 acres of rectangular shaped undeveloped land with surface elevations ranging between 3,615 feet above mean seal level (amsl) at the southwestern corner of the site to a low point of approximately 3,590 feet amsl in the northeast corner of the site. Stormwater runoff occurs as sheet flow in a mostly southwest to northeast direction across the Project site. There are no current stormwater collection facilities on the Project site.

Within the greater Project area, stormwater facilities are managed by the San Bernardino County Flood Control District. Locally, Oro Grande Wash is a regional storm drain facility that is part of the City of Hesperia's Master Plan of Drainage. The wash has an earthen bottom and is routinely maintained by the San Bernardino County Flood Control District. This flood control channel flows for approximately 9 miles to the north and northeast of the Project site, recharging the underlying groundwater basin (Upper Mojave River Valley Basin) before eventually draining into the Mojave River, which in turn terminates in Silver Lake.

While there are no stormwater drainage facilities located on site because the site is undeveloped, stormwater flows as sheet flow to the northeast where it naturally evaporates and/or infiltrates into the soil. Stormwater that is conveyed on the site can be delineated as originating from two drainage areas, essentially a western half and eastern half of the site (Figure 4.8-1, Existing Drainage Conditions, in Section 4.8, Hydrology and Water Quality).

Solid Waste

The collection, transport, and disposal of solid waste and recyclables from business use and residential use in the City are provided by Advance Disposal Company Inc. (Advance Disposal). After waste is collected, it is delivered to the Advance Disposal Co & Recycling Center, located at 17105 Mesa Street in Hesperia, approximately 6 miles to the northeast of the Project site. Currently, 75% or more of solid waste generated by the City is being recycled (Advance Disposal 2022). Any remaining waste is collected and hauled to the Victorville Sanitary Landfill (City of Hesperia 2010). Details on this landfill are provided below (CalRecycle 2022a):

The Victorville Sanitary Landfill is located at 18600 Stoddard Wells Road in Victorville, approximately 13.2 miles to the northeast of the Project site. This landfill is owned and operated by the County of San Bernardino Solid Waste Management Division. The Victorville Landfill has a maximum permitted daily throughput of 3,000 tons, has a maximum capacity of 93,400,000 cubic yards, and has a remaining capacity of 79,400,000 cubic yards. As of 2020, this landfill was expected to remain open for another 27 years.

Construction waste is typically disposed of at inert landfills, which are facilities that accept materials such as soil, concrete, asphalt, and other construction debris. San Bernardino County has two landfills that accept inert waste, the Victorville Sanitary Landfill and the Chino Valley Rock Landfill (County of San Bernardino 2018). The Chino Valley Rock Landfill is located at 13434 Ontario Avenue in Ontario, approximately 31 miles to the southwest of the Project site. The Chino Valley Rock Landfill has a maximum daily throughput of 1,500 tons and a maximum capacity of 4,600,500 tons per year (CalRecycle 2022b). However, as waste from the City is already disposed of at the Victorville Sanitary Landfill, it is unlikely that Chino Valley Rock Landfill would be used. In addition, the City has a franchise agreement with Advance Disposal, which designates them as the City's exclusive waste hauler, including all construction waste.

Existing Solid Waste Generation

The Project site is undeveloped and vacant. As such, no solid waste is currently generated.

Electricity

Electrical power for the City is provided by Southern California Edison (SCE). SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. According to the California Energy Commission, approximately 104,125 gigawatt-hours of electricity were used in SCE's service area in 2019 (CEC 2022). Demand forecasts anticipate that approximately 115 gigawatt-hours of electricity will be used in SCE's service area in 2025 under a high demand forecast (CEC 2022). SCE receives electric power from a variety of sources. According to the California Public Utilities Commission's 2019 California Renewables Portfolio Standard Annual Report, 36% of SCE's power came from eligible renewables, such as biomass/waste, geothermal, small hydroelectric, solar, and wind sources during 2018 (CPUC 2019).

The City is served by a total of three existing substations, with the substation serving the Project site being the Aqueduct Substation, located east of the Project site near the intersection of Muscatel Street and Topaz Street (SCE 2021). The Aqueduct Substation transforms an incoming 220-kilovolt (kV) electrical current into a 115 kV and 12 kV current, which is distributed to the substation's end users via a network of underground and aboveground electrical lines.

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. In order to ensure projected supply meets demand, SCE tracks planned development and coordinates with the California Independent System Operator (CAISO). The CAISO is a nonprofit public benefit corporation and is the impartial operator of the state's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities (such as SCE) still own transmission assets, the CAISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The CAISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every 5 minutes the CAISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities.

Part of the CAISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission owners (investor-owned utilities such as SCE) file annual transmission expansion/modification plans to accommodate the state's growing electrical needs. The CAISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the CAISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the state. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the state.

As the Project site is currently undeveloped, there is no electric infrastructure on site. However, existing 12 kV overhead electrical lines emanating from the Aqueduct Substation are located along Phelan Road and U.S. Highway 395.

Existing Electricity Use

The Project site is undeveloped and vacant. As such, no electricity is currently used.

Natural Gas

Natural gas service for the City is provided by the Southern California Gas Company (SoCalGas). The territory serviced by SoCalGas encompasses approximately 20,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in SoCalGas's service territory. In 2019, approximately 2,409 million cubic feet per day were used in SoCalGas's service area, or 879,285 million cubic feet (California Gas and Electric Utilities 2022). By 2025, the projected demand is expected to be 2,342 million cubic feet per day (California Gas and Electric Utilities 2022). As of 2021, the total capacity available was estimated at 3,425 million cubic feet per day¹ (California Gas and Electric Utilities 2022). Projections out to 2035 continue to show available capacity that is well above the existing and future anticipated natural gas demand in the area serviced by SoCalGas (California Gas and Electric Utilities 2022).

As the Project site is currently undeveloped, there are no underground gas pipelines on site. However, an existing natural gas pipeline is located within Phelan Road.

Existing Natural Gas Use

The Project site is undeveloped and vacant. As such, no natural gas is currently used.

Telecommunications

There are a number of telecommunications service providers in the City including Frontier Communications, Spectrum, and Hughes Net. These are private companies that provide connections to their communication systems on an as-needed basis and maintain existing infrastructure in the vicinity of the Project site. Because the end user of the Project has not yet been identified, it is unknown at this time which provider would provide telecommunications services. However, because existing infrastructure is located within the vicinity of the Project site, it is anticipated that telecommunication lines would be extended onto the Project site from their existing locations.

Existing Telecommunications Use

The Project site is undeveloped and vacant. As such, no telecommunications services are currently used.

4.11.2 Relevant Plans, Policies, and Ordinances

Federal

National Pollutant Discharge Elimination System Permit Program

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. Discharge from any point source is unlawful unless the discharge is in compliance with an NPDES permit. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

¹ One cubic foot of natural gas has approximately 1,020 British thermal units (BTU) of natural gas or 1.02 thousand British thermal units (kBTU) of natural gas.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (40 CFR, Section 268, Subpart D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs that include federal landfill criteria. The federal regulations address the location, operation, design, and closure of landfills, as well as groundwater monitoring requirements.

State

California Code of Regulations, Titles 14 and 27

Title 14 (Natural Resources, Division 7) and Title 27 (Environmental Protection, Division 2 [Solid Waste]) of the California Code of Regulations (CCR) govern the handling and disposal of solid waste and operation of landfills, transfer stations, and recycling facilities.

Assembly Bills 939 and 341: Solid Waste Reduction

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of a desired approach to solid waste management of reducing, reusing, and recycling. AB 939 mandated local jurisdictions to meet waste diversion goals of 25% by 1995 and 50% by 2000 and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. AB 939 requires cities and counties to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element to demonstrate how the jurisdiction will meet the diversion goals. Other elements included encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions under California Integrated Waste Management Board (CIWMB) regulatory oversight. Since the adoption of AB 939, landfill capacity is no longer considered a statewide crisis. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health, safety, and the environment from landfills operations and solid waste facilities.

In 2011, AB 341 was passed, making a legislative declaration that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. AB 341 requires that local agencies adopt strategies that will enable 75% diversion of all solid waste by 2020. This bill requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multifamily apartments with five or more units are also required to form a recycling program.

Senate Bill 1374: Construction and Demolition Waste Reduction

Senate Bill (SB) 1374 requires that annual reports submitted by local jurisdictions to CIWMB include a summary of the progress made in the diversion of construction and demolition waste materials. In addition, SB 1374 requires the CIWMB to adopt a model ordinance suitable for adoption by any local agency that required 50% to 75% diversion of construction and demolition waste materials from landfills. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CIWMB's model by default.

Assembly Bill 1327: California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327, which was established in 1991, required CalRecycle to develop a model ordinance for the use of recyclable materials in development projects. Local agencies were then required to adopt the model ordinance, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects.

Assembly Bill 1826: Mandatory Commercial Organics Recycling

In October 2014, Governor Brown signed AB 1826 Chesbro (Chapter 727, Statutes of 2014), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste generated per week. (*Organic waste* is defined as food waste, green waste, landscape, and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.) This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. This law phases in the mandatory recycling of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to recycle organic waste.

Senate Bill X7-7

SB X7-7, which became effective on February 3, 2010, is the water conservation component to the Delta legislative package (SB 1, Delta Governance/Delta Plan). The bill implements water use reduction goals established in 2008 to achieve a 20% statewide reduction in urban per capita water use by December 31, 2020. The bill requires each urban retail water supplier to develop urban water use targets to help meet the 20% goal by 2020 and an interim 10% goal by 2015. The bill establishes methods for urban retail water suppliers to determine targets to help achieve water reduction targets. The retail water supplier must select one of the four compliance options. The retail agency may choose to comply with SB X7-7 as an individual or as a region in collaboration with other water suppliers. Under the regional compliance option, the retail water supplier must report the water use target for its individual service area.

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley)—collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically overdrafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the DWR provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies to manage basins sustainably and requires those Groundwater Sustainability Agencies to adopt Groundwater Sustainability Plans for crucial groundwater basins in California.

Urban Water Management Plans

Pursuant to the California Urban Water Management Act (California Water Code Sections 10610–10656), urban water purveyors are required to prepare and update a UWMP every 5 years. UWMPs are prepared by California's

urban water suppliers to support long-term resource planning and ensure adequate water supplies. Every urban water supplier that either delivers more than 3,000 AFY of water annually or serves more than 3,000 connections is required to assess the reliability of its water sources over a 20-year period under normal-year, dry-year, and multiple-dry-year scenarios in a UWMP. UWMPs must be updated and submitted to the DWR every 5 years for review and approval. The Project site is within the area addressed by the Hesperia Water District UWMP.

Senate Bill 610 and Senate Bill 221: Water Supply Assessments

SB 610 and SB 221, amended into state law effective January 1, 2002, improve the linkage between certain land-use decisions made by cities and counties and water supply availability. The statutes require detailed information regarding water availability and reliability with respect to certain developments to be included in the administrative record, to serve as the evidentiary basis for an approval action by the City or County on such projects. Under Water Code Section 10912[a], projects subject to the California Environmental Quality Act (CEQA) requiring a Water Supply Assessment (WSA) include: residential development of more than 500 dwelling units; shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; hotel, motel or both, having more than 500 rooms; industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area; mixed-use projects that include one or more of the projects specified; or a project that would demand an amount of water equivalent to or greater than the amount required by a 500 dwelling units. A fundamental source document for compliance with SB 610 is the UWMP. The UWMP can be used by the water supplier to meet the standard for SB 610. SB 221 applies to the Subdivision Map Act, conditioning a tentative map on the applicant to verify that the public water supplier has sufficient water available to serve the proposed development.

Pursuant to the requirements of SB 610, a WSA was prepared for the Project and includes a comprehensive assessment of historical demands and a projection of future demands based on forecasted development of the remaining developable lands within the City's water service area (Appendix J).

Executive Order B-29-15

In response to the ongoing drought in California, Executive Order (EO) B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives became permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the DWR modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Sanitary Sewer General Waste Discharge Requirements

On May 2, 2006, the State Water Resources Control Board adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1.0 miles of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system in order to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System

Management Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the State Water Resources Control Board using an online reporting system.

California Code of Regulations Title 24, Part 11

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code, Part 11 of Title 24, commonly referred to as the CALGreen Code, establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all new construction of residential and non-residential buildings. CALGreen standards are updated periodically. The latest version (CALGreen 2019) became effective on January 1, 2020.

Mandatory CALGreen standards pertaining to water, wastewater, and solid waste include the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water-efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- Diversion of 65% of construction and demolition waste from landfills

Regional

Water Quality Control Plans (Basin Plans)

The Porter-Cologne Water Quality Control Act, Section 13000, directs each Regional Water Quality Control Board (RWQCB) to develop a water quality control plan (Basin Plan) for all areas within its region. The Basin Plan is the basis for each RWQCB's regulatory program. The Project site is located within the purview of the Lahontan RWQCB (Region 6), and the Project must comply with applicable elements of the Basin Plan for Region 6. The Basin Plan gives direction on the beneficial uses of state waters, describes the water quality that must be maintained, and provides programs necessary to achieve the standards established in the Basin Plan. Beneficial uses of waters within the Mojave River Watershed are addressed in the Mojave River Basin Plan Amendment of the Lahontan Basin Plan.

Mojave River Watershed Water Quality Management Plan

The 2013 Phase II Small Municipal Separate Storm Sewer System (MS4) Permit, adopted by the State Water Resources Control Board, and issued statewide, requires all new development covered by this Order to incorporate low impact development (LID) best management practices (BMPs) to the maximum extent practicable. In San Bernardino County, the Phase II MS4 Permit is applicable within the Mojave River Watershed. In addition, the order also requires the development of a standard design and post-development BMP guidance for incorporation of site design/LID, source control, and treatment control BMPs (where feasible and applicable), and hydromodification mitigation measures to the maximum extent practicable to reduce the discharge of pollutants to receiving waters. The purpose of this technical guidance document for the WQMP is to provide direction to project proponents on the regulatory requirements applicable to a private or public development activity, from project conception to completion. This technical guidance document is intended to serve as a living document, which will be updated as needed to remain applicable beyond the current Phase II MS4 Permit term. Any non-substantive updates to the

technical guiding document and WQMP template will be provided in the annual report. Future substantive updates shall be submitted to the Lahontan RWQCB for review and approval, prior to implementation.

Local

City of Hesperia General Plan

The Conservation Element of the City of Hesperia General Plan (City of Hesperia 2010) identifies, establishes, and sets forth goals or policies to promote the sustainability and environmental integrity of natural resources throughout the City. In addition, the Land Use Element of the General Plan identifies, establishes, and sets forth goals or policies regarding long-term plans for the development of the municipality. Goals or policies related to utilities and service systems in the General Plan includes the following:

Conservation Element

Goal CN-1. Conserve water resources within the Upper Mojave River Groundwater Basin.

Policy CN 1.1. Promote the use of desert vegetation with low water usage and drought-tolerant materials in landscaped areas.

Policy CN 1.2. Educate residents on water conservation methods with best practices and tips.

Policy CN 1.3. Promote reduced use of high nitrate fertilizers, herbicides, pesticides and other chemicals in landscaping areas that can contaminate the quality of the groundwater.

Policy CN 1.4. Limit the disturbance of natural water hydrology by minimizing the creation of impervious surface area and continued utilization of underground retention/detention facilities to recharge groundwater.

Policy CN 1.5. Work with local agencies and jurisdictions to provide a coordinated effort to ensure a safe and constant water supply for the region.

Policy CN 1.6. Encourage the use of low-water consumption fixtures in homes and businesses.

Policy CN 1.7. Require new development to use new technology, features, equipment, and other methods to reduce water consumption.

Goal CN-2. Establish building and development standards to maximize the reclamation of water resources.

Policy CN 2.1. Minimize impacts to washes that convey drainage by prohibiting development within drainage corridors that are not consistent with the Master Plan of Drainage.

Policy CN 2.2. Encourage the use of reclaimed water for irrigation and other non-potable uses.

Policy CN 2.3. Protect open space areas used for recharging groundwater basins.

Policy CN 2.4. Continue to implement the use of reclaimed water through the City's "purple pipe" ordinances and regulations to further the use of reclaimed and treated water.

Policy CN 2.5. Implement the state and local laws and policies to develop retention basins for the replenishment of the underground water supply.

Policy CN 2.6. Coordinate City policies and activities with the Victor Valley Wastewater Reclamation Authority.

Goal CN-3. Minimize development and set aside necessary open space near and along the surface waters as well as those washes and other water passageways located in the City to preserve and protect plant and animal species and their natural habitat dependent on such surface waters and waterways.

Policy CN 3.1. Monitor the development impacts on these surface water resources within the City.

Policy CN 3.2. Preserve areas within the Oro Grand Wash and un-named wash #1 that exhibit ideal native habitat in a natural state.

Goal LU-5. Designate and protect land for public uses to serve the needs of the community for schools, parks, community facilities, open space, utilities, and infrastructure.

Goal LU-6. Promote sustainable development and building practices in all facets of project development through the completion of construction.

Policy LU-6.1. Promote the use of green building standards and Leadership in Energy and Environmental Design (LEED), or other equivalent programs, in both private and public projects.

Policy LU-6.2. Promote sustainable building practices that go beyond the requirements of Title 24 of the California Administrative Code and encourage energy-efficient design elements, consistent with Policy LU-6.1.

Policy LU-6.3. Support sustainable building practices that encourage the use of recycled or other building materials that promote environmental quality, economic vitality, and social benefits. Support construction, and operational practices that limit impacts to the environment.

Policy LU-6.4. Encourage sustainable development that incorporates green building best practices and involves the reuse of previously developed property and/or vacant sites within a built-up area.

Policy LU-6.5. Encourage development that incorporates green building practices to conserve natural resources as part of sustainable development practices.

Policy LU-6.6. Encourage in-fill development on lands located adjacent to existing developed areas and utilities to maximize the efficiency of land use and infrastructure.

Policy LU-6.7. Encourage the development of public facilities in a manner that assures adequate levels of service while remaining compatible with existing and future land uses.

Goal LU-7. Facilitate a self-contained community with a well-designed and maintained community with a full range of densities and uses within the capacity of infrastructure and services.

Policy LU-7.1. Continue to encourage quality design in all new construction to further improve the built environment of the City.

Policy LU-7.2 Promote sustainable building practices that go beyond the requirements of Title 24 of the California Administrative Code and encourage energy-efficient design elements, consistent with Policy LU-6.1.

Policy LU-7.3. Support sustainable building practices that encourage the use of recycled or other building materials that promote environmental quality, economic vitality, and social benefits. Support construction, and operational practices that limit impacts on the environment.

Policy LU-7.4. Encourage sustainable development that incorporates green building best practices and involves the reuse of previously developed property and/or vacant sites within a built-up area.

Policy LU-7.5. Encourage development that incorporates green building practices to conserve natural resources as part of sustainable development practices.

Policy LU-7.6. Encourage in-fill development on lands located adjacent to existing developed areas and utilities to maximize the efficiency of land use and infrastructure.

Policy LU-7.7. Encourage the development of public facilities in a manner that assures adequate levels of service while remaining compatible with existing and future land uses.

Erosion and Sediment Control Plan

For projects that would include soil disturbance during construction, project applicants must submit an erosion and sediment control plan for approval to the City of Hesperia. The City will not issue a grading or building permits until the erosion and sediment control plan for the Project is approved.

The purpose of the erosion and sediment control plan is to:

1. Identify potential pollutant sources that may affect the quality of stormwater runoff and prevent non-stormwater discharges from the construction site.
2. Document the BMPs that will be implemented to prevent, to the maximum extent practicable, construction site pollutants from leaving the site during all phases of construction.
3. Document erosion control, sediment control, and good housekeeping BMPs that shall be implemented year-round as appropriate based on construction activities.

4.11.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the Project would:

- A. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- B. Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years.

- C. Result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.
- D. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- E. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.
- F. Result in cumulatively considerable impacts relating to utilities and service systems.

4.11.4 Impacts Analysis

Threshold A: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less-than-Significant Impact. As discussed in further detail below, the Project would result in less-than-significant impacts with regard to the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Water Facilities

The Project would involve the construction of water distribution infrastructure (i.e., pipes, valves, meters, etc.) to provide domestic water, firewater, and irrigation to the Project site. As discussed in Section 4.11.1, Existing Conditions, there are existing water lines within Poplar Street and Mesa Linda Street. The proposed Project would require a new water line into one of these existing water mains.

The construction of the proposed water improvements described above has the potential to cause environmental effects associated with buildout of the Project as a whole. The aforementioned water pipeline improvements have been considered as part of the Project, however, and their disturbance footprints and construction techniques, as well as their associated impacts, have been accounted for within this Draft EIR. There are no unique impacts associated with the installation of water infrastructure to serve the Project that have not been discussed and accounted for in this document. Therefore, impacts associated with water facilities would be less than significant.

Water Treatment Facilities

While the Project would result in an incremental increase in demand for water treatment capacity, the Project's water demand would not result in or require new or expanded water treatment facilities beyond those facilities that are already planned as part of Hesperia Water District's 2020 UWMP. As such, implementation of the Project would not result in the need to expand water treatment facilities. Therefore, impacts associated with water treatment facilities would be less than significant.

Wastewater Conveyance Facilities

As previously discussed, within the immediate vicinity of the Project site, existing sewer lines include a gravity line starting east of Highway 395 in line with Sultana Street (to the north of the Project site) and another also going from east to west along Poplar Street. The relocation and construction of the proposed sewer improvements has the potential to cause environmental effects associated with buildout of the Project as a whole. However, the proposed

sewer improvements have been considered as part of the Project, and their disturbance footprints and construction techniques, as well as their associated impacts, have been accounted for within this Draft EIR. There are no unique impacts associated with the installation of sewer infrastructure to serve the Project that have not been discussed and accounted for in this document. Therefore, impacts associated with wastewater conveyance facilities would be less than significant.

Wastewater Treatment Facilities

Upon build-out of the Project, the Project's wastewater would be conveyed to the Hesperia Subregional Water Recycling Facility and to the VVWRA RWWTP, which has a treatment capacity of 18.0 mgd and currently produces an average flow of 12.5 mgd, or approximately 70% of its total capacity. According to the wastewater generation rates used in the Project's air quality, greenhouse gas emissions, and energy analyses, the Project would generate approximately 0.2102 mgd of wastewater. Projected wastewater from the Project would represent approximately 3.8% of the remaining capacity of the treatment facility. Given the remaining capacity of the VVWRA RWWTP, the VVWRA RWWTP would be able to adequately accommodate the Project's contribution of wastewater. As such, no improvements to any of the City's or VVWRA's facilities would be required to ensure sewer service to the Project site. Therefore, impacts associated with new wastewater treatment facilities would be less than significant.

Stormwater Drainage Facilities

The Project site and a majority of the surrounding area are characterized as a rural, undeveloped, vacant land comprised of pervious surfaces. Ground surface cover within the Project site is moderately vegetated with native grasses, shrubs, and trees. The predominance of pervious surfaces currently allows for the percolation of water into the underlying soils. Developed land typically has a much lower rate of percolation, increasing the amount of runoff reaching the storm drain infrastructure. However, as discussed in Section 4.8, stormwater infiltration would be used as an LID feature as part of the Project.

The Project-specific preliminary drainage report (Appendix G-1) includes analysis of existing and proposed hydrologic conditions to determine whether the post-construction runoff would have any impact on the receiving storm drain system. An analysis was completed for the 2-year, 10-year, 25-year, and 100-year, 24-hour storm event, in accordance with the San Bernardino County Hydrology Manual, to calculate the existing and Project conditions. The proposed stormwater drainage system basins would be sized and designed to prevent flooding from a 100-year storm while also accommodating the required retention volume for water quality purposes. The basins would be designed to capture the entire volume generated from a 10-year 24-hour storm, meaning no runoff would be discharged off site (Appendix G-1).

The Project-specific Preliminary WQMP (Appendix G-2) indicates that stormwater runoff from the Project site would be conveyed to two on-site aboveground infiltration/retention basins and one underground corrugated metal pipe detention systems, which would be designed to capture and infiltrate more than the difference between the existing drainage and propose drainage conditions.

The construction of the proposed storm drain improvements described above has the potential to cause environmental effects associated with buildout of the Project as a whole. The storm drain improvements have been considered as part of the Project, and their disturbance footprints and construction techniques, as well as their associated impacts, have been accounted for within this Draft EIR. There are no unique impacts associated with the installation of storm drain improvements to serve the Project that have not been discussed and accounted for in this document. Therefore, impacts associated with stormwater drainage facilities would be less than significant.

Electric Power, Natural Gas, and Telecommunications

Development of the Project would increase demands for electricity and natural gas and would increase requirements for telecommunication technology infrastructure. Upgrades would be required with respect to electric power, natural gas, and telecommunication facilities (i.e., cable television services), based on the change in land use (i.e., greater intensification). These utilities would be part of a dry utility package that would be installed on site and in the adjacent public roadways to provide service to the Project. Upgrades would be confined to the connections to the Project site and not any off-site centralized facilities. The existing infrastructure is located directly adjacent to the Project site within the public streets. Connection to these existing utilities would require limited construction, which would be temporary and limited to trenching, to the depth of the underground lines. Project construction would occur in accordance with all applicable regulatory requirements. These upgrades and connections have been considered as part of the Project, and their disturbance footprints and construction techniques, as well as their associated impacts, have been accounted for within this Draft EIR.

Electricity would be provided to the Project site by SCE. SCE conducts ongoing monitoring and electrical project development to ensure that it can provide adequate electrical service to the Project area. SoCalGas's Projections out to 2035 continue to show available capacity that is well above the existing and future anticipated natural gas demand in the area serviced by SoCalGas (California Gas and Electric Utilities 2022). There are a number of private telecommunications service providers that provide connections to their communication systems on an as-needed basis and maintain existing infrastructure in the vicinity of the Project site. Project demand for electricity, natural gas and telecommunications would be adequately served by existing infrastructure and capacity. Therefore, impacts associated with electric, natural gas, and telecommunication lateral connections would be less than significant.

Threshold B: Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less-than-Significant Impact. Implementation of the Project would result in the construction of two industrial/warehouse buildings and associated improvements areas on an approximately 17.87-acre site. Based on estimates that were used to calculate energy usage for the operation of the Project, the total water demand for the Project was estimated at 79.3 million gallons per year or 217,260 gallons per day, which is the equivalent of 243 acre-feet per year (AFY). As there is currently no existing water demand for the Project site, the net increase in water demand would be equivalent to the Project's proposed water demand of 243 AFY.

The 2021 Hesperia Water District UWMP has planned for growth within its service area over the next 20 years. Hesperia Water District has made an allowance for future demand estimates. Future demand services are based on historical growth rates in the service area. According to Table 7-2 in the Hesperia Water District 2021 UWMP, Hesperia Water District projects a water demand increase of 3,170 AFY from 2025 (15,250 AFY) to 2045 (18,420 AFY). The net water demand of the proposed Project development would be accounted for within this growth, as the Project is consistent with the underlying City land use designations for the Project site.

As long-term water supply is a significant concern in California, Hesperia Water District, in cooperation with VVWRA, plans to increase water supply reliability throughout its service region by expanding the Hesperia Subregional Water Recycling Facility's water treatment capacity from 1.0 mgd to 2.0 mgd by 2030 as well as build a second water recycling facility within the City that would be able to treat 2.6 mgd of wastewater by 2040. The City additionally plans to construct multiple recharge basins in cooperation with Mojave Water Agency to deliver and recharge State Water Project water into underlying groundwater basins within the Hesperia Water District's service area (Hesperia Water District 2016). Collectively, these additional measures would enable water supply to meet or exceed water

demand for Hesperia Water District for now and into the future. The UWMP identifies a sufficient and reliable water supply for Hesperia Water District's service area, including sufficient water supply for the Project. In addition, the WSA that was prepared for the proposed Project, also concluded that there would be sufficient water supplies for the proposed demand in normal, single dry year, and multiple dry year scenarios (Appendix X). Therefore, impacts associated with water supply would be less than significant.

Threshold C: Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

Less-than-Significant Impact. As previously discussed, upon build-out of the Project, the Project's wastewater would be conveyed to the Hesperia Subregional Water Recycling Facility and to the VVWRA RWWTP, which has a treatment capacity of 18.0 mgd and currently produces an average flow of 12.5 mgd, or approximately 70% of its total capacity. According to the wastewater generation rates used in the Project's air quality, greenhouse gas emissions, and energy analyses, the Project would generate approximately 0.2102 mgd of wastewater. Projected wastewater from the Project would represent approximately 3.8% of the remaining capacity of the treatment facility. Given the remaining capacity of the VVWRA RWWTP, the VVWRA RWWTP would be able to adequately accommodate the Project's contribution of wastewater. Furthermore, as previously discussed, to accommodate an increase in population growth throughout the region, the Hesperia Water District, in cooperation with the VVWRA, plans to expand the water recycling facility to treat 2.0 mgd of wastewater by 2030 as well as build a second water recycling facility within the City that would be able to treat 2.6 mgd of wastewater by 2040.

In addition, Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' sewage systems for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the wastewater treatment system to accommodate the Project. Therefore, impacts associated with wastewater treatment capacity would be less than significant.

Threshold D: Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less-than-Significant Impact. Construction and operation of the Project would result in less-than-significant impacts with regard to the generation of solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Short-Term Construction Impacts

Construction of the Project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, plastics, and soils. Per the CALGreen Code, at least 65% of construction and demolition waste must be diverted from landfills. The City also has construction and demolition debris diversion requirements; however, the CALGreen standards require an equivalent level of diversion (65% diversion). Any hazardous wastes that are generated during construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws. The remaining 35% of construction material that is not required to be recycled would either be disposed of or voluntarily recycled at a solid waste facility with available capacity. As previously described, there are two existing landfills within San Bernardino County that accept inert waste, the Victorville Sanitary Landfill and the Chino Valley Rock Landfill. However, as waste from the City is already transported to the Victorville Sanitary Landfill, it would continue to be transported there. As of 2020, this landfill had an expected remaining capacity of 93,400,000 cubic yards and will remain open for another 27 years.

The City has a franchise agreement with Advance Disposal, which designates them as the City's exclusive waste hauler. Therefore, it is not an option to self-haul or use other companies to transport construction debris. However, the City currently recycles 75% or more of all solid waste produced in the City, exceeding the minimum requirement of 65% per CALGreen requirements. As such, any construction requiring disposal at an inert waste landfill would be sufficiently accommodated by existing landfills.

For the reasons stated above, Project construction would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals (e.g., CALGreen standards). Therefore, short-term construction impacts associated with solid waste disposal would be less than significant.

Long-Term Operational Impacts

Once operational, the Project would produce solid waste on a regular basis, in association with operation and maintenance activities. Anticipated solid waste generation attributable to the Project is shown in Table 4.11-2. The solid waste generation rates assume compliance with the California Code of Regulations Title 24, Part 11.

Table 4.11-2. Anticipated Solid Waste Generation

Project Components	Size Metric	Units of Size Metric	Rate	Solid Waste Generation (tons per year)
Unrefrigerated Warehouse – No Rail	1,000 square feet	414,700	0.94 tons per 1,000 square feet per year	389,818
Total				389,818

Source: CAPCOA 2022.

As previously discussed, the City has a franchise agreement with Advance Disposal, which designates them as the City's exclusive waste hauler. Advance Disposal owns and operates the Advance Disposal Co & Recycling Center, which recycles 75% or more of the municipal's waste prior to being transferred to the Victorville Sanitary Landfill. This landfill has a maximum daily permitted throughput of 3,000 tons per day. Assuming solid waste is collected weekly, the net solid waste that is anticipated to be produced by the Project would equate to approximately 0.087% of the available capacity of the Victorville Landfill through its estimated closure date.

Prior to Victorville Sanitary Landfill reaching capacity, additional landfills and strategies would be identified so that disposal needs continue to be met. Landfills within San Bernardino County that exceed the expected lifespan of the Victorville Landfill include the Barstow Sanitary Landfill, which is expected to remain open another 51 years, and the Landers Landfill, which is expected to remain to open another 52 years (CalRecycle 2019). Additional strategies to accommodate solid waste generated by the Project during its lifespan include the expansion of existing landfills, the construction of new landfills, and the selection of landfills outside of the County. As such, in the event of closure of the Victorville Sanitary Landfill, other landfills in the region would be able to accommodate solid waste from the Project, and regional planning efforts would ensure continued landfill capacity into the foreseeable future.

For the reasons described above, Project operations would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Therefore, long-term operational impacts associated with solid waste disposal would be less than significant.

Threshold E: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less-than-Significant Impact. As described above, solid waste from commercial uses in the City is brought to the Advance Disposal Co & Recycling Center, where waste is sorted for recyclable materials. From there, the remainder of the waste is taken to the Victorville Sanitary Landfill. This facility is regulated under federal, state, and local laws. Additionally, the City is required to comply with the solid waste reduction and diversion requirements set forth in AB 939, AB 341, AB 132, and AB 1826.

In addition, as previously described, waste diversion and reduction during Project construction and operations would be completed in accordance with CALGreen standards and City diversion standards. As a result, the Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, impacts associated with solid waste statutes and regulations would be less than significant.

Threshold F: Would the Project result in cumulatively considerable impacts related to utilities and service systems?

Less-than-Significant Impact. The Project would not result in cumulatively considerable impacts related to utilities and service systems, as discussed below.

Water Supply

The development of the Project would increase land-use intensities in the area, resulting in increased water usage. The Project would be served by Hesperia Water District. As such, the development of the Project would increase the amount of water used in the Hesperia Water District's service area. Hesperia Water District 2021 UWMP estimates the annual water demand for 2025 is projected to be 15,250 acre-feet. This equates to approximately 4.97 billion gallons a year of water or 13.6 mgd. Hesperia Water District UWMP states that Hesperia Water District and other water agencies in Southern California have planned provisions for regional water for the growing population, including drought scenarios for its service area. This plan includes a new water demand forecast prepared for the major categories of demand and uses regional population, demographic projections, the dry climate, historical water use to develop these forecasts. As such, the Project would not be expected to result in increased water usage causing the need for new entitlements, resources, and/or treatment facilities that are not already being planned to accommodate regional growth forecasts.

In addition, the 2021 UWMP and the WSA prepared for the proposed Project concluded that water demand and supply projections for Hesperia Water District, including the Project, demonstrate that projected supplies exceed demand through the year 2045. These projections consider land use, water development programs and projects, and water conservation. For example, Hesperia Water District, in coordination with the VVWRA, plans on expanding the Hesperia Subregional Water Recycling Facility water treatment capacity from 1.0 mgd to 2.0 mgd by 2030 as well as building a second water recycling facility within the City that would be able to treat 2.6 mgd of wastewater by 2040. The City additionally plans to construct multiple recharge basins in cooperation with Mojave Water Agency to deliver and recharge State Water Project water into underlying groundwater basins within the Hesperia Water District's service area. Collectively, these additional programs would enable water supply to exceed water demand for the Hesperia Water District now and into the future.

Lastly, compliance with the CALGreen Code would be required for new development. In addition, CALGreen Code standards require a mandatory reduction in outdoor water use, in accordance with the DWR Model Water Efficient Landscape Ordinance. This would ensure that the Project does not result in wasteful or inefficient use of limited water resources and may, in fact, result in an overall decrease in water use per person.

Due to water planning efforts and water conservation standards, impacts would not be cumulatively considerable.

Wastewater

The Project would increase the amount of wastewater that is being generated in the area. However, as previously described, with the upsizing and installation of the sewer improvements, the wastewater treatment facilities in the Project would have the capacity to convey and treat municipal flows. Additionally, Hesperia Water District addresses its long-term planning efforts through the development of a long-term capital plan, which serves as a fundamental roadmap of required water, recycled water, and water reclamation facilities needed to support the build out of existing jurisdictional general plans throughout its service area. Hesperia Water District's Capital Plan relies on its Wastewater Master Plan (City of Hesperia 2008a) and Recycled Water Master Plan (City of Hesperia 2008b), which identifies the wastewater and recycled water infrastructure projects that will be necessary to accommodate future build-out in its service area. As cumulative increases in wastewater treatment demand within the service area require facility upgrades, Hesperia Water District would charge service connection fees. Such fees would ensure that capital improvements are completed sufficiently to accommodate increased wastewater inflows associated with the Project area. As such, due to Hesperia Water District's long-term planning efforts, Hesperia Water District would have adequate capacity to serve the Project and cumulative projects' projected demand in addition to the provider's existing commitments using existing entitlements and infrastructure, and impacts would not be cumulatively considerable.

Solid Waste

Development of the Project would increase land-use intensities in the area, resulting in increased solid waste generation in the service area for the Victorville Sanitary Landfill. However, per CALGreen, 65% of construction and debris waste must be diverted from landfills. Once operational, AB 939 mandates that cities divert from landfills, at a minimum, 50% of the total solid waste generated to recycling facilities. According to Advance Disposal, the exclusive waste hauler of the City of Hesperia, the City currently recycles 75% or more of debris generated within the municipality. In addition, to reduce on-site solid waste generation, the Project would be required to implement waste reduction, diversion, and recycling during both construction and operation. Therefore, through compliance with state and local solid waste diversion requirements, Project impacts would not be cumulatively considerable.

Electric Power, Natural Gas, and Telecommunication

Development of the Project would add to demands for energy and would increase requirements for telecommunication technology infrastructure. As stated in Section 4.11.1, the CAISO plans and coordinates grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission owners (investor-owned utilities such as SCE) file annual transmission expansion/modification plans to accommodate the state's growing electrical needs. The CAISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the CAISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the state. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the state. Typically, upgrades to utility networks fall under the jurisdiction of the California Public Utilities Commission and would be subject to environmental review as electrical projects are proposed. As a result of this process which involves ongoing monitoring and electrical project development, SCE ensures that it can provide adequate electrical service to the Project area.

As part of the Project, natural gas and telecommunication lines would be extended onto the Project site from their existing locations within the vicinity of the Project site, resulting in localized less-than-significant impacts. Given the nature of telecommunication and gas lines (which are not typically subject to the constraints of existing

facilities), once telecommunication lines are extended to the Project site, no additional telecommunication or gas line construction is anticipated to be required. Additionally, cumulative development would be subject to review on a case-by-case basis. Should the applicable service provider determine that upgrades or extensions of infrastructure be required, any such upgrades would be included within each project's environmental review. As a result, impacts associated with upgrades of electric, natural gas, and telecommunication facilities would not be cumulatively considerable.

4.11.5 Mitigation Measures and Level of Significance After Mitigation

Threshold A: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The Project would result in **less-than-significant impacts** with regard to the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. No mitigation is required.

Threshold B: Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The Project would result in **less-than-significant impacts** with regard to the availability of sufficient water supplies to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. No mitigation is required.

Threshold C: Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

The Project would result in **less-than-significant impacts** with regard to the capability of the Project's future wastewater treatment provider to serve the Project, in addition to the provider's existing commitments. No mitigation is required.

Threshold D: Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The Project would result in **less-than-significant impacts** with regard to the generation of solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. No mitigation is required.

Threshold E: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Project would result in **less-than-significant impacts** to compliance with federal, state, and local management and reduction statutes and regulations related to solid waste. No mitigation is required.

Threshold F: Would the Project result in cumulatively considerable impacts related to utilities and service systems?

The Project would result in less-than-significant cumulative impacts related to utilities and service systems. No mitigation is required.

4.11.6 References Cited

- Advance Disposal (Advance Disposal Company Inc.). 2021. "About Us." Accessed on June 3, 2022. <https://www.advancedisposal.com/about-us>.
- CAPCOA (California Air Pollution Control Officers Association). 2022. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2020.4.0*. Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. May 2022. <http://www.caleemod.com>.
- California Gas and Electric Utilities (Southern California Gas Company, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southwest Gas Corporation, City of Long Beach Gas & Oil Department, and Southern California Edison Company). 2022. *2020 California Gas Report*. Accessed June 3, 2022. https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.
- CEC (California Energy Commission). 2021. California Energy Demand Forecast Update 2020–2030. Accessed September 10, 2021. <https://www.energy.ca.gov/filebrowser/download/2853>.
- CalRecycle (California Department of Resources Recycling and Recovery). 2021a. SWIS Facility Detail for Victorville Landfill, Accessed on June 3, 2022. <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652>.
- CalRecycle (California Department of Resources Recycling and Recovery). 2021b. SWIS Facility Detail for Chino Valley Landfill. Accessed on June 3, 2022. <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/199?siteID=4666>.
- City of Hesperia. 2008a. *Final Report Wastewater Master Plan*. July 2008.
- City of Hesperia. 2008b. *Final Report Water Master Plan*. July 2008.
- City of Hesperia. 2010. *City of Hesperia General Plan 2010*. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.
- City of Hesperia. 2016. RFP 2016-17-002 – Water, Wastewater, and Recycled water Rate Study, and Connection Fee Study. July 29, 2016. <http://www.cityofhesperia.us/DocumentCenter/View/13705/RFP-2016-17-002—Water-Wastewater-Recycled-Water-Rate-Study?bidId=>.
- City of Hesperia. 2022. "Recycled Water". Accessed on June 3, 2022. <https://www.cityofhesperia.us/1384/Recycled-Water>.
- CPUC (California Public Utilities Commission). 2019. *2019 California Renewables Portfolio Standard Annual Report*. November 2019.
- DWR (California Department of Water Resources). 2020. *Sustainable Groundwater Management Act 2019 Basin Prioritization*. May 2020.

Hesperia Water District. 2016. *2015 Urban Water Management Plan*. June 7, 2016.

Hesperia Water District. 2021. *2020 Urban Water Management Plan*. August 3, 2021.

SCE (Southern California Edison). 2022. Southern California Edison Distribution Resources Plan External Portal. Accessed June 3, 2022. <https://ltmdrpep.sce.com/drpep/>.

INTENTIONALLY LEFT BLANK

5 Effects Found Not to Be Significant

Section 15128 of the California Environmental Quality Act (CEQA) guidelines requires that an environmental impact report (EIR) briefly describe potential environmental effects that were determined not to be significant and therefore were not discussed in detail in the EIR. The environmental issues discussed in the following sections are not considered significant for the Poplar 18 Project (Project), and the reasons for these less-than-significant impact or no impact determinations are discussed herein.

5.1 Agricultural and Forestry Resources

Conversion of Agricultural Lands and Forestlands

According to the California Department of Conservation California Important Farmland Finder (CDOC 2021a), the Project site is designated as “grazing land.” Grazing land does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (collectively “Important Farmland”). The Project would not occur within any farmland locations and would not result in the conversion of this land to nonagricultural use. The Project site is not located on or adjacent to any lands under a Williamson Act contract (City of Hesperia 2010b). Further, the Project site and surrounding area are not zoned for agricultural uses, but instead for commercial, industrial, business park, rural estate residential, and neighborhood commercial uses (City of Hesperia 2010a). As such, implementation of the Project would not conflict with existing zoning for agricultural use or land under a Williamson Act contract.

In regard to forestland or timberland, the Project site is not located on or adjacent to forestland, timberland, or timberland zoned timberland production (City of Hesperia 2010a). Therefore, no impacts associated with Important Farmland, Williamson Act contracts/Farmland Security Zones, forestland, or timberland would occur.

5.2 Geology and Soils

Fault Rupture

The Alquist-Priolo Earthquake Zoning Act (Alquist-Priolo Act) requires the delineation of fault zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development on or near active fault traces to reduce hazards associated with fault rupture. The Alquist-Priolo Earthquake Fault Zones are the regulatory zones that include surface traces of active faults. According to the California Department of Conservation, the Project site is not located in an Alquist-Priolo Earthquake Fault Zone (CDOC 2021b). According to the City of Hesperia (City) General Plan, although several faults exist within and in proximity to the City, no faults exist beneath the Project site (City of Hesperia 2010a). Thus, the potential for surface rupture is low on the Project site. Although the Project site could potentially be subject to strong ground shaking during an earthquake, because of the absence of an underlying fault in the Project area, there is no potential for faulting on site. Therefore, no impacts associated with fault rupture would occur.

Seismic Ground Shaking

Similar to other areas located in seismically active Southern California, the City is susceptible to strong ground shaking during an earthquake. However, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone, and the site would not be affected by ground shaking more than any other area in this seismic region. Pursuant to

Title 15, Buildings and Construction, of the Hesperia Municipal Code, the Project would incorporate the design recommendations included in its geotechnical report, which will be subject to review and approval by City staff prior to issuance of a grading permit. The Project's geotechnical report provides specific design recommendations to ensure the structural integrity of the Project in the event that seismic ground shaking is experienced at the Project site. These recommendations include performing remedial grading, over-excavating existing soils, and recompacting these soils with structured fill, among other technical design recommendations (Appendix E). Additionally, the Project's structures would be designed consistent with the most recent version of the California Building Code, which includes universal standards relating to seismic load requirements. Compliance with recommendations of the Project's geotechnical report, impacts associated with strong seismic ground shaking would be less than significant.

Ground Failure

Soil liquefaction is a seismically induced form of ground failure that has been a major cause of earthquake damage in Southern California. Liquefaction is a process by which water-saturated granular soils transform from a solid to a liquid state because of a sudden shock or strain such as an earthquake. Due to the existing geologically young, loose, unconsolidated sediments throughout the City, liquefaction has the potential to occur within the City. However, according to Exhibit SF-1 of the City's General Plan Safety Element (City of Hesperia 2010a), the Project site is not within an area of the City that has the potential for liquefaction. In addition, the Project's geotechnical report states that based on subsurface conditions encountered at boring locations, liquefaction is not considered to be a concern for the Project site (Appendix E). With implementation of the recommendations of the Project's geotechnical report, impacts associated with potential seismic-related ground failure, including liquefaction, would be less than significant.

Landslide

According to Exhibit SF-1 of the City's General Plan Safety Element (City of Hesperia 2010a), the Project site is not located in an area identified as susceptible to slope instability. The Project site is relatively flat and is not located adjacent to any potentially unstable topographical feature such as a hillside or riverbank. Therefore, no impacts associated with landslides would occur.

Soil Erosion and Topsoil Loss

The Project would involve earthwork and other construction activities that would disturb surface soils and temporarily leave exposed soil on the ground's surface. Common causes of soil erosion from construction sites include stormwater, wind, and soil being tracked off site by vehicles. To help curb erosion, Project construction activities must comply with all applicable federal, state, and local regulations for erosion control. The Project would be required to comply with standard regulations, including South Coast Air Quality Management District Rules 402 and 403, which would reduce construction erosion impacts. Rule 402 requires that dust suppression techniques be implemented to prevent dust and soil erosion from creating a nuisance off site (SCAQMD 1976). Rule 403 requires that fugitive dust be controlled with best available control measures so that it does not remain visible in the atmosphere beyond the property line of the emission sources (SCAQMD 2005).

Since Project construction activities would disturb 1 or more acres, the Project must adhere to the provisions of the National Pollutant Discharge Elimination System Construction General Permit. Construction activities subject to this permit include clearing, grading, and ground disturbances such as stockpiling and excavating. The Construction General Permit requires implementation of a stormwater pollution prevention plan, which would include

construction features for the Project (i.e., best management practices [BMPs]) designed to prevent erosion and protect the quality of stormwater runoff. Sediment-control BMPs may include stabilized construction entrances, straw wattles on earthen embankments, sediment filters on existing inlets, or the equivalent. Therefore, construction impacts related to soil erosion would be less than significant.

Once developed, the Project site would include buildings, paved surfaces, and other on-site improvements that would stabilize and help retain on-site soils. The remaining portions of the Project site containing pervious surfaces would primarily consist of landscape areas. These landscape areas would include a mix of trees, shrubs, plants, and groundcover that would help retain on-site soils while preventing wind and water erosion from occurring. Therefore, operational impacts related to soil erosion would be less than significant.

Unstable Geologic Unit or Soil

As discussed previously, the potential for the Project to result in or be affected by landslides and liquefaction is low, and these issues are not anticipated at the Project site. Project activities may occur on geologically unstable soils such as those susceptible to lateral spreading, subsidence, or collapse. However, the Project would be designed consistent with the specific design recommendations of the Project's geotechnical report, which provides recommendations to perform remedial grading, over-excavate existing soils, and recompact these soils with structured fill, among other technical design recommendations (Appendix E). Implementation of these recommendations would address these potentially hazardous conditions and ensure structural integrity in the event that seismic-related issues are experienced at the Project site. Compliance with the recommendations of the geotechnical report is mandated by Section 15.060.040 of the Hesperia Municipal Code, and compliance is subject to inspection by the City Building Official. With implementation of the recommendations of the Project's geotechnical report, impacts would be less than significant.

Expansive Soil

Expansive soils are characterized by their potential shrink/swell behavior. Shrink/swell is the change in volume (expansion and contraction) that occurs in certain fine-grained clay sediments from the cycle of wetting and drying. Clay materials are known to expand with changes in moisture content. The higher the percentage of expansive materials present in near-surface soils, the higher the potential for substantial expansion.

According to the City's General Plan, the City's soils are mostly comprised of water-laid sand, silt, and gravel (City of Hesperia 2010a). The U.S. Department of Agriculture's Web Soil Survey does not identify the Project site or surrounding area as containing clay soils, which are typically expansive. The Project site is documented from 0 to 6 inches as loamy fine sand and from 6 to 60 inches deep as sandy loam and coarse sandy loam, which does not exhibit significant shrink/swell behavior (USDA 2021). Therefore, impacts would be less than significant.

Septic Tanks

The Project would connect to the City's municipal sewer lines. The Project would not require septic tanks or any other alternative wastewater disposal system. Therefore, no impacts associated with the adequacy of soils and septic systems would occur.

5.3 Hazards and Hazardous Materials

Hazardous Materials Use Near Schools

The nearest school to the Project site is San Joaquin Valley College (9331 Mariposa Road), which is located approximately 1.4 miles southeast of the site. As such, the closest school is located well outside a 0.25-mile radius around the Project site. Therefore, no impacts associated with emitting or handling hazardous materials within 0.25 miles of a school would occur.

Hazardous Materials Site Complied Pursuant to Government Code Section 65962.5

The Hazardous Waste and Substances Sites list (Cortese List) is a planning document providing information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous materials release information for the Cortese List (CalEPA 2021). A review of Cortese List online data resources does not identify hazardous materials or waste sites on the Project site or immediately surrounding area (DTSC 2021; RWQCB 2021). Therefore, no impacts would occur.

Airport-Related Safety Hazards or Excessive Noise

The nearest operational public-use airport to the Project site is the Hesperia Airport, which is located approximately 6.2 miles to the south. The airport is located on the Mesa, west of Antelope Valley wash and south of Ranchero Road. According to the Comprehensive Land Use Plan, the Project site is not located within a runway protection zone or safety zone area, which would have potential safety and noise impacts (San Bernardino County 1991). Therefore, no impacts associated with airport hazards would occur.

Emergency Response and Evacuation Plans

According to the City's Hazard Mitigation Plan, the Project would be required to comply with the City's Emergency Operations Plan (City of Hesperia 2017). The City Emergency Operations Plan provides a framework for coordinated response and recovery activities during an emergency (City of Hesperia 2017). In addition, the City's General Plan designates all freeways and arterial roads as emergency evacuation routes. Typically, roadway facilities designated by the City's General Plan Safety Element as major, primary, or secondary highways, as well as other streets with regional access, are assumed to serve as evacuation routes in the event of a regional emergency. As roadways capable of supporting high traffic volumes and providing regional access to other highways, freeways, and neighboring jurisdictions, both Main Street and U.S. Highway 395 (US Hwy 395) are expected to serve as emergency evacuation routes in the event of an emergency. The Project does not propose any changes to the geometry of these roadways, and thus it follows that these roadways' ability to serve as emergency evacuation routes would not be compromised. As a result, the Project would not significantly affect emergency response or evacuation activities. Therefore, impacts associated with emergency response and evacuation routes would be less than significant.

5.4 Hydrology and Water Quality

Flood Hazard, Tsunami, or Seiche Zones

The Project would not be susceptible to flood hazards, tsunami, or seiche. Seiche is generally associated with oscillation of enclosed bodies of water (e.g., reservoirs, lakes) typically caused by ground shaking associated with a seismic event; however, the Project site is not located near an enclosed body of water. Flooding from tsunami conditions is not expected because the Project site is located approximately 60 miles from the Pacific Ocean.

In addition, the Federal Emergency Management Agency Flood Map Service Center identifies the Project site as Zone X, which is classified as an area of minimal flood hazard, outside of the Special Flood Hazard Area and higher than the elevation of the 0.2%-annual-chance flood (FEMA 2021). As such, the Project would not risk release of pollutants due to inundation. Therefore, impacts associated with seiche, tsunami, or flooding would be less than significant.

5.5 Land Use and Planning

Division of an Existing Community

The physical division of an established community typically refers to the construction of a linear feature (e.g., a major highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community or between a community and outlying area.

Under the existing condition, the Project site is vacant land and is not used as a connection between established communities. Instead, connectivity within the area surrounding the Project site is facilitated via local roadways. As such, the Project would not impede movement within the Project area, within an established community, or from one established community to another. Therefore, no impacts associated with division of an existing community would occur.

Conflict with any Land Use Plan

The Project would be consistent with the applicable goals and policies set forth by the Specific Plan, General Plan, and the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Therefore, impacts would be less than significant based on the consistency analysis detailed below.

City of Hesperia Land Use Plans, Policies, and Regulations

General Plan

Pursuant to state law, specific plans establish land use regulations for those areas covered by the specific plan. The General Plan designates the specific plan to cover all freeway frontages within the City as well as the commercial and industrial areas parallel to the freeway corridor. The goals, policies, and development standards applicable to the Project are found in the specific plan.

Main Street and Freeway Corridor Specific Plan

The Main Street and Freeway Corridor Specific Plan (MSFCSP) establishes a framework for the Main Street and freeway corridors and is intended to facilitate and support development and improvements along these corridors. The regulations of the MSFCSP replace those set forth in the planning and zoning provisions of the City's Development Code, and any other applicable ordinances.

The Project site is zoned and designated by the MSFCSP as CIBP (City of Hesperia 2021a). The Project site would be developed in accordance with the provisions set forth in this land use designation. The MSFCSP lists CIBP as one of two industrial zones. The CIBP zone is meant to create consolidated areas for employment-creating uses in a business park setting. The zone is intended to provide for service commercial, light industrial, light manufacturing, and industrial support uses, mainly conducted in an enclosed building, to minimize environmental impacts such as noise, vibration, air pollution, glare, or waste disposal. The CIBP zone falls within three land use districts, Main Street/I-15 District, US Hwy 395/I-15 District, and Industrial District. The Main Street/I-15 and US Hwy 395/I-15 Districts provide enhanced vehicular, truck, and rail accessibility by taking advantage of their location along the I-15 corridor with its connection to US Hwy 395, and its linkage to the Southern California Logistics Airport. The Project site falls within the Main Street/I-15 District. The Main Street/I-15 District takes advantage of regional freeway accessibility and visibility through high-quality development and streetscape enhancements.

Among the permitted uses in the CIBP zone, warehousing and wholesale distribution centers are permitted at 200,000 square feet or less. Warehouses and wholesale distribution centers over 200,000 square feet are conditionally permitted. The MSFCSP states that the maximum gross floor area ratio in CIBP zones is 0.35 (City of Hesperia 2021a). Additionally, maximum building height within the zone is 60 feet at the setback line, thereafter height may be increased at a rate of 1-foot in height for every additional 3-foot increase in front yard setback, up to a maximum building height of 150 feet (City of Hesperia 2021a).

The Project would include construction of a total of 414,700 square feet of warehousing use, which would require a Conditional Use Permit. As part of the Project approvals, the Project Applicant is requesting approval of a Conditional Use Permit. Assuming that the City's decision makers approve the Conditional Use Permit, the Project would be an allowable use within the CIBP zone. Additionally, the Project plans would be reviewed by City staff to ensure consistency with all applicable development standards and regulations.

The MSFCSP contains several goals and policies that address land use and planning and are applicable to the Project. An analysis of the Project's consistency with these goals and policies is provided in Table 5-1.

Table 5-1. Main Street and Freeway Corridor Specific Plan Consistency Analysis

Specific Plan Goal or Policy	Consistency Summary
Specific Plan Goal: LU-1b: Provide for continuing growth within the Specific Plan area, with land uses and intensities appropriately designated to meet the needs of anticipated growth and to achieve the community's objectives.	Consistent. The Project would include the construction of an industrial/warehouse building. The Project site is designated as CIBP and would support the expansion of regional commercial development. Additionally, the Project would support the City's goal of increasing jobs within the City and balancing the job to housing ratio. Therefore, the Project would be consistent with the goal.
Policy LU-1.1: With the adoption of the Main Street and Freeway Corridor Specific Plan, establish land use districts that have complimentary rather than competitive uses/zones, and maintain the integrity of and interrelationships between these zones.	Consistent. The Project site would be located in the MSFCSP's Main Street/I-15 District. The Main Street/I-15 District is intended for mixed-use development to enhance large-scale regional commercial and service uses. The Project would be compatible with the Main Street/I-15 District and be consistent with its land use designation of CIBP. Therefore, the Project would be consistent with the goal.

Table 5-1. Main Street and Freeway Corridor Specific Plan Consistency Analysis

Specific Plan Goal or Policy	Consistency Summary
Goal LU-2: Create a jobs/housing balance in the City.	Consistent. It is assumed the estimated number of employees required for operation would be approximately 657. According to the City's 2019 SCAG profile, the total number of jobs in the City of Hesperia during 2017 was 22,513 (SCAG 2019). Additionally, in 2018, the total number of housing units in the City was 29,601 (SCAG 2019). As such, jobs generated from the Project would contribute to balancing the jobs/housing ratio. Therefore, the Project would be consistent with the goal.
Policy LU-2.1: Designate land near Interstate 15 and Highway 395 for freeway-oriented commercial and industrial/business park development.	Consistent. The Project is located approximately 1.3 miles west of I-15. Additionally, the Project site is a quarter mile east of Highway 395. The Project site and surrounding area to the north and partially to the east and south are designated as CIBP. The Project would include construction of an industrial/warehouse building. Therefore, the Project is consistent with the policy.
Policy LU-2.2: Add to the City's industrial land base where logically and physically possible to do so.	Consistent. Under existing conditions, the Project site is vacant, undeveloped land. The Project site is designated as CIBP. As such, the Project would include construction of an industrial/warehouse building with designated office space and associated improvements. Because of the nature of the Project and the size of the Project site, the Project would add to the City's industrial land base, while being physically advantageous. Additionally, the Project site is located ¼ mile from Highway 395 and 1.3 miles west of I-15. Therefore, trucks traveling to and from the Project site would have convenient freeway access. Thus, the Project would be consistent with the policy.
Goal LU-6: Make use of vacant sites with the Specific Plan area.	Consistent. The Project site is located on vacant land within the MSFCSP area. The Project involves the construction of an industrial/warehouse building. The Project site has a land use designation of CIBP and would comply with provisions associated with development in a CIBP zone outlined in the MSFCSP.

Source: City of Hesperia 2021a.

Notes: CIBP = Commercial/Industrial Business Park; City = City of Hesperia; MSFCSP = Main Street and Freeway Corridor Specific Plan; I = Interstate; SCAG = Southern California Association of Governments.

Regional Transportation Plan/Sustainable Communities Strategy

The 2020–2045 RTP/SCS (also known as the Connect SoCal Plan) was adopted on September 3, 2020, and presents the land use and transportation vision for the region through the year 2045, providing a long-term investment framework for addressing the region's challenges (SCAG 2020). The RTP/SCS explicitly lays out goals related to housing, transportation, equity, and resilience in order to adequately reflect the increasing importance of

these topics in the region, and where possible the goals have been developed to link to potential performance measures and targets. The RTP/SCS development process involved working closely with local governments throughout the region to collect and compile data on land use and growth trends. The core vision of the RTP/SCS is to build upon and expanded land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern.

Analysis of the Project's consistency with the SCAG 2020 RTP/SCS goals is provided in Table 5-2.

Table 5-2. Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis

RTP/SCS Goals	Consistency Summary
RTP/SCS Goal 1. Encourage regional economic prosperity and global competitiveness.	Consistent. The Project would involve construction of a 414,700-square-foot industrial/warehouse building. Thus, the Project would generate jobs and tax revenue for the City and its residents. Once operational, the Project would add to the City's business tax base and would employ approximately 657 workers, helping the City better meet its jobs/housing balance, while also providing commercial/industrial business park use that will help the City offer a more balanced array of land uses throughout the broader Project area.
RTP/SCS Goal 2. Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. The Project would include construction of an industrial/warehouse building that would be easily and efficiently accessible to US Hwy 395 and I-15, which would help to facilitate regional goods movement throughout Southern California.
RTP/SCS Goal 3. Enhance the preservation, security, and resilience of the regional transportation system.	Consistent. A traffic impact analysis will be conducted to determine the Project's potential impact on the regional and local circulation system. If deemed necessary by this upcoming evaluation, feasible mitigation measures would be required to minimize any adverse effects on the circulation system resulting from the Project to the greatest extent feasible. The findings of this evaluation effort will be included in the Draft EIR.
RTP/SCS Goal 4. Increase person and goods movement and travel choices within the transportation system.	Consistent. The Project would include construction and operation of an industrial/warehouse building, which would be easily and efficiently accessible to I-15 and US Hwy 395 and would help to facilitate regional goods movement throughout Southern California.
RTP/SCS Goal 5. Reduce greenhouse gas emissions and improve air quality.	Consistent. The Project would involve development of an industrial use that inherently involves the emission of GHG and air contaminant emissions. An air quality and GHG analysis will be required to determine whether the Project could potentially result in any adverse effects related to air quality, health risk, and/or GHG emissions, and mitigation measures will be applied, as necessary, to minimize potential impacts. In addition, according to the SCAG Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the Project would meet the growing demand for warehousing space, and would do so in an area that is proximate to regional highways (I-15 and US Hwy 395), thereby reducing the need for longer distance trips which could result in additional air pollutant and GHG emissions. Additionally, the Project would employ approximately 657 workers, helping the City better meet its jobs/housing balance, which should

Table 5-2. Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis

RTP/SCS Goals	Consistency Summary
	shorten commute distances of City residents who choose to work on the Project site, which would have a direct positive effect on tailpipe GHG and air contaminant emissions.
RTP/SCS Goal 6. Support healthy and equitable communities.	Consistent. The Project would involve development of an industrial use that inherently involves the emission of GHG and air contaminant emissions. An air quality and GHG analysis will be required to determine whether the Project could potentially result in any adverse effects related to air quality, health risk, and/or GHG emissions, and mitigation measures will be applied, as necessary, to minimize potential impacts. In addition, according to the SCAG Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the Project would meet the growing demand warehousing space, and would do so in an area that is proximate to regional highways (I-15 and US Hwy 395), thereby reducing the need for longer distance trips which could result in additional air pollutant and GHG emissions. Additionally, development of the Project at the Project site would provide quick and efficient access to I-15 and US Hwy 395, thereby eliminating the need for truck traffic to take longer routes through residential or commercial/retail areas. The Project would also include a number of components that are designed to reduce energy use, such as incorporating energy efficiency design features in compliance with CALGreen standards. By incorporating these measures, the Project would minimize its potential environmental effects on surrounding sensitive receptors to the maximum extent practicable. Thus, the Project would assist in this goal.
RTP/SCS Goal 7. Adapt to a changing climate and support an integrated regional development pattern and transportation network.	Consistent. As climate change continues to increase the number of instances of disruption to local and regional systems, it will become increasingly more urgent for local jurisdictions to employ strategies to reduce their individual contributions. The Project would involve development of an industrial use that inherently involves the emission of GHG and air contaminant emissions. An air quality and GHG analysis will be required to determine whether the Project could potentially result in any adverse effects related to air quality, health risk, and/or GHG emissions, and mitigation measures will be applied, as necessary, to minimize potential impacts. In addition, according to the SCAG Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the Project would meet the growing demand warehousing space, and would do so in an area that is proximate to regional highways (I-15 and US Hwy 395), thereby reducing the need for longer distance trips which could result in additional GHG emissions.
RTP/SCS Goal 8. Leverage new transportation technologies and	Consistent. Development of the Project at the Project site would provide quick and efficient access to I-15 and US Hwy 395, thereby eliminating the

Table 5-2. Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis

RTP/SCS Goals	Consistency Summary
data-driven solutions that result in more efficient travel.	need for truck traffic to take longer routes through residential or commercial/retail areas. In addition, according to the SCAG Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the Project would meet the growing demand warehousing space, and would do so in an area that is proximate to regional highways (I-15 and US Hwy 395), thereby reducing the need for longer distance trips which could result in additional air pollutant and GHG emissions.
RTP/SCS Goal 9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Not Applicable. The Project site is not zoned for housing, but rather industrial, and business uses. Thus, this goal is not applicable.
RTP/SCS Goal 10. Promote conservation of natural and agricultural lands and restoration of habitats.	Consistent. The Project would be located on an area zoned for industrial, and business uses. The Project site does not support agriculture.

Source: SCAG 2020 (RTP/SCS Goals).

Notes: RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy; City = City of Hesperia; I = Interstate; EIR = Environmental Impact Report; GHG = greenhouse gas; SCAG = Southern California Association of Governments; CALGreen = California Green Building Standards.

5.6 Mineral Resources

Mineral Resources and Recovery Sites

According to the Conservation Element in the City's General Plan, mineral resources such as sand, gravel, and stone have been identified within the City (City of Hesperia 2010a). Additionally, several aggregate resources such as gravelly alluvium and sandy alluvium are known to exist within the City. These resources are primarily located within wash areas and active stream channels.

Although the City has known mineral resources, none are identified as being of value to the region or the residents of the state (City of Hesperia 2010b). The Project would be located within an area that is not zoned for mineral resource extraction operations, and thus, such activities cannot currently occur on the Project site. Therefore, impacts to mineral resources would be less than significant.

5.7 Population and Housing

Inducement Population Growth

The Project would require a temporary construction workforce and a permanent operational workforce, both of which could potentially induce population growth in the Project area. The temporary workforce would be needed to construct the warehouse building and associated improvements. The number of construction workers needed during any given period would largely depend on the specific stage of construction, but would likely range from a

dozen to several dozen workers on a daily basis. These short-term positions are anticipated to be filled primarily by construction workers who reside in the Project site's vicinity; therefore, construction of the Project would not generate a permanent increase in population within the Project area.

According to the U.S. Census Bureau, as of April 1, 2020, the population of the City was approximately 99,818 residents (U.S. Census Bureau 2020). Upon buildout, the City anticipates growing to more than 243,000 residents (City of Hesperia 2010a). As such, the Project-related increase of approximately 657 employees would represent a nominal percentage of the City's projected future population upon General Plan build-out.

In addition, data provided by the California Employment Development Department in August 2021 found that the unemployment rate for San Bernardino County is at 7.6%, which is approximately the same as the state average 7.5% (EDD 2021). As such, the Project's temporary and permanent employment requirements could likely be met by the City's existing labor force without people needing to relocate into the Project region, and the Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans. Therefore, impacts to population and housing would be less than significant.

Displacement of Existing Housing and People

The Project site is currently vacant and contains no housing or other residential uses. Given that no residential uses are located on site, it follows that the site does not support a residential population. Therefore, no impacts associated with displacement of housing or people would occur.

5.8 Public Services

Fire Protection Facilities

Fire protection and emergency response services for the Project site are provided by the San Bernardino County Fire Department (SBCFD). SBCFD operates three fire stations within the City, with Fire Station 305 (8331 Caliente Road) located approximately 1.9 miles south of the Project site; Fire Station 304 (15660 Eucalyptus Street) located approximately 5.7 miles northeast; and Fire Station 302 (17288 Olive Street) located approximately 6.9 miles east (SBCFD 2021).

According to the City's General Plan Safety Element, the average response time within the City is approximately 7 minutes, 16 seconds (City of Hesperia 2010a). If needed, fire stations from adjacent cities, such as Victorville and Apple Valley, may respond to emergency calls in Hesperia. Based on the proximity of the Project site to the existing SBCFD facilities, the average response times in the Project area, the ability for nearby cities to respond to emergency calls, and the fact that the Project site is already located within SBCFD's service area, the Project could be adequately served by the SBCFD without the construction of new, or the expansion of existing, facilities.

In addition, as previously analyzed in Section 3.14(a), Population and Housing, the Project would not directly or indirectly induce unplanned population growth in the City. Although the Project could potentially result in an incremental increase in calls for service to the Project site compared to existing conditions, this increase is expected to be nominal (as opposed to new residential or commercial/retail land uses, which do result in greater increase in calls for service) and would not result in the need for new fire protection facilities.

Overall, it is anticipated that the Project would be adequately served by existing SBCFD facilities, equipment, and personnel. Therefore, impacts associated with the construction or expansion of fire protection facilities would be less than significant.

Police Protection Facilities

Police protection and emergency response services for the Project site are provided by the San Bernardino County Sheriff's Department. The sheriff's department operates one station within the City, Hesperia Police Department (15840 Smoke Tree Street), and is located approximately 5 miles east of the Project site. Hesperia Police Department is comprised of approximately 58 law enforcement personnel, including 1 captain, 1 lieutenant, 7 sergeants, 5 detectives, and 44 deputy sheriffs (City of Hesperia 2021b).

As previously addressed, the Project would not directly or indirectly induce unplanned population growth in the City. Although the Project could potentially result in a slight incremental increase in calls for service to the Project site compared to existing conditions, this increase is expected to be nominal (as opposed to new residential or commercial/retail land uses, which do result in a greater increase in calls for service) and would not result in the need for new police protection facilities.

Overall, it is anticipated that the Project would be adequately served by existing San Bernardino County Sheriff's Department facilities, equipment, and personnel. Therefore, impacts associated with the construction or expansion of police protection facilities would be less than significant.

School Facilities

As previously discussed, the Project would not directly or indirectly induce unplanned population growth in the City. Although the Project would require employees to construct and operate the Project, these short-term and long-term employees would likely already reside within the broader Project area. As such, it is not anticipated that many people would relocate to the City as a result of the Project, and an increase in school-age children requiring public education is not expected to occur as a result.

Similar to other development projects in the City, the Project would be subject to Senate Bill 50, which requires payment of mandatory impact fees to offset any impact to school services or facilities. The provisions of Senate Bill 50 are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local laws (Government Code Section 65996). In accordance with Senate Bill 50, the Project Applicant would pay its fair share of impact fees based on the Project's square footage per Government Code Section 65995(h). These impact fees are required of most residential, commercial, and industrial development projects in the City. Therefore, no impacts associated with construction or expansion of school facilities would occur.

Parks

The Project would construct an industrial/warehouse building in the City. The Project does not include any residential uses and would not directly or indirectly induce unplanned population growth in the City. As such, the Project would not increase the use of existing neighborhood parks or regional parks in the City and surrounding area. Therefore, no impacts associated with construction or expansion of parks would occur.

Other Public Facilities

Given industrial nature of the Project and the lack of population growth that would result from the Project, it is unlikely that the Project would increase the use of libraries and other public facilities. Therefore, no impacts associated with construction or expansion of other public facilities would occur.

5.9 Recreation

Existing, Expanded, and New Recreation Facilities

The Project would construct an industrial/warehouse building and associated improvements. The Project does not include any residential uses and would not directly or indirectly result in a substantial and unplanned increase in population growth within the Project area. As such, the Project would not increase the use of existing neighborhood parks or regional parks in the City and surrounding area. In addition, as an industrial use, the Project does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, no impacts associated with park and recreational facilities would occur.

5.10 References

- CalEPA (California Environmental Protection Agency). 2021. Cortese List: Section 65962.5(a). Accessed September 28, 2021. <https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>.
- CDOC (California Department of Conservation). 2021a. California Important Farmland Finder. Accessed August 30, 2022. <https://maps.conservation.ca.gov/DLRP/CIFF/>.
- CDOC (California Department of Conservation). 2021b. Earthquake Zones of Required Investigation App. Accessed September 28, 2021. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>.
- City of Hesperia. 2010a. City of Hesperia General Plan Update. Adopted 2010. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.
- City of Hesperia. 2010b. Draft Environmental Impact Report for the City of Hesperia General Plan Update. May 2010. <https://www.cityofhesperia.us/DocumentCenter/View/1588/Hesperia-2010-GPU-Draft-EIR-121610?bidId=>.
- City of Hesperia. 2017. *Hazard Mitigation Plan*. Accessed August 30, 2022. <https://www.cityofhesperia.us/DocumentCenter/View/13807/Hazard-Mitigation-Plan-2012-Update---Final?bidId=>.
- City of Hesperia. 2021b. "Hesperia Police Department." Accessed August 30, 2022. <https://www.cityofhesperia.us/306/Police>.
- DTSC (Department of Toxic Substances Control). 2021. "EnviroStor." Accessed September 28, 2021. <https://www.envirostor.dtsc.ca.gov>.
- EDD (Employment Development Department). 2021. "California Unemployment Rates." September 17, 2021 Accessed August 30, 2022. https://edd.ca.gov/en/about_edd/news_releases_and_announcements/unemployment-august-2021/
- FEMA (Federal Emergency Management Agency). 2021. FEMA Flood Map Service Center [online map database]. Accessed August 30, 2022. <https://msc.fema.gov/portal/home>.
- RWQCB (Regional Water Quality Control Board). 2021. GeoTracker. Accessed September 28, 2021. <https://geotracker.waterboards.ca.gov>.

San Bernardino County. 1991. *Comprehensive Land Use Plan for Hesperia Airport*. Adopted January 1991. Accessed August 30, 2022. <http://www.sbcounty.gov/Uploads/lus/Airports/Hesperia.pdf>.

SBCFD (San Bernardino County Fire Department). April 27, 2021. San Bernardino County Fire & Rescue Station Map. Accessed August 30, 2022. <https://www.sbcfire.org/FireStations.aspx>.

SCAG (Southern California Association of Governments). 2001. Employment Density Study Summary Report. October 31, 2001. Accessed August 30, 2022.

SCAQMD (South Coast Air Quality Management District). 1976. Regulation IV: Prohibitions; Rule 402: Nuisance. Accessed October 22, 2021. <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf>.

SCAQMD. 2005. Regulation IV: Prohibitions; Rule 403: Fugitive Dust. Accessed October 22, 2021. <https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4>.

USDA (U.S. Department of Agriculture). 2021. Web Soil Survey. USDA, Natural Resources Conservation Service, Soil Survey Staff.

U.S. Census Bureau. 2020. "QuickFacts, Hesperia city, California." Accessed on September 24, 2022. <https://www.census.gov/quickfacts/hesperiacitycalifornia>.

6 Other CEQA Considerations

6.1 Growth-Inducing Impacts

As stated in Section 15126.2(e) of the California Environmental Quality Act (CEQA) Guidelines, an environmental impact report (EIR) is required to include a discussion of a project's growth-inducing effects. The CEQA Guidelines generally describe such effects as follows: (1) economic growth, population growth, or additional housing in the surrounding environment; (2) removal of obstacles to population growth (e.g., a major expansion of a wastewater treatment facility that allows for more construction in the service area); (3) increases in population that tax existing services requiring construction of new facilities that could cause significant environmental effects; and (4) characteristics of a project that would encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The Poplar 18 Project (Project) would require a temporary construction workforce and a permanent operational workforce, both of which could potentially induce population growth in the Project area. The temporary workforce would be needed to construct the industrial/warehouse building and associated improvements. The number of construction workers needed during any given period would largely depend on the specific stage of construction, but would likely range from a dozen to several dozen workers on a daily basis.

Because the future tenants are not known yet, the number of jobs that the Project would generate cannot be precisely determined. The Project would include 414,700 square feet of industrial/warehouse space, excluding associated improvements. It is estimated the total number of employees required for operation would be approximately 657.

According to the U.S. Census Bureau, as of April 1, 2020, the population of the City was approximately 99,818 residents (U.S. Census Bureau 2020). Upon buildout, the City anticipates growing to more than 243,000 residents (City of Hesperia 2010a). As such, the Project-related increase of approximately 657 employees would represent a nominal percentage of the City's projected future population upon General Plan build-out. As such, the Project's temporary and permanent employment requirements could likely be met by the City's existing labor force without people needing to relocate into the Project region, and the Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans.

Projects that physically remove obstacles to growth, or projects that indirectly induce growth, are those that may provide a catalyst for future unrelated development in the area. The Project would involve installation of new sewer lines in the Project vicinity. The purpose of these new utilities is solely to serve the needs of the Project, and not to provide capacity for future projects or growth. In addition, since the surrounding Project area is already served by existing wet and dry utilities, the Project would not expand sanitary sewer or stormwater drainage infrastructure into areas not previously served by such utilities.

Further, given that the surrounding Project area is already served by existing wet and dry utilities, it is unlikely that the Project would tax existing community service facilities or require construction or expansion of new regional-scale facilities with capacity to serve more than just the Project. Although roadway improvements are planned to the roads fronting the project site as part of Project implementation, these improvements are necessary to provide for adequate circulation in the Project area; thus, the Project would not result in indirect population growth by providing vehicular access to an area presently lacking such access.

Based on the proximity of the Project site to existing facilities, the average response times in the Project area, the ability for nearby cities to respond to emergency calls, and the fact that the Project site is already located within the San Bernardino County Fire Department and San Bernardino County Sheriff's Department service areas, the Project would be adequately served by public services without the construction of new, or the expansion of existing, facilities. Although the Project could potentially result in an incremental increase in calls for service to the Project site compared to existing conditions, this increase is expected to be nominal (as opposed to new residential or commercial/retail land uses, which do result in greater increase in calls for service) and would not result in the need for new or expanded fire or police facilities. Lastly, since the Project would not directly or indirectly induce unplanned population growth in the City, it is not anticipated that many people would relocate to the City because of the Project, and an increase in school-age children requiring public education is not expected to occur as a result. Thus, the need for new or expanded school facilities is not required.

In conclusion, the Project could cause population growth through new job opportunities. However, this growth falls well within City and regional growth projections for population and housing. The Project would not remove obstacles to population growth and would not cause an increase in population such that new community facilities or infrastructure would be required outside of the Project site. Lastly, the Project is not expected to encourage or facilitate other activities that could significantly affect the environment, as explained above. For these reasons, the Project is not considered to be significantly growth inducing.

6.2 Significant Irreversible Changes

The CEQA Guidelines requires that an EIR address any significant irreversible changes that would be caused by implementation of a project. According to CEQA Guidelines Section 15126.2(c), such a change would involve one or more of the scenarios discussed below.

6.2.1 Change in Land Use That Commits Future Generations to Similar Uses

According to the Main Street and Freeway Corridor Specific Plan (MSFCSP), the land use and zoning designations for the Project site are Commercial/Industrial Business Park (CIBP) (City of Hesperia 2010a). The proposed Project would therefore be consistent with the existing general plan and zoning designations and the MSFCSP. The construction and operation of the proposed Project would develop a total of 414,700 square feet of industrial/warehouse space with associated improvements on land the City already committed to industrial/warehouse (and similar) uses when the City adopted the MSFCSP. The Project would be consistent with the intent of the Main Street/Interstate 15 District in the MSFCSP area, which is to emphasize large-scale employment uses near the interchange along U.S. Highway 395.

6.2.2 Irreversible Damage from Environmental Accidents

Potential environmental accidents of concern include those events that would adversely affect the environment or public due to the type of quantity of materials released and the receptors exposed to that release. Construction activities associated with the Project would involve some risk of environmental accidents. However, these activities would be conducted in accordance with all applicable federal, state, and local regulations, and would follow professional industry standards for safety. Once operational, any materials associated with environmental accidents would comply with applicable federal, state, and local regulations. Use of any such materials would not adversely affect the environment or public due to the type or quantity of materials released and the receptors exposed to that release.

6.2.3 Large Commitment of Nonrenewable Resources

Commitment of nonrenewable resources includes issues related to increased energy consumption, loss of agricultural lands, and lost access to mining reserves. There would be an irretrievable commitment of labor, capital, and materials used during the construction and operation of the Project. Nonrenewable resources would primarily be committed in the form of fossil fuels such as fuel, oil, natural gas, and gasoline used by equipment associated with construction of the Project. Consumption of other nonrenewable or slowly renewable resources would also occur. These resources would include lumber and other forest products, sand and gravel, asphalt, and metals such as steel, copper, and lead.

To ensure that energy implications are considered in project decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (California Public Resources Code Section 21100[b](3)). Energy conservation implies that a project's cost-effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, cost-effectiveness may be determined more by energy efficiency than by initial dollar costs. A lead agency may consider the extent to which an energy source serving a project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production.

Consistent with California Public Resources Code Section 211009(b)(3), CEQA Guidelines Appendix G, and a ruling set forth by the court in *California Clean Energy Committee v. City of Woodland*, potentially significant energy implications of a project must be considered in an EIR to the extent relevant and applicable to that project. Accordingly, based on the energy consumption thresholds set forth in both Appendix F and Appendix G of the CEQA Guidelines, the Project's estimated energy demands (both short-term construction and long-term operational demands) were evaluated (see Section 4.5, Energy, of this EIR). The overall purpose of the energy analysis was to evaluate whether the Project would result in the wasteful, inefficient, or unnecessary consumption of energy.

As further assessed in the energy analysis, for new development, such as that proposed by the Project, compliance with California Title 24 energy efficiency requirements is considered demonstrable evidence of efficient use of energy. The Project would provide for and promote energy efficiencies beyond those required under other applicable federal and state standards and regulations, and in doing so would meet or exceed all Title 24 standards. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy.

6.3 Significant and Unavoidable Impacts

Pursuant to CEQA Guidelines Section 15126.2(b), an EIR must address any significant environmental impacts, including those that can be mitigated but not reduced to less than significant as a result of implementation of a project. As discussed throughout Chapter 4, Environmental Analysis, of this EIR, at the Project and cumulative levels, the Project would result in significant and unavoidable impacts related to greenhouse gas emissions and transportation. For all other environmental issue areas, the Project would result in either less-than-significant impacts or no impact.

6.4 References Cited

City of Hesperia. 2010a. *City of Hesperia General Plan Update*. Accessed August 31, 2021.

<https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.

City of Hesperia. 2020. *Hesperia Main Street & Freeway Corridor Specific Plan*. Adopted October 16, 2008. Amended January 24, 2020. <https://www.cityofhesperia.us/DocumentCenter/View/15940/MSFCSP-update>

U.S. Census Bureau. 2020. QuickFacts, Hesperia city, California. Accessed: September 24, 2022.

<https://www.census.gov/quickfacts/hesperiacitycalifornia>.

7 Alternatives

7.1 Alternatives to the Proposed Project

In accordance with California Environmental Quality Act (CEQA) Section 15126.6, this chapter of the Environmental Impact Report (EIR) contains a comparative evaluation of the Poplar 18 Project (Project) with alternatives to the Project, including a No Project Alternative. Consistent with CEQA Section 15126.6, this chapter focuses on alternatives to the Project that are capable of avoiding or substantially reducing any significant adverse impacts associated with the Project, even if the alternatives may impede attainment of Project objectives or prove less cost efficient. In addition, implementation of a Project alternative may potentially result in new impacts that would not have resulted from the Project.

The CEQA Guidelines require that the analysis of alternatives provide sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with a proposed project. Specifically, CEQA Guidelines Section 15126.6(a) outlines the scope of alternatives to a proposed project that must be evaluated:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Under case law and CEQA Guidelines Section 15126.6(f), the discussion of alternatives is subject to a rule of reason, and need not be exhaustive. CEQA Guidelines Section 15126.6(d) states that “if an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project as proposed.” Determining factors that may be used to eliminate alternatives from detailed consideration in an EIR are (a) failure to meet most of the basic project objectives, (b) infeasibility, or (c) inability to avoid significant environmental impacts. CEQA Guidelines Section 15364 defines “feasibility” as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.”

An EIR need not consider a project alternative whose effects cannot be reasonably ascertained, whose implementation is remote and speculative, or whose execution does not substantially lessen or avoid the significant effects of a proposed project.

As discussed throughout Chapter 4, Environmental Analysis, of this EIR, at the project and cumulative levels, the Project would result in significant and unavoidable greenhouse gas (GHG) emissions and transportation impacts. For all other environmental issue areas, the Project would result in either less-than-significant impacts or no impact.

7.2 Project Alternatives Considered and Rejected

An EIR is required to identify any alternatives that were considered by the lead agency but were rejected as infeasible. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of the project, infeasibility, or inability to avoid significant environmental impacts.

With respect to the feasibility of potential alternatives to a proposed project, CEQA Guidelines Section 15126.6(t)(l) states the following:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries ... and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

In determining an appropriate range of project alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and then rejected. Project alternatives were rejected because they could not accomplish the basic objectives of the Project, they would not have resulted in a reduction of significant adverse environmental impacts, or they were considered infeasible to construct or operate.

Alternative Land Uses

According to the City's General Plan and the Main Street and Freeway Corridor Specific Plan (MSFCSP), the land use and zoning designations for the Project site is Commercial/Industrial Business Park (CIBP). The Alternative land uses for the Project site, including residential, commercial/retail, and mixed-use, were considered and rejected because these land uses are not consistent with the CIBP zoning designation.

According to the MSFCSP, the purpose of the CIBP zone is to create employment-generating uses in a business park setting. The CIBP zone is intended to provide for service commercial, light industrial, light manufacturing and industrial support uses, mainly conducted in enclosed buildings. Important goals of the development standards for this zone are to ensure a quality appearance from the Interstate (I) 15 freeway corridor and I Avenue, and compatibility with the adjacent commercial, residential, and recreational uses. Permitted and conditionally permitted uses and activities within the CIBP zone include manufacturing, offices warehousing and wholesale distribution centers. Land uses that deviate from industrial-based activities, including residential, standalone retail, and residential mixed-use, are not identified in the MSFCSP as being suitable within the CIBP zone (City of Hesperia 2021).

In addition, given the proximity of other existing industrial uses in both the immediate and broader Project area, most uses other than industrial, manufacturing, heavier commercial, and similar activities would likely not be compatible with the neighboring industrial and truck-related uses; thus, the Project site would be an undesirable location for residential, standalone retail, and residential mixed-use land uses.

Alternate Sites

CEQA does not require that an analysis of alternate sites always be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternate site, then a project alternative should be considered and analyzed in the EIR. Pursuant to CEQA Guidelines Section 15126.6(f)(2), in making the decision to include or exclude analysis of an alternate site, the "key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only

locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR.”

Development of the Project in an alternate location would have similar impacts as would occur with implementation of the Project at its proposed location. Thus, moving the Project to an alternative site—assuming that another 17.87-acre property exists within the City and is available—would merely displace environmental impacts instead of avoiding or minimizing them.

Further, if the alternate site were to be located farther from major regional transportation routes (e.g., I-15, U.S. Highway 395, and other local truck routes), operational impacts associated with traffic congestion, truck noise, and tailpipe air contaminant emissions would likely be greater than those associated with the Project and disclosed in this EIR, as the vehicles would need to travel farther on local roads to reach regional highway systems.

Moreover, according to the Southern California Association of Governments (SCAG) Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. At that time, forecasts show that the demand for warehousing space will increase to more than 1 billion square feet. The Comprehensive Regional Goods Movement Plan and Implementation Strategy also states that unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by 2035, a projected shortfall of space of approximately 227 million square feet will occur (SCAG 2013). Thus, it is likely that selection of an alternate site would merely displace the development activity proposed by the Project to another location, resulting in the same or greater environmental effects, given the regional demand for logistics and warehousing space in the SCAG region.

7.3 Project Alternatives Under Further Consideration

The following provides analysis of the No Project/No Development Alternative (Alternative 1) and the two build alternatives: the Other Development Project Alternative (Alternative 2) and the Reduced Development Intensity Alternative (Alternative 3).

The evaluation below provides a relative comparison between the Project and each of the three Project alternatives. The analysis considers the issue areas evaluated in Chapter 4, Environment Analysis, and Chapter 5, Effects Found Not to Be Significant, of this EIR. In many cases, the Project and a Project alternative may share the same level of significance (i.e., both scenarios would result in a less-than-significant impact). However, although they might share the same level of significance under CEQA, the actual degree of impact may be slightly different for each scenario, and this relative difference is the basis for a conclusion of greater or lesser impacts compared to the Project.

An environmentally superior alternative is identified among the alternatives evaluated in this EIR. An alternative would be environmentally superior to the Project if it would result in fewer or less significant environmental impacts while achieving most of the Project objectives.

7.3.1 No Project/No Development Alternative (Alternative 1)

Project Alternative 1 Summary

Under Alternative 1, construction of the Project would not occur. The Project site would remain unchanged, and development activities related to construction and operation of the proposed industrial/warehouse building, associated office spaces, surface parking and loading areas, and all other proposed on- and off-site improvements would not occur.

In the short term, consistent with the existing conditions, the Project site would continue to be undeveloped. Under Alternative 1, the Project site would remain vacant, undeveloped land, although the site would presumably continue to be subject to illegal dumping, trespassing, and unpermitted off-road vehicle use, similar to the existing conditions.

Project Alternative 1 Impact Analysis

The Project site would remain unchanged and would remain a vacant, undeveloped, yet disturbed property. On-site conditions would remain similar to existing conditions; because development activities associated with the Project would not occur, nearly all environmental impacts would be reduced compared with Project conditions. Exceptions would include impacts related to agricultural and forestry resources and recreation, which would result in no impact, whether or not the Project is constructed on the Project site.

Impacts associated with hydrology and water quality would likely be greater under Alternative 1 than with the Project, as the new engineered stormwater drainage system and detention basins would not be constructed on the Project site as proposed under the Project. Under existing conditions, no storm drain or treatment facilities are currently found on site; therefore, stormwater is not currently collected or treated on the Project site prior to being discharged off site. This same stormwater drainage scenario would continue to occur under Alternative 1, resulting in greater impacts related to surface drainage, water quality, erosion, and potentially, periodic isolated flooding.

In addition, based on site reconnaissance performed for the Phase I Environmental Site Assessment, during construction there is a potential to encounter shallow soil contamination due to the observed dumping on the Project site, especially automotive fluid containers and tires. Under the Project scenario, implementation of Mitigation Measure (MM) HAZ-1 requires the removal and disposal of on-site tires and oil containers (e.g., retail motor oil containers and commercial oil drums) from the Project area in accordance with all applicable local, state, and federal guidelines. Further, for excavation and grading activities that occur in areas with the potential for residual contamination, MM-HAZ-1 requires that a qualified environmental professional screen soils in the identified area prior to excavation and grading based on the nature of the potential contamination. In the event that potential contamination is encountered, the contamination shall be evaluated by a qualified environmental professional using the appropriate collection and sampling techniques as determined by the environmental professional based on the nature of the contamination, and the nature and extent of contamination shall be determined and the appropriate handling, disposal, and/or treatment shall be implemented in accordance with applicable regulatory requirements.

However, under Alternative 1, the cleanup activities required pursuant to MM-HAZ-1 would not be initiated, and the existing full and partially full motor oil canisters, used tire piles, and potentially contaminated shallow soils would remain on site. The Project site has previously been a location for illegal dumping activities, and would continue to be so under Alternative 1. The Project would help to remediate the Project site through compliance with MM-HAZ-1, and because this mitigation would not be implemented if not for the Project, Alternative 1 would result in greater impacts related to hazardous materials.

Project Alternative 1 Impact Conclusion

Overall, none of the mitigation measures required for the Project would be necessary with Alternative 1, and this Project alternative would not result in any significant adverse and unavoidable impacts. However, Alternative 1 would not develop a jobs-producing and tax-generating land use near transportation corridors within the housing-rich Victor Valley/High Desert region (Objective 1); concentrate non-residential uses near existing roadways, highways, and freeways (Objective 2); develop a fiscally sound and employment-generating land use that

maximizes utilization of industrial zoned areas (Objective 3); create a project that takes advantage of and enhances existing infrastructure, including the proximity to major regional roadways such as I-15 and U.S. Highway 395, railroad service corridors, and other similar infrastructure (Objective 4); or fulfill the existing and growing demand for logistics and warehouse uses in the region (Objective 5). As such, Alternative 1 would not meet any of the Project objectives.

7.3.2 Other Development Project Alternative (Alternative 2)

Project Alternative 2 Summary

Under Alternative 2, the Project site would be redeveloped with other land uses, consistent with the Project site's existing CIBP zoning designation. As described above, Project site has a land use and zoning designation of CIBP. Therefore, the Alternative 2 scenario involves a land use allowed under the CIBP designation.

The CIBP zone is intended to provide for service commercial, light industrial, light manufacturing, and industrial support uses, mainly conducted in enclosed buildings. The MSFCSP lists several different uses that are either permitted by right or conditionally permitted in the CIBP zone. These include commercial storage facilities/mini-warehouses (i.e., self-storage facilities), offices, manufacturing, small and large equipment sales and rental, schools, vehicle rental and sales, minor and major vehicle repair, and vehicle wash facilities.

It is assumed that Alternative 2 would involve development of a land use that would be permissible either by right or by a Conditional Use Permit, including the land uses listed above. It is also assumed that those uses would share a similar development intensity, floor-area-ratio, and site coverage as the Project. Land uses that are expressly not allowed in the CIBP zone—specifically residential—would not be considered under Alternative 2.

Moreover, given the Project site's proximity to major regional transportation routes (e.g., I-15, U.S. Highway 395, and other local truck routes), and because of the continued demand for new industrial/warehouse operations in the Project region, it is assumed that the Project constructed under Alternative 2 would consist of warehouse, distribution, logistics, or other similar type industrial (or industrial-supporting) land use of a size similar to the Project. Such an alternative could take the form of a similar square footage of industrial space, but warehouse space could be split up into many smaller buildings instead of one larger building.

Project Alternative 2 Impact Analysis

It is assumed that Alternative 2 would involve construction and operation of a land use of similar development and operational intensity as the Project, would have a floor-area-ratio similar to the Project, and would be subject to the same federal, state, and local requirements (e.g., incorporation of a new engineered stormwater drainage system, architectural design review) as the Project. Thus, it is expected that environmental impacts associated with Alternative 2 would be similar—if not identical—to those environmental impacts resulting from implementation of the Project.

In addition, the trip generation rate used to analyze the Project's estimated trip generation (refer to the Transportation Impact Analysis prepared for the Project [Appendix I]) assumed that the Project would support general light industrial and high-cube warehousing uses. These land uses often have lower trip generation rate (either daily or peak hour) than some of the other land uses that are permitted by right or conditionally permitted in the CIBP zone, including but not limited to general office, building material and rental, automobile parts and service center, and car wash (higher daily and peak hour trip generation rates).

As such, other land uses that are allowed on the Project site (either by right or by Conditional Use Permit) could potentially result in greater peak hour or daily trip generation compared with the Project, even if the development footprint is similar or identical. Thus, there would be a potential for increased impacts associated with traffic congestion, tailpipe air and GHG emissions, and traffic noise under Alternative 2.

Alternative 2 Impact Conclusion

All the mitigation measures required for the Project would also apply to Alternative 2, as the land use type, development intensity, and/or site coverage would be similar to the Project; thus, construction and operation characteristics should also be relatively similar. There is the possibility under Alternative 2, however, that some impacts associated with air quality, GHG, and noise may be greater than those resulting from implementation of the Project, given that some of the other allowed land uses in the CIBP zone have a higher peak hour and/or daily trip generation rate.

As an industrial, commercial, office, institutional, or other permissible land use on the Project site, Alternative 2 would be expected to satisfy many of the Project objectives, including developing a jobs-producing and tax-generating land use near transportation corridors within the housing-rich Victor Valley/High Desert region (Objective 1); concentrating non-residential uses near existing roadways, highways, and freeways (Objective 2); developing a fiscally sound and employment-generating land use that maximizes utilization of industrial zoned areas (Objective 3); and creating a project that takes advantage of and enhances existing infrastructure, including the proximity to major regional roadways such as I-15 and U.S. Highway 395, railroad service corridors, and other similar infrastructure (Objective 4). Depending on the use, Alternative 2 may or may not meet Objective 5, which is to fulfill the existing and growing demand for logistics and warehouse uses in the region.

7.3.3 Reduced Development Intensity Alternative (Alternative 3)

In accordance with CEQA Section 15126.6, the purpose of conducting a Project alternative comparative analysis is to identify potential alternatives to the Project that are capable of avoiding or substantially reducing any significant adverse impacts associated with the Project, even if the alternatives may impede attainment of project objectives or prove less cost efficient. As described in Section 7.1 of this chapter and throughout Chapter 4, this EIR has identified the following Project impacts that would be significant and unavoidable.

As discussed in Section 4.6, Greenhouse Gas Emissions, of this EIR, the Project would result in potentially significant impacts with regard to generating GHG emissions. Implementation of MM-GHG-1, MM-GHG-2, and MM-GHG-3, and MM-GHG-4 would also reduce operation-related GHG emissions. However, the effectiveness of the mitigation and the associated emission reductions cannot be accurately quantified at this time and GHG emissions impacts are inherently cumulative in nature. As such, impacts on the project-level and cumulatively would remain significant and unavoidable.

Further, as outlined in Section 4.10, Transportation, several intersections in the vicinity of the Project site currently experience periodic queuing issues during peak hours, which can lead to potential safety concern if a significant speed differential exists between queue vehicles and vehicles proceeding beyond the queue. The Project would result in additional traffic that would exacerbate these conditions under the Existing Plus Project Conditions, Opening Year (2024) Plus Project Conditions, and Horizon Year (2040) Plus Project Conditions (queueing issues would continue to occur without Project-generated traffic for many intersections regardless of the Project). Improvement measures have been identified for which the Project would be required to either construct or contribute fair-share costs to address these conditions. However, some of these intersections are not within the

City's jurisdiction, but rather within the jurisdiction of other agencies, such as the California Department of Transportation. Since the City does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy, and these impacts are considered significant and unavoidable.

Project Alternative 3 Summary

Presently, the only approach to reducing the Project's operational-related GHG emissions and transportation impacts would be to reduce the total number of daily trips and employees generated by the Project. As such, in an effort to reduce the Project's significant and unavoidable impacts, the City considered a Reduced Development Intensity Alternative (Alternative 3).

Under Alternative 3, the Project would be constructed and operated as planned on the Project site, with the exception that the size of the proposed development would be reduced by 15%, equating to an industrial/warehouse project consisting of approximately 352,495 square feet, compared to the Project's 414,700 square feet. Since the building footprint would be reduced by 62,205 square feet (approximately 1.4 acres), this extra space on the Project site would remain vacant. All other on- and off-site improvements proposed as part of the Project are assumed to still be required under Alternative 3.

Alternative 3 Impact Analysis

Under Alternative 3, the Project's development footprint would be reduced by 15% compared to the Project. As a result, it is assumed that a similar reduction in the operational intensity and duration of construction activities would occur. Likewise, a smaller building footprint would be expected to support fewer operational activities than the larger footprints proposed as part of the Project. Thus, the severity of many environmental impacts related to construction and operational phases would be either the same or incrementally reduced under Alternative 3. However, because the development intensity would be reduced under Alternative 3 compared to the Project, certain environmental impacts would differ as a result of this reduction, as the following analysis demonstrates.

Aesthetics

Under Alternative 3, the Project would be constructed and operated as planned on the Project site, with the exception that the size of the proposed development would be reduced by 15%, equating to the 62,205 square feet (approximately 1.4 acres) of extra space on the Project site that would likely be developed with a similar landscape concept to that surrounding the industrial buildings. A reduction in building square footage would reduce the scale and massing of the buildings. Additionally, the increase in landscaped area would soften the visual impact of the buildings. Nonetheless, Alternative 3 would still involve the development of approximately 352,495 square feet of industrial space, which would still be the primary visual feature on the Project site. For these reasons, aesthetics impacts would be similar but lessened under Alternative 3.

Air Quality

Under Alternative 3, the extent of construction activities would be reduced compared to the Project. Thus, construction-related air quality emissions would be lessened. As with the Project, Alternative 3 would not exceed the numerical thresholds of significance established by the Mojave Desert Air Quality Management District (MDAQMD); this is the same outcome that would occur under the Project.

Alternative 3 would generate fewer vehicle trips per day due to the reduction in the amount of building space. Accordingly, air pollutant emissions associated with long-term operation of Alternative 3 would be lessened compared to the Project and like the proposed Project, mitigation would not be required.

Long-term operation of Alternative 3 would also have less than significant impacts due to emissions of volatile organic compounds (VOCs), oxides of nitrogen (NO_x), and coarse particulate matter (PM₁₀) and would not violate the MDAQMD regional air quality standards. Because Alternative 3 would generate fewer average daily vehicle trips than would occur under the Project, impacts due to a conflict with the regional air quality standard and the level of contribution to an existing air quality violation would be minimized, but still at a less-than-significant level. As such, Alternative 3 would reduce the Project's impact due to operational air contaminant emissions; however, impacts would still remain at a less-than-significant level and no mitigation would be required.

As with the Project, impacts to nearby sensitive receptors would remain less than significant under Alternative 3. Similar to the Project, emissions under Alternative 3 would be below the MDAQMD thresholds of significance. However, these impacts to sensitive receptors would be slightly reduced under Alternative 3 due to the reduction in daily vehicular trips compared to the Project. Therefore, air quality impacts would be lessened under Alternative 3, and similar to the proposed Project, no mitigation would be required.

Biological Resources

Under Alternative 3, the Project would be constructed and operated as planned on the entire Project site, although the development intensity would be reduced. Compared to the Project, Alternative 3 would develop less of the Project site, resulting in a smaller overall building footprint by approximately 62,205 square feet. However, in accordance with the City's development standards, these areas would not be allowed to be completely unimproved, but instead would be required to be landscaped. As such, any vacant land and potential suitable habitat in these areas would still be disturbed as a result of landscaping activities, reducing any benefits from a biological resources perspective. Therefore, biological resources impacts would be similar under Alternative 3.

Cultural, Tribal Cultural, and Paleontological Resources

Under Alternative 3, the Project would be constructed and operated as planned on the Project site, but with a reduced development intensity. Compared to the Project, Alternative 3 would develop less of the Project site with buildings, parking and loading areas, and other associated improvements, resulting in a smaller overall building footprint on the site that would disturb less land. However, as previously discussed, Alternative 3 would likely not be able to maintain vacant areas on the Project site, but instead would still be required to landscape these locations. As such, the entirety of the Project site would need to be disturbed to various extents, which would result in the same potential to disturb presently unknown/unrecorded cultural, tribal cultural, and paleontological resources as the Project. Therefore, cultural resources impacts would be similar under Alternative 3.

Energy

The level of construction activities would be reduced under Alternative 3 compared to the Project because the Project's building footprint would be reduced by 15%. Thus, construction-related energy usage would be lessened. Alternative 3 would also generate fewer vehicle trips per day due and would have a less building space than the Project as proposed, result in less on-site and mobile energy consumption. Accordingly, energy usage associated with long-term operation of Alternative 3 would be lessened compared to the Project. Therefore, energy impacts would be reduced under Alternative 3.

Greenhouse Gas Emissions

Similar to air quality, the extent of construction activities would be reduced under Alternative 3 compared to the Project. Thus, construction-related GHG emissions would be lessened. Alternative 3 would also generate fewer vehicle trips per day due to the 15% reduction in the amount of building space. Accordingly, GHG emissions associated with long-term operation of Alternative 3 would be lessened compared to the Project. As discussed in Section 7.1, the Project would result in significant and unavoidable impacts with regard to generating GHG emissions. Implementation of mitigation measures under the Project and Alternative 3 would reduce potential operation-related GHG emissions. However, the effectiveness of the mitigation measures and the associated emission reductions cannot be accurately quantified at this time and GHG emissions impacts are inherently cumulative in nature. Therefore, while GHG emissions impacts would be reduced under Alternative 3 due to decreased construction and operational footprint, they would still remain significant and unavoidable.

Hazards and Hazardous Materials

Under Alternative 3, the Project would be constructed and operated as planned on the site, with the exception that the building footprint would be reduced by 15%. Incorporation of MM-HAZ-1 would still be required under Alternative 3, which mandates, among other requirements, the removal and disposal of on-site tires and oil containers from the Project area in accordance with all applicable guidelines, and that a qualified environmental professional shall screen soils in the identified area prior to excavation and grading based on the nature of the potential contamination. As such, under Alternative 3, the cleanup activities required pursuant to MM-HAZ-1 would be initiated, and the Project would still help to remediate the Project site through compliance with MM-HAZ-1. Therefore, hazards and hazardous materials impacts would be similar under Alternative 3.

Hydrology and Water Quality

Under Alternative 1, the new engineered stormwater drainage system would be constructed on the Project site as proposed under the Project. Under existing conditions, no storm drain or treatment facilities are currently found on site; therefore, stormwater is not currently collected or treated on the Project site prior to being discharged off site. However, under Alternative 1, the Project and its on-site stormwater drainage system would be designed to comply with all state, regional, and local regulation related to site stormwater drainage and water quality during both construction and operation of the Project, regardless of the size of the Project. Therefore, hydrology and water quality impacts would be similar under Alternative 3.

Land Use and Planning

Both the Project and Alternative 3 propose an industrial/warehouse use with similar operational characteristics. Given the substantial similarities in uses between the Project and Alternative 3, Alternative 3 would otherwise not conflict with any plans, policies, or ordinances adopted for the purposes of mitigating or avoiding environmental effects. Therefore, land use and planning impacts would be similar under Alternative 3.

Noise

Noise associated with Alternative 3 would occur during short-term construction activities and under long-term operation. The types of construction activities conducted on the Project site would be similar under Alternative 3 would generally cover the same physical area. However, because Alternative 3 would result in construction of less building area on site, it is anticipated that the duration of noise impacts during the building construction and architectural coating phase would slightly decrease under Alternative 3 compared to the Project. Nonetheless, the types of construction equipment used and the types of construction activities conducted on-site would be similar under Alternative 3, and the peak daily noise levels generated during the construction phase would also be similar.

Under long-term operational conditions, noise generated by Alternative 3 would primarily be associated outdoor mechanical equipment, and on-site truck loading, idling, maneuvering, and parking. Alternative 3 would have reduced operational capacity Project, and, as such, would contribute to less on-site operational noise than the Project. However, the increase in operational noise associated with Alternative 3 would still be noticeable to residences impacted by the Project. Therefore, noise impacts would be similar under Alternative 3.

Transportation and Traffic

Vehicle miles traveled (VMT) is largely dependent on the specific land use type of a particular project and the location of that project. While a reduction in a Project's size could reduce the overall VMT associated with a given project, reducing a project's square footage would not necessarily have an effect on a project's average trip length. Thus, while under Alternative 3 the Project's development footprint would be reduced by 15% compared to the Project, the average trip length for passenger vehicle and truck trips associated with the Project would remain virtually constant. In addition, because a reduction in Project size would correlate to a similar reduction in on-site workforce, the Project's VMT per employee would also stay relatively the same under Alternative 3 as the Project's VMT per employee. Therefore, transportation impacts with regard to VMT would be similar under Alternative 3.

With regard to the Project's significant and unavoidable queueing and hazards impacts, many of the intersections that are anticipated to experience queueing issues under the Horizon Year (2040) conditions would experience these issues regardless of implementation of the Project. As such, even with the reduction in building-square footage and corresponding reduction in trip generation, these intersections would continue to experience these issues. Improvement measures would still be required for Alternative 3; however, because some of the affected intersections are outside the City's jurisdiction, these improvements cannot be assumed to be in place prior to occupancy, and these impacts are considered significant and unavoidable. As such, transportation impacts with regard to queueing and hazards impacts would be similar under Alternative 3.

Utilities and Service Systems

Under Alternative 3, the Project would be constructed and operated as planned on the Project site, with the exception that the size of the proposed development would be reduced by 15%. All other on- and off-site improvements proposed as part of the Project are assumed to still be required under Alternative 3. As such, the same wet and dry utilities would be required, with construction and operational characteristics of these on- and off-site improvements being similar to the Project. Therefore, utilities and service systems impacts would be similar under Alternative 3.

Alternative 3 Impact Conclusion

Based on the above, given that Alternative 3 would result in incremental reductions in both construction activity, daily operational trips on Project area roadways, and a reduction in the scale of the proposed buildings, Alternative 3 result in incremental reductions in the severity of impacts related to aesthetics, air quality, energy, GHG emissions, and noise. In the case of air quality and GHG, the reductions in Project-related trips would not be substantial enough as to reduce impacts below a significance level that is less than significant. Impacts associated with energy and noise are less than significant under both the Project and Alternative 3 scenarios, although emissions would be lessened under Alternative 3.

Impacts associated with agriculture and forestry resources, biological resources, cultural, tribal cultural, and paleontological resources, geology and soils, hazards, hazardous materials, and wildfire, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, noise, transportation, and utilities and service systems would generally be the same under Alternative 3 compared to the Project.

All the mitigation measures required for the Project would be necessary for Alternative 3, although no new measures would be required. Additionally, Alternative 3 would meet all Project objectives, albeit to a lesser extent as proposed under the Project because of the approximately 15% reduction in the Project's size. In particular, because of its reduced size, Alternative 3 would produce fewer jobs (Objective 1), would generate less tax revenue (Objective 1), and would not create as much revenue- and employment-generating land use as the Project (Objectives 1 and 3).

7.4 Environmentally Superior Alternative

Section 15126(e)(2) of the State CEQA Guidelines requires an EIR to identify an "environmentally superior alternative." If the No Project/No Development Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other Project alternatives.

Each of the three Project alternatives considered herein would lessen at least one environmental impact relative to the Project. As previously addressed, if the No Project/No Development Alternative is the environmentally superior alternative, the EIR analysis shall evaluate another environmentally superior alternative among the remaining alternatives. Table 7-1 provides a comparison of the Project with the Project alternatives based on the environmental topic areas addressed in Chapter 4 of this EIR. Table 7-2 presents how the Project and each of the Project alternatives compare in terms of meeting the Project objectives.

Table 7-1. Project Alternatives Environmental Impacts Comparison

Environmental Issue	Project	No Project/No Development Alternative (Alternative 1)	Other Development Project Alternative (Alternative 2)	Reduced Development Intensity Alternative (Alternative 3)
Aesthetics	Less-than-Significant with Mitigation	Avoided	Similar	Similar but reduced
Air Quality	Less-than-Significant	Avoided	Similar	Similar but reduced
Biological Resources	Less-than-Significant with Mitigation	Avoided	Similar	Similar
Cultural, Tribal Cultural, and Paleontological Resources	Less-than-Significant with Mitigation	Avoided	Similar	Similar
Energy	Less-than-Significant	Avoided	Similar	Lessened
Greenhouse Gas Emissions	Significant and Unavoidable	Avoided	Similar	Lessened, but significant and unavoidable impacts still not avoided
Hazards, Hazardous Materials, and Wildfire	Less-than-Significant with Mitigation	Greater	Similar	Similar
Hydrology and Water Quality	Less-than-Significant	Greater	Similar	Similar
Land Use and Planning	Less-than-Significant	Similar	Similar	Similar
Noise	Less-than-Significant	Avoided	Similar	Similar

Table 7-1. Project Alternatives Environmental Impacts Comparison

Environmental Issue	Project	No Project/No Development Alternative (Alternative 1)	Other Development Project Alternative (Alternative 2)	Reduced Development Intensity Alternative (Alternative 3)
Transportation and Traffic	Significant and Unavoidable	Avoided	Similar	Similar
Utilities and Service Systems	Less-than-Significant	Avoided	Similar	Similar

Based on a comparison of Alternative 2 and Alternative 3, environmental impacts associated with aesthetics, air quality, energy, GHG emissions, and noise would be less under Alternative 3 compared to Alternative 2. Impacts associated with biological resources, cultural, tribal cultural, and paleontological resources, hazards and hazardous materials, hydrology and water quality, transportation, and utilities and services systems would be similar under Alternative 3 compared to Alternative 2. Overall, based on these findings, Alternative 3 would be considered the environmentally superior alternative.

Table 7-2. Comparison of Project Alternatives and Project Objectives

Project Objective	Would the Project or alternative meet the Project Objective?			
	Project	No Project/No Development Alternative (Alternative 1)	Other Development Project Alternative (Alternative 2)	Reduced Intensity Alternative (Alternative 3)
Objective 1: Develop a jobs-producing and tax generating land use near transportation corridors within the housing-rich Victor Valley/High Desert region that is constructed to high standards of quality and provides diverse economic opportunities for those residing and wishing to invest within the City of Hesperia.	Yes	No	Yes	Yes, albeit to a lesser degree than the Project
Objective 2: Concentrate non-residential uses near existing roadways, highways, and freeways in an effort to isolate and reduce any potential environmental impacts related to truck traffic congestion, air emissions, and industrial noise to the greatest extent feasible.	Yes	No	Yes	Yes, albeit to a lesser degree than the Project
Objective 3: Develop a fiscally sound and employment generating land use that maximizes utilization of industrial zoned areas.	Yes	No	Yes	Yes, albeit to a lesser degree than the Project

Table 7-2. Comparison of Project Alternatives and Project Objectives

Project Objective	Would the Project or alternative meet the Project Objective?			
	Project	No Project/No Development Alternative (Alternative 1)	Other Development Project Alternative (Alternative 2)	Reduced Intensity Alternative (Alternative 3)
Objective 4: Create a project that takes advantage of and enhances existing infrastructure, including the proximity to major regional roadways such as I-15 and U.S. Highway 395, railroad service corridors, and other similar infrastructure that will help promote the site and its use as an industrial business park development.	Yes	No	Yes	Yes, albeit to a lesser degree than the Project
Objective 5: Fulfill the existing and growing demand for logistics and warehouse uses in the region.	Yes	No	Yes	Yes

7.5 References Cited

- City of Hesperia. 2021. Hesperia Main Street & Freeway Corridor Specific Plan. Adopted October 16, 2008. Amended July 15, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/15940/MSFCSP-update>.
- SCAG (Southern California Association of Governments). 2013. Southern California Association of Governments Comprehensive Regional Goods Movement Plan and Implementation Strategy. <http://www.freightworks.org/Pages/default.aspx>.

INTENTIONALLY LEFT BLANK

8 List of Preparers

Report Preparers

City of Hesperia (Lead Agency)

Ryan Leonard, Senior Planner
Chris Borchert, Principal Planner
Maricruz Montes, Senior Office Specialist

Dudek (Environmental Consultant)

Carey Fernandes, Principal/Senior Project Manager
Ronelle Candia, Senior Project Manager
Patrick Cruz, Project Manager
Hayley Ward, Environmental Analyst
Clarisa Olaguez, Environmental Analyst
Daniel Hoffman, Environmental Analyst
Jennifer Reed, Senior Air Quality Specialist
David Larocca, Air Quality Specialist
Megan Enright, Senior Biologist
Anna Cassady, Biologist
Britney Strittmater, Biologist
Chris Kallstrand, Forester
Michael Williams, PhD, Paleontologist
Heather McDaniel McDevitt, Senior Cultural Resources Specialist
Linda Kry, Cultural Resources Specialist
Adriane Gusick, Archaeologist
Jennifer De Alba, Archaeologist
Kira Archipov, Archaeologist/Paleontologist
Eric Schniewind, Senior Hydrogeologist
Michael Greene, Senior Acoustician
Lisa Valdez, Senior Transportation Specialist
Amanda Meroux, Transportation Analyst
Hailee McOmber, GIS and Graphics
Amy Seals, Senior Technical Editor
Rachel Dobrolenski, Publications Specialist

EIR Contributors

EIR contributors prepared technical reports that have been included in the EIR.

Dipodyms Ecological Consulting LLC (Mohave Ground Squirrel Protocol Survey Report)

Karla L. Flores, Principal Investigator
Karl Fairchild, Independent Researcher

Southern California Geotechnical (Geotechnical Reports)

Robert G. Trazo, Principal Engineer
David W. Nielsen, Senior Engineer

Consolidated Consulting Group LLC (Phase I Environmental Site Assessments)

Tonya Golden, Project Manager
Richard A. Mosman, Project Director

KEC Engineers (Water Supply Assessment)

Kavous Emami, Principal Engineer

Appendix A

Initial Study, Notice of Preparation,
and Scoping Comments

Initial Study

Poplar 18 Project

AUGUST 2022

Prepared for:

CITY OF HESPERIA

9700 Seventh Avenue
Hesperia, California 92345

Contact: Ryan Leonard

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024

Contact: Carey Fernandes

Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	iii
1 Introduction	1
1.1 Project Overview	1
1.2 California Environmental Quality Act Compliance	1
1.3 Availability of the Notice of Preparation and Initial Study	1
2 Project Description.....	3
2.1 Project Location.....	3
2.2 Environmental Setting.....	3
2.3 Project Characteristics	4
2.4 Project Approvals.....	5
3 Initial Study Checklist.....	7
3.1 Aesthetics	12
3.2 Agriculture and Forestry Resources	13
3.3 Air Quality.....	15
3.4 Biological Resources	16
3.5 Cultural Resources	17
3.6 Energy	18
3.7 Geology and Soils	19
3.8 Greenhouse Gas Emissions.....	23
3.9 Hazards and Hazardous Materials	23
3.10 Hydrology and Water Quality.....	26
3.11 Land Use and Planning.....	28
3.12 Mineral Resources	34
3.13 Noise	35
3.14 Population and Housing.....	36
3.15 Public Services	38
3.16 Recreation.....	40
3.17 Transportation	41
3.18 Tribal Cultural Resources.....	42
3.19 Utilities and Service Systems.....	43
3.20 Wildfire	44
3.21 Mandatory Findings of Significance	45
4 References and Preparers.....	47
4.1 References Cited	47
4.2 List of Preparers	48

FIGURES

1 Project Location 49

2 Site Plan..... 51

3 Existing Land Use Designations 53

4 Existing Zoning 55

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APN	Assessor's Parcel Number
CEQA	California Environmental Quality Act
City	City of Hesperia
EIR	Environmental Impact Report
FHSZ	Fire Hazard Severity Zone
I	Interstate
SBCFD	San Bernardino County Fire Department

INTENTIONALLY LEFT BLANK

1 Introduction

1.1 Project Overview

The City of Hesperia (City) received an application from Poplar 18 LLC (Project Applicant) for the development of the Poplar 18 Project (Project). The Project includes the construction of industrial distribution/warehouse building on an approximately 17.87-acre Project site generally located west of Interstate (I) 15, east of U.S. Highway 395, and south of Main Street. The Project would provide 414,700 square feet of industrial/warehouse space and associated improvements, including loading docks, truck and vehicle parking, and landscaped areas, as further described below.

Implementation of the Project would require the following discretionary actions from the City:

- **Parcel Merger** of the two parcels within the project boundary into one 17.87-acre lot.
- **Conditional Use Permit** to permit the construction and operation of a warehousing and distribution center of a size greater than 200,000 square feet in the Commercial/Industrial Business Park zone

1.2 California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) serves as the main framework of environmental law and policy in California. CEQA emphasizes the need for public disclosure and identifying and preventing environmental damage associated with proposed projects. Unless a project is deemed categorically or statutorily exempt, CEQA is applicable to any project that must be approved by a public agency in order to be processed and established. The proposed Project considered herein does not fall under any of the statutory or categorical exemptions listed in the 2018 CEQA Statute and Guidelines (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.); therefore, it must meet CEQA requirements.

The intent of this document is to provide an overview and analysis of the environmental impacts associated with the proposed Project by the City, acting as the lead agency. The document is accessible to the public, in accordance with CEQA, in order to receive feedback on the Project's potential impacts, as well as the scope of the Project's environmental impact report (EIR) (14 CCR Section 15121[a]).

1.3 Availability of the Notice of Preparation and Initial Study

The Initial Study/Notice of Preparation for the Project is being distributed directly to agencies, organizations, and interested groups and persons during the scoping period. The Initial Study/Notice of Preparation is also available for review at the City of Hesperia, Planning Department, 9700 Seventh Avenue, Hesperia, California 92345.

INTENTIONALLY LEFT BLANK

2 Project Description

2.1 Project Location

The approximately 17.87-acre Project site is located in the western part of the City, which is within the Victor Valley region of San Bernardino County (Figure 1, Project Location). The Project site is located on the southwest quadrant of I-15 and Main Street. The Project site is located south of Main Street, west of Cataba Road and Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The Project site consists of two parcels: Assessor's Parcel Numbers (APNs) 3064-581-04-0000 and 3064-581-05-0000. Specifically, the Project site is located in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map. Regional access to the Project site is provided via I-15 and U.S. Highway 395.

2.2 Environmental Setting

City of Hesperia

The City is approximately 110 square miles in the Victor Valley region of San Bernardino County. The City is located within the Mojave Desert, which is a region containing desert plains, dry lakebeds, and scattered mountains. The southern portion of the City lies at the foothills of the San Bernardino Mountains and National Forest. The City contains a variety of slope conditions, with the foothill areas containing significant slopes and the majority of the City being primarily level. The central and northern portions of the City lie upon a moderate to gentle slope with elevations ranging from 2,900 feet to 4,200 feet above mean sea level. Generally, the City is an urban community with a broad mix of land uses, including housing, commercial, office, industrial, agriculture, and public-serving uses. The eastern and southern portions of the City contain generally rural residential uses. Commercial uses follow Main Street, Bear Valley and Hesperia Roads, and the freeway corridor. Industrial uses are generally divided into two areas: west of I-15 and east of U.S. Highway 395, and the eastern area between the BNSF railroad lines and I Avenue north of Main Street.

The City is bordered by the City of Victorville to the north, the City of Apple Valley to the east, unincorporated San Bernardino County land to the south, and the unincorporated community of Oak Hills to the west. Three highways provide direct access to the City: I-15 runs north-south on the west side of the City, U.S. Highway 395 connects to I-15 on the west side, and State Route 138 passes through the southeastern corner of the City (City of Hesperia 2010a).

Existing Project Site

The Project site is currently vacant undeveloped property bound to the west by Lassen Road, to the east by Mesa Linda Street, and to the south by Poplar Street. The Project site is located within the Main Street and Freeway Corridor Specific Plan. According to the Main Street and Freeway Corridor Specific Plan, the Project site is located within the Highway 395/Interstate 15 District and the land use and zoning designations for the Project site are Commercial/Industrial Business Park (CIBP) (City of Hesperia 2010a; City of Hesperia 2021a).

Surrounding Land Uses

Land uses surrounding the Project site primarily consist of vacant land, along with some scattered residential, commercial, light industrial, and utility uses. Specific land uses located in the immediate vicinity of the Project site include the following:

- **North:** Vacant land and scattered commercial, light industrial, and residential uses
- **East:** Commercial uses and I-15
- **South:** Vacant land, scattered commercial and I-15
- **West:** Vacant land, U.S. Highway 395, and scattered commercial, and light industrial

2.3 Project Characteristics

The Project would include construction of an industrial/warehouse building and associated improvements on 17.87 acres of vacant land (see Figure 2, Site Plan). The proposed project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area. Office space within the building would be distributed among four individual office spaces in each of the corners of the building.

On-Site and Off-Site Improvements

The Project would include improvements along Mesa Linda Street, Lassen Street, and Poplar Street, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project frontage's landscape setback area, as well as within the landscape areas found around the proposed industrial/warehouse building and throughout the Project site.

Site Access, Circulation, and Parking

Access to the Project site would be provided by four driveways: two driveways on the western side of the project site off Lassen Street and two driveways on the eastern side of the Project site along Mesa Linda Street. Paved passenger vehicle parking areas would be provided within areas north, east, and west of the warehouse building, while tractor-trailer stalls and loading docks would be located on the northern side of the warehouse building. In total, the Project would provide approximately 54 loading dock positions, approximately 54 tractor-trailer stalls, roughly 182 passenger vehicle parking spaces (including accessible and EV charging stalls), and approximately 14.9% landscape area coverage.

Utility Improvements

Given the vacant, undeveloped nature of the Project site, both wet and dry utilities, including domestic water, sanitary sewer, and electricity, would need to be extended onto the Project site. Stormwater would be managed on site using at-grade detention basins and subsurface catch basins to capture and treat on-site stormwater.

Operations

Tenants for the Project have not been identified; however, the final layout of the industrial warehouse building is complete. Business operations would be expected to be conducted within the enclosed building, with the exception

of the ingressing and egressing of trucks and passenger vehicles accessing the site, passenger and truck parking, the loading and unloading of trailers within designated truck courts/loading areas, and the internal and external movement of materials around the Project site via forklifts, pallet jacks, yard hostlers, and similar equipment. It is anticipated that the facilities would be operated 24 hours a day, 7 days a week. At this time, the Project Applicant does not anticipate leasing any portion of the building to a tenant that would require refrigerated space and this use is not contemplated in this environmental analysis.

2.4 Project Approvals

As part of the Project, the Project Applicant is requesting approval of the following entitlements:

- **Parcel Merger** of the two parcels within the project boundary into one 17.87-acre lot.
- **Conditional Use Permit** to permit the construction and operation of a warehousing and distribution center of a size greater than 200,000 square feet in the Commercial/Industrial Business Park zone.
- **A Development Agreement** may be requested to provide sufficient time for the development of the Project by locking in development standards and extending applicable vesting periods for the Project's entitlements and to establish a mechanism whereby the Project Applicant would be partially reimbursed for costs associated with public improvements constructed that would be used by future developments.
- While not a discretionary action that would be requested of the City, the Project would involve obtaining a **2081 Incidental Take Permit** from the California Department of Fish and Wildlife to authorize removal of western Joshua Tree.

Subsequent non-discretionary approvals (which would require separate processing through the City) would include, but may not be limited to, grading permits, building permits, and occupancy permits.

Note that the preceding list of actions and/or approvals is preliminary and may not be comprehensive.

INTENTIONALLY LEFT BLANK

3 Initial Study Checklist

1. Project title:

Poplar 18 Project

2. Lead agency name and address:

City of Hesperia, Planning Department
9700 Seventh Avenue
Hesperia, California 92345

3. Contact person and phone number:

Ryan Leonard, Senior Planner
City of Hesperia Planning Department
Phone: 760.947.1651
Email: rleonard@cityofhesperia.us

4. Project location:

The approximately 17.87-acre Project site is located in the western part of the City, which is within the Victor Valley region of San Bernardino County (Figure 1, Project Location). The Project site is located on the southwest quadrant of I-15 and Main Street. The Project site is located south of Main Street, west of Cataba Road and Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The Project site consists of two parcels: Assessor's Parcel Numbers (APNs) 3064-581-04-0000 and 3064-581-05-0000. Specifically, the Project site is located in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map. Regional access to the Project site is provided via I-15 and U.S. Highway 395.

5. Project sponsor's name and address:

Poplar 18 LLC
3 Corporate Plaza, Suite 230
Newport Beach, California 92660

6. General Plan Designation:

Main Street/Freeway Corridor Specific Plan – Commercial/Industrial Business Park (CIBP)

7. Zoning:

Commercial/Industrial Business Park (CIBP)

8. Description of project:

The Project would include construction of an industrial/warehouse building and associated improvements on 17.87 acres of vacant land (see Figure 2, Site Plan). The Project would include construction of an

industrial/warehouse building and associated improvements on 17.87 acres of vacant land (see Figure 2, Site Plan). The proposed project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area.

Implementation of the Project would require the approval of the parcel merger of the two parcels within the project boundary into one 17.87-acre lot, and the issuance of a Conditional Use Permit for the construction and operation of a warehousing and distribution center of a size greater than 200,000 square feet in the Commercial/Industrial Business Park zone.

See Section 2, Project Description, for further Project details.

9. Surrounding land uses and setting (Briefly describe the project's surroundings):

Land uses surrounding the Project site primarily consist of vacant land, along with some scattered residential, commercial, light industrial, and utility uses. Specific land uses located in the immediate vicinity of the Project site include the following:

- **North:** Vacant land and scattered commercial, light industrial, and residential uses
- **East:** Commercial uses and I-15
- **South:** Vacant land, scattered commercial and I-15
- **West:** Vacant land, U.S. Highway 395, and scattered commercial, and light industrial

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

No discretionary approvals from other outside agencies are anticipated at this time.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In accordance with California Assembly Bill 52 requirements, the City will initiate Tribal consultation, the results of which will be summarized in the Draft EIR.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklist on the following pages.

- | | | |
|---|--|--|
| ☒ Aesthetics | ☐ Agriculture and Forestry Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☒ Energy |
| ☐ Geology and Soils | ☒ Greenhouse Gas Emissions | ☒ Hazards and Hazardous Materials |
| ☒ Hydrology and Water Quality | ☐ Land Use and Planning | ☐ Mineral Resources |
| ☒ Noise | ☐ Population and Housing | ☐ Public Services |
| ☐ Recreation | ☒ Transportation | ☒ Tribal Cultural Resources |
| ☒ Utilities and Service Systems | ☒ Wildfire | ☒ Mandatory Findings of Significance |

Determination:

On the basis of this initial evaluation:

- ☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☒ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature

Date

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less Than Significant With Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the Project:				
a) Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☒	☐	☐	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

- a) *Would the Project have a substantial adverse effect on a scenic vista?*
- b) *Would the Project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*
- c) *In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?*
- d) *Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Potentially Significant Impact. The Project would include construction of an industrial/warehouse building and associated improvements on currently undeveloped, vacant land. In total, the Project would provide 414,700 square feet of industrial/warehouse space and associated improvements, including loading docks, tractor-trailer stalls, passenger vehicle parking spaces, and landscape areas. Due to this proposed increase in on-site development intensity, there is a potential for the Project to affect public views of scenic vistas or otherwise alter the existing visual character or quality of public views, despite the fact that the Project must be designed and constructed in accordance with the design standards set forth both the Main

Street and Freeway Corridor Specific Plan and the City's Development Code. In addition, implementation of the Project would include the installation of new nighttime lighting, which could potentially adversely affect nighttime views in the area, including drivers on I-15 and U.S. Highway 395. Such lighting would include lighting for on-site parking and facilities and light generated by vehicles entering and exiting the Project site. Therefore, impacts are potentially significant, and these issues will be analyzed in the Draft EIR.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

- a) ***Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

No Impact. According to the California Department of Conservation's California Important Farmland Finder, the Project site contains grazing land (DOC 2021a). Grazing land is described as land on which the existing vegetation is suited to the grazing of livestock. Grazing land does not include land designated or previously designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (collectively "Important Farmland"). Therefore, no impacts would occur, and no further analysis is proposed for the Draft EIR.

- b) ***Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

No Impact. According to the California Department of Conservation's Williamson Act Parcel map for South San Bernardino County, the Project site is not located on or adjacent to any lands under a Williamson Act contract (City of Hesperia 2010b). In addition, the Project site and surrounding area are not zoned for agricultural uses, but instead for Commercial and Industrial Business Park uses (City of Hesperia 2010a). As such, implementation of the Project would not conflict with existing zoning for agricultural use or land under a Williamson Act contract. Therefore, no impacts would occur, and no further analysis is proposed for the Draft EIR.

- c) ***Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?***

No Impact. According to the City's Zoning Map, the Project site is not located on or adjacent to forestland, timberland, or timberland zoned timberland production (City of Hesperia 2010a). Therefore, no impacts would occur, and no further analysis is proposed for the Draft EIR.

- d) ***Would the Project result in the loss of forest land or conversion of forest land to non-forest use?***

No Impact. The Project site is not located on or adjacent to forestland. No private timberlands or public lands with forests are located in the City. Therefore, no impact would occur, and no further analysis is proposed for the Draft EIR.

- e) ***Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

No Impact. The Project site is not located on or adjacent to any parcels identified as Important Farmland or forestland (DOC 2021a). In addition, the Project would not involve changes to the existing environment that would result in the indirect conversion of Important Farmland or forestland located away from the Project site. Therefore, no impacts would occur, and no further analysis is proposed for the Draft EIR.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐

- a) *Would the Project conflict with or obstruct implementation of the applicable air quality plan?*
- b) *Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?*
- c) *Would the Project expose sensitive receptors to substantial pollutant concentrations?*
- d) *Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Potentially Significant Impact. Project construction and operations would involve activities that would generate both short-term and long-term criteria pollutant and other emissions. Further air quality analysis is required to determine whether the Project could potentially result in any adverse effects related to air quality. Therefore, these issues will be analyzed in the Draft EIR.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the Project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☒	☐	☐	☐

- a) *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*
- b) *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*
- c) *Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*
- d) *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*
- e) *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- f) *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on candidate, sensitive, or special-status species; sensitive natural communities; migratory wildlife corridors; and protected trees. Further biological resources analysis is required to determine whether the Project could potentially result in any adverse effects related to biological resources. Therefore, these issues will be analyzed further in the Draft EIR.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the Project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☒	☐	☐	☐

- a) *Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*
- b) *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*
- c) *Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?*

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on currently unrecorded, unknown historical, archaeological, or Tribal cultural resources. Further cultural resources analysis is required to determine whether the Project could potentially result in any adverse effects related to cultural resources. Therefore, these issues will be analyzed further in the Draft EIR.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – Would the Project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	☒	☐	☐	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☒	☐	☐	☐

- a) *Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?*
- b) *Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Potentially Significant Impact. Project construction and operations would involve activities that would require the use of energy, including electricity and petroleum. Further energy usage analysis is required to determine whether the Project could potentially result in any adverse effects related to energy consumption. Therefore, these issues will be analyzed in the Draft EIR.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the Project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
i) ii) Strong seismic ground shaking?	☐	☐	☒	☐
ii) iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iii) iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

a) ***Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

i) ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

No Impact. The Alquist–Priolo Earthquake Zoning Act (Alquist–Priolo Act) requires the delineation of fault zones along active faults in California. The purpose of the Alquist–Priolo Act is to regulate development on or near active fault traces to reduce hazards associated with fault rupture. The Alquist–Priolo Earthquake Fault Zones are the regulatory zones that include surface traces of active faults. According to the California Department of Conservation, the Project site is not located in an Alquist–Priolo Earthquake Fault Zone (DOC 2021b). Thus, the potential for surface rupture is low on the Project site. Therefore, no impacts would occur, and this issue will not be evaluated further in the Draft EIR.

ii) ***Strong seismic ground shaking?***

Less-Than-Significant Impact. Similar to other areas located in seismically active Southern California, the City is susceptible to strong ground shaking during an earthquake. However, the Project site is not located within an Alquist–Priolo Earthquake Fault Zone, and the site would not be affected by ground shaking more than any other area in this seismic region. Pursuant to Title 15, Buildings and Construction, of the Hesperia Municipal Code, the Project would incorporate the design recommendations included in its geotechnical report, which will be subject to review and approval by City staff prior to issuance of a grading permit. The Project's geotechnical report provides specific design recommendations to ensure the structural integrity of the Project in the event that seismic ground shaking is experienced at the Project site. These recommendations include performing remedial grading, over-excavating existing soils, and recompacting these soils with structured fill, among other technical design recommendations (SCG 2022). Additionally, the Project's structures would be designed consistent with the most recent version of the California Building Code, which includes universal standards relating to seismic load requirements. Compliance with the recommendations of the geotechnical report is mandated by Section 15.060.040 of the Hesperia Municipal Code, and compliance is subject to inspection by the City Building Official. With implementation of the recommendations of the Project's geotechnical report, impacts associated with strong seismic ground shaking would be less than significant, and no further analysis will be conducted in the Draft EIR.

iii) ***Seismic-related ground failure, including liquefaction?***

Less-Than-Significant Impact. Soil liquefaction is a seismically induced form of ground failure that has been a major cause of earthquake damage in Southern California. Liquefaction is a process by which water-saturated granular soils transform from a solid to a liquid state because of a sudden shock or strain such as an earthquake. Due to the existing geologically young, loose, unconsolidated sediments throughout the City, liquefaction has the potential to occur within the City. However, according to Exhibit SF-1 of the City's General Plan Safety Element (City of Hesperia 2010a), the Project site is not within an area of the City that has the potential for liquefaction. In addition, the Project's geotechnical report states that based on subsurface conditions encountered at boring locations, liquefaction is not considered to be a concern for the Project site (SCG 2022). With implementation of the recommendations of the Project's geotechnical report, impacts associated with potential seismic-related ground failure, including liquefaction, would be less than significant, and no further analysis will be conducted in the Draft EIR.

iv) Landslides?

No Impact. According to Exhibit SF-1 of the City's General Plan Safety Element (City of Hesperia 2010a), the Project site is not located in an area identified as susceptible to slope instability. The Project site is relatively flat and is not located adjacent to any potentially unstable topographical feature such as a hillside or riverbank. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

b) *Would the Project result in substantial soil erosion or the loss of topsoil?*

Less-Than-Significant Impact. The Project would involve earthwork and other construction activities that would disturb surface soils and temporarily leave exposed soil on the ground's surface. Common causes of soil erosion from construction sites include stormwater, wind, and soil being tracked off site by vehicles. To help curb erosion, Project construction activities must comply with all applicable federal, state, and local regulations for erosion control. The Project would be required to comply with standard regulations, including South Coast Air Quality Management District Rules 402 and 403, which would reduce construction erosion impacts. Rule 402 requires that dust suppression techniques be implemented to prevent dust and soil erosion from creating a nuisance off site (SCAQMD 1976). Rule 403 requires that fugitive dust be controlled with best available control measures so that it does not remain visible in the atmosphere beyond the property line of the emissions source (SCAQMD 2005).

Since Project construction activities would disturb one (1) or more acres, the Project must adhere to the provisions of the National Pollutant Discharge Elimination System Construction General Permit. Construction activities subject to this permit include clearing, grading, and ground disturbances such as stockpiling and excavating. The Construction General Permit requires implementation of a stormwater pollution prevention plan, which would include construction features for the Project (i.e., best management practices) designed to prevent erosion and protect the quality of stormwater runoff. Sediment-control best management practices may include stabilized construction entrances, straw wattles on earthen embankments, sediment filters on existing inlets, or the equivalent. Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

Once developed, the Project site would include an industrial/warehouse building, paved surfaces, and other on-site improvements that would stabilize and help retain on-site soils. The remaining portions of the Project site containing pervious surfaces would primarily consist of landscape areas. These landscape areas would include a mix of trees, shrubs, plants, and groundcover that would help retain on-site soils while preventing wind and water erosion from occurring. Therefore, operational impacts related to soil erosion would be less than significant. No further analysis will be conducted in the Draft EIR.

c) *Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less-Than-Significant Impact. As discussed previously, the potential for the Project to result in or be affected by landslides and liquefaction is low, and these issues are not anticipated at the Project site. Project activities may occur on geologically unstable soils such as those susceptible to lateral spreading, subsidence, or collapse. However, the Project would be designed consistent with the specific design recommendations of the Project's geotechnical report, which provides recommendations to perform remedial grading, over-excavate existing soils, and recompact these soils with structured fill, among other technical design recommendations (SCG 2022). Implementation of these recommendations would address

these potentially hazardous conditions and ensure structural integrity in the event that seismic-related issues are experienced at the Project site. Compliance with the recommendations of the geotechnical report is mandated by Section 15.060.040 of the Hesperia Municipal Code, and compliance is subject to inspection by the City Building Official. With implementation of the recommendations of the Project's geotechnical report, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

- d) ***Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

Less-Than-Significant Impact. Expansive soils are characterized by their potential shrink/swell behavior. Shrink/swell is the change in volume (expansion and contraction) that occurs in certain fine-grained clay sediments from the cycle of wetting and drying. Clay minerals are known to expand with changes in moisture content. The higher the percentage of expansive minerals present in near-surface soils, the higher the potential for substantial expansion.

According to the City's General Plan, the City's soils are mostly comprised of water-laid sand, silt, and gravel (City of Hesperia 2010a). The U.S. Department of Agriculture's Web Soil Survey does not identify the Project site or surrounding area as containing clay soils, which are typically expansive. The Project site is documented from 0 to 6 inches as loamy fine sand and from 6 to 60 inches deep as sandy loam and coarse sandy loam, which does not exhibit significant shrink/swell behavior (USDA 2021). Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

- e) ***Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

No Impact. The Project would connect to the City's municipal sewer lines. The Project would not require septic tanks or alternative wastewater disposal systems. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

- f) ***Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

Potentially Significant Impact. According to the City's General Plan Conservation Element, the City has potential for paleontological finds (City of Hesperia 2010a). As such, development and construction activities associated with the Project have the potential to unearth potentially significant paleontological resources. Therefore, impacts would be potentially significant, and further analysis is proposed in the Draft EIR.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

- a) *Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b) *Would the Project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Potentially Significant Impact. Project construction and operations would involve activities that would generate both short-term and long-term greenhouse gas emissions. Further greenhouse gas analysis is required to determine whether the Project could potentially result in any adverse effects related to greenhouse gases. Therefore, these issues will be analyzed in the Draft EIR.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☒	☐	☐	☐

- a) ***Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Potentially Significant Impact. Development of the Project would result in the construction of an industrial/warehouse building and associated improvements on currently undeveloped, vacant land. Project implementation could potentially result in impacts related to hazardous materials and wildland fire. Therefore, these issues will be analyzed in the Draft EIR.

- b) ***Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

Potentially Significant Impact. Development of the Project would result in the construction of an industrial/warehouse building and associated improvements on currently undeveloped, vacant land. Project implementation could potentially result in impacts related to hazardous materials and wildland fire. Therefore, these issues will be analyzed in the Draft EIR.

- c) ***Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

No Impact. The nearest school to the Project site is San Joaquin Valley College (9331 Mariposa Road), which is located approximately 1.4 miles southeast of the site. As such, the closest school is located well outside of a 0.25-mile radius around the Project site. Therefore, no impacts would occur, and this issue will not be evaluated further in the Draft EIR.

- d) ***Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

No Impact. The Hazardous Waste and Substances Sites List (Cortese List) is a planning document providing information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous materials release information for the Cortese List (CalEPA 2021). A review of Cortese List online data resources does not identify hazardous materials or waste sites on the Project site or immediately surrounding area (DTSC 2021; RWQCB 2021). Therefore, no impacts would occur, and this issue will not be evaluated further in the Draft EIR.

- e) ***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?***

No Impact. The nearest operational public-use airport to the Project site is the Hesperia Airport, which is located approximately 6.2 miles to the south. The airport is located on the Mesa, west of Antelope Valley wash and south of Ranchero Road. According to the Comprehensive Land Use Plan, the Project site is not located within a runway protection zone or safety zone area, which would have potential safety and noise impacts (San Bernardino County 1991). Therefore, impacts would not occur, and this issue will not be evaluated further in the Draft EIR.

- f) ***Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Less-Than-Significant Impact. According to the City's Mitigation Plan, the Project would be required to comply with the City's Emergency Operations Plan (City of Hesperia 2017). The Emergency Operations Plan provides a framework for coordinated response and recovery activities during an emergency (City of Hesperia 2017). In addition, the City's General Plan designates all freeways and arterial roads as emergency evacuation routes. Typically, roadway facilities designated by the City's General Plan Safety Element as major, primary, or secondary highways, as well as other streets with regional access, are assumed to serve as evacuation routes in the event of a regional emergency. As roadways capable of supporting high traffic volumes and providing regional access to other highways, freeways, and neighboring jurisdictions, both Main Street and U.S. Highway 395 are expected to serve as emergency evacuation routes in the event of an emergency. The Project does not propose any changes to the geometry of these roadways, and thus it follows that these roadways' ability to serve as emergency evacuation routes would not be compromised. As a result, the Project would not significantly affect emergency response or evacuation activities. Therefore, impacts would be less than significant, and this issue will not be evaluated further in the Draft EIR.

g) Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Potentially Significant Impact. Development of the Project would result in the construction of an industrial/warehouse building and associated improvements on currently undeveloped, vacant land. Project implementation could potentially result in impacts related to hazardous materials and wildland fire. Therefore, these issues will be analyzed in the Draft EIR.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the Project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	☒	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on or off site;	☒	☐	☐	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	☒	☐	☐	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☒	☐	☐	☐
iv) impede or redirect flood flows?	☒	☐	☐	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☒	☐	☐	☐

- a) *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*
- b) *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?*
- c) *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
 - i) *result in substantial erosion or siltation on or off site;*
 - ii) *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;*
 - iii) *create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
 - iv) *impede or redirect flood flows?*

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on existing drainage patterns, which could subsequently impact surface water and groundwater quality, as well as both on-site and local hydrology. Therefore, these issues will be analyzed in the Draft EIR.

- d) *In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to Project inundation?*

Less-Than-Significant Impact. The Project would not be susceptible to flood hazards, tsunami, or seiche. Seiche is generally associated with oscillation of enclosed bodies of water (e.g., reservoirs, lakes) typically caused by ground shaking associated with a seismic event; however, the Project site is not located near an enclosed body of water. Flooding from tsunami conditions is not expected, since the Project site is located approximately 60 miles from the Pacific Ocean.

In addition, the Federal Emergency Management Agency Flood Map Service Center identifies the Project site as Zone X, which is classified as an area of minimal flood hazard, outside of the Special Flood Hazard Area and higher than the elevation of the 0.2%-annual-chance flood (FEMA 2021). As such, the Project would not risk release of pollutants due to inundation. Therefore, impacts associated with seiche, tsunami, or flooding would be less than significant, and this issue will not be evaluated further in the Draft EIR.

- e) *Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on existing drainage patterns, which could subsequently impact surface water and groundwater quality, as well as both on-site and local hydrology. Therefore, these issues will be analyzed in the Draft EIR.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the Project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a) *Would the Project physically divide an established community?*

No Impact. The physical division of an established community typically refers to the construction of a linear feature (e.g., a major highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community or between a community and outlying area.

Under the existing condition, the Project site is vacant land and is not used as a connection between established communities. Instead, connectivity within the area surrounding the Project site is facilitated via local roadways. As such, the Project would not impede movement within the Project area, within an established community, or from one established community to another. Therefore, no impacts would occur, and this issue will not be evaluated further in the Draft EIR.

b) *Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Less-Than-Significant Impact. The project would not result in a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, as further discussed below.

City of Hesperia Land Use Plans, Policies, and Regulations

General Plan

Pursuant to state law, specific plans establish land use regulations for those areas covered by the Specific Plan. The General Plan designates the Specific Plan to cover all freeway frontages within the City as well as the commercial and industrial areas parallel to the freeway corridor. The goals, policies, and development standards applicable to the project are found in the Specific Plan.

Main Street and Freeway Corridor Specific Plan

The Specific Plan establishes a framework for the Main Street and freeway corridors and is intended to facilitate and support development and improvements along these corridors. The regulations of the specific plan replace those set forth in the planning and zoning provisions of the City's Development Code, and any other applicable ordinances.

The project site is zoned and designated by the Specific Plan as CIBP (City of Hesperia 2021a). The project site would be developed in accordance with the provisions set forth in this land use designation. The Specific Plan lists CIBP as one of two industrial zones. The CIBP zone is meant to create consolidated areas for employment-creating uses in a business park setting. The zone is intended to provide for service commercial, light industrial, light manufacturing, and industrial support uses, mainly conducted in an enclosed building, to minimize environmental impacts such as noise, vibration, air pollution, glare, or waste disposal. The CIBP zone falls within three land use districts, Main Street/I-15 District, Highway 395/I-15 District, and Industrial District. The Main Street/I-15 and Highway 395/I-15 Districts provide enhanced vehicular, truck, and rail accessibility by taking advantage of their location along the I-15 corridor with its connection to Highway 395, and its linkage to the Southern California Logistics Airport. The project site falls within the Main Street/I-15 District. The Main Street/I-15 District takes advantage of regional freeway accessibility and visibility through high-quality development and streetscape enhancements.

Among the permitted uses in the CIBP zone, warehousing and wholesale distribution centers are permitted at 200,000 square feet or less. Warehouses and wholesale distribution centers over 200,000 square feet are conditionally permitted. The Specific Plan states that the maximum gross floor area ratio in CIBP zones is 0.35 (City of Hesperia 2021a). Additionally, maximum building height within the zone is 60 feet at the setback line, thereafter height may be increased at a rate of 1-foot in height for every additional 3-foot increase in front yard setback, up to a maximum building height of 150 feet (City of Hesperia 2021a).

The project would include construction of a total of 414,700 square feet of warehousing use, which would require a Conditional Use Permit. As part of the project approvals, the project Applicant is requesting approval of a Conditional Use Permit. Assuming that the City's decision makers approve the Conditional Use Permit, the project would be an allowable use within the CIBP zone. Additionally, the project plans would be reviewed by City staff to ensure consistency with all applicable development standards and regulations.

The Specific Plan contains several goals and policies that address land use and planning and are applicable to the project. An analysis of the project's consistency with these goals and policies is provided in Table 1.

Table 1. Specific Plan Consistency Analysis

Specific Plan Goal or Policy	Consistency Summary
Specific Plan Goal: LU-1b: Provide for continuing growth within the Specific Plan area, with land uses and intensities appropriately designated to meet the needs of anticipated growth and to achieve the community's objectives.	Consistent. The project would include the construction of an industrial/warehouse building. The project site is designated as CIBP and would support the expansion of regional commercial development. Additionally, the project would support the City's goal of increasing jobs within the City and balancing the job to housing ratio. Therefore, the project would be consistent with the goal.

Table 1. Specific Plan Consistency Analysis

Specific Plan Goal or Policy	Consistency Summary
Policy LU-1.1: With the adoption of the Main Street and Freeway Corridor Specific Plan, establish land use districts that have complimentary rather than competitive uses/zones, and maintain the integrity of and interrelationships between these zones.	Consistent. The project site would be located in the Specific Plan's Main Street/I-15 District. The Main Street/I-15 District is intended for mixed-use development to enhance large-scale regional commercial and service uses. The project would be compatible with the Main Street/I-15 District and be consistent with its land use designation of CIBP. Therefore, the project would be consistent with the goal.
Goal LU-2: Create a jobs/housing balance in the City.	Consistent. For purposes of analyses, employment estimates were calculated using average employment density factors reported by SCAG. SCAG reports that for every 2,111 square feet of warehouse space in San Bernardino County, the median number of jobs supported is one employee (SCAG 2001). As such, the estimated number of employees required for operation would be approximately 197. According to the City's 2019 SCAG profile, the total number of jobs in the City of Hesperia during 2017 was 22,513 (SCAG 2019). Additionally, in 2018, the total number of housing units in the City was 29,601 (SCAG 2019). As such, jobs generated from the project would contribute to balancing the jobs/housing ratio. Therefore, the project would be consistent with the goal.
Policy LU-2.1: Designate land near Interstate-15 and Highway 395 for freeway-oriented commercial and industrial/business park development.	Consistent. The project is located approximately 1.3 miles west of I-15. Additionally, the project site is a quarter mile east of Highway 395. The project site and surrounding area to the north and partially to the east and south are designated as CIBP. The project would include construction of an industrial/warehouse building. Therefore, the project is consistent with the policy.
Policy LU-2.2: Add to the City's industrial land base where logically and physically possible to do so.	Consistent. Under existing conditions, the project site is vacant, undeveloped land. The project site is designated as CIBP. As such, the project would include construction of an industrial/warehouse building with designated office space and associated improvements. Because of the nature of the project and the size of the project site, the project would add to the City's industrial land base, while being physically advantageous. Additionally, the project site is located ¼-mile from Highway 395 and 1.3 miles west of I-15. Therefore, trucks traveling to and from the project site would have convenient freeway access. Thus, the project would be consistent with the policy.

Table 1. Specific Plan Consistency Analysis

Specific Plan Goal or Policy	Consistency Summary
Goal LU-6: Make use of vacant sites with the Specific Plan area.	Consistent. The project site is located on vacant land within the Specific Plan area. The project involves the construction of an industrial/warehouse building. The project site has a land use designation of CIBP and would comply with provisions associated with development in a CIBP zone outlined in the Specific Plan.

Source: City of Hesperia 2021a.

Notes: I = Interstate; City = City of Hesperia; SCAG = Southern California Association of Governments; CIBP = Commercial/Industrial Business Park.

Regional Transportation Plan/Sustainable Communities Strategy

The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (also known as the Connect SoCal Plan) was adopted on September 3, 2020, and presents the land use and transportation vision for the region through the year 2045, providing a long-term investment framework for addressing the region's challenges (SCAG 2020). The RTP/SCS explicitly lays out goals related to housing, transportation, equity and resilience in order to adequately reflect the increasing importance of these topics in the region, and where possible the goals have been developed to link to potential performance measures and targets. The RTP/SCS development process involved working closely with local governments throughout the region to collect and compile data on land use and growth trends. The core vision of the RTP/SCS is to build upon and expanded land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern.

Analysis of the project's consistency with the SCAG 2020 RTP/SCS goals is provided in Table 2.

Table 2. Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis

RTP/SCS Goals ¹	Consistency Summary
RTP/SCS Goal 1. Encourage regional economic prosperity and global competitiveness.	Consistent. The project would involve construction of a 414,700 square foot industrial/warehouse building. Thus, the Project would generate jobs and tax revenue for the City and its residents. Once operational, the Project would add to the City's business tax base and would employ approximately 196 workers, helping the City better meet its jobs/housing balance, while also providing commercial/industrial business park use that will help the City offer a more balanced array of land uses throughout the broader project area.
RTP/SCS Goal 2. Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. The project would include construction of an industrial/warehouse building that would be easily and efficiently accessible to Highway 395, and I-15, which would help to facilitate regional goods movement throughout Southern California.

Table 2. Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis

RTP/SCS Goals ¹	Consistency Summary
RTP/SCS Goal 3. Enhance the preservation, security, and resilience of the regional transportation system.	Consistent. A traffic impact analysis will be conducted to determine the project's potential impact on the regional and local circulation system. If deemed necessary by this upcoming evaluation, feasible mitigation measures would be required to minimize any adverse effects on the circulation system resulting from the project to the greatest extent feasible. The findings of this evaluation effort will be included in the Draft EIR.
RTP/SCS Goal 4. Increase person and goods movement and travel choices within the transportation system.	Consistent. The project would include construction and operation of an industrial/warehouse building, which would be easily and efficiently accessible to I-15 and U.S. Highway 395 and would help to facilitate regional goods movement throughout Southern California.
RTP/SCS Goal 5. Reduce greenhouse gas emissions and improve air quality.	Consistent. The project would involve development of an industrial use that inherently involves the emission of GHG and air contaminant emissions. An air quality and GHG analysis will be required to determine whether the project could potentially result in any adverse effects related to air quality, health risk, and/or GHG emissions, and mitigation measures will be applied, as necessary, to minimize potential impacts. In addition, according to the Southern California Association of Governments Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the project would meet the growing demand for warehousing space, and would do so in an area that is proximate to regional highways (I-15 and U.S. Highway 395), thereby reducing the need for longer distance trips which could result in additional air pollutant and GHG emissions. Additionally, the project would employ approximately 196 workers, helping the City better meet its jobs/housing balance, which should shorten commute distances of City residents who choose to work on the project site, which would have a direct positive effect on tailpipe GHG and air contaminant emissions.
RTP/SCS Goal 6. Support healthy and equitable communities.	Consistent. The project would involve development of an industrial use that inherently involves the emission of GHG and air contaminant emissions. An air quality and GHG analysis will be required to determine whether the project could potentially result in any adverse effects related to air quality, health risk, and/or GHG emissions, and mitigation measures will

Table 2. Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis

RTP/SCS Goals ¹	Consistency Summary
	be applied, as necessary, to minimize potential impacts. In addition, according to the Southern California Association of Governments Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the project would meet the growing demand warehousing space, and would do so in an area that is proximate to regional highways (I-15 and U.S. Highway 395), thereby reducing the need for longer distance trips which could result in additional air pollutant and GHG emissions. Additionally, development of the project at the project site would provide quick and efficient access to I-15 and U.S. Highway 395, thereby eliminating the need for truck traffic to take longer routes through residential or commercial/retail areas. The project would also include a number of components that are designed to reduce energy use, such as incorporating energy efficiency design features in compliance with CALGreen standards. By incorporating these measures, the project would minimize its potential environmental effects on surrounding sensitive receptors to the maximum extent practicable. Thus, the project would assist in this goal.
RTP/SCS Goal 7. Adapt to a changing climate and support an integrated regional development pattern and transportation network.	Consistent. As climate change continues to increase the number of instances of disruption to local and regional systems, it will become increasingly more urgent for local jurisdictions to employ strategies to reduce their individual contributions. The project would involve development of an industrial use that inherently involves the emission of GHG and air contaminant emissions. An air quality and GHG analysis will be required to determine whether the project could potentially result in any adverse effects related to air quality, health risk, and/or GHG emissions, and mitigation measures will be applied, as necessary, to minimize potential impacts. In addition, according to the Southern California Association of Governments Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the project would meet the growing demand warehousing space, and would do so in an area that is proximate to regional highways (I-15 and

Table 2. Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis

RTP/SCS Goals ¹	Consistency Summary
	U.S. Highway 395), thereby reducing the need for longer distance trips which could result in additional GHG emissions.
RTP/SCS Goal 8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Consistent. Development of the project at the project site would provide quick and efficient access to I-15 and U.S. Highway 395, thereby eliminating the need for truck traffic to take longer routes through residential or commercial/retail areas. In addition, according to the Southern California Association of Governments Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the project would meet the growing demand warehousing space, and would do so in an area that is proximate to regional highways (I-15 and US Highway 395), thereby reducing the need for longer distance trips which could result in additional air pollutant and GHG emissions.
RTP/SCS Goal 9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Not Applicable. The project site is not zoned for housing, but rather industrial, and business uses. Thus, this goal is not applicable.
RTP/SCS Goal 10. Promote conservation of natural and agricultural lands and restoration of habitats.	Consistent. The project would be located on an area zoned for industrial, and business uses. The project site does not support agriculture.

Source:¹ SCAG 2020.**Notes:** City = City of Hesperia; I = Interstate; EIR = Environmental Impact Report; GHG = greenhouse gas

As described in Tables 1 and 2, the project would be consistent with the applicable goals and policies set forth by the Specific Plan, General Plan, and SCAG in the RTP/SCS and RCP. Therefore, impacts would be less than significant, and this issue will not be evaluated further in the Draft EIR.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the Project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☒	☐

- a) *Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b) *Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

Less-Than-Significant Impact. According to the Conservation Element in the City's General Plan, mineral resources such as sand, gravel, and stone have been identified within the City (City of Hesperia 2010a). Additionally, several aggregate resources such as gravelly alluvium and sandy alluvium are known to exist within the City. These resources are primarily located within wash areas and active stream channels. Although the City has known mineral resources, none are identified as being of value to the region or the residents of the state (City of Hesperia 2010b). The Project would be located within an area that is not zoned for mineral resource extraction operations, and thus, such activities cannot currently occur on the Project site. Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the Project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐

- a) *Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*
- b) *Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?*
- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Potentially Significant Impact. Project construction and operations would involve activities that would generate both short-term and long-term noise. Further noise analysis is required to determine whether the Project could potentially result in any adverse effects related to increased noise levels. Therefore, these issues will be analyzed in the Draft EIR.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the Project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

- a) ***Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

Less-Than-Significant Impact. The Project would require a temporary construction workforce and a permanent operational workforce, both of which could potentially induce population growth in the Project area. The temporary workforce would be needed to construct the warehouse building and associated improvements. The number of construction workers needed during any given period would largely depend on the specific stage of construction, but would likely range from a dozen to several dozen workers on a daily basis. These short-term positions are anticipated to be filled primarily by construction workers who reside in the Project site's vicinity; therefore, construction of the Project would not generate a permanent increase in population within the Project area.

Because the future tenants are not known yet, the number of jobs that the Project would generate cannot be precisely determined. Thus, for purposes of analyses, employment estimates were calculated using average employment density factors reported by Southern California Association of Governments. Southern California Association of Governments reports that for every 2,111 square feet of warehouse space in San Bernardino County, the median number of jobs supported is one (SCAG 2001). The Project would include 414,700 square feet of industrial/warehouse space, excluding associated improvements. As such, the estimated number of employees required for operation would be approximately 196.

According to the City's General Plan, as of January 2009, the population of the City was approximately 88,184 residents. Upon build-out, the City anticipates to grow to more than 243,000 residents (City of Hesperia 2010a). As such, the Project-related increase of approximately 196 employees would represent a nominal percentage of the City's projected future population upon General Plan build-out.¹

In addition, data provided by the California Employment Development Department in August 2021 found that the unemployment rate for San Bernardino County is at 7.6%, which is approximately the same as the state average 7.5% (EDD 2021). As such, the Project's temporary and permanent employment requirements could likely be met by the City's existing labor force without people needing to relocate into the Project region, and the Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans. Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

- b) ***Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The Project site is currently vacant and contains no housing or other residential uses. Given that no residential uses are located on site, it follows that the site does not support a residential population. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

¹ Note that this represents a conservative approach, as this finding assumes that all future employees will have relocated to the City as a result of the Project from outside of the City, and that no future employees are already residents of the City.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

XV. PUBLIC SERVICES

- a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

iv) Fire protection?	☐	☐	☒	☐
v) Police protection?	☐	☐	☒	☐
vi) Schools?	☐	☐	☐	☒
vii) Parks?	☐	☐	☐	☒
viii) Other public facilities?	☐	☐	☐	☒

- a) *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

Fire protection?

Less-Than-Significant Impact. Fire protection and emergency response services for the Project site are provided by the San Bernardino County Fire Department (SBCFD). SBCFD operates three fire stations within the City, with Fire Station 305 (8331 Caliente Road) located approximately 1.9 miles south of the Project site, Fire Station 304 (15660 Eucalyptus Street) is located approximately 5.7 miles northeast and Fire Station 302 (17288 Olive Street) is located approximately 6.9 miles east (SBCFD 2021).

According to the City's General Plan Safety Element, the average response time within the City is approximately 7 minutes 16 seconds (City of Hesperia 2010a). If needed, fire stations from adjacent cities, such as Victorville and Apple Valley, may respond to emergency calls in Hesperia. Based on the proximity of the Project site to the existing SBCFD facilities, the average response times in the Project area, the ability for nearby cities to respond to emergency calls, and the fact that the Project site is already located within SBCFD's service area, the Project could be adequately served by the SBCFD without the construction of new, or the expansion of existing, facilities.

In addition, as previously analyzed in response 3.14(a), the Project would not directly or indirectly induce unplanned population growth in the City. Although the Project could potentially result in an incremental increase in calls for service to the Project site compared to existing conditions, this increase is expected to be nominal (as opposed to new residential or commercial/retail land uses, which do result in greater increase in calls for service) and would not result in the need for new fire protection facilities.

Overall, it is anticipated that the Project would be adequately served by existing SBCFD facilities, equipment, and personnel. Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

Police protection?

Less-Than-Significant Impact. Police protection and emergency response services for the Project site are provided by the San Bernardino County Sheriff's Department. The sheriff's department operates one station within the City, Hesperia Police Department (15840 Smoke Tree Street), which is located approximately 5 miles east of the Project site. Hesperia Police Department is comprised of approximately 58 law enforcement personnel, including 1 captain, 1 lieutenant, 7 sergeants, 5 detectives, and 44 deputy sheriffs (City of Hesperia 2021b).

As previously addressed, the Project would not directly or indirectly induce unplanned population growth in the City. Although the Project could potentially result in a slight incremental increase in calls for service to the Project site compared to existing conditions, this increase is expected to be nominal (as opposed to new residential or commercial/retail land uses, which do result in greater increase in calls for service) and would not result in the need for new police protection facilities.

Overall, it is anticipated that the Project would be adequately served by existing San Bernardino County Sheriff's Department facilities, equipment, and personnel. Therefore, impacts would be less than significant, and no further analysis will be conducted in the Draft EIR.

Schools?

No Impact. As previously discussed, the Project would not directly or indirectly induce unplanned population growth in the City. Although the Project would require employees to construct and operate the Project, these short-term and long-term employees would likely already reside within the broader Project area. As such, it is not anticipated that many people would relocate to the City as a result of the Project, and an increase in school-age children requiring public education is not expected to occur as a result.

Similar to other development projects in the City, the Project would be subject to Senate Bill 50, which requires payment of mandatory impact fees to offset any impact to school services or facilities. The provisions of Senate Bill 50 are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local laws (Government Code Section 65996). In accordance with Senate Bill 50, the Project Applicant would pay its fair share of impact fees based on the Project's square footage per Government Code Section 65995(h). These impact fees are required of most residential, commercial, and industrial development projects in the City. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

Parks?

No Impact. The Project would construct an industrial/warehouse building in the City. The Project does not propose any residential uses and would not directly or indirectly induce unplanned population growth in the City. As such, the Project would not increase the use of existing neighborhood parks or regional parks in the City and surrounding area. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

Other public facilities?

No Impact. Given industrial nature of the Project and the lack of population growth that would result from the Project, it is unlikely that the Project would increase the use of libraries and other public facilities. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

- a) ***Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***
- b) ***Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?***

No Impact. The Project would construct an industrial/warehouse building and associated improvements. The Project does not propose any residential uses and would not directly or indirectly result in a substantial and unplanned increase in population growth within the Project area. As such, the Project would not increase the use of existing neighborhood parks or regional parks in the City and surrounding area. In addition, as an industrial use, the Project does not propose recreational facilities or require the construction or expansion of recreational facilities. Therefore, no impacts would occur, and no further analysis will be conducted in the Draft EIR.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the Project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☒	☐	☐	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☒	☐	☐	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
d) Result in inadequate emergency access?	☒	☐	☐	☐

- a) *Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*
- b) *Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*
- c) *Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
- d) *Would the Project result in inadequate emergency access?*

Potentially Significant Impact. Project operations would involve industrial/warehouse activities that would generate truck and passenger vehicle traffic that may conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, or otherwise result in both localized and broader transportation impacts. Further traffic impact analysis is required to determine whether the Project could potentially result in any adverse effects related the local and regional circulation system. Therefore, these issues will be analyzed in the Draft EIR.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☒	☐	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☒	☐	☐	☐

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

Potentially Significant Impact. Implementation of the Project would result in construction and operational activities upon a currently undeveloped, vacant site. Such activities could potentially have an adverse effect on currently unrecorded, unknown, historical, archaeological, or Tribal cultural resources. Further cultural resources analysis is required to determine whether the Project could potentially result in any adverse effects related to cultural resources. Therefore, these issues will be analyzed further in the Draft EIR.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the Project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☒	☐	☐	☐
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☒	☐	☐	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☒	☐	☐	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☒	☐	☐	☐

- a) *Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*
- b) *Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?*
- c) *Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?*
- d) *Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

- e) **Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Potentially Significant Impact. Project construction and operations would involve activities that would require the use of energy and would generate the need for domestic water, sanitary sewer, stormwater, and solid waste disposal. Given the vacant, undeveloped nature of the Project site, these, and likely other dry and wet utilities and services would need to be extended onto the Project site. Further analysis is required to determine whether the Project could potentially result in any adverse effects related to utilities and services systems and to determine whether the Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Therefore, these issues will be analyzed in the Draft EIR.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☒	☐	☐	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☒	☐	☐	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☒	☐	☐	☐

- a) *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b) *Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c) *Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- d) *Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Potentially Significant Impact. According to California Department of Forestry and Fire Protection's 2008 Local Response Area map for the City, the Project site is not located in an area identified as being susceptible to wildland fire (CAL FIRE 2021). The Project site is located near a Moderate Fire Hazard Severity Zone (FHSZ) to the west and a High FHSZ to the south, although the nearest Very High FHSZ is located approximately 8 miles south of the Project site. Given the Project site's proximity to Moderate and High FHSZs, further wildfire risk analysis is required to determine whether the Project could potentially result in any adverse effects related to wildfire. Therefore, these issues will be analyzed in the Draft EIR.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

- a) ***Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?***

Potentially Significant Impact. The Project has the potential to degrade the quality of the environment, reduce the habitat of a plant or wildlife species, cause a plant or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal (see Section 3.4, Biological Resources). In addition, the Project may have the potential to eliminate important examples of California history or prehistory during grading activities due to the potential for unanticipated cultural resources (see Section 3.5, Cultural Resources). Therefore, impacts are considered potentially significant, and this issue will be analyzed in the Draft EIR.

- b) ***Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?***

Potentially Significant Impact. The Project could have impacts that are individually limited but cumulatively considerable. The EIR will analyze past, present, and reasonably foreseeable projects in the vicinity of the Project site. Therefore, impacts are considered potentially significant, and this issue will be analyzed in the Draft EIR.

- c) ***Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?***

Potentially Significant Impact. The Project could have environmental effects that could cause substantial adverse effects on human beings. Therefore, impacts are considered potentially significant, and this issue will be analyzed in the Draft EIR.

4 References and Preparers

4.1 References Cited

14 CCR 15000–15387 and Appendices A through L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

CAL FIRE (California Department of Forestry and Fire Protection). 2021. Fire Hazard Severity Zones Viewer. Accessed September 28, 2021. <https://egis.fire.ca.gov/FHSZ/>.

CalEPA (California Environmental Protection Agency). 2021. Cortese List: Section 65962.5(a). Accessed September 28, 2021. <https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>.

California Public Resources Code, Sections 21000–21177. California Environmental Quality Act, as amended.

City of Hesperia. 2010a. City of Hesperia General Plan Update. Adopted 2010. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>.

City of Hesperia. 2010b. Draft Environmental Impact Report for the City of Hesperia General Plan Update. May 2010. <https://www.cityofhesperia.us/DocumentCenter/View/1588/Hesperia-2010-GPU-Draft-EIR-121610?bidId=>.

City of Hesperia. 2017. Hazard Mitigation Plan. Updated 2017. <http://www.cityofhesperia.us/DocumentCenter/View/14830/2017-Hazard-Mitigation-Plan?bidId=>.

City of Hesperia. 2021a. Hesperia Main Street & Freeway Corridor Specific Plan. Adopted October 16, 2008. Amended July 15, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/15940/MSFCSP-update>

City of Hesperia. 2021b. “Hesperia Police Department.” Accessed September 28, 2021. <https://www.cityofhesperia.us/306/Police>.

DOC. 2021a. California Important Farmland Finder. Accessed September 28, 2021. <https://maps.conservation.ca.gov/DLRP/CIFF/>.

DOC. 2021b. Earthquake Zones of Required Investigation App. Accessed September 28, 2021. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>.

DTSC (Department of Toxic Substances Control). 2021. “EnviroStor.” Accessed September 28, 2021. <https://www.envirostor.dtsc.ca.gov>.

EDD (Employment Development Department, California). 2021. “California Unemployment Rates.” September 17, 2021. Accessed September 28, 2021. <https://www.edd.ca.gov/newsroom/unemployment-August-2021.htm>.

FEMA (Federal Emergency Management Agency). 2021. FEMA Flood Map Service Center. Accessed September 28, 2021. <https://msc.fema.gov/portal/home>

- RWQCB (Regional Water Quality Control Board). 2021. "GeoTracker." Accessed September 28, 2021. <https://geotracker.waterboards.ca.gov>.
- San Bernardino County. 1991. Comprehensive Land Use Plan for Hesperia Airport. Adopted January 1991. Accessed January 06, 2021. <http://www.sbcounty.gov/Uploads/lus/Airports/Hesperia.pdf>.
- SBCFD (San Bernardino County Fire Department). 2021. San Bernardino County Fire Stations and Division Areas. Accessed September 28, 2021. <https://sbcfire.org/firestations/>.
- SCAG (Southern California Association of Governments). 2001. Employment Density Study Summary Report. October 31, 2001. Accessed September 28, 2021.
- SCAG (Southern California Association of Governments). 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Adopted April 2016. Accessed September 28, 2021. Final 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy, Adopted April 2016 (ca.gov).
- SCAG (Southern California Association of Governments). 2019. Profile of the City of Hesperia. May 2019. Accessed September 28, 2021. https://scag.ca.gov/sites/main/files/file-attachments/hesperia_localprofile.pdf?1606014847.
- SCAQMD (South Coast Air Quality Management District). 1976. Rule 402, Nuisance. Adopted May 7, 1976. <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf>.
- SCAQMD. 2005. Rule 403, Fugitive Dust. Adopted May 7, 1976; last amended June 3, 2005. <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf>.
- SCG. Geotechnical Investigation Proposed I-15 Business Park Building 3. March 30, 2022.
- USDA (U.S. Department of Agricultural). 2021. "Web Soil Survey." Accessed September 28, 2021. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

4.2 List of Preparers

City of Hesperia

Ryan Leonard, Senior Planner

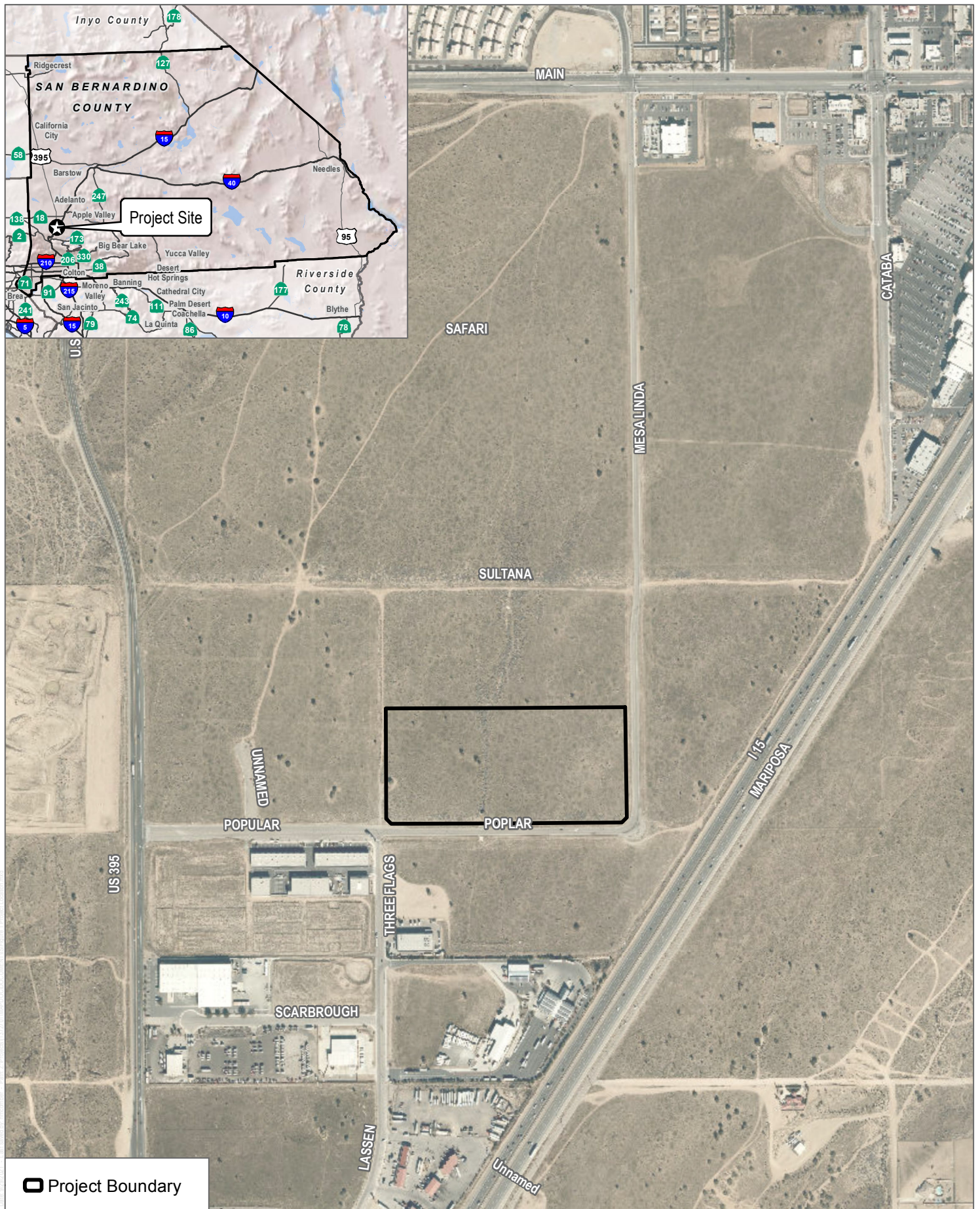
Dudek (Environmental Consultant)

Carey Fernandes, Principal

Sean Kilkenny, Senior Project Manager

Ronelle Candia, Senior Project Manager

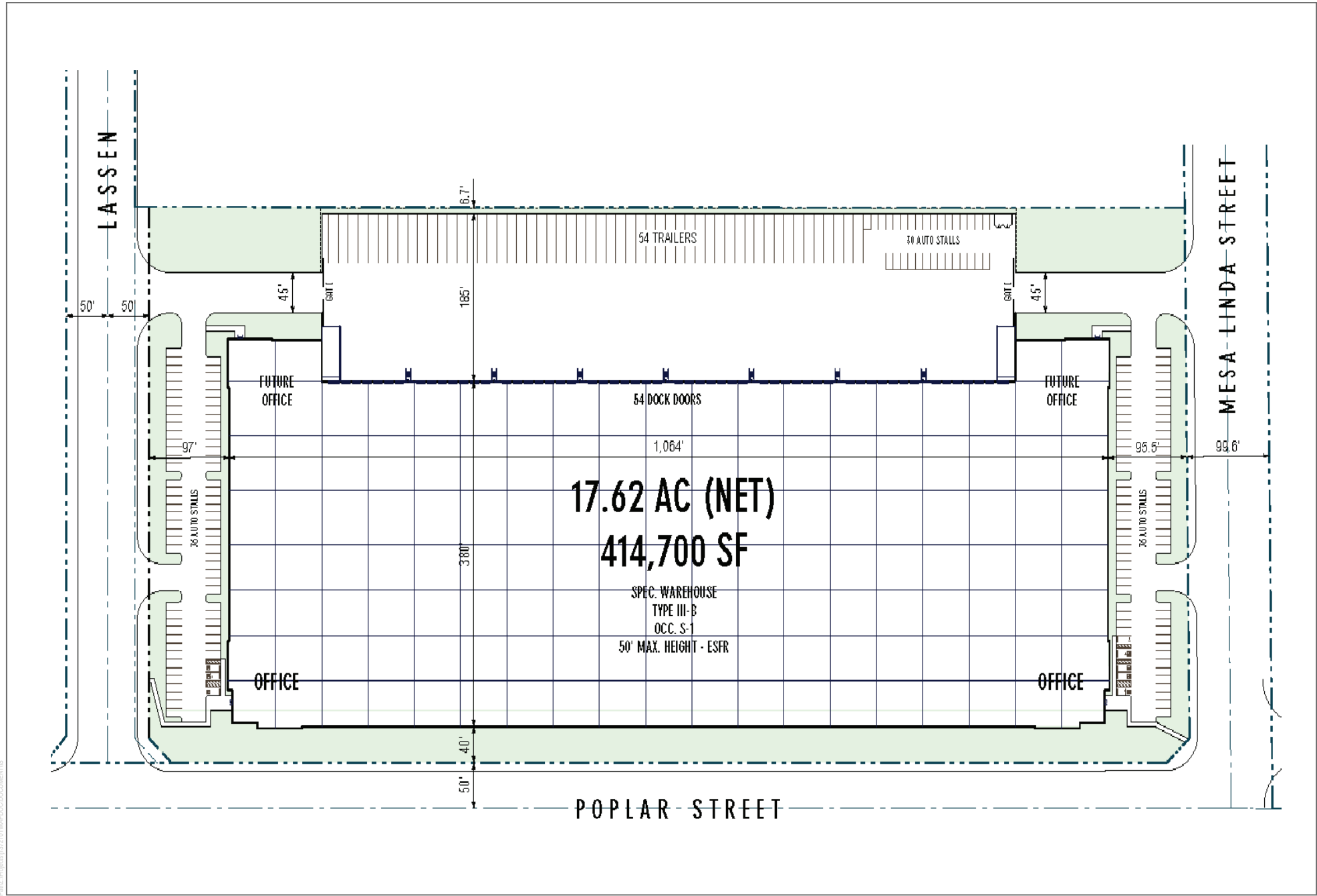
Hailee McOmber, GIS Analyst



SOURCE: Esri World Imagery Basemap 2021

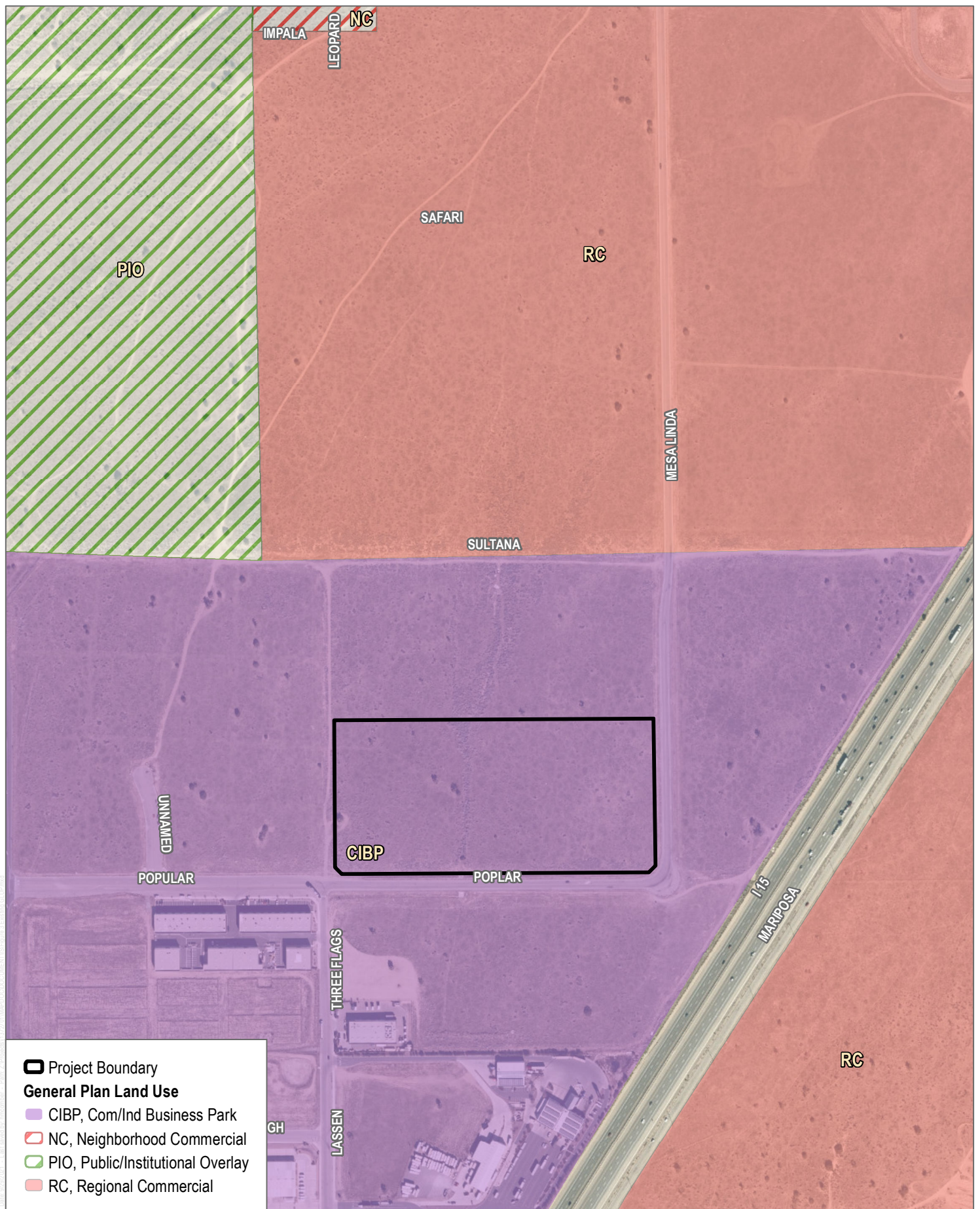
FIGURE 1
Project Location
 Poplar 18 Project

INTENTIONALLY LEFT BLANK



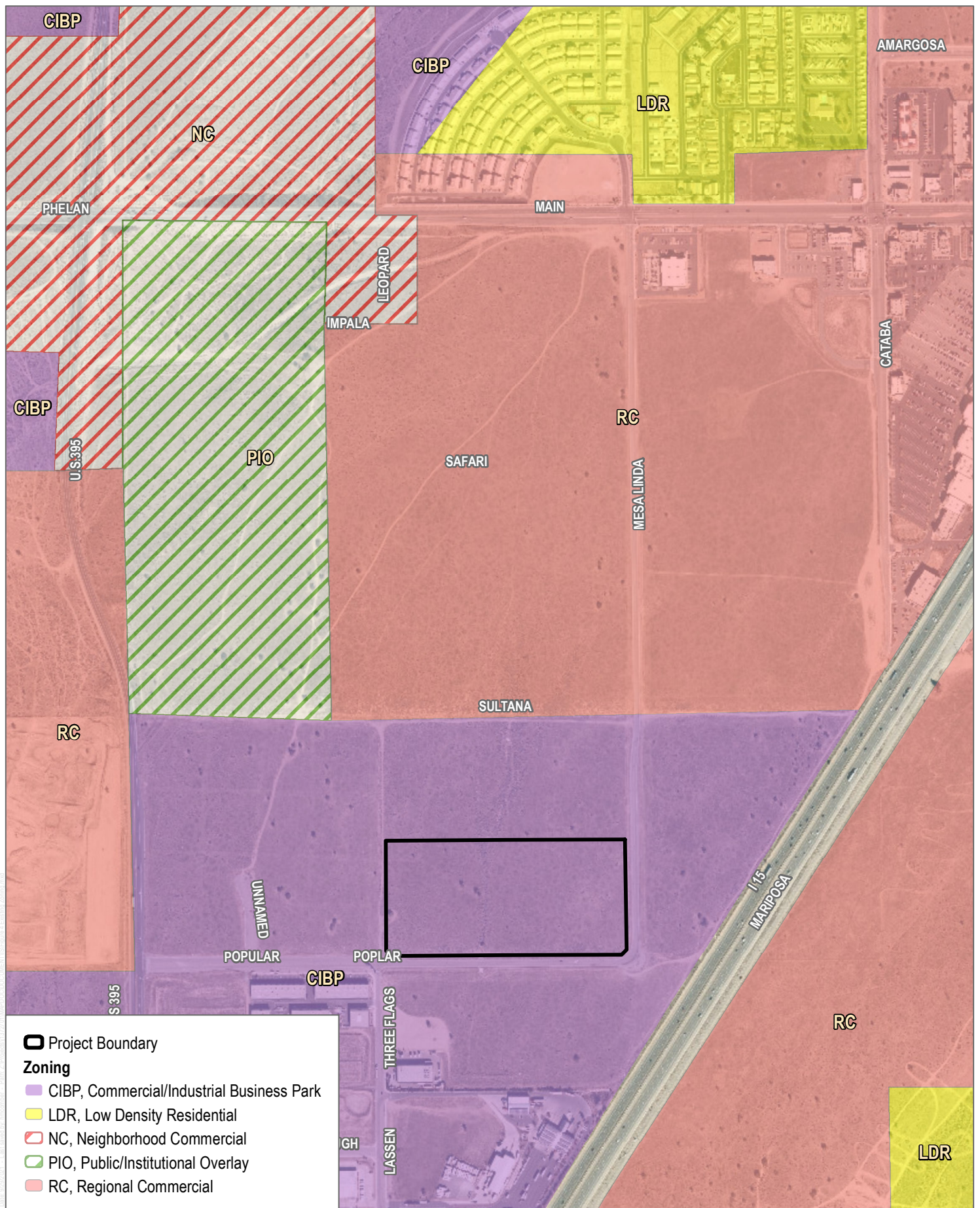
SOURCE: RGA Office of Architectural Design 2021

INTENTIONALLY LEFT BLANK



SOURCE: Esri World Imagery Basemap 2021, City of Hesperia 2020

INTENTIONALLY LEFT BLANK



SOURCE: Esri World Imagery Basemap 2021, City of Hesperia 2020

FIGURE 4
Existing Zoning
Poplar 18 Project

INTENTIONALLY LEFT BLANK



City of Hesperia

Gateway to the High Desert

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF A PUBLIC SCOPING MEETING

Date: August 11, 2022

To: State Agencies, Responsible Agencies, Local and Public Agencies, and Interested Parties

From/Lead Agency: City of Hesperia, Planning Department

Subject: Notice of Preparation of an Environmental Impact Report for the Poplar 18 Project

This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that the City of Hesperia (City), as lead agency, is commencing preparation of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) to evaluate the potential environmental effects associated with implementation of the Poplar 18 Project (Project).

The City is requesting input from interested individuals, organizations, and agencies regarding the scope and content of the environmental analysis to be included in the upcoming EIR. In accordance with CEQA, the City requests that agencies provide comments on the environmental issues related to the statutory responsibilities of their particular agency. This NOP contains a description of the Project, its location, and a preliminary determination of the environmental resource topics to be addressed in the EIR.

Project Location

The approximately 17.87-acre Project site is located in the western part of the City, which is within the Victor Valley region of San Bernardino County (Figure 1, Project Location). The Project site is located on the southwest quadrant of I-15 and Main Street. The Project site is located south of Main Street, west of Cataba Road and Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The Project site consists of two parcels: Assessor's Parcel Numbers (APNs) 3064-581-04-0000 and 3064-581-05-0000. Specifically, the Project site is located in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map. Regional access to the Project site is provided via I-15 and U.S. Highway 395.

Project Summary

The proposed Project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area (see Figure 2, Site Plan). It is anticipated that the facilities would be operated 24 hours a day, 7 days a week. At this time, the project applicant does not anticipate leasing any portion of the buildings to a tenant that would require refrigerated space.

Cameron Gregg, Mayor
Bill Holland, Mayor Pro Tem
Rebekah Swanson, Council Member
Larry Bird, Council Member
Brigit Bennington, Council Member

9700 Seventh Avenue
Hesperia, CA 92345

760-947-1000
TD 760-947-1119

Nils Bentsen, City Manager

www.cityofhesperia.us

The Project site's Land Use Designation and Zoning is Commercial/Industrial Business Park. Project development is consistent with the General Plan and the Main Street and Freeway Corridor Specific Plan. Implementation of the Project would require the following discretionary actions from the City:

- **Parcel Merger** of the two parcels within the project boundary into one 17.87-acre lot.
- **Tentative Parcel Map** to reorganize the property boundaries of the Project site to facilitate Project development
- **Conditional Use Permit** to permit the construction and operation of a warehousing and distribution center of a size greater than 200,000 square feet in the Commercial/Industrial Business Park zone

Potential Environmental Impacts of the Project

As discussed in the attached Initial Study, the EIR will evaluate whether implementation of the Project may potentially result in one or more significant environmental impacts. The potential environmental effects to be addressed in the EIR will include, but may not be limited to, the following:

- | | |
|---|-----------------------------------|
| • Aesthetics | • Hazards and Hazardous Materials |
| • Air Quality | • Hydrology and Water Quality |
| • Biological Resources | • Noise |
| • Cultural, Tribal, and Paleontological Resources | • Transportation |
| • Energy | • Utilities and Service Systems |
| • Greenhouse Gas Emissions | • Wildfire |

The EIR will also address all other CEQA-mandated topics, including cumulative impacts and Project alternatives.

Public Scoping Comment Period and Meeting

Public Scoping Comment Period

The City has established a 30-day public scoping period from August 11, 2022, to September 9, 2022. During the scoping period, the City's intent is to disseminate Project information to the public and solicit comments from agencies, organizations, and interested parties, including nearby residents and business owners, regarding the scope and content of the environmental information to be included in the EIR, including mitigation measures or Project alternatives to reduce potential environmental effects.

During this period, this NOP and the Project's Initial Study may be accessed electronically at the following website:

<https://www.cityofhesperia.us/312/Planning>

This NOP and the Project's Initial Study are also available for review in person at Hesperia City Hall, Planning Department, 9700 Seventh Avenue, Hesperia, California 9234.

Public Scoping Meeting

During the 30-day public scoping period, the City will also hold a public scoping meeting on August 24, 2022, at 5:00 p.m. at Hesperia City Hall, Planning Department, 9700 Seventh Avenue, Hesperia, California 92345. The public scoping meeting will provide an additional opportunity to receive and disseminate information, identify potential environmental issues of concern, and

discuss the scope of analysis to be included in the EIR. The scoping meeting is not a public hearing, and no decisions on the Project will be made at this meeting. It is an additional opportunity for agencies, organizations, and the public to provide scoping comments in person on what environmental issues should be addressed in the EIR. All public agencies, organizations, and interested parties are encouraged to attend and participate in this meeting.

Scoping Comments

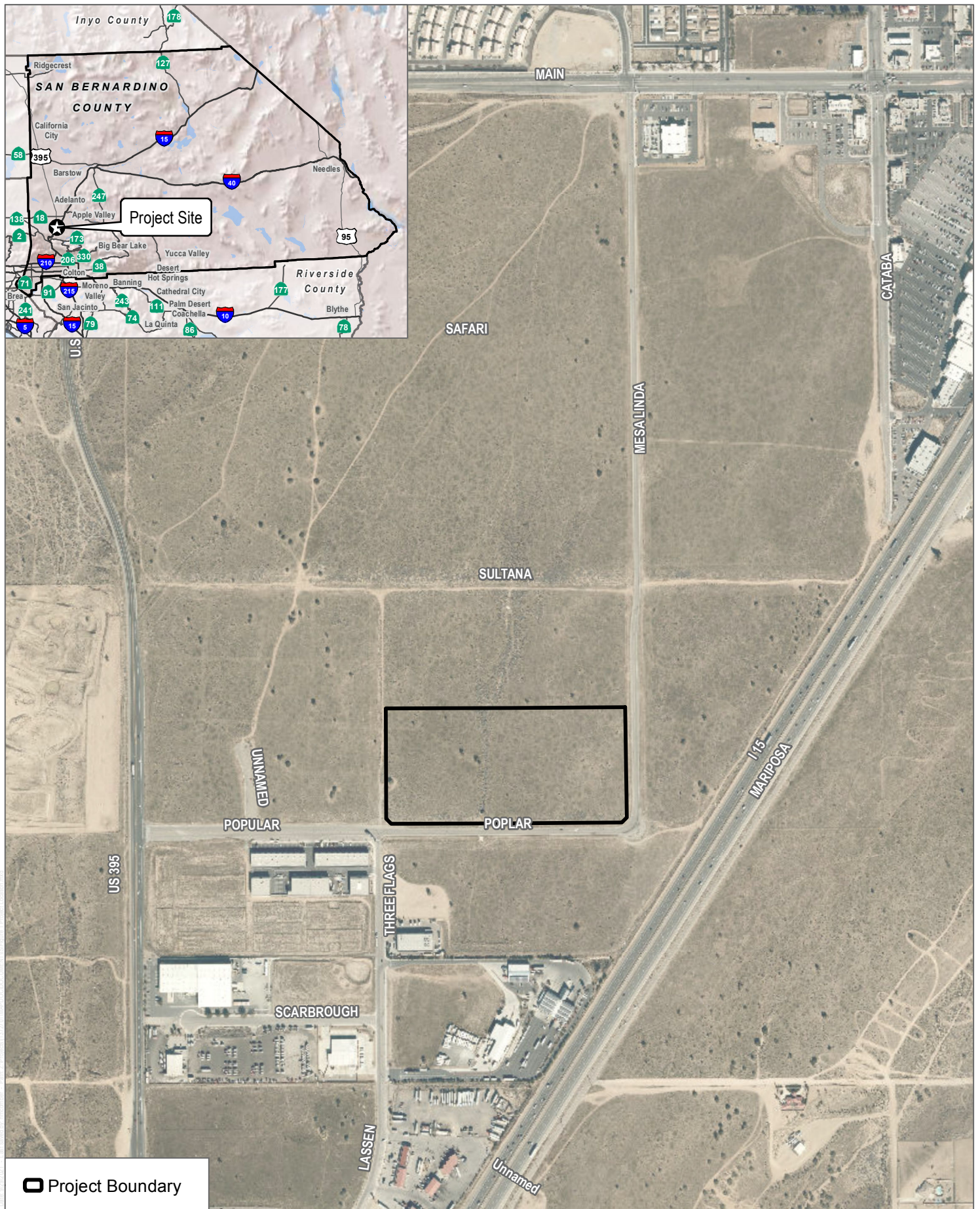
All scoping comments must be received in writing by 5:00 p.m. on September 9, 2022, which marks the end of the 30-day public scoping period. All written comments should indicate an associated contact person for the agency or organization, if applicable, and reference the Project name in the subject line. Pursuant to CEQA, responsible agencies are requested to indicate their statutory responsibilities in connection with the Project when responding. Please mail or email comments and direct any questions to the following contact person:

**Ryan Leonard, Senior Planner
City of Hesperia Planning Department
9700 Seventh Avenue
Hesperia, California 92345
Phone: (760) 947-1651
Email: rleonard@cityofhesperia.us**

Attachments:

Figure 1, Project Location

Figure 2, Site Plan



SOURCE: Esri World Imagery Basemap 2021

FIGURE 1
Project Location
 Poplar 18 Project

Mojave Desert Air Quality Management District

Brad Poiriez, Executive Director

14306 Park Avenue, Victorville, CA 92392-2310

760.245.1661 • Fax 760.245.2022

www.MDAQMD.ca.gov • @MDAQMD



August 17, 2022

Ryan Leonard, Senior Planner
City of Hesperia, Planning Department
9700 Seventh Avenue
Hesperia, CA 92345

Project: Hesperia Poplar 18 Project

Dear Mr. Leonard:

The Mojave Desert Air Quality Management District (District) has reviewed the Notice of Preparation (NOP) for the Poplar 18 Project. The project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area. It is anticipated that the facilities would be operated 24 hours a day, 7 days a week. At this time, the project applicant does not anticipate leasing any portion of the buildings to a tenant that would require refrigerated space.

We have reviewed the project as proposed and based on the information available to us at this time, the District will require the implementation of the following mitigation measures:

- Preparation and submission to the MDAQMD, prior to commencing earth-moving activity, a dust control plan that describes all applicable dust control measures that will be implemented at the project. The most current Dust Control Plan Requirements and Dust Control Plan Submission Form are available at <http://mdaqmd.ca.gov/permitting/compliance-forms>.
- Signage compliant with Rule 403 Attachment B shall be erected at each project site entrance not later than the commencement of construction.
- Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. For projects with exposed sand or fines deposits (and for projects that expose such soils through earthmoving), chemical stabilization or covering with a stabilizing layer of gravel will be required to eliminate visible dust/sand from sand/fines deposits.
- All perimeter fencing shall be wind fencing or the equivalent, to a minimum of four feet of height or the top of all perimeter fencing. The owner/operator shall maintain the wind fencing as needed to keep it intact and remove windblown dropout. This wind fencing

requirement may be superseded by local ordinance, rule or project-specific biological mitigation prohibiting wind fencing.

- All maintenance and access vehicular roads and parking areas shall be stabilized with chemical, gravel or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. Take actions to prevent project-related trackout onto paved surfaces, and clean any project-related trackout within 24 hours. All other earthen surfaces within the project area shall be stabilized by natural or irrigated vegetation, compaction, chemical or other means sufficient to prohibit visible fugitive dust from wind erosion.

Additionally, we recommend the operator obtain District permits for any miscellaneous process equipment that may not be exempt under District Rule 219 including, but not limited to:

- Internal Combustion Engines with a manufacture's maximum continuous rating greater than or equal to 50 brake horsepower.

Thank you for the opportunity to review this planning document. If you have any questions regarding this letter, please contact me at (760) 245-1661, extension 6726, or Bertrand Gaschot at extension 4020.

Sincerely,



Alan J. De Salvio
Deputy APCO

AJD/bg

Hesperia Poplar 18 Project



8/23/2022

Sent via email

Ryan Leonard, Senior Planner
City of Hesperia
9700 Seventh Ave
Hesperia, CA 92345
(760) 947-1651
rleonard@cityofhesperia.us

Re: Comments on Notice of Preparation of Draft Environmental Impact Report for Poplar 18 Project

Dear Mr. Leonard:

These comments are submitted on behalf of the Center for Biological Diversity (the “Center”) regarding City of Hesperia’s Notice of Preparation (“NOP”) of a Draft Environmental Impact Report (“DEIR”) for the Poplar 18 Project (the “Project”). The Center is concerned about the significant impacts the Project may impose on Joshua Trees. The Center urges the City to fully evaluate, disclose, and plan to mitigate the environmental impacts of this Project as required by the California Environmental Quality Act (“CEQA”).

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and across the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Hesperia and San Bernardino County.

I. The Project site is home to a natural community of concern.

The Project site is located in the western part of Hesperia, just north of Interstate 15. The City is located within the range of the western Joshua tree South population (“YUBR South”). The geographic area in which YUBR South is situated is comprised of 3.7 million acres, with over 50% in private ownership, 48% federally owned, and under 2% state, county and local owned. (USFWS 2018.) The USFWS (2018) estimates that 3,255,088 acres of this area are suitable for Joshua trees based on soil characteristics, moisture level, and other factors. However, Joshua trees actually occupy only a fraction of this area, as they have a sparse and scattered distribution, and large areas of habitat have been lost to development and agricultural conversion.

Increasing development, climate change, persistent drought, more frequent and intense wildfires, invasive species, and other threats have led to ongoing reductions in western Joshua trees and western Joshua tree habitat throughout their historic range. Protecting western Joshua trees and their habitat from continued destruction and habitat loss is therefore vitally important to the persistence of the species in California. However, within the City and surrounding communities in particular, western Joshua tree habitat is shrinking at an alarming rate due to increasing development. While western Joshua trees currently persist in the less-developed areas of the City, they are absent from more developed areas and agricultural lands in the region, making the Project site especially valuable as habitat for the species.

The DEIR and associated mitigation plans should acknowledge that the Project site is composed of ecologically significant habitat for Joshua trees. The City should carefully study and disclose the extent to which Joshua trees and their habitat would be impacted by the Project, and take all necessary and prudent actions to mitigate any such impacts. Joshua tree woodland is a community recognized by the California Department of Fish and Wildlife (“CDFW”) as a Natural Community of Concern. Sensitive natural communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. (CDFW 2018.) CDFW’s List of California Terrestrial Natural Communities is based on the best available information, and indicates which natural communities are considered sensitive at the current stage of the California vegetation classification effort.

II. Western Joshua Trees are a Special Status Species, the impacts to which are presumed to be significant.

The CEQA Guidelines indicate that a Project can be expected to have significant impacts to biological resources if the Project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. (CEQA Guidelines, Appendix G, subd. IV(a).) CEQA Guidelines section 15065(a)(1) requires that lead agencies conducting an initial study make a mandatory finding of significance where a proposed project has the potential to substantially reduce the number or restrict the range of a listed species. Further, California Fish and Game Code section 2085 requires that species that are candidates for listing as threatened or endangered under the California Endangered Species Act (“CESA”) be treated as threatened or endangered pending the final listing decision.

On September 22, 2020, the California Fish and Game Commission (“CFGF”) advanced the western Joshua tree to candidacy under CESA, protecting these imperiled plants from harm during the ongoing review process. (CFGF 2020.) Consequently, the Project’s impacts to the western Joshua trees must be considered significant and fully evaluated and disclosed to the public. Accordingly, the DEIR should acknowledge the Project’s significant impacts on Joshua trees, and make appropriate plans to mitigate or avoid those impacts.

III. The DEIR should fully assess and disclose the Project’s impacts on Joshua trees, including destruction or modification of habitat and cumulative impacts.

The DEIR should provide sufficient information about the Joshua tree population and Joshua tree habitat on the current Project site. In addition to the number, size, location, and distribution of Joshua trees on the site, the DEIR should indicate how much of the Project site is suitable Joshua tree habitat and Joshua tree woodland. Additionally, the DEIR should disclose the extent to which Joshua trees at the site will be removed or destroyed and the amount of Joshua tree habitat that would be converted or developed. If any Joshua trees will be preserved, the DEIR should describe the Project's impacts on those Joshua trees, and explain the measures, including monitoring, that will be taken to ensure their continued health after the Project is constructed.

The DEIR should also describe in detail all potentially significant direct or indirect impacts associated with the destruction or adverse modification of the western Joshua tree's habitat. Development, climate change, and increasing wildfire occurrences exacerbated by drought and invasive species negatively impact western Joshua trees and their habitat. (DeFalco et al. 2010; Harrower and Gilbert 2018). Research suggests that even under the most optimistic climate scenarios, western Joshua trees will be eliminated from significant portions of their range by the end of the century; under warming scenarios consistent with current domestic and global emissions trajectories, the species will likely be close to being functionally extinct in the wild in California by century's end. (Dole et al. 2003; Cole et al. 2011; Sweet et al. 2019). Studies indicate that the species' range is contracting at lower elevations, recruitment is limited, and mortality is increasing, all of which would likely reflect a population already starting to decline due to recent warming. Even greater changes are projected to occur over the coming decades. The DEIR should consider the Project's impacts to the Joshua tree in light of its rapidly diminishing habitat. Additionally, the City is currently considering (or has approved) numerous other warehouse projects that will destroy Joshua tree habitat; the DEIR must consider the Project's cumulative impacts to the species and its habitat. (CEQA Guidelines § 15355.)

The DEIR should also consider the significant impacts to Joshua trees associated with the reduction in habitat connectivity. Maintaining habitat connectivity is particularly important to western Joshua trees. For successful reproduction and recruitment, Joshua trees require the presence of their obligate pollinator, yucca moths, and rodents to disperse and cache seeds and nurse plants to shelter emerging seedlings. (Pellmyr and Segraves 2003; Godsoe, et al. 2008.; Harrower and Gilbert 2018). Therefore, to the degree that any Joshua trees are left remaining on the Project site, these moths and rodents must have access to be maintained on site to ensure remnant Joshua trees can successfully reproduce. The DEIR should analyze how construction on the project site will affect habitat connectivity necessary for sustainable Joshua tree recruitment onsite. The City should also evaluate whether the Project would result in further habitat fragmentation, potentially resulting in significant adverse impacts to remnant Joshua tree woodland in nearby areas if pollinator or disperser populations are reduced.

IV. Reliance on a relocation plan is not adequate to mitigate potential significant impacts to Joshua Trees and Joshua Tree habitat.

The DEIR cannot rely solely on a Joshua tree relocation to mitigate the Project's significant impacts to Joshua trees. Though a relocation plan may be designed to fulfill the

requirements of the city of Hesperia's Protected Plant Policy (Hesperia Municipal Code § 16.24), compliance with this City requirement does not satisfy the requirements of CESA and CEQA. Further, relocation success rates for Joshua trees are low, as a proposed relocation plan for another warehouse project in the City has already acknowledged. The California Fish and Game Commission has also noted the inadequacy of translocation as mitigation. When it adopted its California Policy for Native Plants in 2015, the Commission stated that "transplantation as a means of mitigating for listed plant species" is "largely ineffectual over time and often damaging to species or population survival" as documented by "experience and numerous studies." (California Fish and Game Code, 2020.) Moreover, even if individual trees were to survive transplantation, there is no guarantee of long-term viability of the species on the Project or translocation site. Successful recruitment would be constrained by lack of nurse plants and it remains highly uncertain whether pollinating moths, vital to Joshua tree pollination, will be able to persist with the resultant lower Joshua tree densities. (Harrower and Gilbert 2018 ["Having robust, dense, flowering trees is important to support and attract enough moths for successful seed set"]).

If the City does develop a relocation plan as *part* of its overall mitigation, that plan must comply with CEQA and relevant state and local requirements and include sufficient detail for the public to discern the effectiveness of that mitigation plan. The CEQA Guidelines prohibit agencies from deferring the formulation of mitigation measures to after project approval except in certain, strictly limited circumstances. (CEQA Guidelines § 15126.4(a)(1)(B).) An agency may develop the specifics of mitigation after project approval only "when it is impractical or infeasible to include those details during the project's environmental review." (Id.) That is, "practical considerations" must "prevent[] the formulation of mitigations measures at the usual time in the planning process." (*POET, LLC v. State Air Res. Bd.* (2013) 218 Cal.App.4th 681, 736.) Unless those considerations are "readily apparent," an EIR must explain an agency's decision to defer finalizing the specifics of mitigation. (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281.) Any mitigation for the Project's impacts to Joshua trees should therefore be released and approved alongside the EIR, and not deferred.

Any relocation plan should include detailed information and planning regarding where Joshua trees will be transplanted. This information is vital to determining whether transplantation will be successful. Pro forma descriptions of 'suitable habitat' ignore important recent work on demographic trends in Joshua trees showing suitable habitat of Joshua trees under current climate conditions is vastly overestimated. It is also unclear whether transplanted Joshua trees will be able to survive long-term in areas that are deemed current suitable habitat, even if initial transplants are successful. (Cole et al. 2011, Smith 2018). A relocation plan cannot use arbitrary standards for sufficient survival rates of transplanted trees. Targets for transplant survival and success should be clearly linked to significant impacts of the Project and designed to adequately mitigate for the destruction of Joshua trees and Joshua tree habitat at the Project site.

Any relocation plan should include a robust monitoring scheme to ensure short-term success and long-term persistence of transplanted trees. Such a monitoring scheme should include frequent and long-term data collection on the number, condition, and reproductive success of transplanted trees. The success of such translocation will be inaccurate if such monitoring efforts do not account for seedling recruitment, availability of obligate pollinators,

and presence of rodent seed dispersers in addition to general tree health. (Pellmyr and Segraves 2003; Yoder et al. 2013; Lenz 2001). While some impacts such as reduced recruitment may be readily observable, impacts such as adult mortality and consequent population declines and range reductions may have a lag time before their presence is felt on the landscape. (Svenning and Sandel 2013). Accordingly, the DEIR's proposed mitigation must include the required specific performance standards "for evaluating the efficacy of the measures implemented." (*See POET, LLC v. State Air Res. Bd.* (2013) 218 Cal.App.4th 681, 738.)

V. The EIR should require preservation of offsite Joshua trees and Joshua tree habitat at a 5:1 ratio.

In addition to Project design measures that will avoid and minimize onsite impacts, offsite mitigation will be necessary. This should be in the form of protection and preservation of western Joshua trees in other areas at a suitable mitigation ratio. Given the high number of Joshua Trees affected and the important vegetation habitat involved, a high level of mitigation is warranted to offset the Project's significant impacts. A 5:1 mitigation ratio is appropriate here and is consistent with mitigation required by CDFW for projects impacting important desert tortoise habitat.

There are multiple paths to meeting offsite mitigation requirements for Joshua trees. For example, the City and/or Project proponent may purchase credits from a CDFW approved conservation or mitigation bank, which is a privately or publicly owned land managed for its natural resource values. Credits are established for the specific CESA-listed species that occur on the site. As a result of the recent advancement to candidacy of the species under CESA, CDFW has established a Western Joshua Tree Mitigation Fund through which payments may be made for mitigation purposes. (*See Cal. Code Regs., tit. 14, § 749.10.*) This is likely the simplest and most effective plan, and would align CEQA mitigation requirements with those needed to meet incidental take permit conditions under CESA. Alternatively, the Project proponent could work with a land trust or other qualified organization to acquire a conservation easement over habitat of equal or greater value. (*See Gov. Code § 65965 et seq., Civil Code § 813 et seq.*) Regardless of which path the City and Project proponent follow, these mitigation approaches are eminently feasible; in order to comply with CEQA, the City must consider and adopt additional feasible mitigation for the Project's significant adverse impacts to western Joshua trees.

Conclusion

Thank you for the opportunity to submit comments on the NOP for the Poplar 18 Project. The Center is deeply concerned by the potentially significant environmental impacts of the proposed Project. We urge the City to carefully prepare a DEIR and associated mitigation plans for public review and comment so that the extent of Project impacts can be assessed in a legally compliant manner.

Given the possibility that the Center will be required to pursue legal remedies to ensure that the City complies with its legal obligations including those arising under CEQA, we would like to remind the City of its statutory duty to maintain and preserve all documents and communications that may constitute part of the "administrative record" of this proceeding.

(§ 21167.6(e); *Golden Door Properties, LLC v. Superior Court* (2020) 53 Cal.App.5th 733, 762-65.) The administrative record encompasses any and all documents and communications that relate to any and all actions taken by the City with respect to the Project, and includes “pretty much everything that ever came near a proposed [project] or [] the agency’s compliance with CEQA” (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further includes all correspondence, emails, and text messages sent to or received by the City’s representatives or employees, that relate to the Project, including any correspondence, emails, and text messages sent between the City’s representatives or employees and the Applicant’s representatives or employees. Maintenance and preservation of the administrative record requires that, *inter alia*, the City (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

Please place me on the City’s notice list for all future updates, notices, and materials associated with the Project and its environmental review, and do not hesitate to contact the Center with any questions at the number or email listed below.

Sincerely,

A handwritten signature in black ink, appearing to read "Hallie C Kutak". The signature is fluid and cursive, with a large "H" and "K".

Hallie Kutak
Staff Attorney | Senior Conservation Advocate
Center for Biological Diversity
1212 Broadway, Suite #800
Oakland, CA 94612
Tel: (510) 844-7117
hkutak@biologicaldiversity.org

REFERENCES

- California Fish and Game Code. 2020. Matthew Bender & Company, Inc. LexisNexis. p. 3106.
- Center for Biological Diversity. 2019. A Petition to List the Western Joshua Tree (*Yucca brevifolia*) as Threatened under the California Endangered Species Act (CESA).
- CFGF. 2020. Notice of Findings - Western Joshua Tree (*Yucca brevifolia*).
- CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.
- Cole, K.L., K. Ironside, J. Eischeid, G. Garfin, P.B. Duffy, and C. Toney. 2011. Past and ongoing shifts in Joshua tree distribution support future modeled range contraction. *Ecological Applications* 21(1):137–149.
- DeFalco, L.A., T.C. Esque, S.J. Scoles-Sciulla, and J. Rodgers. 2010. Desert wildfire and severe drought diminish survivorship of the long-lived Joshua tree (*Yucca brevifolia*; Agavaceae). *American Journal of Botany* 97(2):243–250.
- Dole, K.P., M.E. Loik, and L.C. Sloan. 2003. The relative importance of climate change and the physiological effects of CO₂ on freezing tolerance for the future distribution of *Yucca brevifolia*. *Global and Planetary Change* 36:137–146.
- Godsoe, W., J. Yoder, C. Smith, O. Pellmyr. 2008. Coevolution and divergence in the Joshua Tree/*Yucca* Moth mutualism. *The American Naturalist* 171(6): 816-823.
- Harrower, J. and G. S. Gilbert. 2018. Context-dependent mutualisms in the Joshua tree–yucca moth system shift along a climate gradient. *Ecosphere* 9(9): e02439. 10.1002/ecs2.2439.
- Lenz, L.W. 2001. Seed dispersal in *Yucca brevifolia* (Agavaceae) present and past, with consideration of the future of the species. *Aliso* 20:61–74.
- Pellmyr, O. and K.A. Segraves. 2003. Pollinator divergence within an obligate mutualism: Two yucca moth species (Lepidoptera; Prodoxidae: Tegeticula) on the Joshua tree (*Yucca brevifolia*; Agavaceae). *Annals of the Entomological Society of America* 96:716–722.
- Smith, C.I. 2018. Peer Review of USFWS Draft Species Status Assessment for Joshua Tree. Email comment, dated June 11, 2018.
- Svenning, J.C. and B. Sandel. 2013. Disequilibrium Vegetation Dynamics Under Future Climate Change. *American Journal of Botany* 100(7):1266–1286.
- Sweet, L.C., T. Green, J.G.C. Heintz, N. Frakes, N. Graver, J.S. Rangitsch, J.E. Rodgers, S. Heacox, and C.W. Barrows. 2019. Congruence between future distribution models and empirical data for an iconic species at Joshua Tree National Park. *Ecosphere* 10(6):e02763/ecs2.2763.

[USFWS] U.S. Fish and Wildlife Service. 2018. Joshua Tree Species Status Assessment. Dated July 20, 2018. 113 pp. + Appendices A–C.

Yoder, J.B., C.I. Smith, D.J. Rowley, R. Flatz, W. Godsoe, C. Drummond, and O. Pellmyr. 2013. Effects of gene flow on phenotype matching between two varieties of Joshua tree (*Yucca brevifolia*, Agavaceae) and their pollinators. *Journal of Evolutionary Biology* 26:1220–1233.



NATIVE AMERICAN HERITAGE COMMISSION

August 24, 2022

Governor's Office of Planning & Research

Aug 26 2022

STATE CLEARINGHOUSE

Ryan Leonard
City of Hesperia
9700 Seventh Street
Hesperia, CA 92345

Re: 2022080248, Poplar 18 Project, San Bernardino County

Dear Mr. Leonard:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines §15064.5 (b))). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1))). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Attebery
Karuk

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- a. A brief description of the project.
- b. The lead agency contact information.
- c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).

- a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.
- c. Significance of the project's impacts on tribal cultural resources.
- d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
 - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i.** Protecting the cultural character and integrity of the resource.
 - ii.** Protecting the traditional use of the resource.
 - iii.** Protecting the confidentiality of the resource.
 - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. **Tribal Consultation**: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation**. There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality**: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation**: Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:
Cameron.Vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

cc: State Clearinghouse

Appendix B-1

Air Quality and GHG Emission Estimates

Appendix B-1
AQ and GHG Emissions Calculations

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**I-15 Industrial Phase II
Mojave Desert AQMD Air District, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	145.15	1000sqft	3.33	145,150.00	0
Unrefrigerated Warehouse-No Rail	134.78	1000sqft	3.09	134,780.00	0
Unrefrigerated Warehouse-Rail	134.78	1000sqft	3.09	134,780.00	0
Other Asphalt Surfaces	219.14	1000sqft	5.03	219,142.00	0
Parking Lot	182.00	Space	1.64	72,800.00	0
Parking Lot	43.30	1000sqft	0.99	43,300.00	0
City Park	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on applicant provided information. Divided land use area of warehouse into 2 and assigned one to "Rail" so that trucks and passenger vehicles can be modeled in a single run. Other asphalt surface includes repaving of Poplar Road project frontage.

Construction Phase - Building Construction set equal to 6 Months based on project specific schedule.

Off-road Equipment - Default values.

Off-road Equipment - Default values.

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-road Equipment - Default values.

Off-road Equipment - Default values

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Per applicant provided information.

On-road Fugitive Dust - Default values

Grading - Per applicant zero import and export of grading materials.

Architectural Coating - Per applicant Low-VOC 50 g/L coatings to be used as PDF for the project.

Vehicle Trips - Based on Traffic Study. All mobile sources accounted for in Warehouse land uses.

Area Coating - Based on applicant provided information. Low-VOC coatings 50 g/L.

Energy Use - Default values

Water And Wastewater - Default values

Solid Waste - Default values

Construction Off-road Equipment Mitigation -

Area Mitigation - Per applicant provided information Low-VOC coatings will be utilized as part of the project as PDF.

Energy Mitigation -

Water Mitigation -

Waste Mitigation - Based on project PDF

Operational Off-Road Equipment - Offroad operational vehicles are assumed electric as PDF.

Fleet Mix - See additiional calculations sheets for basis.

Stationary Sources - Emergency Generators and Fire Pumps - None identified as part of the project.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	207,355.00	207,353.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	622,065.00	622,058.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaCoating	Area_Nonresidential_Exterior	207355	207353
tblAreaCoating	Area_Nonresidential_Interior	622065	622058
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	250
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	250
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	131.00
tblFleetMix	HHD	0.02	0.57
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDA	0.53	0.70
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.07
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.23
tblFleetMix	LHD1	0.03	0.29
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.6920e-003	0.08
tblFleetMix	LHD2	7.6920e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MHD	6.1550e-003	0.06
tblFleetMix	MHD	6.1550e-003	0.00
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	OBUS	4.8300e-004	0.00

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	CC_TL	6.60	40.00
tblVehicleTrips	CC_TL	6.60	16.60
tblVehicleTrips	CNW_TL	6.60	40.00
tblVehicleTrips	CNW_TL	6.60	16.60
tblVehicleTrips	CW_TL	14.70	40.00
tblVehicleTrips	CW_TL	14.70	16.60
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.74	1.88
tblVehicleTrips	ST_TR	1.74	7.63
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.74	1.88
tblVehicleTrips	SU_TR	1.74	7.63
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	1.74	1.88
tblVehicleTrips	WD_TR	1.74	7.63

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.0 Emissions Summary****2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.2619	1.9709	2.6123	6.9000e-003	0.5076	0.0789	0.5865	0.1622	0.0737	0.2360	0.0000	623.7527	623.7527	0.0769	0.0257	633.3416
Maximum	1.2619	1.9709	2.6123	6.9000e-003	0.5076	0.0789	0.5865	0.1622	0.0737	0.2360	0.0000	623.7527	623.7527	0.0769	0.0257	633.3416

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.2619	1.9709	2.6123	6.9000e-003	0.4136	0.0789	0.4926	0.1228	0.0737	0.1966	0.0000	623.7524	623.7524	0.0769	0.0257	633.3413
Maximum	1.2619	1.9709	2.6123	6.9000e-003	0.4136	0.0789	0.4926	0.1228	0.0737	0.1966	0.0000	623.7524	623.7524	0.0769	0.0257	633.3413

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	18.51	0.00	16.02	24.29	0.00	16.70	0.00	0.00	0.00	0.00	0.00	0.00

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	10-4-2022	1-3-2023	0.0103	0.0103
3	1-4-2023	4-3-2023	0.9149	0.9149
4	4-4-2023	7-3-2023	0.7368	0.7368
5	7-4-2023	9-30-2023	0.7554	0.7554
		Highest	0.9149	0.9149

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Energy	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	652.8060	652.8060	0.0369	8.9400e-003	656.3927
Mobile	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,016.1432	5,016.1432	0.0451	0.5147	5,170.6584
Waste						0.0000	0.0000		0.0000	0.0000	88.0088	0.0000	88.0088	5.2012	0.0000	218.0380
Water						0.0000	0.0000		0.0000	0.0000	30.4252	226.6224	257.0476	3.1441	0.0761	358.3292
Total	2.2435	7.6922	7.3103	0.0548	3.6449	0.1161	3.7610	0.9885	0.1116	1.1001	118.4339	5,895.5871	6,014.0210	8.4273	0.5998	6,403.4347

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Energy	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	652.8060	652.8060	0.0369	8.9400e-003	656.3927
Mobile	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,016.143 2	5,016.143 2	0.0451	0.5147	5,170.658 4
Waste						0.0000	0.0000		0.0000	0.0000	22.0022	0.0000	22.0022	1.3003	0.0000	54.5095
Water						0.0000	0.0000		0.0000	0.0000	24.3401	182.3309	206.6710	2.5154	0.0609	287.7016
Total	2.2435	7.6922	7.3103	0.0548	3.6449	0.1161	3.7610	0.9885	0.1116	1.1001	46.3423	5,851.295 5	5,897.637 9	3.8977	0.5846	6,169.278 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.87	0.75	1.94	53.75	2.54	3.66

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2023	1/13/2023	5	10	
2	Grading	Grading	1/14/2023	2/24/2023	5	30	
3	Building Construction	Building Construction	2/25/2023	8/28/2023	5	131	

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	8/29/2023	9/25/2023	5	20
5	Architectural Coating	Architectural Coating	9/26/2023	10/23/2023	5	20

Acres of Grading (Site Preparation Phase): 5**Acres of Grading (Grading Phase): 90****Acres of Paving: 7.66****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 622,058; Non-Residential Outdoor: 207,353; Striped Parking Area: 16,200 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	328.00	128.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0433	0.0267	6.0000e-005		1.9800e-003	1.9800e-003		1.8200e-003	1.8200e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605
Total	4.1800e-003	0.0433	0.0267	6.0000e-005	0.0328	1.9800e-003	0.0347	0.0168	1.8200e-003	0.0187	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.7300e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4777	0.4777	1.0000e-005	1.0000e-005	0.4819
Total	2.0000e-004	1.5000e-004	1.7300e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4777	0.4777	1.0000e-005	1.0000e-005	0.4819

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	7.5800e-003	0.0000	7.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0433	0.0267	6.0000e-005		1.9800e-003	1.9800e-003		1.8200e-003	1.8200e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605
Total	4.1800e-003	0.0433	0.0267	6.0000e-005	0.0147	1.9800e-003	0.0167	7.5800e-003	1.8200e-003	9.4000e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.7300e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4777	0.4777	1.0000e-005	1.0000e-005	0.4819
Total	2.0000e-004	1.5000e-004	1.7300e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4777	0.4777	1.0000e-005	1.0000e-005	0.4819

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e-004	0.1381	0.0214	0.1594	0.0548	0.0197	0.0745	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7900e-003	1.3600e-003	0.0156	5.0000e-005	5.6500e-003	3.0000e-005	5.6700e-003	1.5000e-003	2.0000e-005	1.5200e-003	0.0000	4.2995	4.2995	1.1000e-004	1.2000e-004	4.3373
Total	1.7900e-003	1.3600e-003	0.0156	5.0000e-005	5.6500e-003	3.0000e-005	5.6700e-003	1.5000e-003	2.0000e-005	1.5200e-003	0.0000	4.2995	4.2995	1.1000e-004	1.2000e-004	4.3373

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0621	0.0000	0.0621	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0621	0.0214	0.0835	0.0247	0.0197	0.0443	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7900e-003	1.3600e-003	0.0156	5.0000e-005	5.6500e-003	3.0000e-005	5.6700e-003	1.5000e-003	2.0000e-005	1.5200e-003	0.0000	4.2995	4.2995	1.1000e-004	1.2000e-004	4.3373
Total	1.7900e-003	1.3600e-003	0.0156	5.0000e-005	5.6500e-003	3.0000e-005	5.6700e-003	1.5000e-003	2.0000e-005	1.5200e-003	0.0000	4.2995	4.2995	1.1000e-004	1.2000e-004	4.3373

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8321	151.8321	0.0361	0.0000	152.7351
Total	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8321	151.8321	0.0361	0.0000	152.7351

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0120	0.2838	0.1457	1.5200e-003	0.0507	2.6300e-003	0.0533	0.0146	2.5200e-003	0.0172	0.0000	144.5417	144.5417	6.7000e-004	0.0197	150.4414
Worker	0.0855	0.0650	0.7454	2.2400e-003	0.2695	1.2400e-003	0.2708	0.0716	1.1400e-003	0.0727	0.0000	205.2651	205.2651	5.0800e-003	5.6400e-003	207.0718
Total	0.0975	0.3487	0.8911	3.7600e-003	0.3202	3.8700e-003	0.3241	0.0862	3.6600e-003	0.0899	0.0000	349.8068	349.8068	5.7500e-003	0.0254	357.5132

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8319	151.8319	0.0361	0.0000	152.7349
Total	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8319	151.8319	0.0361	0.0000	152.7349

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0120	0.2838	0.1457	1.5200e-003	0.0507	2.6300e-003	0.0533	0.0146	2.5200e-003	0.0172	0.0000	144.5417	144.5417	6.7000e-004	0.0197	150.4414
Worker	0.0855	0.0650	0.7454	2.2400e-003	0.2695	1.2400e-003	0.2708	0.0716	1.1400e-003	0.0727	0.0000	205.2651	205.2651	5.0800e-003	5.6400e-003	207.0718
Total	0.0975	0.3487	0.8911	3.7600e-003	0.3202	3.8700e-003	0.3241	0.0862	3.6600e-003	0.0899	0.0000	349.8068	349.8068	5.7500e-003	0.0254	357.5132

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0204	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.8000e-004	5.5500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5287	1.5287	4.0000e-005	4.0000e-005	1.5422
Total	6.4000e-004	4.8000e-004	5.5500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5287	1.5287	4.0000e-005	4.0000e-005	1.5422

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0204	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.8000e-004	5.5500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5287	1.5287	4.0000e-005	4.0000e-005	1.5422
Total	6.4000e-004	4.8000e-004	5.5500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5287	1.5287	4.0000e-005	4.0000e-005	1.5422

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.9818	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6300e-003	2.0000e-003	0.0229	7.0000e-005	8.2800e-003	4.0000e-005	8.3200e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.3059	6.3059	1.6000e-004	1.7000e-004	6.3614
Total	2.6300e-003	2.0000e-003	0.0229	7.0000e-005	8.2800e-003	4.0000e-005	8.3200e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.3059	6.3059	1.6000e-004	1.7000e-004	6.3614

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.9818	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6300e-003	2.0000e-003	0.0229	7.0000e-005	8.2800e-003	4.0000e-005	8.3200e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.3059	6.3059	1.6000e-004	1.7000e-004	6.3614
Total	2.6300e-003	2.0000e-003	0.0229	7.0000e-005	8.2800e-003	4.0000e-005	8.3200e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.3059	6.3059	1.6000e-004	1.7000e-004	6.3614

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,016.143 2	5,016.143 2	0.0451	0.5147	5,170.658 4
Unmitigated	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,016.143 2	5,016.143 2	0.0451	0.5147	5,170.658 4

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Heavy Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	253.39	253.39	253.39	3,440,555	3,440,555
Unrefrigerated Warehouse-Rail	1,028.37	1,028.37	1,028.37	5,795,521	5,795,521
Total	1,281.76	1,281.76	1,281.76	9,236,075	9,236,075

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	40.00	40.00	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-Rail	16.60	16.60	16.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
General Heavy Industry	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Other Asphalt Surfaces	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Parking Lot	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.290000	0.076100	0.060900	0.573000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-Rail	0.696000	0.074700	0.229300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	373.4724	373.4724	0.0315	3.8200e-003	375.3991
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	373.4724	373.4724	0.0315	3.8200e-003	375.3991
NaturalGas Mitigated	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3500e-003	5.1200e-003	280.9936
NaturalGas Unmitigated	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3500e-003	5.1200e-003	280.9936

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	4.6927e+006	0.0253	0.2300	0.1932	1.3800e-003		0.0175	0.0175		0.0175	0.0175	0.0000	250.4203	250.4203	4.8000e-003	4.5900e-003	251.9084
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Unrefrigerated Warehouse-Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Total		0.0282	0.2566	0.2156	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3600e-003	5.1300e-003	280.9936

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	4.6927e+006	0.0253	0.2300	0.1932	1.3800e-003		0.0175	0.0175		0.0175	0.0175	0.0000	250.4203	250.4203	4.8000e-003	4.5900e-003	251.9084
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Unrefrigerated Warehouse-Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Total		0.0282	0.2566	0.2156	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3600e-003	5.1300e-003	280.9936

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	1.43989e+006	255.3577	0.0216	2.6100e-003	256.6751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	15155	2.6877	2.3000e-004	3.0000e-005	2.7015
Parking Lot	25480	4.5188	3.8000e-004	5.0000e-005	4.5421
Unrefrigerated Warehouse-No Rail	312690	55.4541	4.6800e-003	5.7000e-004	55.7402
Unrefrigerated Warehouse-Rail	312690	55.4541	4.6800e-003	5.7000e-004	55.7402
Total		373.4724	0.0315	3.8300e-003	375.3991

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	1.43989e+006	255.3577	0.0216	2.6100e-003	256.6751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	15155	2.6877	2.3000e-004	3.0000e-005	2.7015
Parking Lot	25480	4.5188	3.8000e-004	5.0000e-005	4.5421
Unrefrigerated Warehouse-No Rail	312690	55.4541	4.6800e-003	5.7000e-004	55.7402
Unrefrigerated Warehouse-Rail	312690	55.4541	4.6800e-003	5.7000e-004	55.7402
Total		373.4724	0.0315	3.8300e-003	375.3991

6.0 Area Detail**6.1 Mitigation Measures Area**

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Unmitigated	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.3000e-004	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Total	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.3000e-004	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Total	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	206.6710	2.5154	0.0609	287.7016
Unmitigated	257.0476	3.1441	0.0761	358.3292

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.62126	5.1647	4.4000e-004	5.0000e-005	5.1913
General Heavy Industry	33.5659 / 0	88.1599	1.1003	0.0266	123.5995
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.1679 / 0	81.8615	1.0217	0.0247	114.7692
Unrefrigerated Warehouse-Rail	31.1679 / 0	81.8615	1.0217	0.0247	114.7692
Total		257.0476	3.1441	0.0761	358.3292

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.62126	5.1647	4.4000e-004	5.0000e-005	5.1913
General Heavy Industry	26.8528 / 0	70.5280	0.8802	0.0213	98.8796
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	24.9343 / 0	65.4892	0.8173	0.0198	91.8153
Unrefrigerated Warehouse-Rail	24.9343 / 0	65.4892	0.8173	0.0198	91.8153
Total		206.6710	2.5154	0.0609	287.7016

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.0022	1.3003	0.0000	54.5095
Unmitigated	88.0088	5.2012	0.0000	218.0380

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.19	0.0386	2.2800e-003	0.0000	0.0956
General Heavy Industry	179.99	36.5363	2.1592	0.0000	90.5172
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	126.69	25.7169	1.5198	0.0000	63.7126
Unrefrigerated Warehouse-Rail	126.69	25.7169	1.5198	0.0000	63.7126
Total		88.0088	5.2012	0.0000	218.0380

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.0475	9.6400e-003	5.7000e-004	0.0000	0.0239
General Heavy Industry	44.9975	9.1341	0.5398	0.0000	22.6293
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.6725	6.4292	0.3800	0.0000	15.9282
Unrefrigerated Warehouse-Rail	31.6725	6.4292	0.3800	0.0000	15.9282
Total		22.0022	1.3003	0.0000	54.5095

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	8.00	260			Diesel

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**I-15 Industrial Phase II
Mojave Desert AQMD Air District, Summer****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	145.15	1000sqft	3.33	145,150.00	0
Unrefrigerated Warehouse-No Rail	134.78	1000sqft	3.09	134,780.00	0
Unrefrigerated Warehouse-Rail	134.78	1000sqft	3.09	134,780.00	0
Other Asphalt Surfaces	219.14	1000sqft	5.03	219,142.00	0
Parking Lot	182.00	Space	1.64	72,800.00	0
Parking Lot	43.30	1000sqft	0.99	43,300.00	0
City Park	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on applicant provided information. Divided land use area of warehouse into 2 and assigned one to "Rail" so that trucks and passenger vehicles can be modeled in a single run. Other asphalt surface includes repaving of Poplar Road project frontage.

Construction Phase - Building Construction set equal to 6 Months based on project specific schedule.

Off-road Equipment - Default values.

Off-road Equipment - Default values.

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-road Equipment - Default values.

Off-road Equipment - Default values

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Per applicant provided information.

On-road Fugitive Dust - Default values

Grading - Per applicant zero import and export of grading materials.

Architectural Coating - Per applicant Low-VOC 50 g/L coatings to be used as PDF for the project.

Vehicle Trips - Based on Traffic Study. All mobile sources accounted for in Warehouse land uses.

Area Coating - Based on applicant provided information. Low-VOC coatings 50 g/L.

Energy Use - Default values

Water And Wastewater - Default values

Solid Waste - Default values

Construction Off-road Equipment Mitigation -

Area Mitigation - Per applicant provided information Low-VOC coatings will be utilized as part of the project as PDF.

Energy Mitigation -

Water Mitigation -

Waste Mitigation - Based on project PDF

Operational Off-Road Equipment - Offroad operational vehicles are assumed electric as PDF.

Fleet Mix - See additiional calculations sheets for basis.

Stationary Sources - Emergency Generators and Fire Pumps - None identified as part of the project.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	207,355.00	207,353.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	622,065.00	622,058.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaCoating	Area_Nonresidential_Exterior	207355	207353
tblAreaCoating	Area_Nonresidential_Interior	622065	622058
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	250
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	250
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	131.00
tblFleetMix	HHD	0.02	0.57
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDA	0.53	0.70
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.07
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.23
tblFleetMix	LHD1	0.03	0.29
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.6920e-003	0.08
tblFleetMix	LHD2	7.6920e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MHD	6.1550e-003	0.06
tblFleetMix	MHD	6.1550e-003	0.00
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	OBUS	4.8300e-004	0.00

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	CC_TL	6.60	40.00
tblVehicleTrips	CC_TL	6.60	16.60
tblVehicleTrips	CNW_TL	6.60	40.00
tblVehicleTrips	CNW_TL	6.60	16.60
tblVehicleTrips	CW_TL	14.70	40.00
tblVehicleTrips	CW_TL	14.70	16.60
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.74	1.88
tblVehicleTrips	ST_TR	1.74	7.63
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.74	1.88
tblVehicleTrips	SU_TR	1.74	7.63
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	1.74	1.88
tblVehicleTrips	WD_TR	1.74	7.63

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.0 Emissions Summary****2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	98.4810	34.5983	32.0294	0.0875	9.5868	1.4262	11.0130	3.7554	1.3121	5.0675	0.0000	8,768.3970	8,768.3970	1.9520	0.4205	8,911.3074
Maximum	98.4810	34.5983	32.0294	0.0875	9.5868	1.4262	11.0130	3.7554	1.3121	5.0675	0.0000	8,768.3970	8,768.3970	1.9520	0.4205	8,911.3074

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	98.4810	34.5983	32.0294	0.0875	4.9748	1.4262	5.9510	1.7458	1.3121	3.0579	0.0000	8,768.3970	8,768.3970	1.9520	0.4205	8,911.3074
Maximum	98.4810	34.5983	32.0294	0.0875	4.9748	1.4262	5.9510	1.7458	1.3121	3.0579	0.0000	8,768.3970	8,768.3970	1.9520	0.4205	8,911.3074

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	48.11	0.00	45.96	53.51	0.00	39.66	0.00	0.00	0.00	0.00	0.00	0.00

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Energy	0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188
Mobile	3.0137	38.3814	44.0689	0.3018	20.3717	0.5313	20.9029	5.5157	0.5064	6.0221		31,316.9062	31,316.9062	0.2695	3.1015	32,247.8845
Total	12.7530	39.7882	45.3378	0.3102	20.3717	0.6384	21.0101	5.5157	0.6136	6.1293		33,004.2874	33,004.2874	0.3023	3.1324	33,945.3041

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Energy	0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188
Mobile	3.0137	38.3814	44.0689	0.3018	20.3717	0.5313	20.9029	5.5157	0.5064	6.0221		31,316.9062	31,316.9062	0.2695	3.1015	32,247.8845
Total	12.7530	39.7882	45.3378	0.3102	20.3717	0.6384	21.0101	5.5157	0.6136	6.1293		33,004.2874	33,004.2874	0.3023	3.1324	33,945.3041

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2023	1/13/2023	5	10	
2	Grading	Grading	1/14/2023	2/24/2023	5	30	
3	Building Construction	Building Construction	2/25/2023	8/28/2023	5	131	
4	Paving	Paving	8/29/2023	9/25/2023	5	20	
5	Architectural Coating	Architectural Coating	9/26/2023	10/23/2023	5	20	

Acres of Grading (Site Preparation Phase): 5**Acres of Grading (Grading Phase): 90****Acres of Paving: 7.66****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 622,058; Non-Residential Outdoor: 207,353; Striped Parking Area: 16,200 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	328.00	128.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	0.8360	8.6628	5.3377	0.0117		0.3967	0.3967		0.3650	0.3650		1,128.577 2	1,128.577 2	0.3650		1,137.702 3
Total	0.8360	8.6628	5.3377	0.0117	6.5523	0.3967	6.9491	3.3675	0.3650	3.7325		1,128.577 2	1,128.577 2	0.3650		1,137.702 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0461	0.0276	0.4147	1.1400e-003	0.1277	5.8000e-004	0.1283	0.0339	5.3000e-004	0.0344		115.3603	115.3603	2.5900e-003	2.7200e-003	116.2361
Total	0.0461	0.0276	0.4147	1.1400e-003	0.1277	5.8000e-004	0.1283	0.0339	5.3000e-004	0.0344		115.3603	115.3603	2.5900e-003	2.7200e-003	116.2361

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	0.8360	8.6628	5.3377	0.0117		0.3967	0.3967		0.3650	0.3650	0.0000	1,128.577 2	1,128.577 2	0.3650		1,137.702 3
Total	0.8360	8.6628	5.3377	0.0117	2.9486	0.3967	3.3453	1.5154	0.3650	1.8804	0.0000	1,128.577 2	1,128.577 2	0.3650		1,137.702 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0461	0.0276	0.4147	1.1400e-003	0.1277	5.8000e-004	0.1283	0.0339	5.3000e-004	0.0344		115.3603	115.3603	2.5900e-003	2.7200e-003	116.2361
Total	0.0461	0.0276	0.4147	1.1400e-003	0.1277	5.8000e-004	0.1283	0.0339	5.3000e-004	0.0344		115.3603	115.3603	2.5900e-003	2.7200e-003	116.2361

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1383	0.0827	1.2441	3.4200e-003	0.3832	1.7300e-003	0.3849	0.1016	1.5900e-003	0.1032		346.0808	346.0808	7.7600e-003	8.1700e-003	348.7083
Total	0.1383	0.0827	1.2441	3.4200e-003	0.3832	1.7300e-003	0.3849	0.1016	1.5900e-003	0.1032		346.0808	346.0808	7.7600e-003	8.1700e-003	348.7083

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	4.1416	1.4245	5.5661	1.6442	1.3105	2.9547	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1383	0.0827	1.2441	3.4200e-003	0.3832	1.7300e-003	0.3849	0.1016	1.5900e-003	0.1032		346.0808	346.0808	7.7600e-003	8.1700e-003	348.7083
Total	0.1383	0.0827	1.2441	3.4200e-003	0.3832	1.7300e-003	0.3849	0.1016	1.5900e-003	0.1032		346.0808	346.0808	7.7600e-003	8.1700e-003	348.7083

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1907	4.1059	2.1832	0.0231	0.7853	0.0401	0.8254	0.2262	0.0384	0.2646		2,429.369 9	2,429.369 9	0.0114	0.3312	2,528.357 6
Worker	1.5117	0.9043	13.6022	0.0374	4.1896	0.0189	4.2085	1.1110	0.0174	1.1284		3,783.817 2	3,783.817 2	0.0848	0.0893	3,812.543 8
Total	1.7024	5.0102	15.7854	0.0606	4.9748	0.0590	5.0339	1.3372	0.0558	1.3930		6,213.187 1	6,213.187 1	0.0962	0.4205	6,340.901 4

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1907	4.1059	2.1832	0.0231	0.7853	0.0401	0.8254	0.2262	0.0384	0.2646		2,429.369 9	2,429.369 9	0.0114	0.3312	2,528.357 6
Worker	1.5117	0.9043	13.6022	0.0374	4.1896	0.0189	4.2085	1.1110	0.0174	1.1284		3,783.817 2	3,783.817 2	0.0848	0.0893	3,812.543 8
Total	1.7024	5.0102	15.7854	0.0606	4.9748	0.0590	5.0339	1.3372	0.0558	1.3930		6,213.187 1	6,213.187 1	0.0962	0.4205	6,340.901 4

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	1.0035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0362	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0737	0.0441	0.6635	1.8300e-003	0.2044	9.2000e-004	0.2053	0.0542	8.5000e-004	0.0551		184.5765	184.5765	4.1400e-003	4.3600e-003	185.9777
Total	0.0737	0.0441	0.6635	1.8300e-003	0.2044	9.2000e-004	0.2053	0.0542	8.5000e-004	0.0551		184.5765	184.5765	4.1400e-003	4.3600e-003	185.9777

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	1.0035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0362	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0737	0.0441	0.6635	1.8300e-003	0.2044	9.2000e-004	0.2053	0.0542	8.5000e-004	0.0551		184.5765	184.5765	4.1400e-003	4.3600e-003	185.9777
Total	0.0737	0.0441	0.6635	1.8300e-003	0.2044	9.2000e-004	0.2053	0.0542	8.5000e-004	0.0551		184.5765	184.5765	4.1400e-003	4.3600e-003	185.9777

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	97.9852					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	98.1768	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3042	0.1820	2.7370	7.5300e-003	0.8430	3.8000e-003	0.8468	0.2236	3.5000e-003	0.2271		761.3779	761.3779	0.0171	0.0180	767.1582
Total	0.3042	0.1820	2.7370	7.5300e-003	0.8430	3.8000e-003	0.8468	0.2236	3.5000e-003	0.2271		761.3779	761.3779	0.0171	0.0180	767.1582

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	97.9852					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	98.1768	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3042	0.1820	2.7370	7.5300e-003	0.8430	3.8000e-003	0.8468	0.2236	3.5000e-003	0.2271		761.3779	761.3779	0.0171	0.0180	767.1582
Total	0.3042	0.1820	2.7370	7.5300e-003	0.8430	3.8000e-003	0.8468	0.2236	3.5000e-003	0.2271		761.3779	761.3779	0.0171	0.0180	767.1582

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0137	38.3814	44.0689	0.3018	20.3717	0.5313	20.9029	5.5157	0.5064	6.0221		31,316.90 62	31,316.90 62	0.2695	3.1015	32,247.88 45
Unmitigated	3.0137	38.3814	44.0689	0.3018	20.3717	0.5313	20.9029	5.5157	0.5064	6.0221		31,316.90 62	31,316.90 62	0.2695	3.1015	32,247.88 45

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Heavy Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	253.39	253.39	253.39	3,440,555	3,440,555
Unrefrigerated Warehouse-Rail	1,028.37	1,028.37	1,028.37	5,795,521	5,795,521
Total	1,281.76	1,281.76	1,281.76	9,236,075	9,236,075

4.3 Trip Type Information

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	40.00	40.00	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-Rail	16.60	16.60	16.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
General Heavy Industry	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Other Asphalt Surfaces	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Parking Lot	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.290000	0.076100	0.060900	0.573000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-Rail	0.696000	0.074700	0.229300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188
NaturalGas Unmitigated	0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	12856.7	0.1387	1.2605	1.0588	7.5600e-003		0.0958	0.0958		0.0958	0.0958		1,512.5542	1,512.5542	0.0290	0.0277	1,521.5426
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	742.213	8.0000e-003	0.0728	0.0611	4.4000e-004		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003		87.3192	87.3192	1.6700e-003	1.6000e-003	87.8381
Unrefrigerated Warehouse-Rail	742.213	8.0000e-003	0.0728	0.0611	4.4000e-004		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003		87.3192	87.3192	1.6700e-003	1.6000e-003	87.8381
Total		0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	12.8567	0.1387	1.2605	1.0588	7.5600e-003		0.0958	0.0958		0.0958	0.0958		1,512.5542	1,512.5542	0.0290	0.0277	1,521.5426
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.742213	8.0000e-003	0.0728	0.0611	4.4000e-004		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003		87.3192	87.3192	1.6700e-003	1.6000e-003	87.8381
Unrefrigerated Warehouse-Rail	0.742213	8.0000e-003	0.0728	0.0611	4.4000e-004		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003		87.3192	87.3192	1.6700e-003	1.6000e-003	87.8381
Total		0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188

6.0 Area Detail

6.1 Mitigation Measures Area

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Unmitigated	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.1100e-003	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Total	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.1100e-003	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Total	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	8.00	260			Diesel

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

I-15 Industrial Phase II
Mojave Desert AQMD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	145.15	1000sqft	3.33	145,150.00	0
Unrefrigerated Warehouse-No Rail	134.78	1000sqft	3.09	134,780.00	0
Unrefrigerated Warehouse-Rail	134.78	1000sqft	3.09	134,780.00	0
Other Asphalt Surfaces	219.14	1000sqft	5.03	219,142.00	0
Parking Lot	182.00	Space	1.64	72,800.00	0
Parking Lot	43.30	1000sqft	0.99	43,300.00	0
City Park	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on applicant provided information. Divided land use area of warehouse into 2 and assigned one to "Rail" so that trucks and passenger vehicles can be modeled in a single run. Other asphalt surface includes repaving of Poplar Road project frontage.

Construction Phase - Building Construction set equal to 6 Months based on project specific schedule.

Off-road Equipment - Default values.

Off-road Equipment - Default values.

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-road Equipment - Default values.

Off-road Equipment - Default values

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Per applicant provided information.

On-road Fugitive Dust - Default values

Grading - Per applicant zero import and export of grading materials.

Architectural Coating - Per applicant Low-VOC 50 g/L coatings to be used as PDF for the project.

Vehicle Trips - Based on Traffic Study. All mobile sources accounted for in Warehouse land uses.

Area Coating - Based on applicant provided information. Low-VOC coatings 50 g/L.

Energy Use - Default values

Water And Wastewater - Default values

Solid Waste - Default values

Construction Off-road Equipment Mitigation -

Area Mitigation - Per applicant provided information Low-VOC coatings will be utilized as part of the project as PDF.

Energy Mitigation -

Water Mitigation -

Waste Mitigation - Based on project PDF

Operational Off-Road Equipment - Offroad operational vehicles are assumed electric as PDF.

Fleet Mix - See additiional calculations sheets for basis.

Stationary Sources - Emergency Generators and Fire Pumps - None identified as part of the project.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	207,355.00	207,353.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	622,065.00	622,058.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaCoating	Area_Nonresidential_Exterior	207355	207353
tblAreaCoating	Area_Nonresidential_Interior	622065	622058
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	250
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	250
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	131.00
tblFleetMix	HHD	0.02	0.57
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDA	0.53	0.70
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.07
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.23
tblFleetMix	LHD1	0.03	0.29
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.6920e-003	0.08
tblFleetMix	LHD2	7.6920e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MHD	6.1550e-003	0.06
tblFleetMix	MHD	6.1550e-003	0.00
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	OBUS	4.8300e-004	0.00

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	CC_TL	6.60	40.00
tblVehicleTrips	CC_TL	6.60	16.60
tblVehicleTrips	CNW_TL	6.60	40.00
tblVehicleTrips	CNW_TL	6.60	16.60
tblVehicleTrips	CW_TL	14.70	40.00
tblVehicleTrips	CW_TL	14.70	16.60
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.74	1.88
tblVehicleTrips	ST_TR	1.74	7.63
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.74	1.88
tblVehicleTrips	SU_TR	1.74	7.63
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	1.74	1.88
tblVehicleTrips	WD_TR	1.74	7.63

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	98.4623	34.6005	29.1012	0.0834	9.5868	1.4262	11.0130	3.7554	1.3121	5.0675	0.0000	8,351.223 7	8,351.223 7	1.9519	0.4234	8,494.943 7
Maximum	98.4623	34.6005	29.1012	0.0834	9.5868	1.4262	11.0130	3.7554	1.3121	5.0675	0.0000	8,351.223 7	8,351.223 7	1.9519	0.4234	8,494.943 7

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	98.4623	34.6005	29.1012	0.0834	4.9748	1.4262	5.9510	1.7458	1.3121	3.0579	0.0000	8,351.223 7	8,351.223 7	1.9519	0.4234	8,494.943 7
Maximum	98.4623	34.6005	29.1012	0.0834	4.9748	1.4262	5.9510	1.7458	1.3121	3.0579	0.0000	8,351.223 7	8,351.223 7	1.9519	0.4234	8,494.943 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	48.11	0.00	45.96	53.51	0.00	39.66	0.00	0.00	0.00	0.00	0.00	0.00

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Energy	0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188
Mobile	2.5652	40.3953	37.1924	0.2904	20.3717	0.5315	20.9032	5.5157	0.5066	6.0224		30,164.7925	30,164.7925	0.2676	3.1113	31,098.6587
Total	12.3045	41.8021	38.4613	0.2988	20.3717	0.6387	21.0104	5.5157	0.6138	6.1295		31,852.1736	31,852.1736	0.3004	3.1423	32,796.0783

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Energy	0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188
Mobile	2.5652	40.3953	37.1924	0.2904	20.3717	0.5315	20.9032	5.5157	0.5066	6.0224		30,164.7925	30,164.7925	0.2676	3.1113	31,098.6587
Total	12.3045	41.8021	38.4613	0.2988	20.3717	0.6387	21.0104	5.5157	0.6138	6.1295		31,852.1736	31,852.1736	0.3004	3.1423	32,796.0783

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2023	1/13/2023	5	10	
2	Grading	Grading	1/14/2023	2/24/2023	5	30	
3	Building Construction	Building Construction	2/25/2023	8/28/2023	5	131	
4	Paving	Paving	8/29/2023	9/25/2023	5	20	
5	Architectural Coating	Architectural Coating	9/26/2023	10/23/2023	5	20	

Acres of Grading (Site Preparation Phase): 5**Acres of Grading (Grading Phase): 90****Acres of Paving: 7.66****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 622,058; Non-Residential Outdoor: 207,353; Striped Parking Area: 16,200 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	328.00	128.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	0.8360	8.6628	5.3377	0.0117		0.3967	0.3967		0.3650	0.3650		1,128.577 2	1,128.577 2	0.3650		1,137.702 3
Total	0.8360	8.6628	5.3377	0.0117	6.5523	0.3967	6.9491	3.3675	0.3650	3.7325		1,128.577 2	1,128.577 2	0.3650		1,137.702 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0433	0.0283	0.3231	1.0100e-003	0.1277	5.8000e-004	0.1283	0.0339	5.3000e-004	0.0344		102.4141	102.4141	2.5400e-003	2.7600e-003	103.3007
Total	0.0433	0.0283	0.3231	1.0100e-003	0.1277	5.8000e-004	0.1283	0.0339	5.3000e-004	0.0344		102.4141	102.4141	2.5400e-003	2.7600e-003	103.3007

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	0.8360	8.6628	5.3377	0.0117		0.3967	0.3967		0.3650	0.3650	0.0000	1,128.577 2	1,128.577 2	0.3650		1,137.702 3
Total	0.8360	8.6628	5.3377	0.0117	2.9486	0.3967	3.3453	1.5154	0.3650	1.8804	0.0000	1,128.577 2	1,128.577 2	0.3650		1,137.702 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0433	0.0283	0.3231	1.0100e-003	0.1277	5.8000e-004	0.1283	0.0339	5.3000e-004	0.0344		102.4141	102.4141	2.5400e-003	2.7600e-003	103.3007
Total	0.0433	0.0283	0.3231	1.0100e-003	0.1277	5.8000e-004	0.1283	0.0339	5.3000e-004	0.0344		102.4141	102.4141	2.5400e-003	2.7600e-003	103.3007

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1298	0.0849	0.9691	3.0400e-003	0.3832	1.7300e-003	0.3849	0.1016	1.5900e-003	0.1032		307.2422	307.2422	7.6200e-003	8.2900e-003	309.9021
Total	0.1298	0.0849	0.9691	3.0400e-003	0.3832	1.7300e-003	0.3849	0.1016	1.5900e-003	0.1032		307.2422	307.2422	7.6200e-003	8.2900e-003	309.9021

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	4.1416	1.4245	5.5661	1.6442	1.3105	2.9547	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1298	0.0849	0.9691	3.0400e-003	0.3832	1.7300e-003	0.3849	0.1016	1.5900e-003	0.1032		307.2422	307.2422	7.6200e-003	8.2900e-003	309.9021
Total	0.1298	0.0849	0.9691	3.0400e-003	0.3832	1.7300e-003	0.3849	0.1016	1.5900e-003	0.1032		307.2422	307.2422	7.6200e-003	8.2900e-003	309.9021

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1777	4.3734	2.2614	0.0232	0.7853	0.0403	0.8255	0.2262	0.0385	0.2647		2,436.832 7	2,436.832 7	0.0108	0.3328	2,536.274 7
Worker	1.4186	0.9286	10.5959	0.0332	4.1896	0.0189	4.2085	1.1110	0.0174	1.1284		3,359.181 1	3,359.181 1	0.0833	0.0906	3,388.262 9
Total	1.5962	5.3019	12.8572	0.0564	4.9748	0.0592	5.0340	1.3372	0.0559	1.3931		5,796.013 8	5,796.013 8	0.0941	0.4234	5,924.537 6

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1777	4.3734	2.2614	0.0232	0.7853	0.0403	0.8255	0.2262	0.0385	0.2647		2,436.832 7	2,436.832 7	0.0108	0.3328	2,536.274 7
Worker	1.4186	0.9286	10.5959	0.0332	4.1896	0.0189	4.2085	1.1110	0.0174	1.1284		3,359.181 1	3,359.181 1	0.0833	0.0906	3,388.262 9
Total	1.5962	5.3019	12.8572	0.0564	4.9748	0.0592	5.0340	1.3372	0.0559	1.3931		5,796.013 8	5,796.013 8	0.0941	0.4234	5,924.537 6

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	1.0035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0362	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0692	0.0453	0.5169	1.6200e-003	0.2044	9.2000e-004	0.2053	0.0542	8.5000e-004	0.0551		163.8625	163.8625	4.0600e-003	4.4200e-003	165.2811
Total	0.0692	0.0453	0.5169	1.6200e-003	0.2044	9.2000e-004	0.2053	0.0542	8.5000e-004	0.0551		163.8625	163.8625	4.0600e-003	4.4200e-003	165.2811

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	1.0035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0362	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0692	0.0453	0.5169	1.6200e-003	0.2044	9.2000e-004	0.2053	0.0542	8.5000e-004	0.0551		163.8625	163.8625	4.0600e-003	4.4200e-003	165.2811
Total	0.0692	0.0453	0.5169	1.6200e-003	0.2044	9.2000e-004	0.2053	0.0542	8.5000e-004	0.0551		163.8625	163.8625	4.0600e-003	4.4200e-003	165.2811

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	97.9852					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	98.1768	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2854	0.1868	2.1321	6.6900e-003	0.8430	3.8000e-003	0.8468	0.2236	3.5000e-003	0.2271		675.9328	675.9328	0.0168	0.0182	681.7846
Total	0.2854	0.1868	2.1321	6.6900e-003	0.8430	3.8000e-003	0.8468	0.2236	3.5000e-003	0.2271		675.9328	675.9328	0.0168	0.0182	681.7846

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	97.9852					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	98.1768	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2854	0.1868	2.1321	6.6900e-003	0.8430	3.8000e-003	0.8468	0.2236	3.5000e-003	0.2271		675.9328	675.9328	0.0168	0.0182	681.7846
Total	0.2854	0.1868	2.1321	6.6900e-003	0.8430	3.8000e-003	0.8468	0.2236	3.5000e-003	0.2271		675.9328	675.9328	0.0168	0.0182	681.7846

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5652	40.3953	37.1924	0.2904	20.3717	0.5315	20.9032	5.5157	0.5066	6.0224		30,164.79 25	30,164.79 25	0.2676	3.1113	31,098.65 87
Unmitigated	2.5652	40.3953	37.1924	0.2904	20.3717	0.5315	20.9032	5.5157	0.5066	6.0224		30,164.79 25	30,164.79 25	0.2676	3.1113	31,098.65 87

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Heavy Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	253.39	253.39	253.39	3,440,555	3,440,555
Unrefrigerated Warehouse-Rail	1,028.37	1,028.37	1,028.37	5,795,521	5,795,521
Total	1,281.76	1,281.76	1,281.76	9,236,075	9,236,075

4.3 Trip Type Information

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	40.00	40.00	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-Rail	16.60	16.60	16.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
General Heavy Industry	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Other Asphalt Surfaces	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Parking Lot	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.290000	0.076100	0.060900	0.573000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-Rail	0.696000	0.074700	0.229300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188
NaturalGas Unmitigated	0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	12856.7	0.1387	1.2605	1.0588	7.5600e-003		0.0958	0.0958		0.0958	0.0958		1,512.5542	1,512.5542	0.0290	0.0277	1,521.5426
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	742.213	8.0000e-003	0.0728	0.0611	4.4000e-004		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003		87.3192	87.3192	1.6700e-003	1.6000e-003	87.8381
Unrefrigerated Warehouse-Rail	742.213	8.0000e-003	0.0728	0.0611	4.4000e-004		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003		87.3192	87.3192	1.6700e-003	1.6000e-003	87.8381
Total		0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	12.8567	0.1387	1.2605	1.0588	7.5600e-003		0.0958	0.0958		0.0958	0.0958		1,512.5542	1,512.5542	0.0290	0.0277	1,521.5426
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.742213	8.0000e-003	0.0728	0.0611	4.4000e-004		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003		87.3192	87.3192	1.6700e-003	1.6000e-003	87.8381
Unrefrigerated Warehouse-Rail	0.742213	8.0000e-003	0.0728	0.0611	4.4000e-004		5.5300e-003	5.5300e-003		5.5300e-003	5.5300e-003		87.3192	87.3192	1.6700e-003	1.6000e-003	87.8381
Total		0.1547	1.4060	1.1810	8.4400e-003		0.1069	0.1069		0.1069	0.1069		1,687.1926	1,687.1926	0.0323	0.0309	1,697.2188

6.0 Area Detail

6.1 Mitigation Measures Area

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Unmitigated	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.1100e-003	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Total	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.1100e-003	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008
Total	9.5846	8.0000e-004	0.0878	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004		0.1885	0.1885	4.9000e-004		0.2008

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	8.00	260			Diesel

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Annual GHG Emissions - NonPavley

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only**

Mojave Desert AQMD Air District, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	145.15	1000sqft	3.33	145,150.00	0
Unrefrigerated Warehouse-No Rail	134.78	1000sqft	3.09	134,780.00	0
Unrefrigerated Warehouse-Rail	134.78	1000sqft	3.09	134,780.00	0
Other Asphalt Surfaces	219.14	1000sqft	5.03	219,142.00	0
Parking Lot	182.00	Space	1.64	72,800.00	0
Parking Lot	43.30	1000sqft	0.99	43,300.00	0
City Park	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	742	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Non RPS analysis assumes 2009 CO2 Intensity Factor.

Land Use - Based on applicant provided information. Divided land use area of warehouse into 2 and assigned one to "Rail" so that trucks and passenger vehicles can be modeled in a single run. Includes repaving of Poplar Rd. frontage to the project.

Construction Phase - Building Construction set equal to 6 Months based on project specific schedule.

Off-road Equipment - Default values.

Off-road Equipment - Default values.

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-road Equipment - Default values.

Off-road Equipment - Default values

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Per applicant provided information.

On-road Fugitive Dust - Default values

Grading - Per applicant zero import and export of grading materials.

Architectural Coating - Per applicant Low-VOC 50 g/L coatings to be used as PDF for the project.

Vehicle Trips - Based on Traffic Study. All mobile sources accounted for in Warehouse land uses.

Vehicle Emission Factors - For GHG without regulatory requirements LDA, LDT1, LDT2, and MDV CO2_NBIO_RUNEX and _STREX set to non Pavley values per CalEEMod Appendix D Table 4.4.

Area Coating - Based on applicant provided information. Low-VOC coatings 50 g/L.

Energy Use - Default values

Water And Wastewater - Default values

Solid Waste - Default values

Construction Off-road Equipment Mitigation -

Area Mitigation - Per applicant provided information Low-VOC coatings will be utilized as part of the project as PDF.

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Operational Off-Road Equipment - Offroad operational vehicles are assumed electric as PDF.

Fleet Mix - See additioinal calculations sheets for basis.

Stationary Sources - Emergency Generators and Fire Pumps - None identified as part of the project.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	207,355.00	207,353.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	622,065.00	622,058.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_Nonresidential_Exterior	207355	207353
tblAreaCoating	Area_Nonresidential_Interior	622065	622058
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	250
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	250
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	131.00
tblFleetMix	HHD	0.02	0.57
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDA	0.53	0.70
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.07
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.23
tblFleetMix	LHD1	0.03	0.29
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.6920e-003	0.08
tblFleetMix	LHD2	7.6920e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MHD	6.1550e-003	0.06
tblFleetMix	MHD	6.1550e-003	0.00

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	742
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleEF	LDA	242.70	334.33
tblVehicleEF	LDA	50.68	73.93
tblVehicleEF	LDT1	288.95	386.89
tblVehicleEF	LDT1	61.96	85.44
tblVehicleEF	LDT2	305.15	454.20
tblVehicleEF	LDT2	65.85	100.85
tblVehicleEF	MDV	384.89	580.31
tblVehicleEF	MDV	81.46	128.27
tblVehicleTrips	CC_TL	6.60	40.00
tblVehicleTrips	CC_TL	6.60	16.60
tblVehicleTrips	CNW_TL	6.60	40.00
tblVehicleTrips	CNW_TL	6.60	16.60
tblVehicleTrips	CW_TL	14.70	40.00
tblVehicleTrips	CW_TL	14.70	16.60
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	ST_TR	1.74	1.88
tblVehicleTrips	ST_TR	1.74	7.63
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.74	1.88
tblVehicleTrips	SU_TR	1.74	7.63
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	1.74	1.88
tblVehicleTrips	WD_TR	1.74	7.63

2.0 Emissions Summary

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.2619	1.9709	2.6123	6.9000e-003	0.5076	0.0789	0.5865	0.1622	0.0737	0.2360	0.0000	623.7527	623.7527	0.0769	0.0257	633.3416
Maximum	1.2619	1.9709	2.6123	6.9000e-003	0.5076	0.0789	0.5865	0.1622	0.0737	0.2360	0.0000	623.7527	623.7527	0.0769	0.0257	633.3416

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.2619	1.9709	2.6123	6.9000e-003	0.4136	0.0789	0.4926	0.1228	0.0737	0.1966	0.0000	623.7524	623.7524	0.0769	0.0257	633.3413
Maximum	1.2619	1.9709	2.6123	6.9000e-003	0.4136	0.0789	0.4926	0.1228	0.0737	0.1966	0.0000	623.7524	623.7524	0.0769	0.0257	633.3413

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	18.51	0.00	16.02	24.29	0.00	16.70	0.00	0.00	0.00	0.00	0.00	0.00

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	10-4-2022	1-3-2023	0.0103	0.0103
3	1-4-2023	4-3-2023	0.9149	0.9149
4	4-4-2023	7-3-2023	0.7368	0.7368
5	7-4-2023	9-30-2023	0.7554	0.7554
		Highest	0.9149	0.9149

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Energy	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	988.1078	988.1078	0.0369	8.9400e-003	991.6944
Mobile	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,635.2017	5,635.2017	0.0451	0.5147	5,789.7169
Waste						0.0000	0.0000		0.0000	0.0000	88.0088	0.0000	88.0088	5.2012	0.0000	218.0380
Water						0.0000	0.0000		0.0000	0.0000	30.4252	430.0830	460.5082	3.1441	0.0761	561.7898
Total	2.2435	7.6922	7.3103	0.0548	3.6449	0.1161	3.7610	0.9885	0.1116	1.1001	118.4339	7,053.4079	7,171.8418	8.4273	0.5998	7,561.2555

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Energy	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	988.1078	988.1078	0.0369	8.9400e-003	991.6944
Mobile	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,635.2017	5,635.2017	0.0451	0.5147	5,789.7169
Waste						0.0000	0.0000		0.0000	0.0000	88.0088	0.0000	88.0088	5.2012	0.0000	218.0380
Water						0.0000	0.0000		0.0000	0.0000	30.4252	430.0830	460.5082	3.1441	0.0761	561.7898
Total	2.2435	7.6922	7.3103	0.0548	3.6449	0.1161	3.7610	0.9885	0.1116	1.1001	118.4339	7,053.4079	7,171.8418	8.4273	0.5998	7,561.2555

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2023	1/13/2023	5	10	
2	Grading	Grading	1/14/2023	2/24/2023	5	30	
3	Building Construction	Building Construction	2/25/2023	8/28/2023	5	131	

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	8/29/2023	9/25/2023	5	20
5	Architectural Coating	Architectural Coating	9/26/2023	10/23/2023	5	20

Acres of Grading (Site Preparation Phase): 5**Acres of Grading (Grading Phase): 90****Acres of Paving: 7.66****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 622,058; Non-Residential Outdoor: 207,353; Striped Parking Area: 16,200 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	328.00	128.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0433	0.0267	6.0000e-005		1.9800e-003	1.9800e-003		1.8200e-003	1.8200e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605
Total	4.1800e-003	0.0433	0.0267	6.0000e-005	0.0328	1.9800e-003	0.0347	0.0168	1.8200e-003	0.0187	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.7300e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4777	0.4777	1.0000e-005	1.0000e-005	0.4819
Total	2.0000e-004	1.5000e-004	1.7300e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4777	0.4777	1.0000e-005	1.0000e-005	0.4819

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	7.5800e-003	0.0000	7.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0433	0.0267	6.0000e-005		1.9800e-003	1.9800e-003		1.8200e-003	1.8200e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605
Total	4.1800e-003	0.0433	0.0267	6.0000e-005	0.0147	1.9800e-003	0.0167	7.5800e-003	1.8200e-003	9.4000e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.7300e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4777	0.4777	1.0000e-005	1.0000e-005	0.4819
Total	2.0000e-004	1.5000e-004	1.7300e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4777	0.4777	1.0000e-005	1.0000e-005	0.4819

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e-004	0.1381	0.0214	0.1594	0.0548	0.0197	0.0745	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7900e-003	1.3600e-003	0.0156	5.0000e-005	5.6500e-003	3.0000e-005	5.6700e-003	1.5000e-003	2.0000e-005	1.5200e-003	0.0000	4.2995	4.2995	1.1000e-004	1.2000e-004	4.3373
Total	1.7900e-003	1.3600e-003	0.0156	5.0000e-005	5.6500e-003	3.0000e-005	5.6700e-003	1.5000e-003	2.0000e-005	1.5200e-003	0.0000	4.2995	4.2995	1.1000e-004	1.2000e-004	4.3373

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0621	0.0000	0.0621	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0621	0.0214	0.0835	0.0247	0.0197	0.0443	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7900e-003	1.3600e-003	0.0156	5.0000e-005	5.6500e-003	3.0000e-005	5.6700e-003	1.5000e-003	2.0000e-005	1.5200e-003	0.0000	4.2995	4.2995	1.1000e-004	1.2000e-004	4.3373
Total	1.7900e-003	1.3600e-003	0.0156	5.0000e-005	5.6500e-003	3.0000e-005	5.6700e-003	1.5000e-003	2.0000e-005	1.5200e-003	0.0000	4.2995	4.2995	1.1000e-004	1.2000e-004	4.3373

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8321	151.8321	0.0361	0.0000	152.7351
Total	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8321	151.8321	0.0361	0.0000	152.7351

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0120	0.2838	0.1457	1.5200e-003	0.0507	2.6300e-003	0.0533	0.0146	2.5200e-003	0.0172	0.0000	144.5417	144.5417	6.7000e-004	0.0197	150.4414
Worker	0.0855	0.0650	0.7454	2.2400e-003	0.2695	1.2400e-003	0.2708	0.0716	1.1400e-003	0.0727	0.0000	205.2651	205.2651	5.0800e-003	5.6400e-003	207.0718
Total	0.0975	0.3487	0.8911	3.7600e-003	0.3202	3.8700e-003	0.3241	0.0862	3.6600e-003	0.0899	0.0000	349.8068	349.8068	5.7500e-003	0.0254	357.5132

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8319	151.8319	0.0361	0.0000	152.7349
Total	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8319	151.8319	0.0361	0.0000	152.7349

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0120	0.2838	0.1457	1.5200e-003	0.0507	2.6300e-003	0.0533	0.0146	2.5200e-003	0.0172	0.0000	144.5417	144.5417	6.7000e-004	0.0197	150.4414
Worker	0.0855	0.0650	0.7454	2.2400e-003	0.2695	1.2400e-003	0.2708	0.0716	1.1400e-003	0.0727	0.0000	205.2651	205.2651	5.0800e-003	5.6400e-003	207.0718
Total	0.0975	0.3487	0.8911	3.7600e-003	0.3202	3.8700e-003	0.3241	0.0862	3.6600e-003	0.0899	0.0000	349.8068	349.8068	5.7500e-003	0.0254	357.5132

3.5 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0204	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.8000e-004	5.5500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5287	1.5287	4.0000e-005	4.0000e-005	1.5422
Total	6.4000e-004	4.8000e-004	5.5500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5287	1.5287	4.0000e-005	4.0000e-005	1.5422

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0204	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.8000e-004	5.5500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5287	1.5287	4.0000e-005	4.0000e-005	1.5422
Total	6.4000e-004	4.8000e-004	5.5500e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.5287	1.5287	4.0000e-005	4.0000e-005	1.5422

3.6 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.9818	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6300e-003	2.0000e-003	0.0229	7.0000e-005	8.2800e-003	4.0000e-005	8.3200e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.3059	6.3059	1.6000e-004	1.7000e-004	6.3614
Total	2.6300e-003	2.0000e-003	0.0229	7.0000e-005	8.2800e-003	4.0000e-005	8.3200e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.3059	6.3059	1.6000e-004	1.7000e-004	6.3614

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.9818	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6300e-003	2.0000e-003	0.0229	7.0000e-005	8.2800e-003	4.0000e-005	8.3200e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.3059	6.3059	1.6000e-004	1.7000e-004	6.3614
Total	2.6300e-003	2.0000e-003	0.0229	7.0000e-005	8.2800e-003	4.0000e-005	8.3200e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.3059	6.3059	1.6000e-004	1.7000e-004	6.3614

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,635.2017	5,635.2017	0.0451	0.5147	5,789.7169
Unmitigated	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,635.2017	5,635.2017	0.0451	0.5147	5,789.7169

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Heavy Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	253.39	253.39	253.39	3,440,555	3,440,555
Unrefrigerated Warehouse-Rail	1,028.37	1,028.37	1,028.37	5,795,521	5,795,521
Total	1,281.76	1,281.76	1,281.76	9,236,075	9,236,075

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	40.00	40.00	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-Rail	16.60	16.60	16.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
General Heavy Industry	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Other Asphalt Surfaces	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Parking Lot	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.290000	0.076100	0.060900	0.573000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-Rail	0.696000	0.074700	0.229300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	708.7741	708.7741	0.0315	3.8200e-003	710.7008
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	708.7741	708.7741	0.0315	3.8200e-003	710.7008
NaturalGas Mitigated	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3500e-003	5.1200e-003	280.9936
NaturalGas Unmitigated	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3500e-003	5.1200e-003	280.9936

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	4.6927e+006	0.0253	0.2300	0.1932	1.3800e-003		0.0175	0.0175		0.0175	0.0175	0.0000	250.4203	250.4203	4.8000e-003	4.5900e-003	251.9084
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Unrefrigerated Warehouse-Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Total		0.0282	0.2566	0.2156	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3600e-003	5.1300e-003	280.9936

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	4.6927e+006	0.0253	0.2300	0.1932	1.3800e-003		0.0175	0.0175		0.0175	0.0175	0.0000	250.4203	250.4203	4.8000e-003	4.5900e-003	251.9084
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Unrefrigerated Warehouse-Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Total		0.0282	0.2566	0.2156	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3600e-003	5.1300e-003	280.9936

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	1.43989e+006	484.6167	0.0216	2.6100e-003	485.9340
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	15155	5.1007	2.3000e-004	3.0000e-005	5.1145
Parking Lot	25480	8.5757	3.8000e-004	5.0000e-005	8.5990
Unrefrigerated Warehouse-No Rail	312690	105.2405	4.6800e-003	5.7000e-004	105.5266
Unrefrigerated Warehouse-Rail	312690	105.2405	4.6800e-003	5.7000e-004	105.5266
Total		708.7741	0.0315	3.8300e-003	710.7008

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	1.43989e +006	484.6167	0.0216	2.6100e- 003	485.9340
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	15155	5.1007	2.3000e- 004	3.0000e- 005	5.1145
Parking Lot	25480	8.5757	3.8000e- 004	5.0000e- 005	8.5990
Unrefrigerated Warehouse-No Rail	312690	105.2405	4.6800e- 003	5.7000e- 004	105.5266
Unrefrigerated Warehouse-Rail	312690	105.2405	4.6800e- 003	5.7000e- 004	105.5266
Total		708.7741	0.0315	3.8300e- 003	710.7008

6.0 Area Detail**6.1 Mitigation Measures Area**

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Unmitigated	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.3000e-004	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Total	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.3000e-004	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Total	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

7.0 Water Detail**7.1 Mitigation Measures Water**

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	460.5082	3.1441	0.0761	561.7898
Unmitigated	460.5082	3.1441	0.0761	561.7898

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.62126	9.8015	4.4000e-004	5.0000e-005	9.8282
General Heavy Industry	33.5659 / 0	157.7490	1.1003	0.0266	193.1886
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.1679 / 0	146.4788	1.0217	0.0247	179.3865
Unrefrigerated Warehouse-Rail	31.1679 / 0	146.4788	1.0217	0.0247	179.3865
Total		460.5082	3.1441	0.0761	561.7898

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.62126	9.8015	4.4000e-004	5.0000e-005	9.8282
General Heavy Industry	33.5659 / 0	157.7490	1.1003	0.0266	193.1886
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.1679 / 0	146.4788	1.0217	0.0247	179.3865
Unrefrigerated Warehouse-Rail	31.1679 / 0	146.4788	1.0217	0.0247	179.3865
Total		460.5082	3.1441	0.0761	561.7898

8.0 Waste Detail**8.1 Mitigation Measures Waste**

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	88.0088	5.2012	0.0000	218.0380
Unmitigated	88.0088	5.2012	0.0000	218.0380

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.19	0.0386	2.2800e-003	0.0000	0.0956
General Heavy Industry	179.99	36.5363	2.1592	0.0000	90.5172
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	126.69	25.7169	1.5198	0.0000	63.7126
Unrefrigerated Warehouse-Rail	126.69	25.7169	1.5198	0.0000	63.7126
Total		88.0088	5.2012	0.0000	218.0380

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.19	0.0386	2.2800e-003	0.0000	0.0956
General Heavy Industry	179.99	36.5363	2.1592	0.0000	90.5172
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	126.69	25.7169	1.5198	0.0000	63.7126
Unrefrigerated Warehouse-Rail	126.69	25.7169	1.5198	0.0000	63.7126
Total		88.0088	5.2012	0.0000	218.0380

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	8.00	260			Diesel

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

I-15 Industrial Phase II GHG Non Pavley No RPS Annual Op GHG Run Only - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Operational On-Site Equipment Sources

1. Electric Vehicles - Energy Consumption

Vehicle Category	Lift Capacity	Electric Motors	Drive Motor Capacity		Facility Operation	Vehicle Operation			Electric Energy Consumption per Unit		Units	Total Energy Consumption	
	(lbs)		(hp)	(kW)	(hrs/day)	Load Factor ⁴	(days/week)	(weeks/yr)	(hrs/year)	(kWhr/day/Unit)	(kWhr/yr/Unit)	(kWhr/day)	(kWhr/yr)
Pallet Jack ¹	3,300	Drive Motor Capacity		0.7	8	0.2	7	52	582.4	1.12	407.68	10	4,076.80
		Lift Motor Capacity		0.8	8	0.05	7	52	145.6	0.32	116.48	3.20	1,164.80
Small Forklift ²	3,086-4,409	Drive Motor Capacity		11	8	0.2	7	52	582.4	17.60	6,406.40	20	128,128.00
		Lift Motor Capacity		10	8	0.05	7	52	145.6	4.00	1,456.00	80.00	29,120.00
Large Forklift ³	7,000-11,000	Drive Motor Capacity	24	18	8	0.2	7	52	582.4	28.80	10,483.20	20	209,664.00
		Lift Motor Capacity	27	20	8	0.05	7	52	145.6	8.00	2,912.00	160.00	58,240.00
Yard Truck ⁵	N/A	Drive Motor Capacity	215	160	8	0.2	7	52	582.4	256.00	93,184.00	2	186,368.00
Total												1,182.40	430,393.60

¹ Based on Global Industrial™ 3300 LB. CAPACITY SELF-PROPELLED ELECTRIC POWER PALLET JACK TRUCK
https://www.globalindustrial.com/p/material-handling/pallet-trucks-jacks/self-propelled/global-industrial-self-propelled-electric-power-pallet-jack-truck-3300-lb-cap?infoParam.campaignId=T9F&gclid=CjwKCAjw_sn8BRBrEiwAnUGJDsnUx19lvgquuITz2DOx51UqkSAlg9VO22XpkzJZWyl-FmMiqFRaeRoCOqEQAvD_BwE

² Based on CAT Model EP12ANT - EP20ANT
<https://www.catlifttruck.com/lift-trucks/counterbalance-forklift-trucks/electric-powered-lift-trucks/ep14-20acnt>

³ Based on CAT Model 2EPC7000 - 2EP11000
<https://www.logisnextamericas.com/-/media/mcfa/sites/portal/files/forklifts/cat-lift-trucks/sales%20literature/clt-i-2epc7000-2ep11000-english.pdf>

⁴ Drive motor load factor based on CalEEMod User Manual Table 3.3 for offroad forklift load factor
Lift motor load factor set equal of 25% of drive motor capacity factor based on engineering estimate.

⁵ Based on Kalmar Ottawa T22 - 4x2 Electric Yard Truck
[kalmar-ottawa-t2e-4x2-electric-yard-truck - Yard Truck Specialists](#)

2. Electric Vehicles - Greenhouse Gas (GHG) Emissions

Vehicle Category	Lift Capacity	Electric Motors	Total Energy Consumption		GHG Intensity Factors			Annual GHG Emissions				
	(lbs)		(kWhr/day)	(kWhr/yr)	CO ₂ ¹	CH ₄ ²	N ₂ O ²	CO ₂ ¹	CH ₄ ²	N ₂ O ²	CO ₂ e ³	
					(lb/MWhr)	(lb/MWhr)	(lb/MWhr)	(TPY)	(TPY)	(TPY)	(TPY)	(Metric TPY)
Pallet Jack ¹	3,300	Drive Motor Capacity	11.2	4,076.80	513	0.029	0.006	1.05	0.0001	0.0000	1.05	0.95
		Lift Motor Capacity	3.2	1,164.80	513	0.029	0.006	0.30	0.0000	0.0000	0.30	0.27
Small Forklift ²	3,086-4,409	Drive Motor Capacity	352	128,128.00	513	0.029	0.006	32.86	0.0019	0.0004	33.03	29.96
		Lift Motor Capacity	80	29,120.00	513	0.029	0.006	7.47	0.0004	0.0001	7.51	6.81
Large Forklift ³	7,000-11,000	Drive Motor Capacity	576	209,664.00	513	0.029	0.006	53.78	0.0030	0.0006	54.04	49.03
		Lift Motor Capacity	160	58,240.00	513	0.029	0.006	14.94	0.0008	0.0002	15.01	13.62
Yard Truck	N/A	Drive Motor Capacity	512	186,368.00	513	0.029	0.006	47.80	0.0027	0.0006	48.04	43.58
Total								158.20	0.0089	0.0019	158.96	144.21
(Metric TPY)								143.5162	0.0081	0.0017		

¹. Based on SCE 2018 Corporate Sustainability Report.
<https://www.edison.com/content/dam/eix/documents/sustainability/eix-2018-sustainability-report.pdf>

². Based on CalEEMod default values for the Utility

3 CO₂e = CO₂ + 21 x (CH₄) + 298 x (N₂O).

Appendix B-2

Health Risk Assessment

Construction HRA Files

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**I-15 Industrial Phase II
Mojave Desert AQMD Air District, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	145.15	1000sqft	3.33	145,150.00	0
Unrefrigerated Warehouse-No Rail	134.78	1000sqft	3.09	134,780.00	0
Unrefrigerated Warehouse-Rail	134.78	1000sqft	3.09	134,780.00	0
Other Asphalt Surfaces	219.14	1000sqft	5.03	219,140.00	0
Parking Lot	182.00	Space	1.64	72,800.00	0
Parking Lot	43.30	1000sqft	0.99	43,300.00	0
City Park	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on applicant provided information. Divided land use area of warehouse into 2 and assigned one to "Rail" so that trucks and passenger vehicles can be modeled in a single run.

Construction Phase - Building Construction set equal to 6 Months based on project specific schedule.

Off-road Equipment - Default values.

Off-road Equipment - Default values.

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-road Equipment - Default values.

Off-road Equipment - Default values

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Per applicant provided information. Trip length set to 1,000 ft for onsite only operation of vehicles.

On-road Fugitive Dust - Default values

Grading - Per applicant zero import and export of grading materials.

Architectural Coating - Per applicant Low-VOC 50 g/L coatings to be used as PDF for the project.

Vehicle Trips - Based on Traffic Study. All mobile sources accounted for in Warehouse land uses.

Area Coating - Based on applicant provided information. Low-VOC coatings 50 g/L.

Energy Use - Default values

Water And Wastewater - Default values

Solid Waste - Default values

Construction Off-road Equipment Mitigation -

Area Mitigation - Per applicant provided information Low-VOC coatings will be utilized as part of the project as PDF.

Energy Mitigation -

Water Mitigation -

Waste Mitigation - Based on project PDF

Operational Off-Road Equipment - Offroad operational vehicles are assumed electric as PDF.

Fleet Mix - See additiional calculations sheets for basis.

Stationary Sources - Emergency Generators and Fire Pumps - None identified as part of the project.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	207,355.00	207,353.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	622,065.00	622,058.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaCoating	Area_Nonresidential_Exterior	207355	207353
tblAreaCoating	Area_Nonresidential_Interior	622065	622058
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	250
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	250
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	131.00
tblFleetMix	HHD	0.02	0.57
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDA	0.53	0.70
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.07
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.23
tblFleetMix	LHD1	0.03	0.29
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.6920e-003	0.08
tblFleetMix	LHD2	7.6920e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MHD	6.1550e-003	0.06
tblFleetMix	MHD	6.1550e-003	0.00
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	OBUS	4.8300e-004	0.00

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	VendorTripLength	6.60	0.19
tblTripsAndVMT	VendorTripLength	6.60	0.19
tblTripsAndVMT	VendorTripLength	6.60	0.19
tblTripsAndVMT	VendorTripLength	6.60	0.19
tblTripsAndVMT	VendorTripLength	6.60	0.19
tblTripsAndVMT	WorkerTripLength	16.80	0.19
tblTripsAndVMT	WorkerTripLength	16.80	0.19
tblTripsAndVMT	WorkerTripLength	16.80	0.19
tblTripsAndVMT	WorkerTripLength	16.80	0.19
tblTripsAndVMT	WorkerTripLength	16.80	0.19
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	CC_TL	6.60	40.00
tblVehicleTrips	CC_TL	6.60	16.60
tblVehicleTrips	CNW_TL	6.60	40.00
tblVehicleTrips	CNW_TL	6.60	16.60

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	CW_TL	14.70	40.00
tblVehicleTrips	CW_TL	14.70	16.60
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.74	1.88
tblVehicleTrips	ST_TR	1.74	7.63
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.74	1.88
tblVehicleTrips	SU_TR	1.74	7.63
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	1.74	1.88
tblVehicleTrips	WD_TR	1.74	7.63

2.0 Emissions Summary

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.1999	1.7539	1.9250	3.3000e-003	0.1760	0.0753	0.2512	0.0731	0.0703	0.1434	0.0000	288.4312	288.4312	0.0742	4.5500e-003	291.6434
Maximum	1.1999	1.7539	1.9250	3.3000e-003	0.1760	0.0753	0.2512	0.0731	0.0703	0.1434	0.0000	288.4312	288.4312	0.0742	4.5500e-003	291.6434

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.1999	1.7539	1.9249	3.3000e-003	0.0820	0.0753	0.1573	0.0337	0.0703	0.1040	0.0000	288.4309	288.4309	0.0742	4.5500e-003	291.6431
Maximum	1.1999	1.7539	1.9249	3.3000e-003	0.0820	0.0753	0.1573	0.0337	0.0703	0.1040	0.0000	288.4309	288.4309	0.0742	4.5500e-003	291.6431

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	53.40	0.00	37.40	53.91	0.01	27.48	0.00	0.00	0.00	0.00	0.00	0.00

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	10-4-2022	1-3-2023	0.0102	0.0102
3	1-4-2023	4-3-2023	0.8561	0.8561
4	4-4-2023	7-3-2023	0.6080	0.6080
5	7-4-2023	9-30-2023	0.6748	0.6748
		Highest	0.8561	0.8561

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Energy	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	652.8060	652.8060	0.0369	8.9400e-003	656.3927
Mobile	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,016.1432	5,016.1432	0.0451	0.5147	5,170.6584
Waste						0.0000	0.0000		0.0000	0.0000	88.0088	0.0000	88.0088	5.2012	0.0000	218.0380
Water						0.0000	0.0000		0.0000	0.0000	30.4252	226.6224	257.0476	3.1441	0.0761	358.3292
Total	2.2435	7.6922	7.3103	0.0548	3.6449	0.1161	3.7610	0.9885	0.1116	1.1001	118.4339	5,895.5871	6,014.0210	8.4273	0.5998	6,403.4347

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Energy	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	652.8060	652.8060	0.0369	8.9400e-003	656.3927
Mobile	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,016.143 2	5,016.143 2	0.0451	0.5147	5,170.658 4
Waste						0.0000	0.0000		0.0000	0.0000	22.0022	0.0000	22.0022	1.3003	0.0000	54.5095
Water						0.0000	0.0000		0.0000	0.0000	24.3401	182.3309	206.6710	2.5154	0.0609	287.7016
Total	2.2435	7.6922	7.3103	0.0548	3.6449	0.1161	3.7610	0.9885	0.1116	1.1001	46.3423	5,851.295 5	5,897.637 9	3.8977	0.5846	6,169.278 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.87	0.75	1.94	53.75	2.54	3.66

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2023	1/13/2023	5	10	
2	Grading	Grading	1/14/2023	2/24/2023	5	30	
3	Building Construction	Building Construction	2/25/2023	8/28/2023	5	131	

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	8/29/2023	9/25/2023	5	20
5	Architectural Coating	Architectural Coating	9/26/2023	10/23/2023	5	20

Acres of Grading (Site Preparation Phase): 5**Acres of Grading (Grading Phase): 90****Acres of Paving: 7.66****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 622,058; Non-Residential Outdoor: 207,353; Striped Parking Area: 16,200 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	10.00	0.00	0.00	0.19	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Grading	8	30.00	0.00	0.00	0.19	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Building Construction	9	328.00	128.00	0.00	0.19	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	0.19	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	0.19	0.19	0.19	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0433	0.0267	6.0000e-005		1.9800e-003	1.9800e-003		1.8200e-003	1.8200e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605
Total	4.1800e-003	0.0433	0.0267	6.0000e-005	0.0328	1.9800e-003	0.0347	0.0168	1.8200e-003	0.0187	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	3.0000e-005	2.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0140	0.0140	1.0000e-005	0.0000	0.0151
Total	7.0000e-005	3.0000e-005	2.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0140	0.0140	1.0000e-005	0.0000	0.0151

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	7.5800e-003	0.0000	7.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0433	0.0267	6.0000e-005		1.9800e-003	1.9800e-003		1.8200e-003	1.8200e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605
Total	4.1800e-003	0.0433	0.0267	6.0000e-005	0.0147	1.9800e-003	0.0167	7.5800e-003	1.8200e-003	9.4000e-003	0.0000	5.1191	5.1191	1.6600e-003	0.0000	5.1605

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	3.0000e-005	2.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0140	0.0140	1.0000e-005	0.0000	0.0151
Total	7.0000e-005	3.0000e-005	2.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0140	0.0140	1.0000e-005	0.0000	0.0151

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e-004	0.1381	0.0214	0.1594	0.0548	0.0197	0.0745	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	2.5000e-004	2.5800e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1262	0.1262	6.0000e-005	3.0000e-005	0.1356
Total	6.5000e-004	2.5000e-004	2.5800e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1262	0.1262	6.0000e-005	3.0000e-005	0.1356

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0621	0.0000	0.0621	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0621	0.0214	0.0835	0.0247	0.0197	0.0443	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	2.5000e-004	2.5800e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1262	0.1262	6.0000e-005	3.0000e-005	0.1356
Total	6.5000e-004	2.5000e-004	2.5800e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1262	0.1262	6.0000e-005	3.0000e-005	0.1356

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8321	151.8321	0.0361	0.0000	152.7351
Total	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8321	151.8321	0.0361	0.0000	152.7351

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0600e-003	0.1229	0.1189	2.2000e-004	1.6700e-003	1.5000e-004	1.8200e-003	5.1000e-004	1.4000e-004	6.5000e-004	0.0000	20.7030	20.7030	4.6000e-004	3.1900e-003	21.6654
Worker	0.0308	0.0120	0.1231	7.0000e-005	3.2600e-003	1.2000e-004	3.3700e-003	8.9000e-004	1.1000e-004	1.0000e-003	0.0000	6.0239	6.0239	2.7200e-003	1.2800e-003	6.4745
Total	0.0389	0.1349	0.2420	2.9000e-004	4.9300e-003	2.7000e-004	5.1900e-003	1.4000e-003	2.5000e-004	1.6500e-003	0.0000	26.7269	26.7269	3.1800e-003	4.4700e-003	28.1399

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8319	151.8319	0.0361	0.0000	152.7349
Total	0.1030	0.9422	1.0640	1.7600e-003		0.0458	0.0458		0.0431	0.0431	0.0000	151.8319	151.8319	0.0361	0.0000	152.7349

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0600e-003	0.1229	0.1189	2.2000e-004	1.6700e-003	1.5000e-004	1.8200e-003	5.1000e-004	1.4000e-004	6.5000e-004	0.0000	20.7030	20.7030	4.6000e-004	3.1900e-003	21.6654
Worker	0.0308	0.0120	0.1231	7.0000e-005	3.2600e-003	1.2000e-004	3.3700e-003	8.9000e-004	1.1000e-004	1.0000e-003	0.0000	6.0239	6.0239	2.7200e-003	1.2800e-003	6.4745
Total	0.0389	0.1349	0.2420	2.9000e-004	4.9300e-003	2.7000e-004	5.1900e-003	1.4000e-003	2.5000e-004	1.6500e-003	0.0000	26.7269	26.7269	3.1800e-003	4.4700e-003	28.1399

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0204	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	9.0000e-005	9.2000e-004	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0449	0.0449	2.0000e-005	1.0000e-005	0.0482
Total	2.3000e-004	9.0000e-005	9.2000e-004	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0449	0.0449	2.0000e-005	1.0000e-005	0.0482

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0204	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	9.0000e-005	9.2000e-004	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0449	0.0449	2.0000e-005	1.0000e-005	0.0482
Total	2.3000e-004	9.0000e-005	9.2000e-004	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0449	0.0449	2.0000e-005	1.0000e-005	0.0482

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.9818	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5000e-004	3.7000e-004	3.7800e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1851	0.1851	8.0000e-005	4.0000e-005	0.1989
Total	9.5000e-004	3.7000e-004	3.7800e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1851	0.1851	8.0000e-005	4.0000e-005	0.1989

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.9818	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5000e-004	3.7000e-004	3.7800e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1851	0.1851	8.0000e-005	4.0000e-005	0.1989
Total	9.5000e-004	3.7000e-004	3.7800e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1851	0.1851	8.0000e-005	4.0000e-005	0.1989

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,016.143 2	5,016.143 2	0.0451	0.5147	5,170.658 4
Unmitigated	0.4668	7.4356	7.0869	0.0532	3.6449	0.0966	3.7415	0.9885	0.0921	1.0805	0.0000	5,016.143 2	5,016.143 2	0.0451	0.5147	5,170.658 4

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Heavy Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	253.39	253.39	253.39	3,440,555	3,440,555
Unrefrigerated Warehouse-Rail	1,028.37	1,028.37	1,028.37	5,795,521	5,795,521
Total	1,281.76	1,281.76	1,281.76	9,236,075	9,236,075

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	40.00	40.00	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-Rail	16.60	16.60	16.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
General Heavy Industry	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Other Asphalt Surfaces	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Parking Lot	0.530590	0.056931	0.174803	0.137616	0.029294	0.007692	0.006155	0.022126	0.000483	0.000158	0.027801	0.000928	0.005423
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.290000	0.076100	0.060900	0.573000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-Rail	0.696000	0.074700	0.229300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	373.4724	373.4724	0.0315	3.8200e-003	375.3991
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	373.4724	373.4724	0.0315	3.8200e-003	375.3991
NaturalGas Mitigated	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3500e-003	5.1200e-003	280.9936
NaturalGas Unmitigated	0.0282	0.2566	0.2155	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3500e-003	5.1200e-003	280.9936

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	4.6927e+006	0.0253	0.2300	0.1932	1.3800e-003		0.0175	0.0175		0.0175	0.0175	0.0000	250.4203	250.4203	4.8000e-003	4.5900e-003	251.9084
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Unrefrigerated Warehouse-Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Total		0.0282	0.2566	0.2156	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3600e-003	5.1300e-003	280.9936

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	4.6927e+006	0.0253	0.2300	0.1932	1.3800e-003		0.0175	0.0175		0.0175	0.0175	0.0000	250.4203	250.4203	4.8000e-003	4.5900e-003	251.9084
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Unrefrigerated Warehouse-Rail	270908	1.4600e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4567	14.4567	2.8000e-004	2.7000e-004	14.5426
Total		0.0282	0.2566	0.2156	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.3337	279.3337	5.3600e-003	5.1300e-003	280.9936

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	1.43989e +006	255.3577	0.0216	2.6100e- 003	256.6751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	15155	2.6877	2.3000e- 004	3.0000e- 005	2.7015
Parking Lot	25480	4.5188	3.8000e- 004	5.0000e- 005	4.5421
Unrefrigerated Warehouse-No Rail	312690	55.4541	4.6800e- 003	5.7000e- 004	55.7402
Unrefrigerated Warehouse-Rail	312690	55.4541	4.6800e- 003	5.7000e- 004	55.7402
Total		373.4724	0.0315	3.8300e- 003	375.3991

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	1.43989e+006	255.3577	0.0216	2.6100e-003	256.6751
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	15155	2.6877	2.3000e-004	3.0000e-005	2.7015
Parking Lot	25480	4.5188	3.8000e-004	5.0000e-005	4.5421
Unrefrigerated Warehouse-No Rail	312690	55.4541	4.6800e-003	5.7000e-004	55.7402
Unrefrigerated Warehouse-Rail	312690	55.4541	4.6800e-003	5.7000e-004	55.7402
Total		373.4724	0.0315	3.8300e-003	375.3991

6.0 Area Detail**6.1 Mitigation Measures Area**

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Unmitigated	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.3000e-004	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Total	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.3000e-004	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164
Total	1.7484	7.0000e-005	7.9000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0154	0.0154	4.0000e-005	0.0000	0.0164

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	206.6710	2.5154	0.0609	287.7016
Unmitigated	257.0476	3.1441	0.0761	358.3292

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.62126	5.1647	4.4000e-004	5.0000e-005	5.1913
General Heavy Industry	33.5659 / 0	88.1599	1.1003	0.0266	123.5995
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.1679 / 0	81.8615	1.0217	0.0247	114.7692
Unrefrigerated Warehouse-Rail	31.1679 / 0	81.8615	1.0217	0.0247	114.7692
Total		257.0476	3.1441	0.0761	358.3292

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.62126	5.1647	4.4000e-004	5.0000e-005	5.1913
General Heavy Industry	26.8528 / 0	70.5280	0.8802	0.0213	98.8796
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	24.9343 / 0	65.4892	0.8173	0.0198	91.8153
Unrefrigerated Warehouse-Rail	24.9343 / 0	65.4892	0.8173	0.0198	91.8153
Total		206.6710	2.5154	0.0609	287.7016

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.0022	1.3003	0.0000	54.5095
Unmitigated	88.0088	5.2012	0.0000	218.0380

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.19	0.0386	2.2800e-003	0.0000	0.0956
General Heavy Industry	179.99	36.5363	2.1592	0.0000	90.5172
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	126.69	25.7169	1.5198	0.0000	63.7126
Unrefrigerated Warehouse-Rail	126.69	25.7169	1.5198	0.0000	63.7126
Total		88.0088	5.2012	0.0000	218.0380

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.0475	9.6400e-003	5.7000e-004	0.0000	0.0239
General Heavy Industry	44.9975	9.1341	0.5398	0.0000	22.6293
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.6725	6.4292	0.3800	0.0000	15.9282
Unrefrigerated Warehouse-Rail	31.6725	6.4292	0.3800	0.0000	15.9282
Total		22.0022	1.3003	0.0000	54.5095

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	8.00	260			Diesel

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

I-15 Industrial Phase II - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.9.0
** Lakes Environmental Software Inc.
** Date: 4/6/2022
** File: C:\Users\dlarocca\Desktop\Air Quality
Work\Lakes\Poplar18Const\Poplar18Const.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Users\apoll\Desktop\HARP2\HARP\I15 Industrial Park\I15 Industrial
  MODELOPT DFAULT CONC
  AVERTIME 1 PERIOD
  URBANOPT 2180000
  POLLUTID PM_10
  RUNORNOT RUN
  ERRORFIL Poplar18Const.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Onsite Construction
** PREFIX
** Length of Side = 8.60
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 6.80
** SZINIT = 3.16
** Nodes = 12
** 463717.865, 3808519.935, 1098.99, 3.40, 4.00
** 464111.113, 3808518.865, 1095.00, 3.40, 4.00
** 464111.648, 3808492.113, 1096.01, 3.40, 4.00

```

** 463717.330, 3808492.648, 1099.06, 3.40, 4.00
 ** 463717.330, 3808463.756, 1100.00, 3.40, 4.00
 ** 464111.113, 3808462.151, 1096.98, 3.40, 4.00
 ** 464111.648, 3808432.189, 1097.04, 3.40, 4.00
 ** 463716.795, 3808433.795, 1100.08, 3.40, 4.00
 ** 463716.795, 3808402.228, 1101.02, 3.40, 4.00
 ** 464110.578, 3808400.623, 1097.99, 3.40, 4.00
 ** 464110.578, 3808371.731, 1098.01, 3.40, 4.00
 ** 463715.725, 3808371.731, 1101.97, 3.40, 4.00

** -----

LOCATION L0000001	VOLUME	463722.165	3808519.923	1098.80
LOCATION L0000002	VOLUME	463730.765	3808519.900	1098.56
LOCATION L0000003	VOLUME	463739.365	3808519.876	1098.31
LOCATION L0000004	VOLUME	463747.965	3808519.853	1098.06
LOCATION L0000005	VOLUME	463756.565	3808519.829	1098.00
LOCATION L0000006	VOLUME	463765.165	3808519.806	1098.00
LOCATION L0000007	VOLUME	463773.765	3808519.783	1098.00
LOCATION L0000008	VOLUME	463782.365	3808519.759	1097.99
LOCATION L0000009	VOLUME	463790.965	3808519.736	1097.95
LOCATION L0000010	VOLUME	463799.565	3808519.712	1097.92
LOCATION L0000011	VOLUME	463808.165	3808519.689	1097.88
LOCATION L0000012	VOLUME	463816.764	3808519.666	1097.88
LOCATION L0000013	VOLUME	463825.364	3808519.642	1097.88
LOCATION L0000014	VOLUME	463833.964	3808519.619	1097.88
LOCATION L0000015	VOLUME	463842.564	3808519.595	1097.88
LOCATION L0000016	VOLUME	463851.164	3808519.572	1097.88
LOCATION L0000017	VOLUME	463859.764	3808519.549	1097.88
LOCATION L0000018	VOLUME	463868.364	3808519.525	1097.88
LOCATION L0000019	VOLUME	463876.964	3808519.502	1097.68
LOCATION L0000020	VOLUME	463885.564	3808519.478	1097.42
LOCATION L0000021	VOLUME	463894.164	3808519.455	1097.17
LOCATION L0000022	VOLUME	463902.764	3808519.432	1096.99
LOCATION L0000023	VOLUME	463911.364	3808519.408	1096.96
LOCATION L0000024	VOLUME	463919.964	3808519.385	1096.92
LOCATION L0000025	VOLUME	463928.564	3808519.361	1096.89
LOCATION L0000026	VOLUME	463937.164	3808519.338	1096.89
LOCATION L0000027	VOLUME	463945.764	3808519.315	1096.89
LOCATION L0000028	VOLUME	463954.364	3808519.291	1096.89
LOCATION L0000029	VOLUME	463962.964	3808519.268	1096.89
LOCATION L0000030	VOLUME	463971.564	3808519.244	1096.89
LOCATION L0000031	VOLUME	463980.164	3808519.221	1096.89
LOCATION L0000032	VOLUME	463988.764	3808519.198	1096.89
LOCATION L0000033	VOLUME	463997.364	3808519.174	1096.67
LOCATION L0000034	VOLUME	464005.964	3808519.151	1096.42
LOCATION L0000035	VOLUME	464014.564	3808519.127	1096.16
LOCATION L0000036	VOLUME	464023.164	3808519.104	1096.00
LOCATION L0000037	VOLUME	464031.764	3808519.081	1096.00
LOCATION L0000038	VOLUME	464040.364	3808519.057	1096.00
LOCATION L0000039	VOLUME	464048.964	3808519.034	1096.00
LOCATION L0000040	VOLUME	464057.564	3808519.010	1095.97

LOCATION	L0000041	VOLUME	464066.164	3808518.987	1095.95
LOCATION	L0000042	VOLUME	464074.764	3808518.964	1095.92
LOCATION	L0000043	VOLUME	464083.363	3808518.940	1095.80
LOCATION	L0000044	VOLUME	464091.963	3808518.917	1095.54
LOCATION	L0000045	VOLUME	464100.563	3808518.893	1095.28
LOCATION	L0000046	VOLUME	464109.163	3808518.870	1095.02
LOCATION	L0000047	VOLUME	464111.246	3808512.216	1095.12
LOCATION	L0000048	VOLUME	464111.418	3808503.618	1095.41
LOCATION	L0000049	VOLUME	464111.590	3808495.019	1095.70
LOCATION	L0000050	VOLUME	464105.955	3808492.121	1095.82
LOCATION	L0000051	VOLUME	464097.355	3808492.132	1095.88
LOCATION	L0000052	VOLUME	464088.755	3808492.144	1095.94
LOCATION	L0000053	VOLUME	464080.155	3808492.156	1096.00
LOCATION	L0000054	VOLUME	464071.555	3808492.167	1096.22
LOCATION	L0000055	VOLUME	464062.955	3808492.179	1096.45
LOCATION	L0000056	VOLUME	464054.355	3808492.191	1096.68
LOCATION	L0000057	VOLUME	464045.755	3808492.202	1096.79
LOCATION	L0000058	VOLUME	464037.155	3808492.214	1096.79
LOCATION	L0000059	VOLUME	464028.555	3808492.226	1096.79
LOCATION	L0000060	VOLUME	464019.955	3808492.237	1096.79
LOCATION	L0000061	VOLUME	464011.355	3808492.249	1096.85
LOCATION	L0000062	VOLUME	464002.755	3808492.261	1096.91
LOCATION	L0000063	VOLUME	463994.155	3808492.272	1096.97
LOCATION	L0000064	VOLUME	463985.555	3808492.284	1097.00
LOCATION	L0000065	VOLUME	463976.955	3808492.296	1097.00
LOCATION	L0000066	VOLUME	463968.355	3808492.307	1097.00
LOCATION	L0000067	VOLUME	463959.755	3808492.319	1097.01
LOCATION	L0000068	VOLUME	463951.155	3808492.331	1097.23
LOCATION	L0000069	VOLUME	463942.555	3808492.342	1097.46
LOCATION	L0000070	VOLUME	463933.955	3808492.354	1097.68
LOCATION	L0000071	VOLUME	463925.355	3808492.366	1097.79
LOCATION	L0000072	VOLUME	463916.755	3808492.377	1097.79
LOCATION	L0000073	VOLUME	463908.155	3808492.389	1097.79
LOCATION	L0000074	VOLUME	463899.555	3808492.401	1097.79
LOCATION	L0000075	VOLUME	463890.955	3808492.413	1097.85
LOCATION	L0000076	VOLUME	463882.355	3808492.424	1097.91
LOCATION	L0000077	VOLUME	463873.755	3808492.436	1097.97
LOCATION	L0000078	VOLUME	463865.155	3808492.448	1098.00
LOCATION	L0000079	VOLUME	463856.555	3808492.459	1098.00
LOCATION	L0000080	VOLUME	463847.955	3808492.471	1098.00
LOCATION	L0000081	VOLUME	463839.356	3808492.483	1098.02
LOCATION	L0000082	VOLUME	463830.756	3808492.494	1098.24
LOCATION	L0000083	VOLUME	463822.156	3808492.506	1098.46
LOCATION	L0000084	VOLUME	463813.556	3808492.518	1098.69
LOCATION	L0000085	VOLUME	463804.956	3808492.529	1098.78
LOCATION	L0000086	VOLUME	463796.356	3808492.541	1098.78
LOCATION	L0000087	VOLUME	463787.756	3808492.553	1098.78
LOCATION	L0000088	VOLUME	463779.156	3808492.564	1098.78
LOCATION	L0000089	VOLUME	463770.556	3808492.576	1098.78
LOCATION	L0000090	VOLUME	463761.956	3808492.588	1098.78

LOCATION	L0000091	VOLUME	463753.356	3808492.599	1098.78
LOCATION	L0000092	VOLUME	463744.756	3808492.611	1098.82
LOCATION	L0000093	VOLUME	463736.156	3808492.623	1098.88
LOCATION	L0000094	VOLUME	463727.556	3808492.634	1098.94
LOCATION	L0000095	VOLUME	463718.956	3808492.646	1099.03
LOCATION	L0000096	VOLUME	463717.330	3808485.674	1099.10
LOCATION	L0000097	VOLUME	463717.330	3808477.074	1099.36
LOCATION	L0000098	VOLUME	463717.330	3808468.474	1099.62
LOCATION	L0000099	VOLUME	463721.212	3808463.741	1099.74
LOCATION	L0000100	VOLUME	463729.812	3808463.705	1099.74
LOCATION	L0000101	VOLUME	463738.412	3808463.670	1099.74
LOCATION	L0000102	VOLUME	463747.012	3808463.635	1099.74
LOCATION	L0000103	VOLUME	463755.612	3808463.600	1099.61
LOCATION	L0000104	VOLUME	463764.212	3808463.565	1099.39
LOCATION	L0000105	VOLUME	463772.812	3808463.530	1099.18
LOCATION	L0000106	VOLUME	463781.412	3808463.495	1099.00
LOCATION	L0000107	VOLUME	463790.012	3808463.460	1099.00
LOCATION	L0000108	VOLUME	463798.612	3808463.425	1099.00
LOCATION	L0000109	VOLUME	463807.212	3808463.390	1099.00
LOCATION	L0000110	VOLUME	463815.811	3808463.355	1098.95
LOCATION	L0000111	VOLUME	463824.411	3808463.320	1098.88
LOCATION	L0000112	VOLUME	463833.011	3808463.285	1098.81
LOCATION	L0000113	VOLUME	463841.611	3808463.250	1098.76
LOCATION	L0000114	VOLUME	463850.211	3808463.215	1098.76
LOCATION	L0000115	VOLUME	463858.811	3808463.180	1098.76
LOCATION	L0000116	VOLUME	463867.411	3808463.145	1098.76
LOCATION	L0000117	VOLUME	463876.011	3808463.110	1098.61
LOCATION	L0000118	VOLUME	463884.611	3808463.075	1098.39
LOCATION	L0000119	VOLUME	463893.211	3808463.039	1098.17
LOCATION	L0000120	VOLUME	463901.811	3808463.004	1098.00
LOCATION	L0000121	VOLUME	463910.411	3808462.969	1098.00
LOCATION	L0000122	VOLUME	463919.011	3808462.934	1098.00
LOCATION	L0000123	VOLUME	463927.611	3808462.899	1098.00
LOCATION	L0000124	VOLUME	463936.210	3808462.864	1097.95
LOCATION	L0000125	VOLUME	463944.810	3808462.829	1097.89
LOCATION	L0000126	VOLUME	463953.410	3808462.794	1097.82
LOCATION	L0000127	VOLUME	463962.010	3808462.759	1097.77
LOCATION	L0000128	VOLUME	463970.610	3808462.724	1097.77
LOCATION	L0000129	VOLUME	463979.210	3808462.689	1097.78
LOCATION	L0000130	VOLUME	463987.810	3808462.654	1097.78
LOCATION	L0000131	VOLUME	463996.410	3808462.619	1097.78
LOCATION	L0000132	VOLUME	464005.010	3808462.584	1097.78
LOCATION	L0000133	VOLUME	464013.610	3808462.549	1097.78
LOCATION	L0000134	VOLUME	464022.210	3808462.514	1097.72
LOCATION	L0000135	VOLUME	464030.810	3808462.479	1097.50
LOCATION	L0000136	VOLUME	464039.410	3808462.444	1097.28
LOCATION	L0000137	VOLUME	464048.010	3808462.408	1097.05
LOCATION	L0000138	VOLUME	464056.609	3808462.373	1096.95
LOCATION	L0000139	VOLUME	464065.209	3808462.338	1096.89
LOCATION	L0000140	VOLUME	464073.809	3808462.303	1096.83

LOCATION	L0000141	VOLUME	464082.409	3808462.268	1096.79
LOCATION	L0000142	VOLUME	464091.009	3808462.233	1096.79
LOCATION	L0000143	VOLUME	464099.609	3808462.198	1096.79
LOCATION	L0000144	VOLUME	464108.209	3808462.163	1096.79
LOCATION	L0000145	VOLUME	464111.215	3808456.456	1096.94
LOCATION	L0000146	VOLUME	464111.369	3808447.858	1096.97
LOCATION	L0000147	VOLUME	464111.522	3808439.259	1096.98
LOCATION	L0000148	VOLUME	464110.119	3808432.196	1097.00
LOCATION	L0000149	VOLUME	464101.519	3808432.231	1097.22
LOCATION	L0000150	VOLUME	464092.919	3808432.266	1097.45
LOCATION	L0000151	VOLUME	464084.319	3808432.301	1097.67
LOCATION	L0000152	VOLUME	464075.720	3808432.336	1097.79
LOCATION	L0000153	VOLUME	464067.120	3808432.370	1097.79
LOCATION	L0000154	VOLUME	464058.520	3808432.405	1097.78
LOCATION	L0000155	VOLUME	464049.920	3808432.440	1097.78
LOCATION	L0000156	VOLUME	464041.320	3808432.475	1097.85
LOCATION	L0000157	VOLUME	464032.720	3808432.510	1097.91
LOCATION	L0000158	VOLUME	464024.120	3808432.545	1097.97
LOCATION	L0000159	VOLUME	464015.520	3808432.580	1098.00
LOCATION	L0000160	VOLUME	464006.920	3808432.615	1098.00
LOCATION	L0000161	VOLUME	463998.320	3808432.650	1098.00
LOCATION	L0000162	VOLUME	463989.720	3808432.685	1098.00
LOCATION	L0000163	VOLUME	463981.120	3808432.720	1098.00
LOCATION	L0000164	VOLUME	463972.520	3808432.755	1098.00
LOCATION	L0000165	VOLUME	463963.920	3808432.790	1098.00
LOCATION	L0000166	VOLUME	463955.321	3808432.825	1098.12
LOCATION	L0000167	VOLUME	463946.721	3808432.860	1098.34
LOCATION	L0000168	VOLUME	463938.121	3808432.895	1098.56
LOCATION	L0000169	VOLUME	463929.521	3808432.930	1098.77
LOCATION	L0000170	VOLUME	463920.921	3808432.965	1098.77
LOCATION	L0000171	VOLUME	463912.321	3808433.000	1098.76
LOCATION	L0000172	VOLUME	463903.721	3808433.035	1098.76
LOCATION	L0000173	VOLUME	463895.121	3808433.070	1098.80
LOCATION	L0000174	VOLUME	463886.521	3808433.105	1098.87
LOCATION	L0000175	VOLUME	463877.921	3808433.140	1098.94
LOCATION	L0000176	VOLUME	463869.321	3808433.175	1099.02
LOCATION	L0000177	VOLUME	463860.721	3808433.210	1099.23
LOCATION	L0000178	VOLUME	463852.121	3808433.244	1099.45
LOCATION	L0000179	VOLUME	463843.521	3808433.279	1099.67
LOCATION	L0000180	VOLUME	463834.922	3808433.314	1099.75
LOCATION	L0000181	VOLUME	463826.322	3808433.349	1099.75
LOCATION	L0000182	VOLUME	463817.722	3808433.384	1099.75
LOCATION	L0000183	VOLUME	463809.122	3808433.419	1099.75
LOCATION	L0000184	VOLUME	463800.522	3808433.454	1099.75
LOCATION	L0000185	VOLUME	463791.922	3808433.489	1099.75
LOCATION	L0000186	VOLUME	463783.322	3808433.524	1099.75
LOCATION	L0000187	VOLUME	463774.722	3808433.559	1099.79
LOCATION	L0000188	VOLUME	463766.122	3808433.594	1099.86
LOCATION	L0000189	VOLUME	463757.522	3808433.629	1099.94
LOCATION	L0000190	VOLUME	463748.922	3808433.664	1100.00

LOCATION	L0000191	VOLUME	463740.322	3808433.699	1100.00
LOCATION	L0000192	VOLUME	463731.722	3808433.734	1100.00
LOCATION	L0000193	VOLUME	463723.122	3808433.769	1100.00
LOCATION	L0000194	VOLUME	463716.795	3808431.522	1100.09
LOCATION	L0000195	VOLUME	463716.795	3808422.922	1100.20
LOCATION	L0000196	VOLUME	463716.795	3808414.322	1100.45
LOCATION	L0000197	VOLUME	463716.795	3808405.722	1100.71
LOCATION	L0000198	VOLUME	463721.900	3808402.207	1100.79
LOCATION	L0000199	VOLUME	463730.500	3808402.172	1100.79
LOCATION	L0000200	VOLUME	463739.100	3808402.137	1100.79
LOCATION	L0000201	VOLUME	463747.700	3808402.102	1100.79
LOCATION	L0000202	VOLUME	463756.300	3808402.067	1100.80
LOCATION	L0000203	VOLUME	463764.900	3808402.032	1100.80
LOCATION	L0000204	VOLUME	463773.500	3808401.997	1100.80
LOCATION	L0000205	VOLUME	463782.100	3808401.962	1100.74
LOCATION	L0000206	VOLUME	463790.700	3808401.926	1100.51
LOCATION	L0000207	VOLUME	463799.299	3808401.891	1100.29
LOCATION	L0000208	VOLUME	463807.899	3808401.856	1100.06
LOCATION	L0000209	VOLUME	463816.499	3808401.821	1100.00
LOCATION	L0000210	VOLUME	463825.099	3808401.786	1100.00
LOCATION	L0000211	VOLUME	463833.699	3808401.751	1100.00
LOCATION	L0000212	VOLUME	463842.299	3808401.716	1099.99
LOCATION	L0000213	VOLUME	463850.899	3808401.681	1099.93
LOCATION	L0000214	VOLUME	463859.499	3808401.646	1099.88
LOCATION	L0000215	VOLUME	463868.099	3808401.611	1099.82
LOCATION	L0000216	VOLUME	463876.699	3808401.576	1099.81
LOCATION	L0000217	VOLUME	463885.299	3808401.541	1099.81
LOCATION	L0000218	VOLUME	463893.899	3808401.506	1099.81
LOCATION	L0000219	VOLUME	463902.499	3808401.471	1099.75
LOCATION	L0000220	VOLUME	463911.099	3808401.436	1099.51
LOCATION	L0000221	VOLUME	463919.698	3808401.401	1099.28
LOCATION	L0000222	VOLUME	463928.298	3808401.366	1099.05
LOCATION	L0000223	VOLUME	463936.898	3808401.331	1098.96
LOCATION	L0000224	VOLUME	463945.498	3808401.295	1098.91
LOCATION	L0000225	VOLUME	463954.098	3808401.260	1098.86
LOCATION	L0000226	VOLUME	463962.698	3808401.225	1098.82
LOCATION	L0000227	VOLUME	463971.298	3808401.190	1098.83
LOCATION	L0000228	VOLUME	463979.898	3808401.155	1098.83
LOCATION	L0000229	VOLUME	463988.498	3808401.120	1098.83
LOCATION	L0000230	VOLUME	463997.098	3808401.085	1098.63
LOCATION	L0000231	VOLUME	464005.698	3808401.050	1098.40
LOCATION	L0000232	VOLUME	464014.298	3808401.015	1098.16
LOCATION	L0000233	VOLUME	464022.898	3808400.980	1098.00
LOCATION	L0000234	VOLUME	464031.498	3808400.945	1098.00
LOCATION	L0000235	VOLUME	464040.097	3808400.910	1098.00
LOCATION	L0000236	VOLUME	464048.697	3808400.875	1098.00
LOCATION	L0000237	VOLUME	464057.297	3808400.840	1098.00
LOCATION	L0000238	VOLUME	464065.897	3808400.805	1098.00
LOCATION	L0000239	VOLUME	464074.497	3808400.770	1098.00
LOCATION	L0000240	VOLUME	464083.097	3808400.735	1097.98

LOCATION	L0000241	VOLUME	464091.697	3808400.700	1097.94
LOCATION	L0000242	VOLUME	464100.297	3808400.665	1097.89
LOCATION	L0000243	VOLUME	464108.897	3808400.629	1097.85
LOCATION	L0000244	VOLUME	464110.578	3808393.704	1097.98
LOCATION	L0000245	VOLUME	464110.578	3808385.104	1097.99
LOCATION	L0000246	VOLUME	464110.578	3808376.504	1097.99
LOCATION	L0000247	VOLUME	464106.751	3808371.731	1098.00
LOCATION	L0000248	VOLUME	464098.151	3808371.731	1098.00
LOCATION	L0000249	VOLUME	464089.551	3808371.731	1098.00
LOCATION	L0000250	VOLUME	464080.951	3808371.731	1098.00
LOCATION	L0000251	VOLUME	464072.351	3808371.731	1098.21
LOCATION	L0000252	VOLUME	464063.751	3808371.731	1098.44
LOCATION	L0000253	VOLUME	464055.151	3808371.731	1098.67
LOCATION	L0000254	VOLUME	464046.551	3808371.731	1098.81
LOCATION	L0000255	VOLUME	464037.951	3808371.731	1098.81
LOCATION	L0000256	VOLUME	464029.351	3808371.731	1098.81
LOCATION	L0000257	VOLUME	464020.751	3808371.731	1098.81
LOCATION	L0000258	VOLUME	464012.151	3808371.731	1098.86
LOCATION	L0000259	VOLUME	464003.551	3808371.731	1098.91
LOCATION	L0000260	VOLUME	463994.951	3808371.731	1098.97
LOCATION	L0000261	VOLUME	463986.351	3808371.731	1099.10
LOCATION	L0000262	VOLUME	463977.751	3808371.731	1099.33
LOCATION	L0000263	VOLUME	463969.151	3808371.731	1099.56
LOCATION	L0000264	VOLUME	463960.551	3808371.731	1099.79
LOCATION	L0000265	VOLUME	463951.951	3808371.731	1099.81
LOCATION	L0000266	VOLUME	463943.351	3808371.731	1099.81
LOCATION	L0000267	VOLUME	463934.751	3808371.731	1099.81
LOCATION	L0000268	VOLUME	463926.151	3808371.731	1099.83
LOCATION	L0000269	VOLUME	463917.551	3808371.731	1099.89
LOCATION	L0000270	VOLUME	463908.951	3808371.731	1099.94
LOCATION	L0000271	VOLUME	463900.351	3808371.731	1100.00
LOCATION	L0000272	VOLUME	463891.751	3808371.731	1100.00
LOCATION	L0000273	VOLUME	463883.151	3808371.731	1100.00
LOCATION	L0000274	VOLUME	463874.551	3808371.731	1100.00
LOCATION	L0000275	VOLUME	463865.951	3808371.731	1100.11
LOCATION	L0000276	VOLUME	463857.351	3808371.731	1100.34
LOCATION	L0000277	VOLUME	463848.751	3808371.731	1100.57
LOCATION	L0000278	VOLUME	463840.151	3808371.731	1100.80
LOCATION	L0000279	VOLUME	463831.551	3808371.731	1100.81
LOCATION	L0000280	VOLUME	463822.951	3808371.731	1100.81
LOCATION	L0000281	VOLUME	463814.351	3808371.731	1100.81
LOCATION	L0000282	VOLUME	463805.751	3808371.731	1100.83
LOCATION	L0000283	VOLUME	463797.151	3808371.731	1100.89
LOCATION	L0000284	VOLUME	463788.551	3808371.731	1100.94
LOCATION	L0000285	VOLUME	463779.951	3808371.731	1101.00
LOCATION	L0000286	VOLUME	463771.351	3808371.731	1101.00
LOCATION	L0000287	VOLUME	463762.751	3808371.731	1101.00
LOCATION	L0000288	VOLUME	463754.151	3808371.731	1101.00
LOCATION	L0000289	VOLUME	463745.551	3808371.731	1101.12
LOCATION	L0000290	VOLUME	463736.951	3808371.731	1101.35

LOCATION L0000291 VOLUME 463728.351 3808371.731 1101.58
LOCATION L0000292 VOLUME 463719.751 3808371.731 1101.81

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000001	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000002	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000003	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000004	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000005	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000006	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000007	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000008	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000009	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000010	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000011	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000012	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000013	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000014	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000015	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000016	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000017	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000018	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000019	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000020	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000021	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000022	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000023	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000024	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000025	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000026	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000027	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000028	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000029	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000030	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000031	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000032	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000033	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000034	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000035	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000036	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000037	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000038	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000039	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000040	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000041	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000042	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000043	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000044	0.0034246575	3.40	4.00	3.16
SRCPARAM L0000045	0.0034246575	3.40	4.00	3.16

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

**

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED Poplar18Const.rou

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE "..\I15 Industrial Park8.16.21\723825\723825R.SFC"

PROFFILE "..\I15 Industrial Park8.16.21\723825\723825R.PFL"

SURFDATA 23131 2009

UAIRDATA 3160 2009 DESERT_ROCK

PROFBASE 879.4 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST POPLAR18CONST.AD\01H1GALL.PLT 31

PLOTFILE PERIOD ALL POPLAR18CONST.AD\PE00GALL.PLT 32

SUMMFILE Poplar18Const.sum

OU FINISHED

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***

*** 13:53:49

PAGE 1

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** MODEL SETUP OPTIONS SUMMARY

- - - - -
- - - - -
**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

**NO GAS DEPOSITION Data Provided.

**NO PARTICLE DEPOSITION Data Provided.

**Model Uses NO DRY DEPLETION. DRYDPLT = F

**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 292 Source(s),
for Total of 1 Urban Area(s):

Urban Population = 2180000.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:

CCVR_Sub - Meteorological data includes CCVR substitutions

TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM₁₀

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 292 Source(s); 1 Source Group(s); and 3101
Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 292 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)

Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)

Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and

Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 879.40 ; Decay
Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ;
Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 4.0 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: Poplar18Const.err

**File for Summary of Results: Poplar18Const.sum

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 ***
*** 13:53:49

PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
	SOURCE	EMISSION	RATE					
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
	ID	SCALAR	VARY					
		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)

(METERS)

BY

L0000001	0	0.34247E-02	463722.2	3808519.9	1098.8	3.40	4.00
3.16 YES							
L0000002	0	0.34247E-02	463730.8	3808519.9	1098.6	3.40	4.00
3.16 YES							
L0000003	0	0.34247E-02	463739.4	3808519.9	1098.3	3.40	4.00
3.16 YES							
L0000004	0	0.34247E-02	463748.0	3808519.9	1098.1	3.40	4.00
3.16 YES							
L0000005	0	0.34247E-02	463756.6	3808519.8	1098.0	3.40	4.00
3.16 YES							
L0000006	0	0.34247E-02	463765.2	3808519.8	1098.0	3.40	4.00
3.16 YES							
L0000007	0	0.34247E-02	463773.8	3808519.8	1098.0	3.40	4.00
3.16 YES							
L0000008	0	0.34247E-02	463782.4	3808519.8	1098.0	3.40	4.00
3.16 YES							
L0000009	0	0.34247E-02	463791.0	3808519.7	1098.0	3.40	4.00
3.16 YES							
L0000010	0	0.34247E-02	463799.6	3808519.7	1097.9	3.40	4.00
3.16 YES							
L0000011	0	0.34247E-02	463808.2	3808519.7	1097.9	3.40	4.00
3.16 YES							
L0000012	0	0.34247E-02	463816.8	3808519.7	1097.9	3.40	4.00
3.16 YES							
L0000013	0	0.34247E-02	463825.4	3808519.6	1097.9	3.40	4.00
3.16 YES							
L0000014	0	0.34247E-02	463834.0	3808519.6	1097.9	3.40	4.00
3.16 YES							
L0000015	0	0.34247E-02	463842.6	3808519.6	1097.9	3.40	4.00
3.16 YES							
L0000016	0	0.34247E-02	463851.2	3808519.6	1097.9	3.40	4.00
3.16 YES							
L0000017	0	0.34247E-02	463859.8	3808519.5	1097.9	3.40	4.00
3.16 YES							
L0000018	0	0.34247E-02	463868.4	3808519.5	1097.9	3.40	4.00
3.16 YES							
L0000019	0	0.34247E-02	463877.0	3808519.5	1097.7	3.40	4.00
3.16 YES							
L0000020	0	0.34247E-02	463885.6	3808519.5	1097.4	3.40	4.00
3.16 YES							
L0000021	0	0.34247E-02	463894.2	3808519.5	1097.2	3.40	4.00
3.16 YES							
L0000022	0	0.34247E-02	463902.8	3808519.4	1097.0	3.40	4.00
3.16 YES							
L0000023	0	0.34247E-02	463911.4	3808519.4	1097.0	3.40	4.00
3.16 YES							

L0000024	0	0.34247E-02	463920.0	3808519.4	1096.9	3.40	4.00
3.16 YES							
L0000025	0	0.34247E-02	463928.6	3808519.4	1096.9	3.40	4.00
3.16 YES							
L0000026	0	0.34247E-02	463937.2	3808519.3	1096.9	3.40	4.00
3.16 YES							
L0000027	0	0.34247E-02	463945.8	3808519.3	1096.9	3.40	4.00
3.16 YES							
L0000028	0	0.34247E-02	463954.4	3808519.3	1096.9	3.40	4.00
3.16 YES							
L0000029	0	0.34247E-02	463963.0	3808519.3	1096.9	3.40	4.00
3.16 YES							
L0000030	0	0.34247E-02	463971.6	3808519.2	1096.9	3.40	4.00
3.16 YES							
L0000031	0	0.34247E-02	463980.2	3808519.2	1096.9	3.40	4.00
3.16 YES							
L0000032	0	0.34247E-02	463988.8	3808519.2	1096.9	3.40	4.00
3.16 YES							
L0000033	0	0.34247E-02	463997.4	3808519.2	1096.7	3.40	4.00
3.16 YES							
L0000034	0	0.34247E-02	464006.0	3808519.2	1096.4	3.40	4.00
3.16 YES							
L0000035	0	0.34247E-02	464014.6	3808519.1	1096.2	3.40	4.00
3.16 YES							
L0000036	0	0.34247E-02	464023.2	3808519.1	1096.0	3.40	4.00
3.16 YES							
L0000037	0	0.34247E-02	464031.8	3808519.1	1096.0	3.40	4.00
3.16 YES							
L0000038	0	0.34247E-02	464040.4	3808519.1	1096.0	3.40	4.00
3.16 YES							
L0000039	0	0.34247E-02	464049.0	3808519.0	1096.0	3.40	4.00
3.16 YES							
L0000040	0	0.34247E-02	464057.6	3808519.0	1096.0	3.40	4.00
3.16 YES							

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 3

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE			BASE	RELEASE	INIT.
INIT.	URBAN	EMISSION RATE					
SZ	SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR VARY					
		CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)

(METERS)		BY						
-----		-----						
-----		-----						
L0000041		0	0.34247E-02	464066.2	3808519.0	1096.0	3.40	4.00
3.16	YES							
L0000042		0	0.34247E-02	464074.8	3808519.0	1095.9	3.40	4.00
3.16	YES							
L0000043		0	0.34247E-02	464083.4	3808518.9	1095.8	3.40	4.00
3.16	YES							
L0000044		0	0.34247E-02	464092.0	3808518.9	1095.5	3.40	4.00
3.16	YES							
L0000045		0	0.34247E-02	464100.6	3808518.9	1095.3	3.40	4.00
3.16	YES							
L0000046		0	0.34247E-02	464109.2	3808518.9	1095.0	3.40	4.00
3.16	YES							
L0000047		0	0.34247E-02	464111.2	3808512.2	1095.1	3.40	4.00
3.16	YES							
L0000048		0	0.34247E-02	464111.4	3808503.6	1095.4	3.40	4.00
3.16	YES							
L0000049		0	0.34247E-02	464111.6	3808495.0	1095.7	3.40	4.00
3.16	YES							
L0000050		0	0.34247E-02	464106.0	3808492.1	1095.8	3.40	4.00
3.16	YES							
L0000051		0	0.34247E-02	464097.4	3808492.1	1095.9	3.40	4.00
3.16	YES							
L0000052		0	0.34247E-02	464088.8	3808492.1	1095.9	3.40	4.00
3.16	YES							
L0000053		0	0.34247E-02	464080.2	3808492.2	1096.0	3.40	4.00
3.16	YES							
L0000054		0	0.34247E-02	464071.6	3808492.2	1096.2	3.40	4.00
3.16	YES							
L0000055		0	0.34247E-02	464063.0	3808492.2	1096.5	3.40	4.00
3.16	YES							
L0000056		0	0.34247E-02	464054.4	3808492.2	1096.7	3.40	4.00
3.16	YES							
L0000057		0	0.34247E-02	464045.8	3808492.2	1096.8	3.40	4.00
3.16	YES							
L0000058		0	0.34247E-02	464037.2	3808492.2	1096.8	3.40	4.00
3.16	YES							
L0000059		0	0.34247E-02	464028.6	3808492.2	1096.8	3.40	4.00
3.16	YES							
L0000060		0	0.34247E-02	464020.0	3808492.2	1096.8	3.40	4.00
3.16	YES							
L0000061		0	0.34247E-02	464011.4	3808492.2	1096.8	3.40	4.00
3.16	YES							
L0000062		0	0.34247E-02	464002.8	3808492.3	1096.9	3.40	4.00
3.16	YES							
L0000063		0	0.34247E-02	463994.2	3808492.3	1097.0	3.40	4.00
3.16	YES							

L0000064	0	0.34247E-02	463985.6	3808492.3	1097.0	3.40	4.00
3.16 YES							
L0000065	0	0.34247E-02	463977.0	3808492.3	1097.0	3.40	4.00
3.16 YES							
L0000066	0	0.34247E-02	463968.4	3808492.3	1097.0	3.40	4.00
3.16 YES							
L0000067	0	0.34247E-02	463959.8	3808492.3	1097.0	3.40	4.00
3.16 YES							
L0000068	0	0.34247E-02	463951.2	3808492.3	1097.2	3.40	4.00
3.16 YES							
L0000069	0	0.34247E-02	463942.6	3808492.3	1097.5	3.40	4.00
3.16 YES							
L0000070	0	0.34247E-02	463934.0	3808492.4	1097.7	3.40	4.00
3.16 YES							
L0000071	0	0.34247E-02	463925.4	3808492.4	1097.8	3.40	4.00
3.16 YES							
L0000072	0	0.34247E-02	463916.8	3808492.4	1097.8	3.40	4.00
3.16 YES							
L0000073	0	0.34247E-02	463908.2	3808492.4	1097.8	3.40	4.00
3.16 YES							
L0000074	0	0.34247E-02	463899.6	3808492.4	1097.8	3.40	4.00
3.16 YES							
L0000075	0	0.34247E-02	463891.0	3808492.4	1097.8	3.40	4.00
3.16 YES							
L0000076	0	0.34247E-02	463882.4	3808492.4	1097.9	3.40	4.00
3.16 YES							
L0000077	0	0.34247E-02	463873.8	3808492.4	1098.0	3.40	4.00
3.16 YES							
L0000078	0	0.34247E-02	463865.2	3808492.4	1098.0	3.40	4.00
3.16 YES							
L0000079	0	0.34247E-02	463856.6	3808492.5	1098.0	3.40	4.00
3.16 YES							
L0000080	0	0.34247E-02	463848.0	3808492.5	1098.0	3.40	4.00
3.16 YES							

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 4

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE	BASE	RELEASE	INIT.
SOURCE	EMISSION RATE				
SZ	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT
SCALAR VARY					
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)

(METERS)

BY

L0000081	0	0.34247E-02	463839.4	3808492.5	1098.0	3.40	4.00
3.16 YES							
L0000082	0	0.34247E-02	463830.8	3808492.5	1098.2	3.40	4.00
3.16 YES							
L0000083	0	0.34247E-02	463822.2	3808492.5	1098.5	3.40	4.00
3.16 YES							
L0000084	0	0.34247E-02	463813.6	3808492.5	1098.7	3.40	4.00
3.16 YES							
L0000085	0	0.34247E-02	463805.0	3808492.5	1098.8	3.40	4.00
3.16 YES							
L0000086	0	0.34247E-02	463796.4	3808492.5	1098.8	3.40	4.00
3.16 YES							
L0000087	0	0.34247E-02	463787.8	3808492.6	1098.8	3.40	4.00
3.16 YES							
L0000088	0	0.34247E-02	463779.2	3808492.6	1098.8	3.40	4.00
3.16 YES							
L0000089	0	0.34247E-02	463770.6	3808492.6	1098.8	3.40	4.00
3.16 YES							
L0000090	0	0.34247E-02	463762.0	3808492.6	1098.8	3.40	4.00
3.16 YES							
L0000091	0	0.34247E-02	463753.4	3808492.6	1098.8	3.40	4.00
3.16 YES							
L0000092	0	0.34247E-02	463744.8	3808492.6	1098.8	3.40	4.00
3.16 YES							
L0000093	0	0.34247E-02	463736.2	3808492.6	1098.9	3.40	4.00
3.16 YES							
L0000094	0	0.34247E-02	463727.6	3808492.6	1098.9	3.40	4.00
3.16 YES							
L0000095	0	0.34247E-02	463719.0	3808492.6	1099.0	3.40	4.00
3.16 YES							
L0000096	0	0.34247E-02	463717.3	3808485.7	1099.1	3.40	4.00
3.16 YES							
L0000097	0	0.34247E-02	463717.3	3808477.1	1099.4	3.40	4.00
3.16 YES							
L0000098	0	0.34247E-02	463717.3	3808468.5	1099.6	3.40	4.00
3.16 YES							
L0000099	0	0.34247E-02	463721.2	3808463.7	1099.7	3.40	4.00
3.16 YES							
L0000100	0	0.34247E-02	463729.8	3808463.7	1099.7	3.40	4.00
3.16 YES							
L0000101	0	0.34247E-02	463738.4	3808463.7	1099.7	3.40	4.00
3.16 YES							
L0000102	0	0.34247E-02	463747.0	3808463.6	1099.7	3.40	4.00
3.16 YES							
L0000103	0	0.34247E-02	463755.6	3808463.6	1099.6	3.40	4.00
3.16 YES							

L0000104	0	0.34247E-02	463764.2	3808463.6	1099.4	3.40	4.00
3.16 YES							
L0000105	0	0.34247E-02	463772.8	3808463.5	1099.2	3.40	4.00
3.16 YES							
L0000106	0	0.34247E-02	463781.4	3808463.5	1099.0	3.40	4.00
3.16 YES							
L0000107	0	0.34247E-02	463790.0	3808463.5	1099.0	3.40	4.00
3.16 YES							
L0000108	0	0.34247E-02	463798.6	3808463.4	1099.0	3.40	4.00
3.16 YES							
L0000109	0	0.34247E-02	463807.2	3808463.4	1099.0	3.40	4.00
3.16 YES							
L0000110	0	0.34247E-02	463815.8	3808463.4	1099.0	3.40	4.00
3.16 YES							
L0000111	0	0.34247E-02	463824.4	3808463.3	1098.9	3.40	4.00
3.16 YES							
L0000112	0	0.34247E-02	463833.0	3808463.3	1098.8	3.40	4.00
3.16 YES							
L0000113	0	0.34247E-02	463841.6	3808463.2	1098.8	3.40	4.00
3.16 YES							
L0000114	0	0.34247E-02	463850.2	3808463.2	1098.8	3.40	4.00
3.16 YES							
L0000115	0	0.34247E-02	463858.8	3808463.2	1098.8	3.40	4.00
3.16 YES							
L0000116	0	0.34247E-02	463867.4	3808463.1	1098.8	3.40	4.00
3.16 YES							
L0000117	0	0.34247E-02	463876.0	3808463.1	1098.6	3.40	4.00
3.16 YES							
L0000118	0	0.34247E-02	463884.6	3808463.1	1098.4	3.40	4.00
3.16 YES							
L0000119	0	0.34247E-02	463893.2	3808463.0	1098.2	3.40	4.00
3.16 YES							
L0000120	0	0.34247E-02	463901.8	3808463.0	1098.0	3.40	4.00
3.16 YES							

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 5

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE	BASE	RELEASE	INIT.
SOURCE	EMISSION RATE				
SZ	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT
SCALAR VARY					
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)

(METERS)		BY						
-----		-----						
-----		-----						
L0000121		0	0.34247E-02	463910.4	3808463.0	1098.0	3.40	4.00
3.16	YES							
L0000122		0	0.34247E-02	463919.0	3808462.9	1098.0	3.40	4.00
3.16	YES							
L0000123		0	0.34247E-02	463927.6	3808462.9	1098.0	3.40	4.00
3.16	YES							
L0000124		0	0.34247E-02	463936.2	3808462.9	1098.0	3.40	4.00
3.16	YES							
L0000125		0	0.34247E-02	463944.8	3808462.8	1097.9	3.40	4.00
3.16	YES							
L0000126		0	0.34247E-02	463953.4	3808462.8	1097.8	3.40	4.00
3.16	YES							
L0000127		0	0.34247E-02	463962.0	3808462.8	1097.8	3.40	4.00
3.16	YES							
L0000128		0	0.34247E-02	463970.6	3808462.7	1097.8	3.40	4.00
3.16	YES							
L0000129		0	0.34247E-02	463979.2	3808462.7	1097.8	3.40	4.00
3.16	YES							
L0000130		0	0.34247E-02	463987.8	3808462.7	1097.8	3.40	4.00
3.16	YES							
L0000131		0	0.34247E-02	463996.4	3808462.6	1097.8	3.40	4.00
3.16	YES							
L0000132		0	0.34247E-02	464005.0	3808462.6	1097.8	3.40	4.00
3.16	YES							
L0000133		0	0.34247E-02	464013.6	3808462.5	1097.8	3.40	4.00
3.16	YES							
L0000134		0	0.34247E-02	464022.2	3808462.5	1097.7	3.40	4.00
3.16	YES							
L0000135		0	0.34247E-02	464030.8	3808462.5	1097.5	3.40	4.00
3.16	YES							
L0000136		0	0.34247E-02	464039.4	3808462.4	1097.3	3.40	4.00
3.16	YES							
L0000137		0	0.34247E-02	464048.0	3808462.4	1097.0	3.40	4.00
3.16	YES							
L0000138		0	0.34247E-02	464056.6	3808462.4	1097.0	3.40	4.00
3.16	YES							
L0000139		0	0.34247E-02	464065.2	3808462.3	1096.9	3.40	4.00
3.16	YES							
L0000140		0	0.34247E-02	464073.8	3808462.3	1096.8	3.40	4.00
3.16	YES							
L0000141		0	0.34247E-02	464082.4	3808462.3	1096.8	3.40	4.00
3.16	YES							
L0000142		0	0.34247E-02	464091.0	3808462.2	1096.8	3.40	4.00
3.16	YES							
L0000143		0	0.34247E-02	464099.6	3808462.2	1096.8	3.40	4.00
3.16	YES							

L0000144	0	0.34247E-02	464108.2	3808462.2	1096.8	3.40	4.00
3.16 YES							
L0000145	0	0.34247E-02	464111.2	3808456.5	1096.9	3.40	4.00
3.16 YES							
L0000146	0	0.34247E-02	464111.4	3808447.9	1097.0	3.40	4.00
3.16 YES							
L0000147	0	0.34247E-02	464111.5	3808439.3	1097.0	3.40	4.00
3.16 YES							
L0000148	0	0.34247E-02	464110.1	3808432.2	1097.0	3.40	4.00
3.16 YES							
L0000149	0	0.34247E-02	464101.5	3808432.2	1097.2	3.40	4.00
3.16 YES							
L0000150	0	0.34247E-02	464092.9	3808432.3	1097.5	3.40	4.00
3.16 YES							
L0000151	0	0.34247E-02	464084.3	3808432.3	1097.7	3.40	4.00
3.16 YES							
L0000152	0	0.34247E-02	464075.7	3808432.3	1097.8	3.40	4.00
3.16 YES							
L0000153	0	0.34247E-02	464067.1	3808432.4	1097.8	3.40	4.00
3.16 YES							
L0000154	0	0.34247E-02	464058.5	3808432.4	1097.8	3.40	4.00
3.16 YES							
L0000155	0	0.34247E-02	464049.9	3808432.4	1097.8	3.40	4.00
3.16 YES							
L0000156	0	0.34247E-02	464041.3	3808432.5	1097.8	3.40	4.00
3.16 YES							
L0000157	0	0.34247E-02	464032.7	3808432.5	1097.9	3.40	4.00
3.16 YES							
L0000158	0	0.34247E-02	464024.1	3808432.5	1098.0	3.40	4.00
3.16 YES							
L0000159	0	0.34247E-02	464015.5	3808432.6	1098.0	3.40	4.00
3.16 YES							
L0000160	0	0.34247E-02	464006.9	3808432.6	1098.0	3.40	4.00
3.16 YES							

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 6

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE			BASE	RELEASE	INIT.
INIT.	URBAN	EMISSION RATE					
SZ	SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID	SOURCE	SCALAR VARY					
		CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)

(METERS)		BY						
-----		-----						
-----		-----						
L0000161		0	0.34247E-02	463998.3	3808432.6	1098.0	3.40	4.00
3.16	YES							
L0000162		0	0.34247E-02	463989.7	3808432.7	1098.0	3.40	4.00
3.16	YES							
L0000163		0	0.34247E-02	463981.1	3808432.7	1098.0	3.40	4.00
3.16	YES							
L0000164		0	0.34247E-02	463972.5	3808432.8	1098.0	3.40	4.00
3.16	YES							
L0000165		0	0.34247E-02	463963.9	3808432.8	1098.0	3.40	4.00
3.16	YES							
L0000166		0	0.34247E-02	463955.3	3808432.8	1098.1	3.40	4.00
3.16	YES							
L0000167		0	0.34247E-02	463946.7	3808432.9	1098.3	3.40	4.00
3.16	YES							
L0000168		0	0.34247E-02	463938.1	3808432.9	1098.6	3.40	4.00
3.16	YES							
L0000169		0	0.34247E-02	463929.5	3808432.9	1098.8	3.40	4.00
3.16	YES							
L0000170		0	0.34247E-02	463920.9	3808433.0	1098.8	3.40	4.00
3.16	YES							
L0000171		0	0.34247E-02	463912.3	3808433.0	1098.8	3.40	4.00
3.16	YES							
L0000172		0	0.34247E-02	463903.7	3808433.0	1098.8	3.40	4.00
3.16	YES							
L0000173		0	0.34247E-02	463895.1	3808433.1	1098.8	3.40	4.00
3.16	YES							
L0000174		0	0.34247E-02	463886.5	3808433.1	1098.9	3.40	4.00
3.16	YES							
L0000175		0	0.34247E-02	463877.9	3808433.1	1098.9	3.40	4.00
3.16	YES							
L0000176		0	0.34247E-02	463869.3	3808433.2	1099.0	3.40	4.00
3.16	YES							
L0000177		0	0.34247E-02	463860.7	3808433.2	1099.2	3.40	4.00
3.16	YES							
L0000178		0	0.34247E-02	463852.1	3808433.2	1099.5	3.40	4.00
3.16	YES							
L0000179		0	0.34247E-02	463843.5	3808433.3	1099.7	3.40	4.00
3.16	YES							
L0000180		0	0.34247E-02	463834.9	3808433.3	1099.8	3.40	4.00
3.16	YES							
L0000181		0	0.34247E-02	463826.3	3808433.3	1099.8	3.40	4.00
3.16	YES							
L0000182		0	0.34247E-02	463817.7	3808433.4	1099.8	3.40	4.00
3.16	YES							
L0000183		0	0.34247E-02	463809.1	3808433.4	1099.8	3.40	4.00
3.16	YES							

L0000184	0	0.34247E-02	463800.5	3808433.5	1099.8	3.40	4.00
3.16 YES							
L0000185	0	0.34247E-02	463791.9	3808433.5	1099.8	3.40	4.00
3.16 YES							
L0000186	0	0.34247E-02	463783.3	3808433.5	1099.8	3.40	4.00
3.16 YES							
L0000187	0	0.34247E-02	463774.7	3808433.6	1099.8	3.40	4.00
3.16 YES							
L0000188	0	0.34247E-02	463766.1	3808433.6	1099.9	3.40	4.00
3.16 YES							
L0000189	0	0.34247E-02	463757.5	3808433.6	1099.9	3.40	4.00
3.16 YES							
L0000190	0	0.34247E-02	463748.9	3808433.7	1100.0	3.40	4.00
3.16 YES							
L0000191	0	0.34247E-02	463740.3	3808433.7	1100.0	3.40	4.00
3.16 YES							
L0000192	0	0.34247E-02	463731.7	3808433.7	1100.0	3.40	4.00
3.16 YES							
L0000193	0	0.34247E-02	463723.1	3808433.8	1100.0	3.40	4.00
3.16 YES							
L0000194	0	0.34247E-02	463716.8	3808431.5	1100.1	3.40	4.00
3.16 YES							
L0000195	0	0.34247E-02	463716.8	3808422.9	1100.2	3.40	4.00
3.16 YES							
L0000196	0	0.34247E-02	463716.8	3808414.3	1100.5	3.40	4.00
3.16 YES							
L0000197	0	0.34247E-02	463716.8	3808405.7	1100.7	3.40	4.00
3.16 YES							
L0000198	0	0.34247E-02	463721.9	3808402.2	1100.8	3.40	4.00
3.16 YES							
L0000199	0	0.34247E-02	463730.5	3808402.2	1100.8	3.40	4.00
3.16 YES							
L0000200	0	0.34247E-02	463739.1	3808402.1	1100.8	3.40	4.00
3.16 YES							

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 7

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE	BASE	RELEASE	INIT.
INIT.	URBAN	EMISSION RATE			
SOURCE		PART. (GRAMS/SEC)	X	Y	SY
SZ	SOURCE	SCALAR VARY			
ID		CATS.	(METERS)	(METERS)	(METERS)

(METERS)

BY

L0000201	0	0.34247E-02	463747.7	3808402.1	1100.8	3.40	4.00
3.16 YES							
L0000202	0	0.34247E-02	463756.3	3808402.1	1100.8	3.40	4.00
3.16 YES							
L0000203	0	0.34247E-02	463764.9	3808402.0	1100.8	3.40	4.00
3.16 YES							
L0000204	0	0.34247E-02	463773.5	3808402.0	1100.8	3.40	4.00
3.16 YES							
L0000205	0	0.34247E-02	463782.1	3808402.0	1100.7	3.40	4.00
3.16 YES							
L0000206	0	0.34247E-02	463790.7	3808401.9	1100.5	3.40	4.00
3.16 YES							
L0000207	0	0.34247E-02	463799.3	3808401.9	1100.3	3.40	4.00
3.16 YES							
L0000208	0	0.34247E-02	463807.9	3808401.9	1100.1	3.40	4.00
3.16 YES							
L0000209	0	0.34247E-02	463816.5	3808401.8	1100.0	3.40	4.00
3.16 YES							
L0000210	0	0.34247E-02	463825.1	3808401.8	1100.0	3.40	4.00
3.16 YES							
L0000211	0	0.34247E-02	463833.7	3808401.8	1100.0	3.40	4.00
3.16 YES							
L0000212	0	0.34247E-02	463842.3	3808401.7	1100.0	3.40	4.00
3.16 YES							
L0000213	0	0.34247E-02	463850.9	3808401.7	1099.9	3.40	4.00
3.16 YES							
L0000214	0	0.34247E-02	463859.5	3808401.6	1099.9	3.40	4.00
3.16 YES							
L0000215	0	0.34247E-02	463868.1	3808401.6	1099.8	3.40	4.00
3.16 YES							
L0000216	0	0.34247E-02	463876.7	3808401.6	1099.8	3.40	4.00
3.16 YES							
L0000217	0	0.34247E-02	463885.3	3808401.5	1099.8	3.40	4.00
3.16 YES							
L0000218	0	0.34247E-02	463893.9	3808401.5	1099.8	3.40	4.00
3.16 YES							
L0000219	0	0.34247E-02	463902.5	3808401.5	1099.8	3.40	4.00
3.16 YES							
L0000220	0	0.34247E-02	463911.1	3808401.4	1099.5	3.40	4.00
3.16 YES							
L0000221	0	0.34247E-02	463919.7	3808401.4	1099.3	3.40	4.00
3.16 YES							
L0000222	0	0.34247E-02	463928.3	3808401.4	1099.0	3.40	4.00
3.16 YES							
L0000223	0	0.34247E-02	463936.9	3808401.3	1099.0	3.40	4.00
3.16 YES							

L0000224	0	0.34247E-02	463945.5	3808401.3	1098.9	3.40	4.00
3.16 YES							
L0000225	0	0.34247E-02	463954.1	3808401.3	1098.9	3.40	4.00
3.16 YES							
L0000226	0	0.34247E-02	463962.7	3808401.2	1098.8	3.40	4.00
3.16 YES							
L0000227	0	0.34247E-02	463971.3	3808401.2	1098.8	3.40	4.00
3.16 YES							
L0000228	0	0.34247E-02	463979.9	3808401.2	1098.8	3.40	4.00
3.16 YES							
L0000229	0	0.34247E-02	463988.5	3808401.1	1098.8	3.40	4.00
3.16 YES							
L0000230	0	0.34247E-02	463997.1	3808401.1	1098.6	3.40	4.00
3.16 YES							
L0000231	0	0.34247E-02	464005.7	3808401.0	1098.4	3.40	4.00
3.16 YES							
L0000232	0	0.34247E-02	464014.3	3808401.0	1098.2	3.40	4.00
3.16 YES							
L0000233	0	0.34247E-02	464022.9	3808401.0	1098.0	3.40	4.00
3.16 YES							
L0000234	0	0.34247E-02	464031.5	3808400.9	1098.0	3.40	4.00
3.16 YES							
L0000235	0	0.34247E-02	464040.1	3808400.9	1098.0	3.40	4.00
3.16 YES							
L0000236	0	0.34247E-02	464048.7	3808400.9	1098.0	3.40	4.00
3.16 YES							
L0000237	0	0.34247E-02	464057.3	3808400.8	1098.0	3.40	4.00
3.16 YES							
L0000238	0	0.34247E-02	464065.9	3808400.8	1098.0	3.40	4.00
3.16 YES							
L0000239	0	0.34247E-02	464074.5	3808400.8	1098.0	3.40	4.00
3.16 YES							
L0000240	0	0.34247E-02	464083.1	3808400.7	1098.0	3.40	4.00
3.16 YES							

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 8

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE			BASE	RELEASE	INIT.
INIT.	URBAN	EMISSION RATE					
SOURCE		PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
SZ	SOURCE	SCALAR VARY					
ID		CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)

(METERS)

BY

L0000241	0	0.34247E-02	464091.7	3808400.7	1097.9	3.40	4.00
3.16 YES							
L0000242	0	0.34247E-02	464100.3	3808400.7	1097.9	3.40	4.00
3.16 YES							
L0000243	0	0.34247E-02	464108.9	3808400.6	1097.8	3.40	4.00
3.16 YES							
L0000244	0	0.34247E-02	464110.6	3808393.7	1098.0	3.40	4.00
3.16 YES							
L0000245	0	0.34247E-02	464110.6	3808385.1	1098.0	3.40	4.00
3.16 YES							
L0000246	0	0.34247E-02	464110.6	3808376.5	1098.0	3.40	4.00
3.16 YES							
L0000247	0	0.34247E-02	464106.8	3808371.7	1098.0	3.40	4.00
3.16 YES							
L0000248	0	0.34247E-02	464098.2	3808371.7	1098.0	3.40	4.00
3.16 YES							
L0000249	0	0.34247E-02	464089.6	3808371.7	1098.0	3.40	4.00
3.16 YES							
L0000250	0	0.34247E-02	464081.0	3808371.7	1098.0	3.40	4.00
3.16 YES							
L0000251	0	0.34247E-02	464072.4	3808371.7	1098.2	3.40	4.00
3.16 YES							
L0000252	0	0.34247E-02	464063.8	3808371.7	1098.4	3.40	4.00
3.16 YES							
L0000253	0	0.34247E-02	464055.2	3808371.7	1098.7	3.40	4.00
3.16 YES							
L0000254	0	0.34247E-02	464046.6	3808371.7	1098.8	3.40	4.00
3.16 YES							
L0000255	0	0.34247E-02	464038.0	3808371.7	1098.8	3.40	4.00
3.16 YES							
L0000256	0	0.34247E-02	464029.4	3808371.7	1098.8	3.40	4.00
3.16 YES							
L0000257	0	0.34247E-02	464020.8	3808371.7	1098.8	3.40	4.00
3.16 YES							
L0000258	0	0.34247E-02	464012.2	3808371.7	1098.9	3.40	4.00
3.16 YES							
L0000259	0	0.34247E-02	464003.6	3808371.7	1098.9	3.40	4.00
3.16 YES							
L0000260	0	0.34247E-02	463995.0	3808371.7	1099.0	3.40	4.00
3.16 YES							
L0000261	0	0.34247E-02	463986.4	3808371.7	1099.1	3.40	4.00
3.16 YES							
L0000262	0	0.34247E-02	463977.8	3808371.7	1099.3	3.40	4.00
3.16 YES							
L0000263	0	0.34247E-02	463969.2	3808371.7	1099.6	3.40	4.00
3.16 YES							

L0000264	0	0.34247E-02	463960.6	3808371.7	1099.8	3.40	4.00
3.16 YES							
L0000265	0	0.34247E-02	463952.0	3808371.7	1099.8	3.40	4.00
3.16 YES							
L0000266	0	0.34247E-02	463943.4	3808371.7	1099.8	3.40	4.00
3.16 YES							
L0000267	0	0.34247E-02	463934.8	3808371.7	1099.8	3.40	4.00
3.16 YES							
L0000268	0	0.34247E-02	463926.2	3808371.7	1099.8	3.40	4.00
3.16 YES							
L0000269	0	0.34247E-02	463917.6	3808371.7	1099.9	3.40	4.00
3.16 YES							
L0000270	0	0.34247E-02	463909.0	3808371.7	1099.9	3.40	4.00
3.16 YES							
L0000271	0	0.34247E-02	463900.4	3808371.7	1100.0	3.40	4.00
3.16 YES							
L0000272	0	0.34247E-02	463891.8	3808371.7	1100.0	3.40	4.00
3.16 YES							
L0000273	0	0.34247E-02	463883.2	3808371.7	1100.0	3.40	4.00
3.16 YES							
L0000274	0	0.34247E-02	463874.6	3808371.7	1100.0	3.40	4.00
3.16 YES							
L0000275	0	0.34247E-02	463866.0	3808371.7	1100.1	3.40	4.00
3.16 YES							
L0000276	0	0.34247E-02	463857.4	3808371.7	1100.3	3.40	4.00
3.16 YES							
L0000277	0	0.34247E-02	463848.8	3808371.7	1100.6	3.40	4.00
3.16 YES							
L0000278	0	0.34247E-02	463840.2	3808371.7	1100.8	3.40	4.00
3.16 YES							
L0000279	0	0.34247E-02	463831.6	3808371.7	1100.8	3.40	4.00
3.16 YES							
L0000280	0	0.34247E-02	463823.0	3808371.7	1100.8	3.40	4.00
3.16 YES							

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 9

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE	BASE	RELEASE	INIT.
SOURCE	EMISSION RATE				
SZ	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT
SCALAR VARY					
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)

(METERS)

BY

```
- - - - -
- - - - -

L0000281      0  0.34247E-02  463814.4  3808371.7  1100.8    3.40    4.00
3.16      YES
L0000282      0  0.34247E-02  463805.8  3808371.7  1100.8    3.40    4.00
3.16      YES
L0000283      0  0.34247E-02  463797.2  3808371.7  1100.9    3.40    4.00
3.16      YES
L0000284      0  0.34247E-02  463788.6  3808371.7  1100.9    3.40    4.00
3.16      YES
L0000285      0  0.34247E-02  463780.0  3808371.7  1101.0    3.40    4.00
3.16      YES
L0000286      0  0.34247E-02  463771.4  3808371.7  1101.0    3.40    4.00
3.16      YES
L0000287      0  0.34247E-02  463762.8  3808371.7  1101.0    3.40    4.00
3.16      YES
L0000288      0  0.34247E-02  463754.2  3808371.7  1101.0    3.40    4.00
3.16      YES
L0000289      0  0.34247E-02  463745.6  3808371.7  1101.1    3.40    4.00
3.16      YES
L0000290      0  0.34247E-02  463737.0  3808371.7  1101.3    3.40    4.00
3.16      YES
L0000291      0  0.34247E-02  463728.4  3808371.7  1101.6    3.40    4.00
3.16      YES
L0000292      0  0.34247E-02  463719.8  3808371.7  1101.8    3.40    4.00
3.16      YES
```

```
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49
```

PAGE 10

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

```
-----
-----

ALL      L0000001  , L0000002  , L0000003  , L0000004  , L0000005  ,
L0000006  , L0000007  , L0000008  ,

L0000009  , L0000010  , L0000011  , L0000012  , L0000013  ,
L0000014  , L0000015  , L0000016  ,

L0000017  , L0000018  , L0000019  , L0000020  , L0000021  ,
```

L0000022	, L0000023	, L0000024	,			
L0000030	L0000025 , L0000031	, L0000026 , L0000032	, L0000027 ,	, L0000028	, L0000029	,
L0000038	L0000033 , L0000039	, L0000034 , L0000040	, L0000035 ,	, L0000036	, L0000037	,
L0000046	L0000041 , L0000047	, L0000042 , L0000048	, L0000043 ,	, L0000044	, L0000045	,
L0000054	L0000049 , L0000055	, L0000050 , L0000056	, L0000051 ,	, L0000052	, L0000053	,
L0000062	L0000057 , L0000063	, L0000058 , L0000064	, L0000059 ,	, L0000060	, L0000061	,
L0000070	L0000065 , L0000071	, L0000066 , L0000072	, L0000067 ,	, L0000068	, L0000069	,
L0000078	L0000073 , L0000079	, L0000074 , L0000080	, L0000075 ,	, L0000076	, L0000077	,
L0000086	L0000081 , L0000087	, L0000082 , L0000088	, L0000083 ,	, L0000084	, L0000085	,
L0000094	L0000089 , L0000095	, L0000090 , L0000096	, L0000091 ,	, L0000092	, L0000093	,
L0000102	L0000097 , L0000103	, L0000098 , L0000104	, L0000099 ,	, L0000100	, L0000101	,
L0000110	L0000105 , L0000111	, L0000106 , L0000112	, L0000107 ,	, L0000108	, L0000109	,
L0000118	L0000113 , L0000119	, L0000114 , L0000120	, L0000115 ,	, L0000116	, L0000117	,
L0000126	L0000121 , L0000127	, L0000122 , L0000128	, L0000123 ,	, L0000124	, L0000125	,
L0000134	L0000129 , L0000135	, L0000130 , L0000136	, L0000131 ,	, L0000132	, L0000133	,
L0000142	L0000137 , L0000143	, L0000138 , L0000144	, L0000139 ,	, L0000140	, L0000141	,
L0000150	L0000145 , L0000151	, L0000146 , L0000152	, L0000147 ,	, L0000148	, L0000149	,

L0000153 , L0000154 , L0000155 , L0000156 , L0000157 ,
 L0000158 , L0000159 , L0000160 ,
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 11

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
L0000166	L0000161 , L0000162 , L0000163 , L0000164 , L0000165 , L0000166 , L0000167 , L0000168 ,
L0000174	L0000169 , L0000170 , L0000171 , L0000172 , L0000173 , L0000174 , L0000175 , L0000176 ,
L0000182	L0000177 , L0000178 , L0000179 , L0000180 , L0000181 , L0000182 , L0000183 , L0000184 ,
L0000190	L0000185 , L0000186 , L0000187 , L0000188 , L0000189 , L0000190 , L0000191 , L0000192 ,
L0000198	L0000193 , L0000194 , L0000195 , L0000196 , L0000197 , L0000198 , L0000199 , L0000200 ,
L0000206	L0000201 , L0000202 , L0000203 , L0000204 , L0000205 , L0000206 , L0000207 , L0000208 ,
L0000214	L0000209 , L0000210 , L0000211 , L0000212 , L0000213 , L0000214 , L0000215 , L0000216 ,
L0000222	L0000217 , L0000218 , L0000219 , L0000220 , L0000221 , L0000222 , L0000223 , L0000224 ,
L0000230	L0000225 , L0000226 , L0000227 , L0000228 , L0000229 , L0000230 , L0000231 , L0000232 ,
L0000238	L0000233 , L0000234 , L0000235 , L0000236 , L0000237 , L0000238 , L0000239 , L0000240 ,
L0000246	L0000241 , L0000242 , L0000243 , L0000244 , L0000245 , L0000246 , L0000247 , L0000248 ,

L0000254	L0000249 , L0000250 , L0000251 , L0000252 , L0000253 , , L0000255 , L0000256 ,
L0000262	L0000257 , L0000258 , L0000259 , L0000260 , L0000261 , , L0000263 , L0000264 ,
L0000270	L0000265 , L0000266 , L0000267 , L0000268 , L0000269 , , L0000271 , L0000272 ,
L0000278	L0000273 , L0000274 , L0000275 , L0000276 , L0000277 , , L0000279 , L0000280 ,
L0000286	L0000281 , L0000282 , L0000283 , L0000284 , L0000285 , , L0000287 , L0000288 ,

L0000289 , L0000290 , L0000291 , L0000292 ,
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 12

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000005 L0000008	2180000. , L0000006 , ,	L0000001 , L0000002 , L0000003 , L0000004 , , L0000007 , ,
L0000014	L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , , L0000015 , L0000016 ,	
L0000022	L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , , L0000023 , L0000024 ,	
L0000030	L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , , L0000031 , L0000032 ,	
L0000038	L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , , L0000039 , L0000040 ,	
L0000046	L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , , L0000047 , L0000048 ,	

L0000054	L0000049 , L0000055	, L0000050 , L0000056	, L0000051 ,	, L0000052	, L0000053	,
L0000062	L0000057 , L0000063	, L0000058 , L0000064	, L0000059 ,	, L0000060	, L0000061	,
L0000070	L0000065 , L0000071	, L0000066 , L0000072	, L0000067 ,	, L0000068	, L0000069	,
L0000078	L0000073 , L0000079	, L0000074 , L0000080	, L0000075 ,	, L0000076	, L0000077	,
L0000086	L0000081 , L0000087	, L0000082 , L0000088	, L0000083 ,	, L0000084	, L0000085	,
L0000094	L0000089 , L0000095	, L0000090 , L0000096	, L0000091 ,	, L0000092	, L0000093	,
L0000102	L0000097 , L0000103	, L0000098 , L0000104	, L0000099 ,	, L0000100	, L0000101	,
L0000110	L0000105 , L0000111	, L0000106 , L0000112	, L0000107 ,	, L0000108	, L0000109	,
L0000118	L0000113 , L0000119	, L0000114 , L0000120	, L0000115 ,	, L0000116	, L0000117	,
L0000126	L0000121 , L0000127	, L0000122 , L0000128	, L0000123 ,	, L0000124	, L0000125	,
L0000134	L0000129 , L0000135	, L0000130 , L0000136	, L0000131 ,	, L0000132	, L0000133	,
L0000142	L0000137 , L0000143	, L0000138 , L0000144	, L0000139 ,	, L0000140	, L0000141	,
L0000150	L0000145 , L0000151	, L0000146 , L0000152	, L0000147 ,	, L0000148	, L0000149	,
L0000158	L0000153 , L0000159	, L0000154 , L0000160	, L0000155 ,	, L0000156	, L0000157	,

*** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID -----	URBAN POP -----	SOURCE IDs -----				
L0000166	L0000161 , L0000167	, L0000162 , L0000168	, L0000163 ,	, L0000164	, L0000165	,
L0000174	L0000169 , L0000175	, L0000170 , L0000176	, L0000171 ,	, L0000172	, L0000173	,
L0000182	L0000177 , L0000183	, L0000178 , L0000184	, L0000179 ,	, L0000180	, L0000181	,
L0000190	L0000185 , L0000191	, L0000186 , L0000192	, L0000187 ,	, L0000188	, L0000189	,
L0000198	L0000193 , L0000199	, L0000194 , L0000200	, L0000195 ,	, L0000196	, L0000197	,
L0000206	L0000201 , L0000207	, L0000202 , L0000208	, L0000203 ,	, L0000204	, L0000205	,
L0000214	L0000209 , L0000215	, L0000210 , L0000216	, L0000211 ,	, L0000212	, L0000213	,
L0000222	L0000217 , L0000223	, L0000218 , L0000224	, L0000219 ,	, L0000220	, L0000221	,
L0000230	L0000225 , L0000231	, L0000226 , L0000232	, L0000227 ,	, L0000228	, L0000229	,
L0000238	L0000233 , L0000239	, L0000234 , L0000240	, L0000235 ,	, L0000236	, L0000237	,
L0000246	L0000241 , L0000247	, L0000242 , L0000248	, L0000243 ,	, L0000244	, L0000245	,
L0000254	L0000249 , L0000255	, L0000250 , L0000256	, L0000251 ,	, L0000252	, L0000253	,
L0000262	L0000257 , L0000263	, L0000258 , L0000264	, L0000259 ,	, L0000260	, L0000261	,
L0000270	L0000265 , L0000271	, L0000266 , L0000272	, L0000267 ,	, L0000268	, L0000269	,

L0000273 , L0000274 , L0000275 , L0000276 , L0000277 ,
L0000278 , L0000279 , L0000280 ,

L0000281 , L0000282 , L0000283 , L0000284 , L0000285 ,
L0000286 , L0000287 , L0000288 ,

L0000289 , L0000290 , L0000291 , L0000292 ,
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

PAGE 14

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(462160.5, 3809377.8, 1098.0, 1098.0, 0.0);	(462051.5,
3809270.6, 1100.0, 1100.0, 0.0);	
(462014.5, 3809029.1, 1104.0, 1104.0, 0.0);	(462010.6,
3808855.8, 1107.0, 1107.0, 0.0);	
(461936.6, 3808886.9, 1107.0, 1107.0, 0.0);	(461936.6,
3808997.9, 1105.4, 1105.4, 0.0);	
(461909.3, 3808768.1, 1109.2, 1109.2, 0.0);	(461835.3,
3808894.7, 1107.4, 1107.4, 0.0);	
(461845.0, 3808996.0, 1106.0, 1106.0, 0.0);	(461833.3,
3809114.8, 1104.0, 1104.0, 0.0);	
(461843.1, 3809210.2, 1103.0, 1103.0, 0.0);	(461810.0,
3809297.9, 1101.9, 1101.9, 0.0);	
(461856.7, 3809385.5, 1100.0, 1100.0, 0.0);	(461841.1,
3809482.9, 1098.0, 1098.0, 0.0);	
(462004.7, 3809379.7, 1099.0, 1099.0, 0.0);	(461763.2,
3808793.4, 1110.0, 1110.0, 0.0);	
(461753.5, 3808699.9, 1110.0, 1110.0, 0.0);	(461835.3,
3808686.3, 1111.0, 1111.0, 0.0);	
(461823.6, 3808579.2, 1113.9, 1113.9, 0.0);	(461761.3,
3808585.0, 1114.1, 1114.1, 0.0);	
(462301.2, 3807807.1, 1122.2, 1122.2, 0.0);	(462304.8,
3807868.2, 1121.3, 1121.3, 0.0);	
(462216.8, 3807882.5, 1122.1, 1122.1, 0.0);	(462116.3,
3807886.1, 1123.0, 1123.0, 0.0);	
(462114.5, 3807789.2, 1125.2, 1125.2, 0.0);	(462012.2,
3807887.9, 1123.9, 1123.9, 0.0);	
(462008.7, 3807975.8, 1122.0, 1122.0, 0.0);	(461917.1,
3807972.2, 1123.1, 1123.1, 0.0);	
(461922.5, 3808187.6, 1119.0, 1119.0, 0.0);	(461908.2,
3808288.1, 1117.6, 1117.6, 0.0);	
(461848.9, 3808377.8, 1116.2, 1116.2, 0.0);	(461831.0,

3808494.5,	1114.7,	1114.7,	0.0);		
(462421.4,	3808394.0,	1110.0,	1110.0,	0.0);	(462459.1,
3808501.7,	1108.5,	1108.5,	0.0);		
(462437.6,	3808580.6,	1107.6,	1107.6,	0.0);	(462654.7,
3809189.0,	1096.6,	1096.6,	0.0);		
(462559.5,	3809194.3,	1097.0,	1097.0,	0.0);	(465763.9,
3807935.2,	1085.9,	1085.9,	0.0);		
(465819.8,	3807935.2,	1085.0,	1085.0,	0.0);	(465875.8,
3807935.2,	1084.0,	1084.0,	0.0);		
(465931.8,	3807935.2,	1083.1,	1083.1,	0.0);	(465987.8,
3807935.2,	1082.1,	1082.1,	0.0);		
(466043.8,	3807935.2,	1081.2,	1081.2,	0.0);	(466099.7,
3807935.2,	1080.2,	1080.2,	0.0);		
(466155.7,	3807935.2,	1079.3,	1079.3,	0.0);	(466211.7,
3807935.2,	1078.3,	1078.3,	0.0);		
(466267.7,	3807935.2,	1077.4,	1077.4,	0.0);	(466323.7,
3807935.2,	1076.2,	1076.2,	0.0);		
(466379.6,	3807935.2,	1075.3,	1075.3,	0.0);	(466435.6,
3807935.2,	1074.5,	1074.5,	0.0);		
(466491.6,	3807935.2,	1073.6,	1073.6,	0.0);	(466547.6,
3807935.2,	1072.0,	1072.0,	0.0);		
(466603.6,	3807935.2,	1071.0,	1071.0,	0.0);	(466659.5,
3807935.2,	1070.0,	1070.0,	0.0);		
(466715.5,	3807935.2,	1069.0,	1069.0,	0.0);	(466771.5,
3807935.2,	1068.0,	1068.0,	0.0);		
(466827.5,	3807935.2,	1066.6,	1066.6,	0.0);	(466883.5,
3807935.2,	1065.5,	1065.5,	0.0);		
(465763.9,	3808001.4,	1084.9,	1084.9,	0.0);	(465819.8,
3808001.4,	1084.0,	1084.0,	0.0);		
(465875.8,	3808001.4,	1083.0,	1083.0,	0.0);	(465931.8,
3808001.4,	1082.0,	1082.0,	0.0);		
(465987.8,	3808001.4,	1081.4,	1081.4,	0.0);	(466043.8,
3808001.4,	1080.1,	1080.1,	0.0);		
(466099.7,	3808001.4,	1079.7,	1079.7,	0.0);	(466155.7,
3808001.4,	1078.8,	1078.8,	0.0);		
(466211.7,	3808001.4,	1078.0,	1078.0,	0.0);	(466267.7,
3808001.4,	1077.0,	1077.0,	0.0);		
(466323.7,	3808001.4,	1076.0,	1076.0,	0.0);	(466379.6,
3808001.4,	1075.0,	1075.0,	0.0);		
(466435.6,	3808001.4,	1074.0,	1074.0,	0.0);	(466491.6,
3808001.4,	1073.0,	1073.0,	0.0);		
(466547.6,	3808001.4,	1071.8,	1071.8,	0.0);	(466603.6,
3808001.4,	1070.9,	1070.9,	0.0);		
(466659.5,	3808001.4,	1070.0,	1070.0,	0.0);	(466715.5,
3808001.4,	1068.3,	1068.3,	0.0);		
(466771.5,	3808001.4,	1067.4,	1067.4,	0.0);	(466827.5,
3808001.4,	1066.4,	1066.4,	0.0);		
(466883.5,	3808001.4,	1065.1,	1065.1,	0.0);	(465763.9,
3808067.6,	1084.0,	1084.0,	0.0);		
(465819.8,	3808067.6,	1083.0,	1083.0,	0.0);	(465875.8,

```

3808067.6, 1082.1, 1082.1, 0.0);
( 465931.8, 3808067.6, 1081.2, 1081.2, 0.0); ( 465987.8,
3808067.6, 1080.4, 1080.4, 0.0);
( 466043.8, 3808067.6, 1079.5, 1079.5, 0.0); ( 466099.7,
3808067.6, 1078.6, 1078.6, 0.0);
( 466155.7, 3808067.6, 1077.8, 1077.8, 0.0); ( 466211.7,
3808067.6, 1076.9, 1076.9, 0.0);
( 466267.7, 3808067.6, 1076.0, 1076.0, 0.0); ( 466323.7,
3808067.6, 1075.0, 1075.0, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 15

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

```

( 466379.6, 3808067.6, 1074.0, 1074.0, 0.0); ( 466435.6,
3808067.6, 1073.5, 1073.5, 0.0);
( 466491.6, 3808067.6, 1072.0, 1072.0, 0.0); ( 466547.6,
3808067.6, 1071.0, 1071.0, 0.0);
( 466603.6, 3808067.6, 1070.0, 1070.0, 0.0); ( 466659.5,
3808067.6, 1069.0, 1069.0, 0.0);
( 466715.5, 3808067.6, 1068.1, 1068.1, 0.0); ( 466771.5,
3808067.6, 1067.3, 1067.3, 0.0);
( 466827.5, 3808067.6, 1066.0, 1066.0, 0.0); ( 466883.5,
3808067.6, 1064.5, 1064.5, 0.0);
( 465763.9, 3808133.8, 1083.0, 1083.0, 0.0); ( 465819.8,
3808133.8, 1082.0, 1082.0, 0.0);
( 465875.8, 3808133.8, 1081.1, 1081.1, 0.0); ( 465931.8,
3808133.8, 1080.2, 1080.2, 0.0);
( 465987.8, 3808133.8, 1079.8, 1079.8, 0.0); ( 466043.8,
3808133.8, 1078.9, 1078.9, 0.0);
( 466099.7, 3808133.8, 1077.9, 1077.9, 0.0); ( 466155.7,
3808133.8, 1077.0, 1077.0, 0.0);
( 466211.7, 3808133.8, 1076.0, 1076.0, 0.0); ( 466267.7,
3808133.8, 1075.0, 1075.0, 0.0);
( 466323.7, 3808133.8, 1074.1, 1074.1, 0.0); ( 466379.6,
3808133.8, 1073.3, 1073.3, 0.0);
( 466435.6, 3808133.8, 1072.5, 1072.5, 0.0); ( 466491.6,
3808133.8, 1071.6, 1071.6, 0.0);
( 466547.6, 3808133.8, 1070.5, 1070.5, 0.0); ( 466603.6,
3808133.8, 1069.6, 1069.6, 0.0);
( 466659.5, 3808133.8, 1068.8, 1068.8, 0.0); ( 466715.5,
3808133.8, 1067.8, 1067.8, 0.0);
( 466771.5, 3808133.8, 1066.3, 1066.3, 0.0); ( 466827.5,

```

3808133.8,	1065.4,	1065.4,	0.0);		
(466883.5,	3808133.8,	1064.4,	1064.4,	0.0);	(465763.9,
3808200.1,	1081.9,	1081.9,	0.0);		
(465819.8,	3808200.1,	1081.0,	1081.0,	0.0);	(465875.8,
3808200.1,	1080.1,	1080.1,	0.0);		
(465931.8,	3808200.1,	1079.7,	1079.7,	0.0);	(465987.8,
3808200.1,	1078.7,	1078.7,	0.0);		
(466043.8,	3808200.1,	1077.8,	1077.8,	0.0);	(466099.7,
3808200.1,	1076.8,	1076.8,	0.0);		
(466155.7,	3808200.1,	1075.9,	1075.9,	0.0);	(466211.7,
3808200.1,	1075.0,	1075.0,	0.0);		
(466267.7,	3808200.1,	1074.0,	1074.0,	0.0);	(466323.7,
3808200.1,	1073.6,	1073.6,	0.0);		
(466379.6,	3808200.1,	1072.7,	1072.7,	0.0);	(466435.6,
3808200.1,	1071.8,	1071.8,	0.0);		
(466491.6,	3808200.1,	1070.8,	1070.8,	0.0);	(466547.6,
3808200.1,	1069.9,	1069.9,	0.0);		
(466603.6,	3808200.1,	1068.9,	1068.9,	0.0);	(466659.5,
3808200.1,	1068.0,	1068.0,	0.0);		
(466715.5,	3808200.1,	1067.1,	1067.1,	0.0);	(466771.5,
3808200.1,	1066.0,	1066.0,	0.0);		
(466827.5,	3808200.1,	1064.7,	1064.7,	0.0);	(466883.5,
3808200.1,	1063.8,	1063.8,	0.0);		
(465763.9,	3808266.3,	1080.3,	1080.3,	0.0);	(465819.8,
3808266.3,	1080.0,	1080.0,	0.0);		
(465875.8,	3808266.3,	1079.4,	1079.4,	0.0);	(465931.8,
3808266.3,	1078.5,	1078.5,	0.0);		
(465987.8,	3808266.3,	1077.6,	1077.6,	0.0);	(466043.8,
3808266.3,	1076.7,	1076.7,	0.0);		
(466099.7,	3808266.3,	1075.8,	1075.8,	0.0);	(466155.7,
3808266.3,	1074.9,	1074.9,	0.0);		
(466211.7,	3808266.3,	1074.0,	1074.0,	0.0);	(466267.7,
3808266.3,	1073.4,	1073.4,	0.0);		
(466323.7,	3808266.3,	1072.5,	1072.5,	0.0);	(466379.6,
3808266.3,	1072.0,	1072.0,	0.0);		
(466435.6,	3808266.3,	1071.2,	1071.2,	0.0);	(466491.6,
3808266.3,	1070.0,	1070.0,	0.0);		
(466547.6,	3808266.3,	1069.0,	1069.0,	0.0);	(466603.6,
3808266.3,	1068.0,	1068.0,	0.0);		
(466659.5,	3808266.3,	1067.3,	1067.3,	0.0);	(466715.5,
3808266.3,	1066.1,	1066.1,	0.0);		
(466771.5,	3808266.3,	1065.3,	1065.3,	0.0);	(466827.5,
3808266.3,	1064.1,	1064.1,	0.0);		
(466883.5,	3808266.3,	1063.2,	1063.2,	0.0);	(465763.9,
3808332.5,	1079.1,	1079.1,	0.0);		
(465819.8,	3808332.5,	1079.1,	1079.1,	0.0);	(465875.8,
3808332.5,	1078.2,	1078.2,	0.0);		
(465931.8,	3808332.5,	1077.4,	1077.4,	0.0);	(465987.8,
3808332.5,	1076.5,	1076.5,	0.0);		
(466043.8,	3808332.5,	1075.6,	1075.6,	0.0);	(466099.7,


```

3808332.5, 1074.7, 1074.7, 0.0);
( 466155.7, 3808332.5, 1074.0, 1074.0, 0.0); ( 466211.7,
3808332.5, 1073.1, 1073.1, 0.0);
( 466267.7, 3808332.5, 1072.2, 1072.2, 0.0); ( 466323.7,
3808332.5, 1072.0, 1072.0, 0.0);
( 466379.6, 3808332.5, 1071.0, 1071.0, 0.0); ( 466435.6,
3808332.5, 1070.1, 1070.1, 0.0);
( 466491.6, 3808332.5, 1069.1, 1069.1, 0.0); ( 466547.6,
3808332.5, 1068.1, 1068.1, 0.0);
( 466603.6, 3808332.5, 1067.9, 1067.9, 0.0); ( 466659.5,
3808332.5, 1067.0, 1067.0, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 16

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 466715.5, 3808332.5, 1066.0, 1066.0, 0.0); ( 466771.5,
3808332.5, 1064.4, 1064.4, 0.0);
( 466827.5, 3808332.5, 1063.5, 1063.5, 0.0); ( 466883.5,
3808332.5, 1062.5, 1062.5, 0.0);
( 465763.9, 3808398.7, 1078.0, 1078.0, 0.0); ( 465819.8,
3808398.7, 1077.9, 1077.9, 0.0);
( 465875.8, 3808398.7, 1077.0, 1077.0, 0.0); ( 465931.8,
3808398.7, 1076.2, 1076.2, 0.0);
( 465987.8, 3808398.7, 1075.4, 1075.4, 0.0); ( 466043.8,
3808398.7, 1074.5, 1074.5, 0.0);
( 466099.7, 3808398.7, 1074.0, 1074.0, 0.0); ( 466155.7,
3808398.7, 1073.0, 1073.0, 0.0);
( 466211.7, 3808398.7, 1072.0, 1072.0, 0.0); ( 466267.7,
3808398.7, 1071.9, 1071.9, 0.0);
( 466323.7, 3808398.7, 1070.9, 1070.9, 0.0); ( 466379.6,
3808398.7, 1070.0, 1070.0, 0.0);
( 466435.6, 3808398.7, 1069.4, 1069.4, 0.0); ( 466491.6,
3808398.7, 1068.6, 1068.6, 0.0);
( 466547.6, 3808398.7, 1067.7, 1067.7, 0.0); ( 466603.6,
3808398.7, 1066.9, 1066.9, 0.0);
( 466659.5, 3808398.7, 1066.0, 1066.0, 0.0); ( 466715.5,
3808398.7, 1064.9, 1064.9, 0.0);
( 466771.5, 3808398.7, 1064.0, 1064.0, 0.0); ( 466827.5,
3808398.7, 1063.0, 1063.0, 0.0);
( 466883.5, 3808398.7, 1062.0, 1062.0, 0.0); ( 465763.9,
3808464.9, 1077.0, 1077.0, 0.0);
( 465819.8, 3808464.9, 1076.7, 1076.7, 0.0); ( 465875.8,

```

3808464.9,	1075.8,	1075.8,	0.0);		
(465931.8,	3808464.9,	1075.0,	1075.0,	0.0);	(465987.8,
3808464.9,	1074.3,	1074.3,	0.0);		
(466043.8,	3808464.9,	1073.9,	1073.9,	0.0);	(466099.7,
3808464.9,	1072.9,	1072.9,	0.0);		
(466155.7,	3808464.9,	1071.9,	1071.9,	0.0);	(466211.7,
3808464.9,	1071.0,	1071.0,	0.0);		
(466267.7,	3808464.9,	1070.7,	1070.7,	0.0);	(466323.7,
3808464.9,	1069.8,	1069.8,	0.0);		
(466379.6,	3808464.9,	1069.2,	1069.2,	0.0);	(466435.6,
3808464.9,	1068.3,	1068.3,	0.0);		
(466491.6,	3808464.9,	1067.9,	1067.9,	0.0);	(466547.6,
3808464.9,	1066.9,	1066.9,	0.0);		
(466603.6,	3808464.9,	1066.0,	1066.0,	0.0);	(466659.5,
3808464.9,	1065.0,	1065.0,	0.0);		
(466715.5,	3808464.9,	1064.1,	1064.1,	0.0);	(466771.5,
3808464.9,	1063.2,	1063.2,	0.0);		
(466827.5,	3808464.9,	1062.3,	1062.3,	0.0);	(466883.5,
3808464.9,	1061.4,	1061.4,	0.0);		
(465763.9,	3808531.2,	1076.4,	1076.4,	0.0);	(465819.8,
3808531.2,	1075.5,	1075.5,	0.0);		
(465875.8,	3808531.2,	1074.6,	1074.6,	0.0);	(465931.8,
3808531.2,	1073.6,	1073.6,	0.0);		
(465987.8,	3808531.2,	1073.2,	1073.2,	0.0);	(466043.8,
3808531.2,	1072.5,	1072.5,	0.0);		
(466099.7,	3808531.2,	1071.8,	1071.8,	0.0);	(466155.7,
3808531.2,	1070.9,	1070.9,	0.0);		
(466211.7,	3808531.2,	1070.0,	1070.0,	0.0);	(466267.7,
3808531.2,	1069.5,	1069.5,	0.0);		
(466323.7,	3808531.2,	1069.0,	1069.0,	0.0);	(466379.6,
3808531.2,	1068.2,	1068.2,	0.0);		
(466435.6,	3808531.2,	1067.7,	1067.7,	0.0);	(466491.6,
3808531.2,	1066.8,	1066.8,	0.0);		
(466547.6,	3808531.2,	1065.9,	1065.9,	0.0);	(466603.6,
3808531.2,	1064.9,	1064.9,	0.0);		
(466659.5,	3808531.2,	1064.0,	1064.0,	0.0);	(466715.5,
3808531.2,	1063.1,	1063.1,	0.0);		
(466771.5,	3808531.2,	1062.1,	1062.1,	0.0);	(466827.5,
3808531.2,	1061.4,	1061.4,	0.0);		
(466883.5,	3808531.2,	1060.5,	1060.5,	0.0);	(465763.9,
3808597.4,	1075.2,	1075.2,	0.0);		
(465819.8,	3808597.4,	1075.0,	1075.0,	0.0);	(465875.8,
3808597.4,	1074.0,	1074.0,	0.0);		
(465931.8,	3808597.4,	1072.5,	1072.5,	0.0);	(465987.8,
3808597.4,	1072.0,	1072.0,	0.0);		
(466043.8,	3808597.4,	1071.7,	1071.7,	0.0);	(466099.7,
3808597.4,	1070.8,	1070.8,	0.0);		
(466155.7,	3808597.4,	1070.0,	1070.0,	0.0);	(466211.7,
3808597.4,	1069.3,	1069.3,	0.0);		
(466267.7,	3808597.4,	1068.3,	1068.3,	0.0);	(466323.7,

```

3808597.4, 1068.0, 1068.0, 0.0);
( 466379.6, 3808597.4, 1067.5, 1067.5, 0.0); ( 466435.6,
3808597.4, 1066.6, 1066.6, 0.0);
( 466491.6, 3808597.4, 1066.0, 1066.0, 0.0); ( 466547.6,
3808597.4, 1065.2, 1065.2, 0.0);
( 466603.6, 3808597.4, 1064.3, 1064.3, 0.0); ( 466659.5,
3808597.4, 1063.3, 1063.3, 0.0);
( 466715.5, 3808597.4, 1062.4, 1062.4, 0.0); ( 466771.5,
3808597.4, 1061.5, 1061.5, 0.0);
( 466827.5, 3808597.4, 1060.6, 1060.6, 0.0); ( 466883.5,
3808597.4, 1060.0, 1060.0, 0.0);
( 465763.9, 3808663.6, 1074.1, 1074.1, 0.0); ( 465819.8,
3808663.6, 1074.0, 1074.0, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 17

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465875.8, 3808663.6, 1073.1, 1073.1, 0.0); ( 465931.8,
3808663.6, 1072.3, 1072.3, 0.0);
( 465987.8, 3808663.6, 1071.5, 1071.5, 0.0); ( 466043.8,
3808663.6, 1070.6, 1070.6, 0.0);
( 466099.7, 3808663.6, 1070.0, 1070.0, 0.0); ( 466155.7,
3808663.6, 1069.1, 1069.1, 0.0);
( 466211.7, 3808663.6, 1068.1, 1068.1, 0.0); ( 466267.7,
3808663.6, 1067.1, 1067.1, 0.0);
( 466323.7, 3808663.6, 1067.0, 1067.0, 0.0); ( 466379.6,
3808663.6, 1066.1, 1066.1, 0.0);
( 466435.6, 3808663.6, 1066.0, 1066.0, 0.0); ( 466491.6,
3808663.6, 1065.0, 1065.0, 0.0);
( 466547.6, 3808663.6, 1064.1, 1064.1, 0.0); ( 466603.6,
3808663.6, 1063.1, 1063.1, 0.0);
( 466659.5, 3808663.6, 1062.1, 1062.1, 0.0); ( 466715.5,
3808663.6, 1061.2, 1061.2, 0.0);
( 466771.5, 3808663.6, 1060.3, 1060.3, 0.0); ( 466827.5,
3808663.6, 1060.0, 1060.0, 0.0);
( 466883.5, 3808663.6, 1059.0, 1059.0, 0.0); ( 465763.9,
3808729.8, 1073.9, 1073.9, 0.0);
( 465819.8, 3808729.8, 1074.0, 1074.0, 0.0); ( 465875.8,
3808729.8, 1073.1, 1073.1, 0.0);
( 465931.8, 3808729.8, 1072.0, 1072.0, 0.0); ( 465987.8,
3808729.8, 1070.9, 1070.9, 0.0);
( 466043.8, 3808729.8, 1069.9, 1069.9, 0.0); ( 466099.7,

```

3808729.8,	1069.0,	1069.0,	0.0);		
(466155.7,	3808729.8,	1068.0,	1068.0,	0.0);	(466211.7,
3808729.8,	1067.0,	1067.0,	0.0);		
(466267.7,	3808729.8,	1066.1,	1066.1,	0.0);	(466323.7,
3808729.8,	1065.9,	1065.9,	0.0);		
(466379.6,	3808729.8,	1065.3,	1065.3,	0.0);	(466435.6,
3808729.8,	1064.4,	1064.4,	0.0);		
(466491.6,	3808729.8,	1064.0,	1064.0,	0.0);	(466547.6,
3808729.8,	1063.0,	1063.0,	0.0);		
(466603.6,	3808729.8,	1062.0,	1062.0,	0.0);	(466659.5,
3808729.8,	1061.9,	1061.9,	0.0);		
(466715.5,	3808729.8,	1060.9,	1060.9,	0.0);	(466771.5,
3808729.8,	1060.0,	1060.0,	0.0);		
(466827.5,	3808729.8,	1059.4,	1059.4,	0.0);	(466883.5,
3808729.8,	1058.5,	1058.5,	0.0);		
(465763.9,	3808796.0,	1072.7,	1072.7,	0.0);	(465819.8,
3808796.0,	1073.7,	1073.7,	0.0);		
(465875.8,	3808796.0,	1072.1,	1072.1,	0.0);	(465931.8,
3808796.0,	1071.3,	1071.3,	0.0);		
(465987.8,	3808796.0,	1070.3,	1070.3,	0.0);	(466043.8,
3808796.0,	1069.4,	1069.4,	0.0);		
(466099.7,	3808796.0,	1068.5,	1068.5,	0.0);	(466155.7,
3808796.0,	1067.5,	1067.5,	0.0);		
(466211.7,	3808796.0,	1066.6,	1066.6,	0.0);	(466267.7,
3808796.0,	1065.7,	1065.7,	0.0);		
(466323.7,	3808796.0,	1065.0,	1065.0,	0.0);	(466379.6,
3808796.0,	1064.2,	1064.2,	0.0);		
(466435.6,	3808796.0,	1063.8,	1063.8,	0.0);	(466491.6,
3808796.0,	1062.9,	1062.9,	0.0);		
(466547.6,	3808796.0,	1062.0,	1062.0,	0.0);	(466603.6,
3808796.0,	1061.6,	1061.6,	0.0);		
(466659.5,	3808796.0,	1060.7,	1060.7,	0.0);	(466715.5,
3808796.0,	1060.0,	1060.0,	0.0);		
(466771.5,	3808796.0,	1059.2,	1059.2,	0.0);	(466827.5,
3808796.0,	1058.3,	1058.3,	0.0);		
(466883.5,	3808796.0,	1057.8,	1057.8,	0.0);	(465763.9,
3808862.3,	1070.5,	1070.5,	0.0);		
(465819.8,	3808862.3,	1070.9,	1070.9,	0.0);	(465875.8,
3808862.3,	1071.0,	1071.0,	0.0);		
(465931.8,	3808862.3,	1070.1,	1070.1,	0.0);	(465987.8,
3808862.3,	1069.2,	1069.2,	0.0);		
(466043.8,	3808862.3,	1068.2,	1068.2,	0.0);	(466099.7,
3808862.3,	1067.7,	1067.7,	0.0);		
(466155.7,	3808862.3,	1066.4,	1066.4,	0.0);	(466211.7,
3808862.3,	1065.4,	1065.4,	0.0);		
(466267.7,	3808862.3,	1065.0,	1065.0,	0.0);	(466323.7,
3808862.3,	1064.1,	1064.1,	0.0);		
(466379.6,	3808862.3,	1063.5,	1063.5,	0.0);	(466435.6,
3808862.3,	1062.7,	1062.7,	0.0);		
(466491.6,	3808862.3,	1062.0,	1062.0,	0.0);	(466547.6,

```

3808862.3, 1061.3, 1061.3, 0.0);
( 466603.6, 3808862.3, 1060.4, 1060.4, 0.0); ( 466659.5,
3808862.3, 1060.0, 1060.0, 0.0);
( 466715.5, 3808862.3, 1059.1, 1059.1, 0.0); ( 466771.5,
3808862.3, 1058.3, 1058.3, 0.0);
( 466827.5, 3808862.3, 1057.7, 1057.7, 0.0); ( 466883.5,
3808862.3, 1057.0, 1057.0, 0.0);
( 465763.9, 3808928.5, 1067.3, 1067.3, 0.0); ( 465819.8,
3808928.5, 1067.5, 1067.5, 0.0);
( 465875.8, 3808928.5, 1068.2, 1068.2, 0.0); ( 465931.8,
3808928.5, 1068.3, 1068.3, 0.0);
( 465987.8, 3808928.5, 1068.1, 1068.1, 0.0); ( 466043.8,
3808928.5, 1068.0, 1068.0, 0.0);
( 466099.7, 3808928.5, 1066.7, 1066.7, 0.0); ( 466155.7,
3808928.5, 1065.8, 1065.8, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 18

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 466211.7, 3808928.5, 1065.0, 1065.0, 0.0); ( 466267.7,
3808928.5, 1064.0, 1064.0, 0.0);
( 466323.7, 3808928.5, 1063.0, 1063.0, 0.0); ( 466379.6,
3808928.5, 1062.1, 1062.1, 0.0);
( 466435.6, 3808928.5, 1061.6, 1061.6, 0.0); ( 466491.6,
3808928.5, 1061.0, 1061.0, 0.0);
( 466547.6, 3808928.5, 1060.2, 1060.2, 0.0); ( 466603.6,
3808928.5, 1059.9, 1059.9, 0.0);
( 466659.5, 3808928.5, 1059.0, 1059.0, 0.0); ( 466715.5,
3808928.5, 1058.4, 1058.4, 0.0);
( 466771.5, 3808928.5, 1057.5, 1057.5, 0.0); ( 466827.5,
3808928.5, 1057.0, 1057.0, 0.0);
( 466883.5, 3808928.5, 1056.1, 1056.1, 0.0); ( 465763.9,
3808994.7, 1066.8, 1066.8, 0.0);
( 465819.8, 3808994.7, 1066.0, 1066.0, 0.0); ( 465875.8,
3808994.7, 1066.0, 1066.0, 0.0);
( 465931.8, 3808994.7, 1066.8, 1066.8, 0.0); ( 465987.8,
3808994.7, 1067.6, 1067.6, 0.0);
( 466043.8, 3808994.7, 1067.0, 1067.0, 0.0); ( 466099.7,
3808994.7, 1066.0, 1066.0, 0.0);
( 466155.7, 3808994.7, 1064.8, 1064.8, 0.0); ( 466211.7,
3808994.7, 1064.0, 1064.0, 0.0);
( 466267.7, 3808994.7, 1063.1, 1063.1, 0.0); ( 466323.7,

```

3808994.7,	1062.2,	1062.2,	0.0);		
(466379.6,	3808994.7,	1061.4,	1061.4,	0.0);	(466435.6,
3808994.7,	1060.5,	1060.5,	0.0);		
(466491.6,	3808994.7,	1060.0,	1060.0,	0.0);	(466547.6,
3808994.7,	1059.8,	1059.8,	0.0);		
(466603.6,	3808994.7,	1059.0,	1059.0,	0.0);	(466659.5,
3808994.7,	1058.1,	1058.1,	0.0);		
(466715.5,	3808994.7,	1058.0,	1058.0,	0.0);	(466771.5,
3808994.7,	1057.0,	1057.0,	0.0);		
(466827.5,	3808994.7,	1056.0,	1056.0,	0.0);	(466883.5,
3808994.7,	1055.6,	1055.6,	0.0);		
(465763.9,	3809060.9,	1067.0,	1067.0,	0.0);	(465819.8,
3809060.9,	1066.2,	1066.2,	0.0);		
(465875.8,	3809060.9,	1066.0,	1066.0,	0.0);	(465931.8,
3809060.9,	1066.0,	1066.0,	0.0);		
(465987.8,	3809060.9,	1066.0,	1066.0,	0.0);	(466043.8,
3809060.9,	1065.9,	1065.9,	0.0);		
(466099.7,	3809060.9,	1064.6,	1064.6,	0.0);	(466155.7,
3809060.9,	1063.8,	1063.8,	0.0);		
(466211.7,	3809060.9,	1062.8,	1062.8,	0.0);	(466267.7,
3809060.9,	1062.1,	1062.1,	0.0);		
(466323.7,	3809060.9,	1061.2,	1061.2,	0.0);	(466379.6,
3809060.9,	1060.3,	1060.3,	0.0);		
(466435.6,	3809060.9,	1060.0,	1060.0,	0.0);	(466491.6,
3809060.9,	1059.5,	1059.5,	0.0);		
(466547.6,	3809060.9,	1058.6,	1058.6,	0.0);	(466603.6,
3809060.9,	1058.0,	1058.0,	0.0);		
(466659.5,	3809060.9,	1057.8,	1057.8,	0.0);	(466715.5,
3809060.9,	1056.9,	1056.9,	0.0);		
(466771.5,	3809060.9,	1056.0,	1056.0,	0.0);	(466827.5,
3809060.9,	1055.3,	1055.3,	0.0);		
(466883.5,	3809060.9,	1054.8,	1054.8,	0.0);	(465763.9,
3809127.1,	1068.0,	1068.0,	0.0);		
(465819.8,	3809127.1,	1067.4,	1067.4,	0.0);	(465875.8,
3809127.1,	1067.0,	1067.0,	0.0);		
(465931.8,	3809127.1,	1066.4,	1066.4,	0.0);	(465987.8,
3809127.1,	1065.8,	1065.8,	0.0);		
(466043.8,	3809127.1,	1064.2,	1064.2,	0.0);	(466099.7,
3809127.1,	1062.6,	1062.6,	0.0);		
(466155.7,	3809127.1,	1061.6,	1061.6,	0.0);	(466211.7,
3809127.1,	1062.0,	1062.0,	0.0);		
(466267.7,	3809127.1,	1061.7,	1061.7,	0.0);	(466323.7,
3809127.1,	1061.0,	1061.0,	0.0);		
(466379.6,	3809127.1,	1060.0,	1060.0,	0.0);	(466435.6,
3809127.1,	1059.3,	1059.3,	0.0);		
(466491.6,	3809127.1,	1058.6,	1058.6,	0.0);	(466547.6,
3809127.1,	1058.0,	1058.0,	0.0);		
(466603.6,	3809127.1,	1057.6,	1057.6,	0.0);	(466659.5,
3809127.1,	1056.6,	1056.6,	0.0);		
(466715.5,	3809127.1,	1056.0,	1056.0,	0.0);	(466771.5,

```

3809127.1, 1055.3, 1055.3, 0.0);
( 466827.5, 3809127.1, 1054.4, 1054.4, 0.0); ( 466883.5,
3809127.1, 1054.0, 1054.0, 0.0);
( 465763.9, 3809193.4, 1068.0, 1068.0, 0.0); ( 465819.8,
3809193.4, 1068.0, 1068.0, 0.0);
( 465875.8, 3809193.4, 1067.4, 1067.4, 0.0); ( 465931.8,
3809193.4, 1066.6, 1066.6, 0.0);
( 465987.8, 3809193.4, 1064.8, 1064.8, 0.0); ( 466043.8,
3809193.4, 1061.7, 1061.7, 0.0);
( 466099.7, 3809193.4, 1061.3, 1061.3, 0.0); ( 466155.7,
3809193.4, 1060.4, 1060.4, 0.0);
( 466211.7, 3809193.4, 1060.4, 1060.4, 0.0); ( 466267.7,
3809193.4, 1060.4, 1060.4, 0.0);
( 466323.7, 3809193.4, 1060.1, 1060.1, 0.0); ( 466379.6,
3809193.4, 1059.6, 1059.6, 0.0);
( 466435.6, 3809193.4, 1058.7, 1058.7, 0.0); ( 466491.6,
3809193.4, 1058.0, 1058.0, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 466547.6, 3809193.4, 1057.3, 1057.3, 0.0); ( 466603.6,
3809193.4, 1056.9, 1056.9, 0.0);
( 466659.5, 3809193.4, 1056.0, 1056.0, 0.0); ( 466715.5,
3809193.4, 1055.5, 1055.5, 0.0);
( 466771.5, 3809193.4, 1054.6, 1054.6, 0.0); ( 466827.5,
3809193.4, 1054.0, 1054.0, 0.0);
( 466883.5, 3809193.4, 1053.2, 1053.2, 0.0); ( 465763.9,
3809259.6, 1067.2, 1067.2, 0.0);
( 465819.8, 3809259.6, 1067.0, 1067.0, 0.0); ( 465875.8,
3809259.6, 1066.2, 1066.2, 0.0);
( 465931.8, 3809259.6, 1065.4, 1065.4, 0.0); ( 465987.8,
3809259.6, 1063.5, 1063.5, 0.0);
( 466043.8, 3809259.6, 1061.5, 1061.5, 0.0); ( 466099.7,
3809259.6, 1060.0, 1060.0, 0.0);
( 466155.7, 3809259.6, 1060.0, 1060.0, 0.0); ( 466211.7,
3809259.6, 1060.0, 1060.0, 0.0);
( 466267.7, 3809259.6, 1060.0, 1060.0, 0.0); ( 466323.7,
3809259.6, 1059.0, 1059.0, 0.0);
( 466379.6, 3809259.6, 1058.5, 1058.5, 0.0); ( 466435.6,
3809259.6, 1058.0, 1058.0, 0.0);
( 466491.6, 3809259.6, 1057.1, 1057.1, 0.0); ( 466547.6,

```

3809259.6,	1056.8,	1056.8,	0.0);		
(466603.6,	3809259.6,	1056.0,	1056.0,	0.0);	(466659.5,
3809259.6,	1055.2,	1055.2,	0.0);		
(466715.5,	3809259.6,	1055.0,	1055.0,	0.0);	(466771.5,
3809259.6,	1054.1,	1054.1,	0.0);		
(466827.5,	3809259.6,	1053.4,	1053.4,	0.0);	(466883.5,
3809259.6,	1052.6,	1052.6,	0.0);		
(464503.4,	3807141.9,	1112.9,	1112.9,	0.0);	(464523.4,
3807141.9,	1112.2,	1112.2,	0.0);		
(464543.4,	3807141.9,	1112.0,	1112.0,	0.0);	(464563.4,
3807141.9,	1111.9,	1111.9,	0.0);		
(464583.4,	3807141.9,	1111.2,	1111.2,	0.0);	(464603.4,
3807141.9,	1110.9,	1110.9,	0.0);		
(464623.4,	3807141.9,	1110.7,	1110.7,	0.0);	(464643.4,
3807141.9,	1110.2,	1110.2,	0.0);		
(464663.4,	3807141.9,	1109.9,	1109.9,	0.0);	(464683.4,
3807141.9,	1109.7,	1109.7,	0.0);		
(464703.4,	3807141.9,	1109.2,	1109.2,	0.0);	(464723.4,
3807141.9,	1109.0,	1109.0,	0.0);		
(464743.4,	3807141.9,	1109.0,	1109.0,	0.0);	(464763.4,
3807141.9,	1108.8,	1108.8,	0.0);		
(464783.4,	3807141.9,	1108.8,	1108.8,	0.0);	(464803.4,
3807141.9,	1108.7,	1108.7,	0.0);		
(464823.4,	3807141.9,	1108.2,	1108.2,	0.0);	(464843.4,
3807141.9,	1108.0,	1108.0,	0.0);		
(464863.4,	3807141.9,	1108.0,	1108.0,	0.0);	(464883.4,
3807141.9,	1107.8,	1107.8,	0.0);		
(464903.4,	3807141.9,	1107.4,	1107.4,	0.0);	(464923.4,
3807141.9,	1107.0,	1107.0,	0.0);		
(464503.4,	3807161.9,	1112.9,	1112.9,	0.0);	(464523.4,
3807161.9,	1112.2,	1112.2,	0.0);		
(464543.4,	3807161.9,	1112.0,	1112.0,	0.0);	(464563.4,
3807161.9,	1111.9,	1111.9,	0.0);		
(464583.4,	3807161.9,	1111.2,	1111.2,	0.0);	(464603.4,
3807161.9,	1110.6,	1110.6,	0.0);		
(464623.4,	3807161.9,	1110.1,	1110.1,	0.0);	(464643.4,
3807161.9,	1110.0,	1110.0,	0.0);		
(464663.4,	3807161.9,	1109.6,	1109.6,	0.0);	(464683.4,
3807161.9,	1109.1,	1109.1,	0.0);		
(464703.4,	3807161.9,	1109.0,	1109.0,	0.0);	(464723.4,
3807161.9,	1109.0,	1109.0,	0.0);		
(464743.4,	3807161.9,	1108.9,	1108.9,	0.0);	(464763.4,
3807161.9,	1108.3,	1108.3,	0.0);		
(464783.4,	3807161.9,	1108.1,	1108.1,	0.0);	(464803.4,
3807161.9,	1108.1,	1108.1,	0.0);		
(464823.4,	3807161.9,	1108.0,	1108.0,	0.0);	(464843.4,
3807161.9,	1108.0,	1108.0,	0.0);		
(464863.4,	3807161.9,	1107.9,	1107.9,	0.0);	(464883.4,
3807161.9,	1107.3,	1107.3,	0.0);		
(464903.4,	3807161.9,	1107.1,	1107.1,	0.0);	(464923.4,


```

3807161.9, 1106.9, 1106.9, 0.0);
( 464503.4, 3807181.9, 1112.4, 1112.4, 0.0); ( 464523.4,
3807181.9, 1112.1, 1112.1, 0.0);
( 464543.4, 3807181.9, 1111.8, 1111.8, 0.0); ( 464563.4,
3807181.9, 1111.4, 1111.4, 0.0);
( 464583.4, 3807181.9, 1111.1, 1111.1, 0.0); ( 464603.4,
3807181.9, 1110.5, 1110.5, 0.0);
( 464623.4, 3807181.9, 1110.0, 1110.0, 0.0); ( 464643.4,
3807181.9, 1110.0, 1110.0, 0.0);
( 464663.4, 3807181.9, 1109.5, 1109.5, 0.0); ( 464683.4,
3807181.9, 1109.0, 1109.0, 0.0);
( 464703.4, 3807181.9, 1109.0, 1109.0, 0.0); ( 464723.4,
3807181.9, 1108.8, 1108.8, 0.0);
( 464743.4, 3807181.9, 1108.4, 1108.4, 0.0); ( 464763.4,
3807181.9, 1108.1, 1108.1, 0.0);
( 464783.4, 3807181.9, 1108.0, 1108.0, 0.0); ( 464803.4,
3807181.9, 1107.9, 1107.9, 0.0);
( 464823.4, 3807181.9, 1107.6, 1107.6, 0.0); ( 464843.4,
3807181.9, 1107.5, 1107.5, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 20

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464863.4, 3807181.9, 1107.4, 1107.4, 0.0); ( 464883.4,
3807181.9, 1107.1, 1107.1, 0.0);
( 464903.4, 3807181.9, 1106.8, 1106.8, 0.0); ( 464923.4,
3807181.9, 1106.4, 1106.4, 0.0);
( 464503.4, 3807201.9, 1112.0, 1112.0, 0.0); ( 464523.4,
3807201.9, 1112.0, 1112.0, 0.0);
( 464543.4, 3807201.9, 1111.5, 1111.5, 0.0); ( 464563.4,
3807201.9, 1111.0, 1111.0, 0.0);
( 464583.4, 3807201.9, 1110.8, 1110.8, 0.0); ( 464603.4,
3807201.9, 1110.4, 1110.4, 0.0);
( 464623.4, 3807201.9, 1110.0, 1110.0, 0.0); ( 464643.4,
3807201.9, 1109.8, 1109.8, 0.0);
( 464663.4, 3807201.9, 1109.4, 1109.4, 0.0); ( 464683.4,
3807201.9, 1109.0, 1109.0, 0.0);
( 464703.4, 3807201.9, 1108.8, 1108.8, 0.0); ( 464723.4,
3807201.9, 1108.4, 1108.4, 0.0);
( 464743.4, 3807201.9, 1108.0, 1108.0, 0.0); ( 464763.4,
3807201.9, 1108.0, 1108.0, 0.0);
( 464783.4, 3807201.9, 1107.9, 1107.9, 0.0); ( 464803.4,

```

3807201.9,	1107.7,	1107.7,	0.0);		
(464823.4,	3807201.9,	1107.2,	1107.2,	0.0);	(464843.4,
3807201.9,	1106.9,	1106.9,	0.0);		
(464863.4,	3807201.9,	1106.8,	1106.8,	0.0);	(464883.4,
3807201.9,	1106.8,	1106.8,	0.0);		
(464903.4,	3807201.9,	1106.4,	1106.4,	0.0);	(464923.4,
3807201.9,	1106.0,	1106.0,	0.0);		
(464503.4,	3807221.9,	1112.0,	1112.0,	0.0);	(464523.4,
3807221.9,	1112.0,	1112.0,	0.0);		
(464543.4,	3807221.9,	1111.5,	1111.5,	0.0);	(464563.4,
3807221.9,	1110.9,	1110.9,	0.0);		
(464583.4,	3807221.9,	1110.3,	1110.3,	0.0);	(464603.4,
3807221.9,	1110.1,	1110.1,	0.0);		
(464623.4,	3807221.9,	1109.9,	1109.9,	0.0);	(464643.4,
3807221.9,	1109.3,	1109.3,	0.0);		
(464663.4,	3807221.9,	1109.1,	1109.1,	0.0);	(464683.4,
3807221.9,	1108.9,	1108.9,	0.0);		
(464703.4,	3807221.9,	1108.3,	1108.3,	0.0);	(464723.4,
3807221.9,	1108.1,	1108.1,	0.0);		
(464743.4,	3807221.9,	1108.0,	1108.0,	0.0);	(464763.4,
3807221.9,	1108.0,	1108.0,	0.0);		
(464783.4,	3807221.9,	1107.6,	1107.6,	0.0);	(464803.4,
3807221.9,	1107.1,	1107.1,	0.0);		
(464823.4,	3807221.9,	1107.0,	1107.0,	0.0);	(464843.4,
3807221.9,	1106.6,	1106.6,	0.0);		
(464863.4,	3807221.9,	1106.1,	1106.1,	0.0);	(464883.4,
3807221.9,	1106.1,	1106.1,	0.0);		
(464903.4,	3807221.9,	1106.1,	1106.1,	0.0);	(464923.4,
3807221.9,	1105.9,	1105.9,	0.0);		
(464503.4,	3807241.9,	1111.9,	1111.9,	0.0);	(464523.4,
3807241.9,	1111.6,	1111.6,	0.0);		
(464543.4,	3807241.9,	1111.3,	1111.3,	0.0);	(464563.4,
3807241.9,	1110.9,	1110.9,	0.0);		
(464583.4,	3807241.9,	1110.2,	1110.2,	0.0);	(464603.4,
3807241.9,	1110.0,	1110.0,	0.0);		
(464623.4,	3807241.9,	1109.9,	1109.9,	0.0);	(464643.4,
3807241.9,	1109.2,	1109.2,	0.0);		
(464663.4,	3807241.9,	1108.8,	1108.8,	0.0);	(464683.4,
3807241.9,	1108.4,	1108.4,	0.0);		
(464703.4,	3807241.9,	1108.1,	1108.1,	0.0);	(464723.4,
3807241.9,	1108.0,	1108.0,	0.0);		
(464743.4,	3807241.9,	1107.9,	1107.9,	0.0);	(464763.4,
3807241.9,	1107.6,	1107.6,	0.0);		
(464783.4,	3807241.9,	1107.3,	1107.3,	0.0);	(464803.4,
3807241.9,	1106.9,	1106.9,	0.0);		
(464823.4,	3807241.9,	1106.6,	1106.6,	0.0);	(464843.4,
3807241.9,	1106.3,	1106.3,	0.0);		
(464863.4,	3807241.9,	1106.0,	1106.0,	0.0);	(464883.4,
3807241.9,	1106.0,	1106.0,	0.0);		
(464903.4,	3807241.9,	1105.8,	1105.8,	0.0);	(464923.4,

```

3807241.9, 1105.4, 1105.4, 0.0);
( 464503.4, 3807261.9, 1111.9, 1111.9, 0.0); ( 464523.4,
3807261.9, 1111.2, 1111.2, 0.0);
( 464543.4, 3807261.9, 1111.0, 1111.0, 0.0); ( 464563.4,
3807261.9, 1110.9, 1110.9, 0.0);
( 464583.4, 3807261.9, 1110.2, 1110.2, 0.0); ( 464603.4,
3807261.9, 1109.9, 1109.9, 0.0);
( 464623.4, 3807261.9, 1109.7, 1109.7, 0.0); ( 464643.4,
3807261.9, 1109.2, 1109.2, 0.0);
( 464663.4, 3807261.9, 1108.5, 1108.5, 0.0); ( 464683.4,
3807261.9, 1108.0, 1108.0, 0.0);
( 464703.4, 3807261.9, 1108.0, 1108.0, 0.0); ( 464723.4,
3807261.9, 1107.9, 1107.9, 0.0);
( 464743.4, 3807261.9, 1107.7, 1107.7, 0.0); ( 464763.4,
3807261.9, 1107.2, 1107.2, 0.0);
( 464783.4, 3807261.9, 1106.9, 1106.9, 0.0); ( 464803.4,
3807261.9, 1106.7, 1106.7, 0.0);
( 464823.4, 3807261.9, 1106.2, 1106.2, 0.0); ( 464843.4,
3807261.9, 1105.9, 1105.9, 0.0);
( 464863.4, 3807261.9, 1105.8, 1105.8, 0.0); ( 464883.4,
3807261.9, 1105.8, 1105.8, 0.0);

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***

*** 13:53:49

PAGE 21

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

```

( 464903.4, 3807261.9, 1105.3, 1105.3, 0.0); ( 464923.4,
3807261.9, 1104.8, 1104.8, 0.0);
( 464503.4, 3807281.9, 1111.9, 1111.9, 0.0); ( 464523.4,
3807281.9, 1111.2, 1111.2, 0.0);
( 464543.4, 3807281.9, 1111.0, 1111.0, 0.0); ( 464563.4,
3807281.9, 1110.9, 1110.9, 0.0);
( 464583.4, 3807281.9, 1110.2, 1110.2, 0.0); ( 464603.4,
3807281.9, 1109.6, 1109.6, 0.0);
( 464623.4, 3807281.9, 1109.1, 1109.1, 0.0); ( 464643.4,
3807281.9, 1109.0, 1109.0, 0.0);
( 464663.4, 3807281.9, 1108.5, 1108.5, 0.0); ( 464683.4,
3807281.9, 1108.0, 1108.0, 0.0);
( 464703.4, 3807281.9, 1108.0, 1108.0, 0.0); ( 464723.4,
3807281.9, 1107.6, 1107.6, 0.0);
( 464743.4, 3807281.9, 1107.1, 1107.1, 0.0); ( 464763.4,
3807281.9, 1107.0, 1107.0, 0.0);
( 464783.4, 3807281.9, 1106.6, 1106.6, 0.0); ( 464803.4,

```

3807281.9,	1106.1,	1106.1,	0.0);		
(464823.4,	3807281.9,	1106.0,	1106.0,	0.0);	(464843.4,
3807281.9,	1105.6,	1105.6,	0.0);		
(464863.4,	3807281.9,	1105.1,	1105.1,	0.0);	(464883.4,
3807281.9,	1105.1,	1105.1,	0.0);		
(464903.4,	3807281.9,	1104.7,	1104.7,	0.0);	(464923.4,
3807281.9,	1104.1,	1104.1,	0.0);		
(464503.4,	3807301.9,	1111.4,	1111.4,	0.0);	(464523.4,
3807301.9,	1111.1,	1111.1,	0.0);		
(464543.4,	3807301.9,	1110.8,	1110.8,	0.0);	(464563.4,
3807301.9,	1110.4,	1110.4,	0.0);		
(464583.4,	3807301.9,	1110.1,	1110.1,	0.0);	(464603.4,
3807301.9,	1109.5,	1109.5,	0.0);		
(464623.4,	3807301.9,	1109.0,	1109.0,	0.0);	(464643.4,
3807301.9,	1109.0,	1109.0,	0.0);		
(464663.4,	3807301.9,	1108.5,	1108.5,	0.0);	(464683.4,
3807301.9,	1108.0,	1108.0,	0.0);		
(464703.4,	3807301.9,	1108.0,	1108.0,	0.0);	(464723.4,
3807301.9,	1107.5,	1107.5,	0.0);		
(464743.4,	3807301.9,	1106.9,	1106.9,	0.0);	(464763.4,
3807301.9,	1106.6,	1106.6,	0.0);		
(464783.4,	3807301.9,	1106.3,	1106.3,	0.0);	(464803.4,
3807301.9,	1106.0,	1106.0,	0.0);		
(464823.4,	3807301.9,	1106.0,	1106.0,	0.0);	(464843.4,
3807301.9,	1105.5,	1105.5,	0.0);		
(464863.4,	3807301.9,	1104.9,	1104.9,	0.0);	(464883.4,
3807301.9,	1104.6,	1104.6,	0.0);		
(464903.4,	3807301.9,	1104.3,	1104.3,	0.0);	(464923.4,
3807301.9,	1104.0,	1104.0,	0.0);		
(464503.4,	3807321.9,	1111.0,	1111.0,	0.0);	(464523.4,
3807321.9,	1111.0,	1111.0,	0.0);		
(464543.4,	3807321.9,	1110.5,	1110.5,	0.0);	(464563.4,
3807321.9,	1110.0,	1110.0,	0.0);		
(464583.4,	3807321.9,	1110.0,	1110.0,	0.0);	(464603.4,
3807321.9,	1109.5,	1109.5,	0.0);		
(464623.4,	3807321.9,	1109.0,	1109.0,	0.0);	(464643.4,
3807321.9,	1109.0,	1109.0,	0.0);		
(464663.4,	3807321.9,	1108.5,	1108.5,	0.0);	(464683.4,
3807321.9,	1108.0,	1108.0,	0.0);		
(464703.4,	3807321.9,	1107.8,	1107.8,	0.0);	(464723.4,
3807321.9,	1107.4,	1107.4,	0.0);		
(464743.4,	3807321.9,	1106.9,	1106.9,	0.0);	(464763.4,
3807321.9,	1106.2,	1106.2,	0.0);		
(464783.4,	3807321.9,	1106.0,	1106.0,	0.0);	(464803.4,
3807321.9,	1106.0,	1106.0,	0.0);		
(464823.4,	3807321.9,	1105.8,	1105.8,	0.0);	(464843.4,
3807321.9,	1105.3,	1105.3,	0.0);		
(464863.4,	3807321.9,	1104.7,	1104.7,	0.0);	(464883.4,
3807321.9,	1104.2,	1104.2,	0.0);		
(464903.4,	3807321.9,	1104.0,	1104.0,	0.0);	(464923.4,

```

3807321.9, 1104.0, 1104.0, 0.0);
( 464503.4, 3807341.9, 1111.0, 1111.0, 0.0); ( 464523.4,
3807341.9, 1111.0, 1111.0, 0.0);
( 464543.4, 3807341.9, 1110.5, 1110.5, 0.0); ( 464563.4,
3807341.9, 1110.0, 1110.0, 0.0);
( 464583.4, 3807341.9, 1110.0, 1110.0, 0.0); ( 464603.4,
3807341.9, 1109.5, 1109.5, 0.0);
( 464623.4, 3807341.9, 1109.0, 1109.0, 0.0); ( 464643.4,
3807341.9, 1109.0, 1109.0, 0.0);
( 464663.4, 3807341.9, 1108.5, 1108.5, 0.0); ( 464683.4,
3807341.9, 1107.9, 1107.9, 0.0);
( 464703.4, 3807341.9, 1107.3, 1107.3, 0.0); ( 464723.4,
3807341.9, 1107.1, 1107.1, 0.0);
( 464743.4, 3807341.9, 1106.9, 1106.9, 0.0); ( 464763.4,
3807341.9, 1106.2, 1106.2, 0.0);
( 464783.4, 3807341.9, 1106.0, 1106.0, 0.0); ( 464803.4,
3807341.9, 1105.9, 1105.9, 0.0);
( 464823.4, 3807341.9, 1105.3, 1105.3, 0.0); ( 464843.4,
3807341.9, 1104.7, 1104.7, 0.0);
( 464863.4, 3807341.9, 1104.1, 1104.1, 0.0); ( 464883.4,
3807341.9, 1104.0, 1104.0, 0.0);
( 464903.4, 3807341.9, 1104.0, 1104.0, 0.0); ( 464923.4,
3807341.9, 1103.9, 1103.9, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 22

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464503.4, 3807361.9, 1110.9, 1110.9, 0.0); ( 464523.4,
3807361.9, 1110.6, 1110.6, 0.0);
( 464543.4, 3807361.9, 1110.3, 1110.3, 0.0); ( 464563.4,
3807361.9, 1110.0, 1110.0, 0.0);
( 464583.4, 3807361.9, 1110.0, 1110.0, 0.0); ( 464603.4,
3807361.9, 1109.5, 1109.5, 0.0);
( 464623.4, 3807361.9, 1108.9, 1108.9, 0.0); ( 464643.4,
3807361.9, 1108.6, 1108.6, 0.0);
( 464663.4, 3807361.9, 1108.3, 1108.3, 0.0); ( 464683.4,
3807361.9, 1107.9, 1107.9, 0.0);
( 464703.4, 3807361.9, 1107.2, 1107.2, 0.0); ( 464723.4,
3807361.9, 1106.8, 1106.8, 0.0);
( 464743.4, 3807361.9, 1106.4, 1106.4, 0.0); ( 464763.4,
3807361.9, 1106.1, 1106.1, 0.0);
( 464783.4, 3807361.9, 1105.8, 1105.8, 0.0); ( 464803.4,

```

3807361.9,	1105.3,	1105.3,	0.0);		
(464823.4,	3807361.9,	1104.7,	1104.7,	0.0);	(464843.4,
3807361.9,	1104.3,	1104.3,	0.0);		
(464863.4,	3807361.9,	1104.0,	1104.0,	0.0);	(464883.4,
3807361.9,	1104.0,	1104.0,	0.0);		
(464903.4,	3807361.9,	1103.8,	1103.8,	0.0);	(464923.4,
3807361.9,	1103.4,	1103.4,	0.0);		
(464503.4,	3807381.9,	1110.7,	1110.7,	0.0);	(464523.4,
3807381.9,	1110.2,	1110.2,	0.0);		
(464543.4,	3807381.9,	1110.0,	1110.0,	0.0);	(464563.4,
3807381.9,	1110.0,	1110.0,	0.0);		
(464583.4,	3807381.9,	1109.8,	1109.8,	0.0);	(464603.4,
3807381.9,	1109.4,	1109.4,	0.0);		
(464623.4,	3807381.9,	1108.9,	1108.9,	0.0);	(464643.4,
3807381.9,	1108.2,	1108.2,	0.0);		
(464663.4,	3807381.9,	1107.9,	1107.9,	0.0);	(464683.4,
3807381.9,	1107.7,	1107.7,	0.0);		
(464703.4,	3807381.9,	1107.2,	1107.2,	0.0);	(464723.4,
3807381.9,	1106.5,	1106.5,	0.0);		
(464743.4,	3807381.9,	1106.0,	1106.0,	0.0);	(464763.4,
3807381.9,	1105.8,	1105.8,	0.0);		
(464783.4,	3807381.9,	1105.4,	1105.4,	0.0);	(464803.4,
3807381.9,	1104.9,	1104.9,	0.0);		
(464823.4,	3807381.9,	1104.2,	1104.2,	0.0);	(464843.4,
3807381.9,	1104.0,	1104.0,	0.0);		
(464863.4,	3807381.9,	1104.0,	1104.0,	0.0);	(464883.4,
3807381.9,	1103.8,	1103.8,	0.0);		
(464903.4,	3807381.9,	1103.4,	1103.4,	0.0);	(464923.4,
3807381.9,	1103.0,	1103.0,	0.0);		
(464503.4,	3807401.9,	1110.1,	1110.1,	0.0);	(464523.4,
3807401.9,	1110.0,	1110.0,	0.0);		
(464543.4,	3807401.9,	1110.0,	1110.0,	0.0);	(464563.4,
3807401.9,	1109.9,	1109.9,	0.0);		
(464583.4,	3807401.9,	1109.3,	1109.3,	0.0);	(464603.4,
3807401.9,	1109.1,	1109.1,	0.0);		
(464623.4,	3807401.9,	1108.9,	1108.9,	0.0);	(464643.4,
3807401.9,	1108.2,	1108.2,	0.0);		
(464663.4,	3807401.9,	1107.6,	1107.6,	0.0);	(464683.4,
3807401.9,	1107.1,	1107.1,	0.0);		
(464703.4,	3807401.9,	1107.0,	1107.0,	0.0);	(464723.4,
3807401.9,	1106.5,	1106.5,	0.0);		
(464743.4,	3807401.9,	1105.9,	1105.9,	0.0);	(464763.4,
3807401.9,	1105.3,	1105.3,	0.0);		
(464783.4,	3807401.9,	1105.1,	1105.1,	0.0);	(464803.4,
3807401.9,	1104.9,	1104.9,	0.0);		
(464823.4,	3807401.9,	1104.2,	1104.2,	0.0);	(464843.4,
3807401.9,	1104.0,	1104.0,	0.0);		
(464863.4,	3807401.9,	1103.9,	1103.9,	0.0);	(464883.4,
3807401.9,	1103.3,	1103.3,	0.0);		
(464903.4,	3807401.9,	1103.1,	1103.1,	0.0);	(464923.4,

```

3807401.9, 1102.9, 1102.9, 0.0);
( 464503.4, 3807421.9, 1110.0, 1110.0, 0.0); ( 464523.4,
3807421.9, 1110.0, 1110.0, 0.0);
( 464543.4, 3807421.9, 1109.8, 1109.8, 0.0); ( 464563.4,
3807421.9, 1109.4, 1109.4, 0.0);
( 464583.4, 3807421.9, 1109.1, 1109.1, 0.0); ( 464603.4,
3807421.9, 1108.8, 1108.8, 0.0);
( 464623.4, 3807421.9, 1108.4, 1108.4, 0.0); ( 464643.4,
3807421.9, 1108.1, 1108.1, 0.0);
( 464663.4, 3807421.9, 1107.5, 1107.5, 0.0); ( 464683.4,
3807421.9, 1106.9, 1106.9, 0.0);
( 464703.4, 3807421.9, 1106.6, 1106.6, 0.0); ( 464723.4,
3807421.9, 1106.3, 1106.3, 0.0);
( 464743.4, 3807421.9, 1105.9, 1105.9, 0.0); ( 464763.4,
3807421.9, 1105.2, 1105.2, 0.0);
( 464783.4, 3807421.9, 1104.8, 1104.8, 0.0); ( 464803.4,
3807421.9, 1104.4, 1104.4, 0.0);
( 464823.4, 3807421.9, 1104.1, 1104.1, 0.0); ( 464843.4,
3807421.9, 1103.8, 1103.8, 0.0);
( 464863.4, 3807421.9, 1103.4, 1103.4, 0.0); ( 464883.4,
3807421.9, 1103.1, 1103.1, 0.0);
( 464903.4, 3807421.9, 1102.8, 1102.8, 0.0); ( 464923.4,
3807421.9, 1102.4, 1102.4, 0.0);
( 464503.4, 3807441.9, 1110.0, 1110.0, 0.0); ( 464523.4,
3807441.9, 1109.8, 1109.8, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 23

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464543.4, 3807441.9, 1109.4, 1109.4, 0.0); ( 464563.4,
3807441.9, 1109.0, 1109.0, 0.0);
( 464583.4, 3807441.9, 1108.8, 1108.8, 0.0); ( 464603.4,
3807441.9, 1108.4, 1108.4, 0.0);
( 464623.4, 3807441.9, 1108.0, 1108.0, 0.0); ( 464643.4,
3807441.9, 1107.8, 1107.8, 0.0);
( 464663.4, 3807441.9, 1107.4, 1107.4, 0.0); ( 464683.4,
3807441.9, 1106.9, 1106.9, 0.0);
( 464703.4, 3807441.9, 1106.2, 1106.2, 0.0); ( 464723.4,
3807441.9, 1105.9, 1105.9, 0.0);
( 464743.4, 3807441.9, 1105.7, 1105.7, 0.0); ( 464763.4,
3807441.9, 1105.2, 1105.2, 0.0);
( 464783.4, 3807441.9, 1104.5, 1104.5, 0.0); ( 464803.4,

```

3807441.9,	1104.0,	1104.0,	0.0);		
(464823.4,	3807441.9,	1104.0,	1104.0,	0.0);	(464843.4,
3807441.9,	1103.5,	1103.5,	0.0);		
(464863.4,	3807441.9,	1103.0,	1103.0,	0.0);	(464883.4,
3807441.9,	1103.0,	1103.0,	0.0);		
(464903.4,	3807441.9,	1102.5,	1102.5,	0.0);	(464923.4,
3807441.9,	1102.0,	1102.0,	0.0);		
(464503.4,	3807461.9,	1109.9,	1109.9,	0.0);	(464523.4,
3807461.9,	1109.3,	1109.3,	0.0);		
(464543.4,	3807461.9,	1109.1,	1109.1,	0.0);	(464563.4,
3807461.9,	1108.9,	1108.9,	0.0);		
(464583.4,	3807461.9,	1108.3,	1108.3,	0.0);	(464603.4,
3807461.9,	1108.1,	1108.1,	0.0);		
(464623.4,	3807461.9,	1107.9,	1107.9,	0.0);	(464643.4,
3807461.9,	1107.3,	1107.3,	0.0);		
(464663.4,	3807461.9,	1107.1,	1107.1,	0.0);	(464683.4,
3807461.9,	1106.9,	1106.9,	0.0);		
(464703.4,	3807461.9,	1106.2,	1106.2,	0.0);	(464723.4,
3807461.9,	1105.6,	1105.6,	0.0);		
(464743.4,	3807461.9,	1105.1,	1105.1,	0.0);	(464763.4,
3807461.9,	1105.0,	1105.0,	0.0);		
(464783.4,	3807461.9,	1104.5,	1104.5,	0.0);	(464803.4,
3807461.9,	1104.0,	1104.0,	0.0);		
(464823.4,	3807461.9,	1104.0,	1104.0,	0.0);	(464843.4,
3807461.9,	1103.5,	1103.5,	0.0);		
(464863.4,	3807461.9,	1103.0,	1103.0,	0.0);	(464883.4,
3807461.9,	1103.0,	1103.0,	0.0);		
(464903.4,	3807461.9,	1102.5,	1102.5,	0.0);	(464923.4,
3807461.9,	1102.0,	1102.0,	0.0);		
(464503.4,	3807481.9,	1109.9,	1109.9,	0.0);	(464523.4,
3807481.9,	1109.2,	1109.2,	0.0);		
(464543.4,	3807481.9,	1108.8,	1108.8,	0.0);	(464563.4,
3807481.9,	1108.4,	1108.4,	0.0);		
(464583.4,	3807481.9,	1108.1,	1108.1,	0.0);	(464603.4,
3807481.9,	1107.8,	1107.8,	0.0);		
(464623.4,	3807481.9,	1107.4,	1107.4,	0.0);	(464643.4,
3807481.9,	1107.1,	1107.1,	0.0);		
(464663.4,	3807481.9,	1106.8,	1106.8,	0.0);	(464683.4,
3807481.9,	1106.4,	1106.4,	0.0);		
(464703.4,	3807481.9,	1106.1,	1106.1,	0.0);	(464723.4,
3807481.9,	1105.5,	1105.5,	0.0);		
(464743.4,	3807481.9,	1105.0,	1105.0,	0.0);	(464763.4,
3807481.9,	1105.0,	1105.0,	0.0);		
(464783.4,	3807481.9,	1104.5,	1104.5,	0.0);	(464803.4,
3807481.9,	1104.0,	1104.0,	0.0);		
(464823.4,	3807481.9,	1104.0,	1104.0,	0.0);	(464843.4,
3807481.9,	1103.5,	1103.5,	0.0);		
(464863.4,	3807481.9,	1102.9,	1102.9,	0.0);	(464883.4,
3807481.9,	1102.6,	1102.6,	0.0);		
(464903.4,	3807481.9,	1102.3,	1102.3,	0.0);	(464923.4,


```

3807481.9, 1101.9, 1101.9, 0.0);
( 464503.4, 3807501.9, 1109.7, 1109.7, 0.0); ( 464523.4,
3807501.9, 1109.0, 1109.0, 0.0);
( 464543.4, 3807501.9, 1108.4, 1108.4, 0.0); ( 464563.4,
3807501.9, 1108.0, 1108.0, 0.0);
( 464583.4, 3807501.9, 1107.8, 1107.8, 0.0); ( 464603.4,
3807501.9, 1107.4, 1107.4, 0.0);
( 464623.4, 3807501.9, 1107.0, 1107.0, 0.0); ( 464643.4,
3807501.9, 1106.8, 1106.8, 0.0);
( 464663.4, 3807501.9, 1106.4, 1106.4, 0.0); ( 464683.4,
3807501.9, 1106.0, 1106.0, 0.0);
( 464703.4, 3807501.9, 1105.8, 1105.8, 0.0); ( 464723.4,
3807501.9, 1105.4, 1105.4, 0.0);
( 464743.4, 3807501.9, 1105.0, 1105.0, 0.0); ( 464763.4,
3807501.9, 1104.8, 1104.8, 0.0);
( 464783.4, 3807501.9, 1104.4, 1104.4, 0.0); ( 464803.4,
3807501.9, 1104.0, 1104.0, 0.0);
( 464823.4, 3807501.9, 1103.8, 1103.8, 0.0); ( 464843.4,
3807501.9, 1103.4, 1103.4, 0.0);
( 464863.4, 3807501.9, 1102.9, 1102.9, 0.0); ( 464883.4,
3807501.9, 1102.2, 1102.2, 0.0);
( 464903.4, 3807501.9, 1102.0, 1102.0, 0.0); ( 464923.4,
3807501.9, 1101.9, 1101.9, 0.0);
( 464503.4, 3807521.9, 1109.0, 1109.0, 0.0); ( 464523.4,
3807521.9, 1108.3, 1108.3, 0.0);
( 464543.4, 3807521.9, 1108.1, 1108.1, 0.0); ( 464563.4,
3807521.9, 1107.9, 1107.9, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 24

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464583.4, 3807521.9, 1107.3, 1107.3, 0.0); ( 464603.4,
3807521.9, 1107.1, 1107.1, 0.0);
( 464623.4, 3807521.9, 1106.9, 1106.9, 0.0); ( 464643.4,
3807521.9, 1106.3, 1106.3, 0.0);
( 464663.4, 3807521.9, 1106.1, 1106.1, 0.0); ( 464683.4,
3807521.9, 1105.9, 1105.9, 0.0);
( 464703.4, 3807521.9, 1105.3, 1105.3, 0.0); ( 464723.4,
3807521.9, 1105.1, 1105.1, 0.0);
( 464743.4, 3807521.9, 1104.9, 1104.9, 0.0); ( 464763.4,
3807521.9, 1104.3, 1104.3, 0.0);
( 464783.4, 3807521.9, 1104.1, 1104.1, 0.0); ( 464803.4,

```

3807521.9,	1103.9,	1103.9,	0.0);		
(464823.4,	3807521.9,	1103.3,	1103.3,	0.0);	(464843.4,
3807521.9,	1103.1,	1103.1,	0.0);		
(464863.4,	3807521.9,	1102.9,	1102.9,	0.0);	(464883.4,
3807521.9,	1102.2,	1102.2,	0.0);		
(464903.4,	3807521.9,	1102.0,	1102.0,	0.0);	(464923.4,
3807521.9,	1101.9,	1101.9,	0.0);		
(464503.4,	3807541.9,	1108.4,	1108.4,	0.0);	(464523.4,
3807541.9,	1108.1,	1108.1,	0.0);		
(464543.4,	3807541.9,	1107.8,	1107.8,	0.0);	(464563.4,
3807541.9,	1107.4,	1107.4,	0.0);		
(464583.4,	3807541.9,	1107.1,	1107.1,	0.0);	(464603.4,
3807541.9,	1106.8,	1106.8,	0.0);		
(464623.4,	3807541.9,	1106.4,	1106.4,	0.0);	(464643.4,
3807541.9,	1106.1,	1106.1,	0.0);		
(464663.4,	3807541.9,	1105.8,	1105.8,	0.0);	(464683.4,
3807541.9,	1105.4,	1105.4,	0.0);		
(464703.4,	3807541.9,	1105.1,	1105.1,	0.0);	(464723.4,
3807541.9,	1104.8,	1104.8,	0.0);		
(464743.4,	3807541.9,	1104.4,	1104.4,	0.0);	(464763.4,
3807541.9,	1104.1,	1104.1,	0.0);		
(464783.4,	3807541.9,	1104.0,	1104.0,	0.0);	(464803.4,
3807541.9,	1103.9,	1103.9,	0.0);		
(464823.4,	3807541.9,	1103.2,	1103.2,	0.0);	(464843.4,
3807541.9,	1102.8,	1102.8,	0.0);		
(464863.4,	3807541.9,	1102.4,	1102.4,	0.0);	(464883.4,
3807541.9,	1102.1,	1102.1,	0.0);		
(464903.4,	3807541.9,	1101.8,	1101.8,	0.0);	(464923.4,
3807541.9,	1101.4,	1101.4,	0.0);		
(464503.4,	3807561.9,	1108.0,	1108.0,	0.0);	(464523.4,
3807561.9,	1107.8,	1107.8,	0.0);		
(464543.4,	3807561.9,	1107.4,	1107.4,	0.0);	(464563.4,
3807561.9,	1107.0,	1107.0,	0.0);		
(464583.4,	3807561.9,	1106.8,	1106.8,	0.0);	(464603.4,
3807561.9,	1106.4,	1106.4,	0.0);		
(464623.4,	3807561.9,	1106.0,	1106.0,	0.0);	(464643.4,
3807561.9,	1105.8,	1105.8,	0.0);		
(464663.4,	3807561.9,	1105.4,	1105.4,	0.0);	(464683.4,
3807561.9,	1105.0,	1105.0,	0.0);		
(464703.4,	3807561.9,	1104.8,	1104.8,	0.0);	(464723.4,
3807561.9,	1104.4,	1104.4,	0.0);		
(464743.4,	3807561.9,	1104.0,	1104.0,	0.0);	(464763.4,
3807561.9,	1104.0,	1104.0,	0.0);		
(464783.4,	3807561.9,	1103.9,	1103.9,	0.0);	(464803.4,
3807561.9,	1103.7,	1103.7,	0.0);		
(464823.4,	3807561.9,	1103.2,	1103.2,	0.0);	(464843.4,
3807561.9,	1102.5,	1102.5,	0.0);		
(464863.4,	3807561.9,	1102.0,	1102.0,	0.0);	(464883.4,
3807561.9,	1102.0,	1102.0,	0.0);		
(464903.4,	3807561.9,	1101.5,	1101.5,	0.0);	(464923.4,

```

3807561.9, 1101.0, 1101.0, 0.0);
( 464503.4, 3807581.9, 1107.9, 1107.9, 0.0); ( 464523.4,
3807581.9, 1107.3, 1107.3, 0.0);
( 464543.4, 3807581.9, 1107.1, 1107.1, 0.0); ( 464563.4,
3807581.9, 1106.9, 1106.9, 0.0);
( 464583.4, 3807581.9, 1106.3, 1106.3, 0.0); ( 464603.4,
3807581.9, 1106.1, 1106.1, 0.0);
( 464623.4, 3807581.9, 1105.9, 1105.9, 0.0); ( 464643.4,
3807581.9, 1105.3, 1105.3, 0.0);
( 464663.4, 3807581.9, 1105.1, 1105.1, 0.0); ( 464683.4,
3807581.9, 1104.9, 1104.9, 0.0);
( 464703.4, 3807581.9, 1104.3, 1104.3, 0.0); ( 464723.4,
3807581.9, 1104.1, 1104.1, 0.0);
( 464743.4, 3807581.9, 1104.0, 1104.0, 0.0); ( 464763.4,
3807581.9, 1104.0, 1104.0, 0.0);
( 464783.4, 3807581.9, 1103.6, 1103.6, 0.0); ( 464803.4,
3807581.9, 1103.1, 1103.1, 0.0);
( 464823.4, 3807581.9, 1103.0, 1103.0, 0.0); ( 464843.4,
3807581.9, 1102.5, 1102.5, 0.0);
( 464863.4, 3807581.9, 1102.0, 1102.0, 0.0); ( 464883.4,
3807581.9, 1102.0, 1102.0, 0.0);
( 464903.4, 3807581.9, 1101.5, 1101.5, 0.0); ( 464923.4,
3807581.9, 1100.9, 1100.9, 0.0);
( 464503.4, 3807601.9, 1107.3, 1107.3, 0.0); ( 464523.4,
3807601.9, 1106.7, 1106.7, 0.0);
( 464543.4, 3807601.9, 1106.5, 1106.5, 0.0); ( 464563.4,
3807601.9, 1106.4, 1106.4, 0.0);
( 464583.4, 3807601.9, 1106.1, 1106.1, 0.0); ( 464603.4,
3807601.9, 1105.8, 1105.8, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 25

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464623.4, 3807601.9, 1105.4, 1105.4, 0.0); ( 464643.4,
3807601.9, 1105.1, 1105.1, 0.0);
( 464663.4, 3807601.9, 1104.8, 1104.8, 0.0); ( 464683.4,
3807601.9, 1104.4, 1104.4, 0.0);
( 464703.4, 3807601.9, 1104.1, 1104.1, 0.0); ( 464723.4,
3807601.9, 1104.0, 1104.0, 0.0);
( 464743.4, 3807601.9, 1103.9, 1103.9, 0.0); ( 464763.4,
3807601.9, 1103.6, 1103.6, 0.0);
( 464783.4, 3807601.9, 1103.3, 1103.3, 0.0); ( 464803.4,

```

3807601.9,	1102.9,	1102.9,	0.0);		
(464823.4,	3807601.9,	1102.6,	1102.6,	0.0);	(464843.4,
3807601.9,	1102.3,	1102.3,	0.0);		
(464863.4,	3807601.9,	1101.9,	1101.9,	0.0);	(464883.4,
3807601.9,	1101.6,	1101.6,	0.0);		
(464903.4,	3807601.9,	1101.3,	1101.3,	0.0);	(464923.4,
3807601.9,	1100.9,	1100.9,	0.0);		
(464503.4,	3807621.9,	1106.7,	1106.7,	0.0);	(464523.4,
3807621.9,	1106.2,	1106.2,	0.0);		
(464543.4,	3807621.9,	1106.0,	1106.0,	0.0);	(464563.4,
3807621.9,	1106.0,	1106.0,	0.0);		
(464583.4,	3807621.9,	1105.8,	1105.8,	0.0);	(464603.4,
3807621.9,	1105.4,	1105.4,	0.0);		
(464623.4,	3807621.9,	1105.0,	1105.0,	0.0);	(464643.4,
3807621.9,	1104.8,	1104.8,	0.0);		
(464663.4,	3807621.9,	1104.4,	1104.4,	0.0);	(464683.4,
3807621.9,	1104.0,	1104.0,	0.0);		
(464703.4,	3807621.9,	1104.0,	1104.0,	0.0);	(464723.4,
3807621.9,	1103.9,	1103.9,	0.0);		
(464743.4,	3807621.9,	1103.7,	1103.7,	0.0);	(464763.4,
3807621.9,	1103.2,	1103.2,	0.0);		
(464783.4,	3807621.9,	1102.9,	1102.9,	0.0);	(464803.4,
3807621.9,	1102.7,	1102.7,	0.0);		
(464823.4,	3807621.9,	1102.2,	1102.2,	0.0);	(464843.4,
3807621.9,	1101.9,	1101.9,	0.0);		
(464863.4,	3807621.9,	1101.7,	1101.7,	0.0);	(464883.4,
3807621.9,	1101.2,	1101.2,	0.0);		
(464903.4,	3807621.9,	1100.9,	1100.9,	0.0);	(464923.4,
3807621.9,	1100.7,	1100.7,	0.0);		
(464503.4,	3807641.9,	1106.1,	1106.1,	0.0);	(464523.4,
3807641.9,	1106.0,	1106.0,	0.0);		
(464543.4,	3807641.9,	1106.0,	1106.0,	0.0);	(464563.4,
3807641.9,	1105.9,	1105.9,	0.0);		
(464583.4,	3807641.9,	1105.3,	1105.3,	0.0);	(464603.4,
3807641.9,	1105.1,	1105.1,	0.0);		
(464623.4,	3807641.9,	1104.9,	1104.9,	0.0);	(464643.4,
3807641.9,	1104.3,	1104.3,	0.0);		
(464663.4,	3807641.9,	1104.1,	1104.1,	0.0);	(464683.4,
3807641.9,	1104.0,	1104.0,	0.0);		
(464703.4,	3807641.9,	1104.0,	1104.0,	0.0);	(464723.4,
3807641.9,	1103.6,	1103.6,	0.0);		
(464743.4,	3807641.9,	1103.1,	1103.1,	0.0);	(464763.4,
3807641.9,	1103.0,	1103.0,	0.0);		
(464783.4,	3807641.9,	1102.6,	1102.6,	0.0);	(464803.4,
3807641.9,	1102.1,	1102.1,	0.0);		
(464823.4,	3807641.9,	1102.0,	1102.0,	0.0);	(464843.4,
3807641.9,	1101.6,	1101.6,	0.0);		
(464863.4,	3807641.9,	1101.1,	1101.1,	0.0);	(464883.4,
3807641.9,	1101.0,	1101.0,	0.0);		
(464903.4,	3807641.9,	1100.6,	1100.6,	0.0);	(464923.4,

```

3807641.9, 1100.1, 1100.1, 0.0);
( 464503.4, 3807661.9, 1105.5, 1105.5, 0.0); ( 464523.4,
3807661.9, 1105.5, 1105.5, 0.0);
( 464543.4, 3807661.9, 1105.5, 1105.5, 0.0); ( 464563.4,
3807661.9, 1105.4, 1105.4, 0.0);
( 464583.4, 3807661.9, 1105.1, 1105.1, 0.0); ( 464603.4,
3807661.9, 1104.8, 1104.8, 0.0);
( 464623.4, 3807661.9, 1104.4, 1104.4, 0.0); ( 464643.4,
3807661.9, 1104.1, 1104.1, 0.0);
( 464663.4, 3807661.9, 1103.8, 1103.8, 0.0); ( 464683.4,
3807661.9, 1103.5, 1103.5, 0.0);
( 464703.4, 3807661.9, 1103.5, 1103.5, 0.0); ( 464723.4,
3807661.9, 1103.3, 1103.3, 0.0);
( 464743.4, 3807661.9, 1102.9, 1102.9, 0.0); ( 464763.4,
3807661.9, 1102.6, 1102.6, 0.0);
( 464783.4, 3807661.9, 1102.3, 1102.3, 0.0); ( 464803.4,
3807661.9, 1101.9, 1101.9, 0.0);
( 464823.4, 3807661.9, 1101.6, 1101.6, 0.0); ( 464843.4,
3807661.9, 1101.3, 1101.3, 0.0);
( 464863.4, 3807661.9, 1100.9, 1100.9, 0.0); ( 464883.4,
3807661.9, 1100.6, 1100.6, 0.0);
( 464903.4, 3807661.9, 1100.3, 1100.3, 0.0); ( 464923.4,
3807661.9, 1099.9, 1099.9, 0.0);
( 464503.4, 3807681.9, 1104.8, 1104.8, 0.0); ( 464523.4,
3807681.9, 1104.8, 1104.8, 0.0);
( 464543.4, 3807681.9, 1104.8, 1104.8, 0.0); ( 464563.4,
3807681.9, 1104.8, 1104.8, 0.0);
( 464583.4, 3807681.9, 1104.8, 1104.8, 0.0); ( 464603.4,
3807681.9, 1104.4, 1104.4, 0.0);
( 464623.4, 3807681.9, 1104.0, 1104.0, 0.0); ( 464643.4,
3807681.9, 1103.8, 1103.8, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 26

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464663.4, 3807681.9, 1103.4, 1103.4, 0.0); ( 464683.4,
3807681.9, 1103.0, 1103.0, 0.0);
( 464703.4, 3807681.9, 1102.8, 1102.8, 0.0); ( 464723.4,
3807681.9, 1102.8, 1102.8, 0.0);
( 464743.4, 3807681.9, 1102.7, 1102.7, 0.0); ( 464763.4,
3807681.9, 1102.2, 1102.2, 0.0);
( 464783.4, 3807681.9, 1101.9, 1101.9, 0.0); ( 464803.4,

```

3807681.9,	1101.7,	1101.7,	0.0);		
(464823.4,	3807681.9,	1101.2,	1101.2,	0.0);	(464843.4,
3807681.9,	1100.9,	1100.9,	0.0);		
(464863.4,	3807681.9,	1100.7,	1100.7,	0.0);	(464883.4,
3807681.9,	1100.2,	1100.2,	0.0);		
(464903.4,	3807681.9,	1099.9,	1099.9,	0.0);	(464923.4,
3807681.9,	1099.7,	1099.7,	0.0);		
(464523.4,	3807701.9,	1104.1,	1104.1,	0.0);	(464543.4,
3807701.9,	1104.1,	1104.1,	0.0);		
(464563.4,	3807701.9,	1104.1,	1104.1,	0.0);	(464583.4,
3807701.9,	1104.1,	1104.1,	0.0);		
(464603.4,	3807701.9,	1104.1,	1104.1,	0.0);	(464623.4,
3807701.9,	1103.9,	1103.9,	0.0);		
(464643.4,	3807701.9,	1103.3,	1103.3,	0.0);	(464663.4,
3807701.9,	1103.1,	1103.1,	0.0);		
(464683.4,	3807701.9,	1102.9,	1102.9,	0.0);	(464703.4,
3807701.9,	1102.3,	1102.3,	0.0);		
(464723.4,	3807701.9,	1102.1,	1102.1,	0.0);	(464743.4,
3807701.9,	1102.1,	1102.1,	0.0);		
(464763.4,	3807701.9,	1102.0,	1102.0,	0.0);	(464783.4,
3807701.9,	1101.6,	1101.6,	0.0);		
(464803.4,	3807701.9,	1101.1,	1101.1,	0.0);	(464823.4,
3807701.9,	1101.0,	1101.0,	0.0);		
(464843.4,	3807701.9,	1100.6,	1100.6,	0.0);	(464863.4,
3807701.9,	1100.1,	1100.1,	0.0);		
(464883.4,	3807701.9,	1100.0,	1100.0,	0.0);	(464903.4,
3807701.9,	1099.6,	1099.6,	0.0);		
(464923.4,	3807701.9,	1099.1,	1099.1,	0.0);	(464543.4,
3807721.9,	1103.7,	1103.7,	0.0);		
(464563.4,	3807721.9,	1104.0,	1104.0,	0.0);	(464583.4,
3807721.9,	1104.0,	1104.0,	0.0);		
(464603.4,	3807721.9,	1104.0,	1104.0,	0.0);	(464623.4,
3807721.9,	1103.9,	1103.9,	0.0);		
(464643.4,	3807721.9,	1103.2,	1103.2,	0.0);	(464663.4,
3807721.9,	1102.8,	1102.8,	0.0);		
(464683.4,	3807721.9,	1102.4,	1102.4,	0.0);	(464703.4,
3807721.9,	1102.1,	1102.1,	0.0);		
(464723.4,	3807721.9,	1102.0,	1102.0,	0.0);	(464743.4,
3807721.9,	1101.9,	1101.9,	0.0);		
(464763.4,	3807721.9,	1101.6,	1101.6,	0.0);	(464783.4,
3807721.9,	1101.3,	1101.3,	0.0);		
(464803.4,	3807721.9,	1100.9,	1100.9,	0.0);	(464823.4,
3807721.9,	1100.6,	1100.6,	0.0);		
(464843.4,	3807721.9,	1100.3,	1100.3,	0.0);	(464863.4,
3807721.9,	1099.9,	1099.9,	0.0);		
(464883.4,	3807721.9,	1099.6,	1099.6,	0.0);	(464903.4,
3807721.9,	1099.3,	1099.3,	0.0);		
(464923.4,	3807721.9,	1098.9,	1098.9,	0.0);	(464943.4,
3807721.9,	1098.6,	1098.6,	0.0);		
(464963.4,	3807721.9,	1098.3,	1098.3,	0.0);	(464983.4,

```

3807721.9, 1097.9, 1097.9, 0.0);
( 465003.4, 3807721.9, 1097.6, 1097.6, 0.0); ( 465023.4,
3807721.9, 1097.3, 1097.3, 0.0);
( 465043.4, 3807721.9, 1096.9, 1096.9, 0.0); ( 465063.4,
3807721.9, 1096.6, 1096.6, 0.0);
( 465083.4, 3807721.9, 1096.3, 1096.3, 0.0); ( 465103.4,
3807721.9, 1096.0, 1096.0, 0.0);
( 465123.4, 3807721.9, 1096.0, 1096.0, 0.0); ( 465143.4,
3807721.9, 1095.8, 1095.8, 0.0);
( 465163.4, 3807721.9, 1095.5, 1095.5, 0.0); ( 465183.4,
3807721.9, 1095.5, 1095.5, 0.0);
( 465203.4, 3807721.9, 1095.3, 1095.3, 0.0); ( 465223.4,
3807721.9, 1094.9, 1094.9, 0.0);
( 465243.4, 3807721.9, 1094.6, 1094.6, 0.0); ( 465263.4,
3807721.9, 1094.3, 1094.3, 0.0);
( 465283.4, 3807721.9, 1094.0, 1094.0, 0.0); ( 465303.4,
3807721.9, 1094.0, 1094.0, 0.0);
( 465323.4, 3807721.9, 1093.8, 1093.8, 0.0); ( 465343.4,
3807721.9, 1093.5, 1093.5, 0.0);
( 465363.4, 3807721.9, 1093.5, 1093.5, 0.0); ( 465383.4,
3807721.9, 1093.3, 1093.3, 0.0);
( 464543.4, 3807741.9, 1102.9, 1102.9, 0.0); ( 464563.4,
3807741.9, 1103.6, 1103.6, 0.0);
( 464583.4, 3807741.9, 1103.8, 1103.8, 0.0); ( 464603.4,
3807741.9, 1103.8, 1103.8, 0.0);
( 464623.4, 3807741.9, 1103.7, 1103.7, 0.0); ( 464643.4,
3807741.9, 1103.0, 1103.0, 0.0);
( 464663.4, 3807741.9, 1102.4, 1102.4, 0.0); ( 464683.4,
3807741.9, 1102.0, 1102.0, 0.0);
( 464703.4, 3807741.9, 1102.0, 1102.0, 0.0); ( 464723.4,
3807741.9, 1101.9, 1101.9, 0.0);
( 464743.4, 3807741.9, 1101.7, 1101.7, 0.0); ( 464763.4,
3807741.9, 1101.2, 1101.2, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 ***

```

*** 13:53:49

PAGE 27

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464783.4, 3807741.9, 1100.9, 1100.9, 0.0); ( 464803.4,
3807741.9, 1100.7, 1100.7, 0.0);
( 464823.4, 3807741.9, 1100.2, 1100.2, 0.0); ( 464843.4,
3807741.9, 1100.0, 1100.0, 0.0);
( 464863.4, 3807741.9, 1099.9, 1099.9, 0.0); ( 464883.4,

```

3807741.9,	1099.2,	1099.2,	0.0);		
(464903.4,	3807741.9,	1099.0,	1099.0,	0.0);	(464923.4,
3807741.9,	1098.9,	1098.9,	0.0);		
(464943.4,	3807741.9,	1098.2,	1098.2,	0.0);	(464963.4,
3807741.9,	1098.0,	1098.0,	0.0);		
(464983.4,	3807741.9,	1097.9,	1097.9,	0.0);	(465003.4,
3807741.9,	1097.2,	1097.2,	0.0);		
(465023.4,	3807741.9,	1096.9,	1096.9,	0.0);	(465043.4,
3807741.9,	1096.7,	1096.7,	0.0);		
(465063.4,	3807741.9,	1096.2,	1096.2,	0.0);	(465083.4,
3807741.9,	1096.0,	1096.0,	0.0);		
(465103.4,	3807741.9,	1096.0,	1096.0,	0.0);	(465123.4,
3807741.9,	1095.8,	1095.8,	0.0);		
(465143.4,	3807741.9,	1095.4,	1095.4,	0.0);	(465163.4,
3807741.9,	1095.0,	1095.0,	0.0);		
(465183.4,	3807741.9,	1094.8,	1094.8,	0.0);	(465203.4,
3807741.9,	1094.8,	1094.8,	0.0);		
(465223.4,	3807741.9,	1094.7,	1094.7,	0.0);	(465243.4,
3807741.9,	1094.2,	1094.2,	0.0);		
(465263.4,	3807741.9,	1094.0,	1094.0,	0.0);	(465283.4,
3807741.9,	1094.0,	1094.0,	0.0);		
(465303.4,	3807741.9,	1093.8,	1093.8,	0.0);	(465323.4,
3807741.9,	1093.4,	1093.4,	0.0);		
(465343.4,	3807741.9,	1093.0,	1093.0,	0.0);	(465363.4,
3807741.9,	1092.8,	1092.8,	0.0);		
(465383.4,	3807741.9,	1092.8,	1092.8,	0.0);	(464543.4,
3807761.9,	1101.2,	1101.2,	0.0);		
(464563.4,	3807761.9,	1102.4,	1102.4,	0.0);	(464583.4,
3807761.9,	1103.0,	1103.0,	0.0);		
(464603.4,	3807761.9,	1103.1,	1103.1,	0.0);	(464623.4,
3807761.9,	1103.0,	1103.0,	0.0);		
(464643.4,	3807761.9,	1102.3,	1102.3,	0.0);	(464663.4,
3807761.9,	1102.1,	1102.1,	0.0);		
(464683.4,	3807761.9,	1102.0,	1102.0,	0.0);	(464703.4,
3807761.9,	1102.0,	1102.0,	0.0);		
(464723.4,	3807761.9,	1101.6,	1101.6,	0.0);	(464743.4,
3807761.9,	1101.1,	1101.1,	0.0);		
(464763.4,	3807761.9,	1101.0,	1101.0,	0.0);	(464783.4,
3807761.9,	1100.6,	1100.6,	0.0);		
(464803.4,	3807761.9,	1100.1,	1100.1,	0.0);	(464823.4,
3807761.9,	1100.0,	1100.0,	0.0);		
(464843.4,	3807761.9,	1100.0,	1100.0,	0.0);	(464863.4,
3807761.9,	1099.9,	1099.9,	0.0);		
(464883.4,	3807761.9,	1099.2,	1099.2,	0.0);	(464903.4,
3807761.9,	1099.0,	1099.0,	0.0);		
(464923.4,	3807761.9,	1098.9,	1098.9,	0.0);	(464943.4,
3807761.9,	1098.2,	1098.2,	0.0);		
(464963.4,	3807761.9,	1098.0,	1098.0,	0.0);	(464983.4,
3807761.9,	1097.9,	1097.9,	0.0);		
(465003.4,	3807761.9,	1097.2,	1097.2,	0.0);	(465023.4,


```

3807761.9, 1096.6, 1096.6, 0.0);
( 465043.4, 3807761.9, 1096.1, 1096.1, 0.0); ( 465063.4,
3807761.9, 1096.0, 1096.0, 0.0);
( 465083.4, 3807761.9, 1096.0, 1096.0, 0.0); ( 465103.4,
3807761.9, 1095.9, 1095.9, 0.0);
( 465123.4, 3807761.9, 1095.3, 1095.3, 0.0); ( 465143.4,
3807761.9, 1095.1, 1095.1, 0.0);
( 465163.4, 3807761.9, 1094.9, 1094.9, 0.0); ( 465183.4,
3807761.9, 1094.3, 1094.3, 0.0);
( 465203.4, 3807761.9, 1094.1, 1094.1, 0.0); ( 465223.4,
3807761.9, 1094.1, 1094.1, 0.0);
( 465243.4, 3807761.9, 1094.0, 1094.0, 0.0); ( 465263.4,
3807761.9, 1094.0, 1094.0, 0.0);
( 465283.4, 3807761.9, 1093.9, 1093.9, 0.0); ( 465303.4,
3807761.9, 1093.3, 1093.3, 0.0);
( 465323.4, 3807761.9, 1093.1, 1093.1, 0.0); ( 465343.4,
3807761.9, 1092.9, 1092.9, 0.0);
( 465363.4, 3807761.9, 1092.3, 1092.3, 0.0); ( 465383.4,
3807761.9, 1092.1, 1092.1, 0.0);
( 464543.4, 3807781.9, 1099.3, 1102.0, 0.0); ( 464563.4,
3807781.9, 1100.5, 1100.5, 0.0);
( 464583.4, 3807781.9, 1101.2, 1103.0, 0.0); ( 464603.4,
3807781.9, 1101.6, 1101.6, 0.0);
( 464623.4, 3807781.9, 1101.9, 1101.9, 0.0); ( 464643.4,
3807781.9, 1102.0, 1102.0, 0.0);
( 464663.4, 3807781.9, 1101.8, 1101.8, 0.0); ( 464683.4,
3807781.9, 1101.5, 1101.5, 0.0);
( 464703.4, 3807781.9, 1101.5, 1101.5, 0.0); ( 464723.4,
3807781.9, 1101.3, 1101.3, 0.0);
( 464743.4, 3807781.9, 1100.9, 1100.9, 0.0); ( 464763.4,
3807781.9, 1100.6, 1100.6, 0.0);
( 464783.4, 3807781.9, 1100.3, 1100.3, 0.0); ( 464803.4,
3807781.9, 1100.0, 1100.0, 0.0);
( 464823.4, 3807781.9, 1100.0, 1100.0, 0.0); ( 464843.4,
3807781.9, 1099.8, 1099.8, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 28

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464863.4, 3807781.9, 1099.4, 1099.4, 0.0); ( 464883.4,
3807781.9, 1099.1, 1099.1, 0.0);
( 464903.4, 3807781.9, 1098.8, 1098.8, 0.0); ( 464923.4,

```

3807781.9,	1098.4,	1098.4,	0.0);		
(464943.4,	3807781.9,	1098.1,	1098.1,	0.0);	(464963.4,
3807781.9,	1097.8,	1097.8,	0.0);		
(464983.4,	3807781.9,	1097.4,	1097.4,	0.0);	(465003.4,
3807781.9,	1097.1,	1097.1,	0.0);		
(465023.4,	3807781.9,	1096.5,	1096.5,	0.0);	(465043.4,
3807781.9,	1096.0,	1096.0,	0.0);		
(465063.4,	3807781.9,	1096.0,	1096.0,	0.0);	(465083.4,
3807781.9,	1095.8,	1095.8,	0.0);		
(465103.4,	3807781.9,	1095.4,	1095.4,	0.0);	(465123.4,
3807781.9,	1095.1,	1095.1,	0.0);		
(465143.4,	3807781.9,	1094.8,	1094.8,	0.0);	(465163.4,
3807781.9,	1094.4,	1094.4,	0.0);		
(465183.4,	3807781.9,	1094.1,	1094.1,	0.0);	(465203.4,
3807781.9,	1094.0,	1094.0,	0.0);		
(465223.4,	3807781.9,	1093.9,	1093.9,	0.0);	(465243.4,
3807781.9,	1093.6,	1093.6,	0.0);		
(465263.4,	3807781.9,	1093.5,	1093.5,	0.0);	(465283.4,
3807781.9,	1093.4,	1093.4,	0.0);		
(465303.4,	3807781.9,	1093.1,	1093.1,	0.0);	(465323.4,
3807781.9,	1092.8,	1092.8,	0.0);		
(465343.4,	3807781.9,	1092.4,	1092.4,	0.0);	(465363.4,
3807781.9,	1092.1,	1092.1,	0.0);		
(465383.4,	3807781.9,	1092.0,	1092.0,	0.0);	(464543.4,
3807801.9,	1097.4,	1102.0,	0.0);		
(464563.4,	3807801.9,	1098.5,	1098.5,	0.0);	(464583.4,
3807801.9,	1099.3,	1103.0,	0.0);		
(464603.4,	3807801.9,	1100.1,	1100.1,	0.0);	(464623.4,
3807801.9,	1100.9,	1100.9,	0.0);		
(464643.4,	3807801.9,	1101.6,	1101.6,	0.0);	(464663.4,
3807801.9,	1101.4,	1101.4,	0.0);		
(464683.4,	3807801.9,	1101.0,	1101.0,	0.0);	(464703.4,
3807801.9,	1101.0,	1101.0,	0.0);		
(464723.4,	3807801.9,	1100.9,	1100.9,	0.0);	(464743.4,
3807801.9,	1100.7,	1100.7,	0.0);		
(464763.4,	3807801.9,	1100.2,	1100.2,	0.0);	(464783.4,
3807801.9,	1100.0,	1100.0,	0.0);		
(464803.4,	3807801.9,	1100.0,	1100.0,	0.0);	(464823.4,
3807801.9,	1099.8,	1099.8,	0.0);		
(464843.4,	3807801.9,	1099.4,	1099.4,	0.0);	(464863.4,
3807801.9,	1099.0,	1099.0,	0.0);		
(464883.4,	3807801.9,	1098.8,	1098.8,	0.0);	(464903.4,
3807801.9,	1098.4,	1098.4,	0.0);		
(464923.4,	3807801.9,	1098.0,	1098.0,	0.0);	(464943.4,
3807801.9,	1097.8,	1097.8,	0.0);		
(464963.4,	3807801.9,	1097.4,	1097.4,	0.0);	(464983.4,
3807801.9,	1097.0,	1097.0,	0.0);		
(465003.4,	3807801.9,	1096.8,	1096.8,	0.0);	(465023.4,
3807801.9,	1096.4,	1096.4,	0.0);		
(465043.4,	3807801.9,	1096.0,	1096.0,	0.0);	(465063.4,

```

3807801.9, 1095.8, 1095.8, 0.0);
( 465083.4, 3807801.9, 1095.4, 1095.4, 0.0); ( 465103.4,
3807801.9, 1095.0, 1095.0, 0.0);
( 465123.4, 3807801.9, 1094.8, 1094.8, 0.0); ( 465143.4,
3807801.9, 1094.4, 1094.4, 0.0);
( 465163.4, 3807801.9, 1094.0, 1094.0, 0.0); ( 465183.4,
3807801.9, 1094.0, 1094.0, 0.0);
( 465203.4, 3807801.9, 1093.9, 1093.9, 0.0); ( 465223.4,
3807801.9, 1093.7, 1093.7, 0.0);
( 465243.4, 3807801.9, 1093.2, 1093.2, 0.0); ( 465263.4,
3807801.9, 1093.0, 1093.0, 0.0);
( 465283.4, 3807801.9, 1093.0, 1093.0, 0.0); ( 465303.4,
3807801.9, 1092.8, 1092.8, 0.0);
( 465323.4, 3807801.9, 1092.4, 1092.4, 0.0); ( 465343.4,
3807801.9, 1092.0, 1092.0, 0.0);
( 465363.4, 3807801.9, 1092.0, 1092.0, 0.0); ( 465383.4,
3807801.9, 1091.9, 1091.9, 0.0);
( 464543.4, 3807821.9, 1095.8, 1102.0, 0.0); ( 464563.4,
3807821.9, 1096.6, 1103.0, 0.0);
( 464583.4, 3807821.9, 1097.9, 1097.9, 0.0); ( 464603.4,
3807821.9, 1099.1, 1099.1, 0.0);
( 464623.4, 3807821.9, 1100.2, 1100.2, 0.0); ( 464643.4,
3807821.9, 1100.9, 1100.9, 0.0);
( 464663.4, 3807821.9, 1101.1, 1101.1, 0.0); ( 464683.4,
3807821.9, 1101.0, 1101.0, 0.0);
( 464703.4, 3807821.9, 1101.0, 1101.0, 0.0); ( 464723.4,
3807821.9, 1100.6, 1100.6, 0.0);
( 464743.4, 3807821.9, 1100.1, 1100.1, 0.0); ( 464763.4,
3807821.9, 1100.0, 1100.0, 0.0);
( 464783.4, 3807821.9, 1100.0, 1100.0, 0.0); ( 464803.4,
3807821.9, 1099.9, 1099.9, 0.0);
( 464823.4, 3807821.9, 1099.3, 1099.3, 0.0); ( 464843.4,
3807821.9, 1099.1, 1099.1, 0.0);
( 464863.4, 3807821.9, 1098.9, 1098.9, 0.0); ( 464883.4,
3807821.9, 1098.3, 1098.3, 0.0);
( 464903.4, 3807821.9, 1098.1, 1098.1, 0.0); ( 464923.4,
3807821.9, 1097.9, 1097.9, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 13:53:49

```

PAGE 29

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

```

( 464943.4, 3807821.9, 1097.3, 1097.3, 0.0); ( 464963.4,

```

3807821.9,	1097.1,	1097.1,	0.0);		
(464983.4,	3807821.9,	1096.9,	1096.9,	0.0);	(465003.4,
3807821.9,	1096.3,	1096.3,	0.0);		
(465023.4,	3807821.9,	1096.1,	1096.1,	0.0);	(465043.4,
3807821.9,	1095.9,	1095.9,	0.0);		
(465063.4,	3807821.9,	1095.3,	1095.3,	0.0);	(465083.4,
3807821.9,	1095.1,	1095.1,	0.0);		
(465103.4,	3807821.9,	1094.9,	1094.9,	0.0);	(465123.4,
3807821.9,	1094.3,	1094.3,	0.0);		
(465143.4,	3807821.9,	1094.1,	1094.1,	0.0);	(465163.4,
3807821.9,	1094.0,	1094.0,	0.0);		
(465183.4,	3807821.9,	1094.0,	1094.0,	0.0);	(465203.4,
3807821.9,	1093.6,	1093.6,	0.0);		
(465223.4,	3807821.9,	1093.1,	1093.1,	0.0);	(465243.4,
3807821.9,	1093.0,	1093.0,	0.0);		
(465263.4,	3807821.9,	1093.0,	1093.0,	0.0);	(465283.4,
3807821.9,	1092.9,	1092.9,	0.0);		
(465303.4,	3807821.9,	1092.3,	1092.3,	0.0);	(465323.4,
3807821.9,	1092.1,	1092.1,	0.0);		
(465343.4,	3807821.9,	1092.0,	1092.0,	0.0);	(465363.4,
3807821.9,	1092.0,	1092.0,	0.0);		
(465383.4,	3807821.9,	1091.6,	1091.6,	0.0);	(464543.4,
3807841.9,	1093.6,	1103.0,	0.0);		
(464563.4,	3807841.9,	1094.2,	1103.0,	0.0);	(464583.4,
3807841.9,	1095.8,	1100.0,	0.0);		
(464603.4,	3807841.9,	1097.5,	1100.0,	0.0);	(464623.4,
3807841.9,	1099.0,	1099.0,	0.0);		
(464643.4,	3807841.9,	1099.7,	1099.7,	0.0);	(464663.4,
3807841.9,	1100.2,	1100.2,	0.0);		
(464683.4,	3807841.9,	1100.5,	1100.5,	0.0);	(464723.4,
3807841.9,	1100.3,	1100.3,	0.0);		
(464743.4,	3807841.9,	1100.0,	1100.0,	0.0);	(464763.4,
3807841.9,	1100.0,	1100.0,	0.0);		
(464783.4,	3807841.9,	1099.8,	1099.8,	0.0);	(464803.4,
3807841.9,	1099.4,	1099.4,	0.0);		
(464823.4,	3807841.9,	1099.1,	1099.1,	0.0);	(464843.4,
3807841.9,	1098.8,	1098.8,	0.0);		
(464863.4,	3807841.9,	1098.4,	1098.4,	0.0);	(464883.4,
3807841.9,	1098.1,	1098.1,	0.0);		
(464903.4,	3807841.9,	1097.8,	1097.8,	0.0);	(464923.4,
3807841.9,	1097.4,	1097.4,	0.0);		
(464943.4,	3807841.9,	1097.1,	1097.1,	0.0);	(464963.4,
3807841.9,	1096.8,	1096.8,	0.0);		
(464983.4,	3807841.9,	1096.4,	1096.4,	0.0);	(465003.4,
3807841.9,	1096.1,	1096.1,	0.0);		
(465023.4,	3807841.9,	1095.8,	1095.8,	0.0);	(465043.4,
3807841.9,	1095.4,	1095.4,	0.0);		
(465063.4,	3807841.9,	1095.1,	1095.1,	0.0);	(465083.4,
3807841.9,	1094.8,	1094.8,	0.0);		
(465103.4,	3807841.9,	1094.4,	1094.4,	0.0);	(465123.4,

```

3807841.9, 1094.1, 1094.1, 0.0);
( 465143.4, 3807841.9, 1093.8, 1093.8, 0.0); ( 465163.4,
3807841.9, 1093.5, 1093.5, 0.0);
( 465183.4, 3807841.9, 1093.5, 1093.5, 0.0); ( 465203.4,
3807841.9, 1093.3, 1093.3, 0.0);
( 465223.4, 3807841.9, 1092.9, 1092.9, 0.0); ( 465243.4,
3807841.9, 1092.6, 1092.6, 0.0);
( 465263.4, 3807841.9, 1092.5, 1092.5, 0.0); ( 465283.4,
3807841.9, 1092.4, 1092.4, 0.0);
( 465303.4, 3807841.9, 1092.1, 1092.1, 0.0); ( 465323.4,
3807841.9, 1092.0, 1092.0, 0.0);
( 465343.4, 3807841.9, 1091.9, 1091.9, 0.0); ( 465363.4,
3807841.9, 1091.6, 1091.6, 0.0);
( 465383.4, 3807841.9, 1091.3, 1091.3, 0.0); ( 464503.4,
3807861.9, 1092.7, 1104.0, 0.0);
( 464523.4, 3807861.9, 1092.0, 1092.0, 0.0); ( 464543.4,
3807861.9, 1091.8, 1103.0, 0.0);
( 464563.4, 3807861.9, 1092.1, 1103.0, 0.0); ( 464583.4,
3807861.9, 1093.7, 1100.0, 0.0);
( 464603.4, 3807861.9, 1095.5, 1100.0, 0.0); ( 464723.4,
3807861.9, 1100.0, 1100.0, 0.0);
( 464743.4, 3807861.9, 1100.0, 1100.0, 0.0); ( 464763.4,
3807861.9, 1100.0, 1100.0, 0.0);
( 464783.4, 3807861.9, 1099.5, 1099.5, 0.0); ( 464803.4,
3807861.9, 1099.0, 1099.0, 0.0);
( 464823.4, 3807861.9, 1098.8, 1098.8, 0.0); ( 464843.4,
3807861.9, 1098.4, 1098.4, 0.0);
( 464863.4, 3807861.9, 1098.0, 1098.0, 0.0); ( 464883.4,
3807861.9, 1097.8, 1097.8, 0.0);
( 464903.4, 3807861.9, 1097.4, 1097.4, 0.0); ( 464923.4,
3807861.9, 1097.0, 1097.0, 0.0);
( 464943.4, 3807861.9, 1096.8, 1096.8, 0.0); ( 464963.4,
3807861.9, 1096.4, 1096.4, 0.0);
( 464983.4, 3807861.9, 1096.0, 1096.0, 0.0); ( 465003.4,
3807861.9, 1095.8, 1095.8, 0.0);
( 465023.4, 3807861.9, 1095.4, 1095.4, 0.0); ( 465043.4,
3807861.9, 1095.0, 1095.0, 0.0);
( 465063.4, 3807861.9, 1094.8, 1094.8, 0.0); ( 465083.4,
3807861.9, 1094.4, 1094.4, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 13:53:49

```

PAGE 30

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

(465103.4, 3807861.9, 1094.0, 1094.0,	0.0);	(465123.4,
3807861.9, 1093.8, 1093.8, 0.0);		
(465143.4, 3807861.9, 1093.4, 1093.4,	0.0);	(465163.4,
3807861.9, 1093.0, 1093.0, 0.0);		
(465183.4, 3807861.9, 1092.8, 1092.8,	0.0);	(465203.4,
3807861.9, 1092.8, 1092.8, 0.0);		
(465223.4, 3807861.9, 1092.7, 1092.7,	0.0);	(465243.4,
3807861.9, 1092.2, 1092.2, 0.0);		
(465263.4, 3807861.9, 1092.0, 1092.0,	0.0);	(465283.4,
3807861.9, 1092.0, 1092.0, 0.0);		
(465303.4, 3807861.9, 1091.8, 1091.8,	0.0);	(465323.4,
3807861.9, 1091.8, 1091.8, 0.0);		
(465343.4, 3807861.9, 1091.7, 1091.7,	0.0);	(465363.4,
3807861.9, 1091.2, 1091.2, 0.0);		
(465383.4, 3807861.9, 1090.9, 1090.9,	0.0);	(464503.4,
3807881.9, 1092.0, 1104.0, 0.0);		
(464523.4, 3807881.9, 1091.3, 1104.0,	0.0);	(464543.4,
3807881.9, 1091.1, 1091.1, 0.0);		
(464723.4, 3807881.9, 1100.0, 1100.0,	0.0);	(464743.4,
3807881.9, 1100.0, 1100.0, 0.0);		
(464763.4, 3807881.9, 1100.0, 1100.0,	0.0);	(464783.4,
3807881.9, 1099.5, 1099.5, 0.0);		
(464803.4, 3807881.9, 1098.9, 1098.9,	0.0);	(464823.4,
3807881.9, 1098.3, 1098.3, 0.0);		
(464843.4, 3807881.9, 1098.1, 1098.1,	0.0);	(464863.4,
3807881.9, 1097.9, 1097.9, 0.0);		
(464883.4, 3807881.9, 1097.3, 1097.3,	0.0);	(464903.4,
3807881.9, 1097.1, 1097.1, 0.0);		
(464923.4, 3807881.9, 1096.9, 1096.9,	0.0);	(464943.4,
3807881.9, 1096.3, 1096.3, 0.0);		
(464963.4, 3807881.9, 1096.1, 1096.1,	0.0);	(464983.4,
3807881.9, 1095.9, 1095.9, 0.0);		
(465003.4, 3807881.9, 1095.3, 1095.3,	0.0);	(465023.4,
3807881.9, 1095.1, 1095.1, 0.0);		
(465043.4, 3807881.9, 1094.9, 1094.9,	0.0);	(465063.4,
3807881.9, 1094.3, 1094.3, 0.0);		
(465083.4, 3807881.9, 1094.1, 1094.1,	0.0);	(465103.4,
3807881.9, 1093.9, 1093.9, 0.0);		
(465123.4, 3807881.9, 1093.3, 1093.3,	0.0);	(465143.4,
3807881.9, 1093.1, 1093.1, 0.0);		
(465163.4, 3807881.9, 1092.9, 1092.9,	0.0);	(465183.4,
3807881.9, 1092.3, 1092.3, 0.0);		
(465203.4, 3807881.9, 1092.1, 1092.1,	0.0);	(465223.4,
3807881.9, 1092.1, 1092.1, 0.0);		
(465243.4, 3807881.9, 1092.0, 1092.0,	0.0);	(465263.4,
3807881.9, 1092.0, 1092.0, 0.0);		
(465283.4, 3807881.9, 1091.9, 1091.9,	0.0);	(465303.4,
3807881.9, 1091.3, 1091.3, 0.0);		
(465323.4, 3807881.9, 1091.1, 1091.1,	0.0);	(465343.4,

```

3807881.9, 1091.1, 1091.1, 0.0);
( 465363.4, 3807881.9, 1091.0, 1091.0, 0.0); ( 465383.4,
3807881.9, 1090.6, 1090.6, 0.0);
( 464723.4, 3807901.9, 1099.4, 1099.4, 0.0); ( 464743.4,
3807901.9, 1099.9, 1099.9, 0.0);
( 464763.4, 3807901.9, 1099.6, 1099.6, 0.0); ( 464783.4,
3807901.9, 1099.3, 1099.3, 0.0);
( 464803.4, 3807901.9, 1098.9, 1098.9, 0.0); ( 464823.4,
3807901.9, 1098.2, 1098.2, 0.0);
( 464843.4, 3807901.9, 1098.0, 1098.0, 0.0); ( 464863.4,
3807901.9, 1097.9, 1097.9, 0.0);
( 464883.4, 3807901.9, 1097.2, 1097.2, 0.0); ( 464903.4,
3807901.9, 1096.8, 1096.8, 0.0);
( 464923.4, 3807901.9, 1096.4, 1096.4, 0.0); ( 464943.4,
3807901.9, 1096.1, 1096.1, 0.0);
( 464963.4, 3807901.9, 1096.0, 1096.0, 0.0); ( 464983.4,
3807901.9, 1095.9, 1095.9, 0.0);
( 465003.4, 3807901.9, 1095.2, 1095.2, 0.0); ( 465023.4,
3807901.9, 1094.8, 1094.8, 0.0);
( 465043.4, 3807901.9, 1094.4, 1094.4, 0.0); ( 465063.4,
3807901.9, 1094.1, 1094.1, 0.0);
( 465083.4, 3807901.9, 1093.8, 1093.8, 0.0); ( 465103.4,
3807901.9, 1093.4, 1093.4, 0.0);
( 465123.4, 3807901.9, 1093.1, 1093.1, 0.0); ( 465143.4,
3807901.9, 1092.8, 1092.8, 0.0);
( 465163.4, 3807901.9, 1092.4, 1092.4, 0.0); ( 465183.4,
3807901.9, 1092.1, 1092.1, 0.0);
( 465203.4, 3807901.9, 1092.0, 1092.0, 0.0); ( 465223.4,
3807901.9, 1091.9, 1091.9, 0.0);
( 465243.4, 3807901.9, 1091.6, 1091.6, 0.0); ( 465263.4,
3807901.9, 1091.5, 1091.5, 0.0);
( 465283.4, 3807901.9, 1091.4, 1091.4, 0.0); ( 465303.4,
3807901.9, 1091.1, 1091.1, 0.0);
( 465323.4, 3807901.9, 1090.8, 1090.8, 0.0); ( 465343.4,
3807901.9, 1090.5, 1090.5, 0.0);
( 465363.4, 3807901.9, 1090.5, 1090.5, 0.0); ( 465383.4,
3807901.9, 1090.3, 1090.3, 0.0);
( 464723.4, 3807921.9, 1098.5, 1098.5, 0.0); ( 464743.4,
3807921.9, 1099.5, 1099.5, 0.0);
( 464763.4, 3807921.9, 1099.1, 1099.1, 0.0); ( 464783.4,
3807921.9, 1098.9, 1098.9, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 31

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***

(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(464803.4, 3807921.9, 1098.7, 1098.7, 0.0);	(464823.4,
3807921.9, 1098.2, 1098.2, 0.0);	
(464843.4, 3807921.9, 1097.9, 1097.9, 0.0);	(464863.4,
3807921.9, 1097.7, 1097.7, 0.0);	
(464883.4, 3807921.9, 1097.0, 1097.0, 0.0);	(464903.4,
3807921.9, 1096.4, 1096.4, 0.0);	
(464923.4, 3807921.9, 1096.0, 1096.0, 0.0);	(464943.4,
3807921.9, 1096.0, 1096.0, 0.0);	
(464963.4, 3807921.9, 1095.9, 1095.9, 0.0);	(464983.4,
3807921.9, 1095.7, 1095.7, 0.0);	
(465003.4, 3807921.9, 1095.0, 1095.0, 0.0);	(465023.4,
3807921.9, 1094.4, 1094.4, 0.0);	
(465043.4, 3807921.9, 1094.0, 1094.0, 0.0);	(465063.4,
3807921.9, 1093.8, 1093.8, 0.0);	
(465083.4, 3807921.9, 1093.4, 1093.4, 0.0);	(465103.4,
3807921.9, 1093.0, 1093.0, 0.0);	
(465123.4, 3807921.9, 1092.8, 1092.8, 0.0);	(465143.4,
3807921.9, 1092.4, 1092.4, 0.0);	
(465163.4, 3807921.9, 1092.0, 1092.0, 0.0);	(465183.4,
3807921.9, 1091.8, 1091.8, 0.0);	
(465203.4, 3807921.9, 1091.8, 1091.8, 0.0);	(465223.4,
3807921.9, 1091.7, 1091.7, 0.0);	
(465243.4, 3807921.9, 1091.2, 1091.2, 0.0);	(465263.4,
3807921.9, 1090.9, 1090.9, 0.0);	
(465283.4, 3807921.9, 1090.8, 1090.8, 0.0);	(465303.4,
3807921.9, 1090.8, 1090.8, 0.0);	
(465323.4, 3807921.9, 1090.4, 1090.4, 0.0);	(465343.4,
3807921.9, 1090.0, 1090.0, 0.0);	
(465363.4, 3807921.9, 1090.0, 1090.0, 0.0);	(465383.4,
3807921.9, 1089.9, 1089.9, 0.0);	
(464723.4, 3807941.9, 1097.2, 1097.2, 0.0);	(464743.4,
3807941.9, 1098.3, 1098.3, 0.0);	
(464763.4, 3807941.9, 1098.8, 1098.8, 0.0);	(464783.4,
3807941.9, 1098.6, 1098.6, 0.0);	
(464803.4, 3807941.9, 1098.1, 1098.1, 0.0);	(464823.4,
3807941.9, 1098.0, 1098.0, 0.0);	
(464843.4, 3807941.9, 1097.6, 1097.6, 0.0);	(464863.4,
3807941.9, 1097.0, 1097.0, 0.0);	
(464883.4, 3807941.9, 1096.3, 1096.3, 0.0);	(464903.4,
3807941.9, 1096.1, 1096.1, 0.0);	
(464923.4, 3807941.9, 1096.0, 1096.0, 0.0);	(464943.4,
3807941.9, 1096.0, 1096.0, 0.0);	
(464963.4, 3807941.9, 1095.6, 1095.6, 0.0);	(464983.4,
3807941.9, 1095.0, 1095.0, 0.0);	
(465003.4, 3807941.9, 1094.3, 1094.3, 0.0);	(465023.4,
3807941.9, 1094.1, 1094.1, 0.0);	
(465043.4, 3807941.9, 1093.9, 1093.9, 0.0);	(465063.4,


```

3807941.9, 1093.3, 1093.3, 0.0);
( 465083.4, 3807941.9, 1093.1, 1093.1, 0.0); ( 465103.4,
3807941.9, 1092.9, 1092.9, 0.0);
( 465123.4, 3807941.9, 1092.3, 1092.3, 0.0); ( 465143.4,
3807941.9, 1092.1, 1092.1, 0.0);
( 465163.4, 3807941.9, 1091.9, 1091.9, 0.0); ( 465183.4,
3807941.9, 1091.3, 1091.3, 0.0);
( 465203.4, 3807941.9, 1091.1, 1091.1, 0.0); ( 465223.4,
3807941.9, 1091.1, 1091.1, 0.0);
( 465243.4, 3807941.9, 1091.0, 1091.0, 0.0); ( 465263.4,
3807941.9, 1090.6, 1090.6, 0.0);
( 465283.4, 3807941.9, 1090.1, 1090.1, 0.0); ( 465303.4,
3807941.9, 1090.1, 1090.1, 0.0);
( 465323.4, 3807941.9, 1090.1, 1090.1, 0.0); ( 465343.4,
3807941.9, 1090.0, 1090.0, 0.0);
( 465363.4, 3807941.9, 1090.0, 1090.0, 0.0); ( 465383.4,
3807941.9, 1089.6, 1089.6, 0.0);
( 465403.4, 3807941.9, 1089.1, 1089.1, 0.0); ( 465423.4,
3807941.9, 1089.0, 1089.0, 0.0);
( 465443.4, 3807941.9, 1089.0, 1089.0, 0.0); ( 465463.4,
3807941.9, 1089.1, 1089.1, 0.0);
( 465483.4, 3807941.9, 1089.0, 1089.0, 0.0); ( 465503.4,
3807941.9, 1089.0, 1089.0, 0.0);
( 465523.4, 3807941.9, 1088.9, 1088.9, 0.0); ( 465543.4,
3807941.9, 1088.3, 1088.3, 0.0);
( 465563.4, 3807941.9, 1088.1, 1088.1, 0.0); ( 465583.4,
3807941.9, 1088.0, 1088.0, 0.0);
( 465603.4, 3807941.9, 1088.0, 1088.0, 0.0); ( 465623.4,
3807941.9, 1087.6, 1087.6, 0.0);
( 465643.4, 3807941.9, 1087.1, 1087.1, 0.0); ( 465663.4,
3807941.9, 1087.0, 1087.0, 0.0);
( 465683.4, 3807941.9, 1086.6, 1086.6, 0.0); ( 465703.4,
3807941.9, 1086.1, 1086.1, 0.0);
( 464723.4, 3807961.9, 1095.2, 1098.0, 0.0); ( 464743.4,
3807961.9, 1097.1, 1097.1, 0.0);
( 464763.4, 3807961.9, 1098.1, 1098.1, 0.0); ( 464783.4,
3807961.9, 1098.3, 1098.3, 0.0);
( 464803.4, 3807961.9, 1097.9, 1097.9, 0.0); ( 464823.4,
3807961.9, 1097.6, 1097.6, 0.0);
( 464843.4, 3807961.9, 1097.3, 1097.3, 0.0); ( 464863.4,
3807961.9, 1096.9, 1096.9, 0.0);
( 464883.4, 3807961.9, 1096.2, 1096.2, 0.0); ( 464903.4,
3807961.9, 1096.0, 1096.0, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(464923.4, 3807961.9, 1095.9, 1095.9,	0.0);	(464943.4,
3807961.9, 1095.6, 1095.6, 0.0);		
(464963.4, 3807961.9, 1095.3, 1095.3,	0.0);	(464983.4,
3807961.9, 1094.9, 1094.9, 0.0);		
(465003.4, 3807961.9, 1094.2, 1094.2,	0.0);	(465023.4,
3807961.9, 1094.0, 1094.0, 0.0);		
(465043.4, 3807961.9, 1093.9, 1093.9,	0.0);	(465063.4,
3807961.9, 1093.2, 1093.2, 0.0);		
(465083.4, 3807961.9, 1092.8, 1092.8,	0.0);	(465103.4,
3807961.9, 1092.4, 1092.4, 0.0);		
(465123.4, 3807961.9, 1092.1, 1092.1,	0.0);	(465143.4,
3807961.9, 1091.8, 1091.8, 0.0);		
(465163.4, 3807961.9, 1091.4, 1091.4,	0.0);	(465183.4,
3807961.9, 1091.1, 1091.1, 0.0);		
(465203.4, 3807961.9, 1090.8, 1090.8,	0.0);	(465223.4,
3807961.9, 1090.5, 1090.5, 0.0);		
(465243.4, 3807961.9, 1090.5, 1090.5,	0.0);	(465263.4,
3807961.9, 1090.3, 1090.3, 0.0);		
(465283.4, 3807961.9, 1090.0, 1090.0,	0.0);	(465303.4,
3807961.9, 1090.0, 1090.0, 0.0);		
(465323.4, 3807961.9, 1089.8, 1089.8,	0.0);	(465343.4,
3807961.9, 1089.5, 1089.5, 0.0);		
(465363.4, 3807961.9, 1089.5, 1089.5,	0.0);	(465383.4,
3807961.9, 1089.3, 1089.3, 0.0);		
(465403.4, 3807961.9, 1088.9, 1088.9,	0.0);	(465423.4,
3807961.9, 1088.6, 1088.6, 0.0);		
(465443.4, 3807961.9, 1088.5, 1088.5,	0.0);	(465463.4,
3807961.9, 1088.9, 1088.9, 0.0);		
(465483.4, 3807961.9, 1088.6, 1088.6,	0.0);	(465503.4,
3807961.9, 1088.5, 1088.5, 0.0);		
(465523.4, 3807961.9, 1088.4, 1088.4,	0.0);	(465543.4,
3807961.9, 1088.1, 1088.1, 0.0);		
(465563.4, 3807961.9, 1088.0, 1088.0,	0.0);	(465583.4,
3807961.9, 1087.9, 1087.9, 0.0);		
(465603.4, 3807961.9, 1087.6, 1087.6,	0.0);	(465623.4,
3807961.9, 1087.3, 1087.3, 0.0);		
(465643.4, 3807961.9, 1086.9, 1086.9,	0.0);	(465663.4,
3807961.9, 1086.6, 1086.6, 0.0);		
(465683.4, 3807961.9, 1086.3, 1086.3,	0.0);	(465703.4,
3807961.9, 1086.0, 1086.0, 0.0);		
(464743.4, 3807981.9, 1095.7, 1095.7,	0.0);	(464763.4,
3807981.9, 1097.1, 1097.1, 0.0);		
(464783.4, 3807981.9, 1097.7, 1097.7,	0.0);	(464803.4,
3807981.9, 1097.7, 1097.7, 0.0);		
(464823.4, 3807981.9, 1097.0, 1097.0,	0.0);	(464843.4,

```

3807981.9, 1096.8, 1096.8, 0.0);
( 464863.4, 3807981.9, 1096.7, 1096.7, 0.0); ( 464883.4,
3807981.9, 1096.0, 1096.0, 0.0);
( 464903.4, 3807981.9, 1095.8, 1095.8, 0.0); ( 464923.4,
3807981.9, 1095.7, 1095.7, 0.0);
( 464943.4, 3807981.9, 1095.2, 1095.2, 0.0); ( 464963.4,
3807981.9, 1094.9, 1094.9, 0.0);
( 464983.4, 3807981.9, 1094.7, 1094.7, 0.0); ( 465003.4,
3807981.9, 1094.2, 1094.2, 0.0);
( 465023.4, 3807981.9, 1093.9, 1093.9, 0.0); ( 465043.4,
3807981.9, 1093.7, 1093.7, 0.0);
( 465063.4, 3807981.9, 1093.2, 1093.2, 0.0); ( 465083.4,
3807981.9, 1092.5, 1092.5, 0.0);
( 465103.4, 3807981.9, 1092.0, 1092.0, 0.0); ( 465123.4,
3807981.9, 1092.0, 1092.0, 0.0);
( 465143.4, 3807981.9, 1091.5, 1091.5, 0.0); ( 465163.4,
3807981.9, 1091.0, 1091.0, 0.0);
( 465183.4, 3807981.9, 1090.8, 1090.8, 0.0); ( 465203.4,
3807981.9, 1090.4, 1090.4, 0.0);
( 465223.4, 3807981.9, 1090.0, 1090.0, 0.0); ( 465243.4,
3807981.9, 1090.0, 1090.0, 0.0);
( 465263.4, 3807981.9, 1090.0, 1090.0, 0.0); ( 465283.4,
3807981.9, 1090.0, 1090.0, 0.0);
( 465303.4, 3807981.9, 1089.8, 1089.8, 0.0); ( 465323.4,
3807981.9, 1089.4, 1089.4, 0.0);
( 465343.4, 3807981.9, 1089.0, 1089.0, 0.0); ( 465363.4,
3807981.9, 1088.8, 1088.8, 0.0);
( 465383.4, 3807981.9, 1088.8, 1088.8, 0.0); ( 465403.4,
3807981.9, 1088.7, 1088.7, 0.0);
( 465423.4, 3807981.9, 1088.2, 1088.2, 0.0); ( 465443.4,
3807981.9, 1088.0, 1088.0, 0.0);
( 465463.4, 3807981.9, 1088.7, 1088.7, 0.0); ( 465483.4,
3807981.9, 1088.2, 1088.2, 0.0);
( 465503.4, 3807981.9, 1088.0, 1088.0, 0.0); ( 465523.4,
3807981.9, 1088.0, 1088.0, 0.0);
( 465543.4, 3807981.9, 1087.8, 1087.8, 0.0); ( 465563.4,
3807981.9, 1087.8, 1087.8, 0.0);
( 465583.4, 3807981.9, 1087.7, 1087.7, 0.0); ( 465603.4,
3807981.9, 1087.2, 1087.2, 0.0);
( 465623.4, 3807981.9, 1086.9, 1086.9, 0.0); ( 465643.4,
3807981.9, 1086.7, 1086.7, 0.0);
( 465663.4, 3807981.9, 1086.2, 1086.2, 0.0); ( 465683.4,
3807981.9, 1086.0, 1086.0, 0.0);
( 465703.4, 3807981.9, 1086.0, 1086.0, 0.0); ( 464763.4,
3808001.9, 1095.6, 1095.6, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 13:53:49

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(464783.4, 3808001.9, 1096.7, 1096.7, 0.0);	(464803.4,
3808001.9, 1097.0, 1097.0, 0.0);	
(464823.4, 3808001.9, 1096.3, 1096.3, 0.0);	(464843.4,
3808001.9, 1096.1, 1096.1, 0.0);	
(464863.4, 3808001.9, 1096.0, 1096.0, 0.0);	(464883.4,
3808001.9, 1095.3, 1095.3, 0.0);	
(464903.4, 3808001.9, 1095.1, 1095.1, 0.0);	(464923.4,
3808001.9, 1095.1, 1095.1, 0.0);	
(464943.4, 3808001.9, 1095.0, 1095.0, 0.0);	(464963.4,
3808001.9, 1094.6, 1094.6, 0.0);	
(464983.4, 3808001.9, 1094.1, 1094.1, 0.0);	(465003.4,
3808001.9, 1094.0, 1094.0, 0.0);	
(465023.4, 3808001.9, 1093.6, 1093.6, 0.0);	(465043.4,
3808001.9, 1093.1, 1093.1, 0.0);	
(465063.4, 3808001.9, 1093.0, 1093.0, 0.0);	(465083.4,
3808001.9, 1092.5, 1092.5, 0.0);	
(465103.4, 3808001.9, 1092.0, 1092.0, 0.0);	(465123.4,
3808001.9, 1092.0, 1092.0, 0.0);	
(465143.4, 3808001.9, 1091.5, 1091.5, 0.0);	(465163.4,
3808001.9, 1090.9, 1090.9, 0.0);	
(465183.4, 3808001.9, 1090.3, 1090.3, 0.0);	(465203.4,
3808001.9, 1090.1, 1090.1, 0.0);	
(465223.4, 3808001.9, 1090.0, 1090.0, 0.0);	(465243.4,
3808001.9, 1090.0, 1090.0, 0.0);	
(465263.4, 3808001.9, 1090.0, 1090.0, 0.0);	(465283.4,
3808001.9, 1089.9, 1089.9, 0.0);	
(465303.4, 3808001.9, 1089.3, 1089.3, 0.0);	(465323.4,
3808001.9, 1089.1, 1089.1, 0.0);	
(465343.4, 3808001.9, 1088.9, 1088.9, 0.0);	(465363.4,
3808001.9, 1088.3, 1088.3, 0.0);	
(465383.4, 3808001.9, 1088.1, 1088.1, 0.0);	(465403.4,
3808001.9, 1088.1, 1088.1, 0.0);	
(465423.4, 3808001.9, 1088.0, 1088.0, 0.0);	(465443.4,
3808001.9, 1088.0, 1088.0, 0.0);	
(465463.4, 3808001.9, 1088.1, 1088.1, 0.0);	(465483.4,
3808001.9, 1088.0, 1088.0, 0.0);	
(465503.4, 3808001.9, 1088.0, 1088.0, 0.0);	(465523.4,
3808001.9, 1087.9, 1087.9, 0.0);	
(465543.4, 3808001.9, 1087.3, 1087.3, 0.0);	(465563.4,
3808001.9, 1087.1, 1087.1, 0.0);	
(465583.4, 3808001.9, 1087.1, 1087.1, 0.0);	(465603.4,
3808001.9, 1087.0, 1087.0, 0.0);	
(465623.4, 3808001.9, 1086.6, 1086.6, 0.0);	(465643.4,

```

3808001.9, 1086.1, 1086.1, 0.0);
( 465663.4, 3808001.9, 1086.0, 1086.0, 0.0); ( 465683.4,
3808001.9, 1086.0, 1086.0, 0.0);
( 465703.4, 3808001.9, 1085.9, 1085.9, 0.0); ( 464763.4,
3808021.9, 1093.5, 1096.0, 0.0);
( 464783.4, 3808021.9, 1094.6, 1097.0, 0.0); ( 464803.4,
3808021.9, 1095.4, 1095.4, 0.0);
( 464823.4, 3808021.9, 1095.5, 1095.5, 0.0); ( 464843.4,
3808021.9, 1095.5, 1095.5, 0.0);
( 464863.4, 3808021.9, 1095.4, 1095.4, 0.0); ( 464883.4,
3808021.9, 1095.1, 1095.1, 0.0);
( 464903.4, 3808021.9, 1094.8, 1094.8, 0.0); ( 464923.4,
3808021.9, 1094.5, 1094.5, 0.0);
( 464943.4, 3808021.9, 1094.5, 1094.5, 0.0); ( 464963.4,
3808021.9, 1094.3, 1094.3, 0.0);
( 464983.4, 3808021.9, 1093.9, 1093.9, 0.0); ( 465003.4,
3808021.9, 1093.6, 1093.6, 0.0);
( 465023.4, 3808021.9, 1093.3, 1093.3, 0.0); ( 465043.4,
3808021.9, 1092.9, 1092.9, 0.0);
( 465063.4, 3808021.9, 1092.6, 1092.6, 0.0); ( 465083.4,
3808021.9, 1092.3, 1092.3, 0.0);
( 465103.4, 3808021.9, 1091.9, 1091.9, 0.0); ( 465123.4,
3808021.9, 1091.6, 1091.6, 0.0);
( 465143.4, 3808021.9, 1091.3, 1091.3, 0.0); ( 465163.4,
3808021.9, 1090.9, 1090.9, 0.0);
( 465183.4, 3808021.9, 1090.2, 1090.2, 0.0); ( 465203.4,
3808021.9, 1090.0, 1090.0, 0.0);
( 465223.4, 3808021.9, 1089.9, 1089.9, 0.0); ( 465243.4,
3808021.9, 1089.6, 1089.6, 0.0);
( 465263.4, 3808021.9, 1089.5, 1089.5, 0.0); ( 465283.4,
3808021.9, 1089.4, 1089.4, 0.0);
( 465303.4, 3808021.9, 1089.1, 1089.1, 0.0); ( 465323.4,
3808021.9, 1088.8, 1088.8, 0.0);
( 465343.4, 3808021.9, 1088.4, 1088.4, 0.0); ( 465363.4,
3808021.9, 1088.1, 1088.1, 0.0);
( 465383.4, 3808021.9, 1088.0, 1088.0, 0.0); ( 465403.4,
3808021.9, 1087.9, 1087.9, 0.0);
( 465423.4, 3808021.9, 1087.6, 1087.6, 0.0); ( 465443.4,
3808021.9, 1087.5, 1087.5, 0.0);
( 465463.4, 3808021.9, 1087.9, 1087.9, 0.0); ( 465483.4,
3808021.9, 1087.6, 1087.6, 0.0);
( 465503.4, 3808021.9, 1087.5, 1087.5, 0.0); ( 465523.4,
3808021.9, 1087.4, 1087.4, 0.0);
( 465543.4, 3808021.9, 1087.1, 1087.1, 0.0); ( 465563.4,
3808021.9, 1086.8, 1086.8, 0.0);
( 465583.4, 3808021.9, 1086.5, 1086.5, 0.0); ( 465603.4,
3808021.9, 1086.5, 1086.5, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***

```

13:53:49

PAGE 34

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(465623.4, 3808021.9, 1086.3, 1086.3, 0.0);	(465643.4,
3808021.9, 1086.0, 1086.0, 0.0);	
(465663.4, 3808021.9, 1086.0, 1086.0, 0.0);	(465683.4,
3808021.9, 1085.8, 1085.8, 0.0);	
(465703.4, 3808021.9, 1085.4, 1085.4, 0.0);	(464783.4,
3808041.9, 1092.6, 1097.0, 0.0);	
(464803.4, 3808041.9, 1093.7, 1093.7, 0.0);	(464823.4,
3808041.9, 1094.4, 1094.4, 0.0);	
(464843.4, 3808041.9, 1094.7, 1094.7, 0.0);	(464863.4,
3808041.9, 1094.8, 1094.8, 0.0);	
(464883.4, 3808041.9, 1094.8, 1094.8, 0.0);	(464903.4,
3808041.9, 1094.4, 1094.4, 0.0);	
(464923.4, 3808041.9, 1094.0, 1094.0, 0.0);	(464943.4,
3808041.9, 1094.0, 1094.0, 0.0);	
(464963.4, 3808041.9, 1094.0, 1094.0, 0.0);	(464983.4,
3808041.9, 1093.9, 1093.9, 0.0);	
(465003.4, 3808041.9, 1093.2, 1093.2, 0.0);	(465023.4,
3808041.9, 1092.9, 1092.9, 0.0);	
(465043.4, 3808041.9, 1092.7, 1092.7, 0.0);	(465063.4,
3808041.9, 1092.2, 1092.2, 0.0);	
(465083.4, 3808041.9, 1091.9, 1091.9, 0.0);	(465103.4,
3808041.9, 1091.7, 1091.7, 0.0);	
(465123.4, 3808041.9, 1091.2, 1091.2, 0.0);	(465143.4,
3808041.9, 1090.9, 1090.9, 0.0);	
(465163.4, 3808041.9, 1090.7, 1090.7, 0.0);	(465183.4,
3808041.9, 1090.2, 1090.2, 0.0);	
(465203.4, 3808041.9, 1089.9, 1089.9, 0.0);	(465223.4,
3808041.9, 1089.7, 1089.7, 0.0);	
(465243.4, 3808041.9, 1089.2, 1089.2, 0.0);	(465263.4,
3808041.9, 1088.9, 1088.9, 0.0);	
(465283.4, 3808041.9, 1088.8, 1088.8, 0.0);	(465303.4,
3808041.9, 1088.8, 1088.8, 0.0);	
(465323.4, 3808041.9, 1088.4, 1088.4, 0.0);	(465343.4,
3808041.9, 1088.0, 1088.0, 0.0);	
(465363.4, 3808041.9, 1087.8, 1087.8, 0.0);	(465383.4,
3808041.9, 1087.8, 1087.8, 0.0);	
(465403.4, 3808041.9, 1087.7, 1087.7, 0.0);	(465423.4,
3808041.9, 1087.2, 1087.2, 0.0);	
(465443.4, 3808041.9, 1087.0, 1087.0, 0.0);	(465463.4,
3808041.9, 1087.7, 1087.7, 0.0);	
(465483.4, 3808041.9, 1087.2, 1087.2, 0.0);	(465503.4,

```

3808041.9, 1086.9, 1086.9, 0.0);
( 465523.4, 3808041.9, 1086.8, 1086.8, 0.0); ( 465543.4,
3808041.9, 1086.8, 1086.8, 0.0);
( 465563.4, 3808041.9, 1086.4, 1086.4, 0.0); ( 465583.4,
3808041.9, 1086.0, 1086.0, 0.0);
( 465603.4, 3808041.9, 1086.0, 1086.0, 0.0); ( 465623.4,
3808041.9, 1086.0, 1086.0, 0.0);
( 465643.4, 3808041.9, 1086.0, 1086.0, 0.0); ( 465663.4,
3808041.9, 1085.8, 1085.8, 0.0);
( 465683.4, 3808041.9, 1085.4, 1085.4, 0.0); ( 465703.4,
3808041.9, 1085.0, 1085.0, 0.0);
( 464803.4, 3808061.9, 1092.4, 1092.4, 0.0); ( 464823.4,
3808061.9, 1093.0, 1093.0, 0.0);
( 464843.4, 3808061.9, 1093.7, 1093.7, 0.0); ( 464863.4,
3808061.9, 1094.1, 1094.1, 0.0);
( 464883.4, 3808061.9, 1094.1, 1094.1, 0.0); ( 464903.4,
3808061.9, 1094.1, 1094.1, 0.0);
( 464923.4, 3808061.9, 1094.0, 1094.0, 0.0); ( 464943.4,
3808061.9, 1094.0, 1094.0, 0.0);
( 464963.4, 3808061.9, 1094.0, 1094.0, 0.0); ( 464983.4,
3808061.9, 1093.9, 1093.9, 0.0);
( 465003.4, 3808061.9, 1093.2, 1093.2, 0.0); ( 465023.4,
3808061.9, 1092.6, 1092.6, 0.0);
( 465043.4, 3808061.9, 1092.1, 1092.1, 0.0); ( 465063.4,
3808061.9, 1092.0, 1092.0, 0.0);
( 465083.4, 3808061.9, 1091.6, 1091.6, 0.0); ( 465103.4,
3808061.9, 1091.1, 1091.1, 0.0);
( 465123.4, 3808061.9, 1091.0, 1091.0, 0.0); ( 465143.4,
3808061.9, 1090.6, 1090.6, 0.0);
( 465163.4, 3808061.9, 1090.1, 1090.1, 0.0); ( 465183.4,
3808061.9, 1090.0, 1090.0, 0.0);
( 465203.4, 3808061.9, 1089.6, 1089.6, 0.0); ( 465223.4,
3808061.9, 1089.1, 1089.1, 0.0);
( 465243.4, 3808061.9, 1089.0, 1089.0, 0.0); ( 465263.4,
3808061.9, 1088.6, 1088.6, 0.0);
( 465283.4, 3808061.9, 1088.1, 1088.1, 0.0); ( 465303.4,
3808061.9, 1088.1, 1088.1, 0.0);
( 465323.4, 3808061.9, 1088.1, 1088.1, 0.0); ( 465343.4,
3808061.9, 1087.9, 1087.9, 0.0);
( 465363.4, 3808061.9, 1087.3, 1087.3, 0.0); ( 465383.4,
3808061.9, 1087.1, 1087.1, 0.0);
( 465403.4, 3808061.9, 1087.1, 1087.1, 0.0); ( 465423.4,
3808061.9, 1087.0, 1087.0, 0.0);
( 465443.4, 3808061.9, 1087.0, 1087.0, 0.0); ( 465463.4,
3808061.9, 1087.1, 1087.1, 0.0);
( 465483.4, 3808061.9, 1087.0, 1087.0, 0.0); ( 465503.4,
3808061.9, 1086.6, 1086.6, 0.0);
( 465523.4, 3808061.9, 1086.1, 1086.1, 0.0); ( 465543.4,
3808061.9, 1086.1, 1086.1, 0.0);

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

PAGE 35
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(465563.4, 3808061.9, 1086.1, 1086.1, 0.0);	(465583.4,
3808061.9, 1086.0, 1086.0, 0.0);	
(465603.4, 3808061.9, 1086.0, 1086.0, 0.0);	(465623.4,
3808061.9, 1086.0, 1086.0, 0.0);	
(465643.4, 3808061.9, 1085.9, 1085.9, 0.0);	(465663.4,
3808061.9, 1085.3, 1085.3, 0.0);	
(465683.4, 3808061.9, 1085.1, 1085.1, 0.0);	(465703.4,
3808061.9, 1085.0, 1085.0, 0.0);	
(464823.4, 3808081.9, 1092.2, 1092.2, 0.0);	(464843.4,
3808081.9, 1092.7, 1092.7, 0.0);	
(464863.4, 3808081.9, 1093.0, 1093.0, 0.0);	(464883.4,
3808081.9, 1093.3, 1093.3, 0.0);	
(464903.4, 3808081.9, 1093.7, 1093.7, 0.0);	(464923.4,
3808081.9, 1094.0, 1094.0, 0.0);	
(464943.4, 3808081.9, 1094.0, 1094.0, 0.0);	(464963.4,
3808081.9, 1093.8, 1093.8, 0.0);	
(464983.4, 3808081.9, 1093.4, 1093.4, 0.0);	(465003.4,
3808081.9, 1093.1, 1093.1, 0.0);	
(465023.4, 3808081.9, 1092.5, 1092.5, 0.0);	(465043.4,
3808081.9, 1092.0, 1092.0, 0.0);	
(465063.4, 3808081.9, 1092.0, 1092.0, 0.0);	(465083.4,
3808081.9, 1091.5, 1091.5, 0.0);	
(465103.4, 3808081.9, 1090.9, 1090.9, 0.0);	(465123.4,
3808081.9, 1090.6, 1090.6, 0.0);	
(465143.4, 3808081.9, 1090.3, 1090.3, 0.0);	(465163.4,
3808081.9, 1089.9, 1089.9, 0.0);	
(465183.4, 3808081.9, 1089.6, 1089.6, 0.0);	(465203.4,
3808081.9, 1089.3, 1089.3, 0.0);	
(465223.4, 3808081.9, 1088.9, 1088.9, 0.0);	(465243.4,
3808081.9, 1088.6, 1088.6, 0.0);	
(465263.4, 3808081.9, 1088.3, 1088.3, 0.0);	(465283.4,
3808081.9, 1088.0, 1088.0, 0.0);	
(465303.4, 3808081.9, 1088.0, 1088.0, 0.0);	(465323.4,
3808081.9, 1087.8, 1087.8, 0.0);	
(465343.4, 3808081.9, 1087.4, 1087.4, 0.0);	(465363.4,
3808081.9, 1087.1, 1087.1, 0.0);	
(465383.4, 3808081.9, 1087.0, 1087.0, 0.0);	(465403.4,
3808081.9, 1086.9, 1086.9, 0.0);	
(465423.4, 3808081.9, 1086.6, 1086.6, 0.0);	(465443.4,

3808081.9,	1086.5,	1086.5,	0.0);		
(465463.4,	3808081.9,	1086.9,	1086.9,	0.0);	(465483.4,
3808081.9,	1086.6,	1086.6,	0.0);		
(465503.4,	3808081.9,	1086.3,	1086.3,	0.0);	(465523.4,
3808081.9,	1085.9,	1085.9,	0.0);		
(465543.4,	3808081.9,	1085.6,	1085.6,	0.0);	(465563.4,
3808081.9,	1085.5,	1085.5,	0.0);		
(465583.4,	3808081.9,	1085.5,	1085.5,	0.0);	(465603.4,
3808081.9,	1085.5,	1085.5,	0.0);		
(465623.4,	3808081.9,	1085.5,	1085.5,	0.0);	(465643.4,
3808081.9,	1085.4,	1085.4,	0.0);		
(465663.4,	3808081.9,	1085.1,	1085.1,	0.0);	(465683.4,
3808081.9,	1085.0,	1085.0,	0.0);		
(465703.4,	3808081.9,	1084.9,	1084.9,	0.0);	(464843.4,
3808101.9,	1091.8,	1091.8,	0.0);		
(464863.4,	3808101.9,	1092.1,	1092.1,	0.0);	(464883.4,
3808101.9,	1092.8,	1092.8,	0.0);		
(464903.4,	3808101.9,	1093.4,	1093.4,	0.0);	(464923.4,
3808101.9,	1093.8,	1093.8,	0.0);		
(464943.4,	3808101.9,	1093.8,	1093.8,	0.0);	(464963.4,
3808101.9,	1093.4,	1093.4,	0.0);		
(464983.4,	3808101.9,	1093.0,	1093.0,	0.0);	(465003.4,
3808101.9,	1092.8,	1092.8,	0.0);		
(465023.4,	3808101.9,	1092.4,	1092.4,	0.0);	(465043.4,
3808101.9,	1092.0,	1092.0,	0.0);		
(465063.4,	3808101.9,	1091.8,	1091.8,	0.0);	(465083.4,
3808101.9,	1091.3,	1091.3,	0.0);		
(465103.4,	3808101.9,	1090.7,	1090.7,	0.0);	(465123.4,
3808101.9,	1090.2,	1090.2,	0.0);		
(465143.4,	3808101.9,	1090.0,	1090.0,	0.0);	(465163.4,
3808101.9,	1089.9,	1089.9,	0.0);		
(465183.4,	3808101.9,	1089.2,	1089.2,	0.0);	(465203.4,
3808101.9,	1088.9,	1088.9,	0.0);		
(465223.4,	3808101.9,	1088.7,	1088.7,	0.0);	(465243.4,
3808101.9,	1088.2,	1088.2,	0.0);		
(465263.4,	3808101.9,	1088.0,	1088.0,	0.0);	(465283.4,
3808101.9,	1088.0,	1088.0,	0.0);		
(465303.4,	3808101.9,	1087.8,	1087.8,	0.0);	(465323.4,
3808101.9,	1087.4,	1087.4,	0.0);		
(465343.4,	3808101.9,	1087.0,	1087.0,	0.0);	(465363.4,
3808101.9,	1086.8,	1086.8,	0.0);		
(465383.4,	3808101.9,	1086.8,	1086.8,	0.0);	(465403.4,
3808101.9,	1086.7,	1086.7,	0.0);		
(465423.4,	3808101.9,	1086.2,	1086.2,	0.0);	(465443.4,
3808101.9,	1086.0,	1086.0,	0.0);		
(465463.4,	3808101.9,	1086.7,	1086.7,	0.0);	(465483.4,
3808101.9,	1086.2,	1086.2,	0.0);		
(465503.4,	3808101.9,	1085.9,	1085.9,	0.0);	(465523.4,
3808101.9,	1085.7,	1085.7,	0.0);		
(465543.4,	3808101.9,	1085.2,	1085.2,	0.0);	(465563.4,

3808101.9, 1085.0, 1085.0, 0.0);
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 36

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(465583.4, 3808101.9, 1085.0, 1085.0, 0.0);	(465603.4,
3808101.9, 1085.0, 1085.0, 0.0);	
(465623.4, 3808101.9, 1085.0, 1085.0, 0.0);	(465643.4,
3808101.9, 1085.0, 1085.0, 0.0);	
(465663.4, 3808101.9, 1084.8, 1084.8, 0.0);	(465683.4,
3808101.9, 1084.8, 1084.8, 0.0);	
(465703.4, 3808101.9, 1084.7, 1084.7, 0.0);	(464863.4,
3808121.9, 1092.1, 1092.1, 0.0);	
(464883.4, 3808121.9, 1092.8, 1092.8, 0.0);	(464903.4,
3808121.9, 1093.1, 1093.1, 0.0);	
(464923.4, 3808121.9, 1093.1, 1093.1, 0.0);	(464943.4,
3808121.9, 1093.1, 1093.1, 0.0);	
(464963.4, 3808121.9, 1093.1, 1093.1, 0.0);	(464983.4,
3808121.9, 1092.9, 1092.9, 0.0);	
(465003.4, 3808121.9, 1092.3, 1092.3, 0.0);	(465023.4,
3808121.9, 1092.1, 1092.1, 0.0);	
(465043.4, 3808121.9, 1091.9, 1091.9, 0.0);	(465063.4,
3808121.9, 1091.3, 1091.3, 0.0);	
(465083.4, 3808121.9, 1090.7, 1090.7, 0.0);	(465103.4,
3808121.9, 1090.1, 1090.1, 0.0);	
(465123.4, 3808121.9, 1090.0, 1090.0, 0.0);	(465143.4,
3808121.9, 1090.0, 1090.0, 0.0);	
(465163.4, 3808121.9, 1089.9, 1089.9, 0.0);	(465183.4,
3808121.9, 1089.2, 1089.2, 0.0);	
(465203.4, 3808121.9, 1088.6, 1088.6, 0.0);	(465223.4,
3808121.9, 1088.1, 1088.1, 0.0);	
(465243.4, 3808121.9, 1088.0, 1088.0, 0.0);	(465263.4,
3808121.9, 1088.0, 1088.0, 0.0);	
(465283.4, 3808121.9, 1087.9, 1087.9, 0.0);	(465303.4,
3808121.9, 1087.3, 1087.3, 0.0);	
(465323.4, 3808121.9, 1087.1, 1087.1, 0.0);	(465343.4,
3808121.9, 1086.9, 1086.9, 0.0);	
(465363.4, 3808121.9, 1086.3, 1086.3, 0.0);	(465383.4,
3808121.9, 1086.1, 1086.1, 0.0);	
(465403.4, 3808121.9, 1086.1, 1086.1, 0.0);	(465423.4,
3808121.9, 1086.0, 1086.0, 0.0);	
(465443.4, 3808121.9, 1086.0, 1086.0, 0.0);	(465463.4,

3808121.9,	1086.1,	1086.1,	0.0);		
(465483.4,	3808121.9,	1086.0,	1086.0,	0.0);	(465503.4,
3808121.9,	1085.6,	1085.6,	0.0);		
(465523.4,	3808121.9,	1085.1,	1085.1,	0.0);	(465543.4,
3808121.9,	1085.0,	1085.0,	0.0);		
(465563.4,	3808121.9,	1085.0,	1085.0,	0.0);	(465583.4,
3808121.9,	1085.0,	1085.0,	0.0);		
(465603.4,	3808121.9,	1085.0,	1085.0,	0.0);	(465623.4,
3808121.9,	1085.0,	1085.0,	0.0);		
(465643.4,	3808121.9,	1084.9,	1084.9,	0.0);	(465663.4,
3808121.9,	1084.3,	1084.3,	0.0);		
(465683.4,	3808121.9,	1084.1,	1084.1,	0.0);	(465703.4,
3808121.9,	1084.1,	1084.1,	0.0);		
(464883.4,	3808141.9,	1092.1,	1092.1,	0.0);	(464903.4,
3808141.9,	1092.7,	1092.7,	0.0);		
(464923.4,	3808141.9,	1093.0,	1093.0,	0.0);	(464943.4,
3808141.9,	1093.0,	1093.0,	0.0);		
(464963.4,	3808141.9,	1093.0,	1093.0,	0.0);	(464983.4,
3808141.9,	1092.9,	1092.9,	0.0);		
(465003.4,	3808141.9,	1092.2,	1092.2,	0.0);	(465023.4,
3808141.9,	1092.0,	1092.0,	0.0);		
(465043.4,	3808141.9,	1091.9,	1091.9,	0.0);	(465063.4,
3808141.9,	1091.2,	1091.2,	0.0);		
(465083.4,	3808141.9,	1090.5,	1090.5,	0.0);	(465103.4,
3808141.9,	1090.0,	1090.0,	0.0);		
(465123.4,	3808141.9,	1090.0,	1090.0,	0.0);	(465143.4,
3808141.9,	1089.8,	1089.8,	0.0);		
(465163.4,	3808141.9,	1089.4,	1089.4,	0.0);	(465183.4,
3808141.9,	1089.1,	1089.1,	0.0);		
(465203.4,	3808141.9,	1088.5,	1088.5,	0.0);	(465223.4,
3808141.9,	1088.0,	1088.0,	0.0);		
(465243.4,	3808141.9,	1088.0,	1088.0,	0.0);	(465263.4,
3808141.9,	1087.8,	1087.8,	0.0);		
(465283.4,	3808141.9,	1087.4,	1087.4,	0.0);	(465303.4,
3808141.9,	1087.1,	1087.1,	0.0);		
(465323.4,	3808141.9,	1086.8,	1086.8,	0.0);	(465343.4,
3808141.9,	1086.4,	1086.4,	0.0);		
(465363.4,	3808141.9,	1086.1,	1086.1,	0.0);	(465383.4,
3808141.9,	1086.0,	1086.0,	0.0);		
(465403.4,	3808141.9,	1085.9,	1085.9,	0.0);	(465423.4,
3808141.9,	1085.6,	1085.6,	0.0);		
(465443.4,	3808141.9,	1085.5,	1085.5,	0.0);	(465463.4,
3808141.9,	1085.5,	1085.5,	0.0);		
(465483.4,	3808141.9,	1085.5,	1085.5,	0.0);	(465503.4,
3808141.9,	1085.3,	1085.3,	0.0);		
(465523.4,	3808141.9,	1084.9,	1084.9,	0.0);	(465543.4,
3808141.9,	1084.6,	1084.6,	0.0);		
(465563.4,	3808141.9,	1084.5,	1084.5,	0.0);	(465583.4,
3808141.9,	1084.5,	1084.5,	0.0);		
(465603.4,	3808141.9,	1084.5,	1084.5,	0.0);	(465623.4,

3808141.9, 1084.5, 1084.5, 0.0);
(465643.4, 3808141.9, 1084.4, 1084.4, 0.0); (465663.4,
3808141.9, 1084.1, 1084.1, 0.0);

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

PAGE 37

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(465683.4, 3808141.9, 1083.8, 1083.8, 0.0); (465703.4,
3808141.9, 1083.5, 1083.5, 0.0);
(464883.4, 3808161.9, 1091.3, 1091.3, 0.0); (464903.4,
3808161.9, 1092.2, 1092.2, 0.0);
(464923.4, 3808161.9, 1092.8, 1092.8, 0.0); (464943.4,
3808161.9, 1092.8, 1092.8, 0.0);
(464963.4, 3808161.9, 1092.8, 1092.8, 0.0); (464983.4,
3808161.9, 1092.7, 1092.7, 0.0);
(465003.4, 3808161.9, 1092.2, 1092.2, 0.0); (465023.4,
3808161.9, 1091.9, 1091.9, 0.0);
(465043.4, 3808161.9, 1091.7, 1091.7, 0.0); (465063.4,
3808161.9, 1091.0, 1091.0, 0.0);
(465083.4, 3808161.9, 1090.4, 1090.4, 0.0); (465103.4,
3808161.9, 1090.0, 1090.0, 0.0);
(465123.4, 3808161.9, 1089.8, 1089.8, 0.0); (465143.4,
3808161.9, 1089.4, 1089.4, 0.0);
(465163.4, 3808161.9, 1089.0, 1089.0, 0.0); (465183.4,
3808161.9, 1088.8, 1088.8, 0.0);
(465203.4, 3808161.9, 1088.4, 1088.4, 0.0); (465223.4,
3808161.9, 1088.0, 1088.0, 0.0);
(465243.4, 3808161.9, 1087.8, 1087.8, 0.0); (465263.4,
3808161.9, 1087.4, 1087.4, 0.0);
(465283.4, 3808161.9, 1087.0, 1087.0, 0.0); (465303.4,
3808161.9, 1086.8, 1086.8, 0.0);
(465323.4, 3808161.9, 1086.4, 1086.4, 0.0); (465343.4,
3808161.9, 1086.0, 1086.0, 0.0);
(465363.4, 3808161.9, 1085.8, 1085.8, 0.0); (465383.4,
3808161.9, 1085.8, 1085.8, 0.0);
(465403.4, 3808161.9, 1085.7, 1085.7, 0.0); (465423.4,
3808161.9, 1085.2, 1085.2, 0.0);
(465443.4, 3808161.9, 1085.0, 1085.0, 0.0); (465463.4,
3808161.9, 1085.0, 1085.0, 0.0);
(465483.4, 3808161.9, 1084.8, 1084.8, 0.0); (465503.4,
3808161.9, 1084.8, 1084.8, 0.0);
(465523.4, 3808161.9, 1084.7, 1084.7, 0.0); (465543.4,

3808161.9,	1084.2,	1084.2,	0.0);		
(465563.4,	3808161.9,	1084.0,	1084.0,	0.0);	(465583.4,
3808161.9,	1084.0,	1084.0,	0.0);		
(465603.4,	3808161.9,	1084.0,	1084.0,	0.0);	(465623.4,
3808161.9,	1083.9,	1083.9,	0.0);		
(465643.4,	3808161.9,	1083.8,	1083.8,	0.0);	(465663.4,
3808161.9,	1083.8,	1083.8,	0.0);		
(465683.4,	3808161.9,	1083.4,	1083.4,	0.0);	(465703.4,
3808161.9,	1083.0,	1083.0,	0.0);		
(464903.4,	3808181.9,	1091.6,	1091.6,	0.0);	(464923.4,
3808181.9,	1092.1,	1092.1,	0.0);		
(464943.4,	3808181.9,	1092.1,	1092.1,	0.0);	(464963.4,
3808181.9,	1092.1,	1092.1,	0.0);		
(464983.4,	3808181.9,	1092.1,	1092.1,	0.0);	(465003.4,
3808181.9,	1092.0,	1092.0,	0.0);		
(465023.4,	3808181.9,	1091.6,	1091.6,	0.0);	(465043.4,
3808181.9,	1091.0,	1091.0,	0.0);		
(465063.4,	3808181.9,	1090.3,	1090.3,	0.0);	(465083.4,
3808181.9,	1090.1,	1090.1,	0.0);		
(465103.4,	3808181.9,	1089.9,	1089.9,	0.0);	(465123.4,
3808181.9,	1089.3,	1089.3,	0.0);		
(465143.4,	3808181.9,	1089.1,	1089.1,	0.0);	(465163.4,
3808181.9,	1088.9,	1088.9,	0.0);		
(465183.4,	3808181.9,	1088.3,	1088.3,	0.0);	(465203.4,
3808181.9,	1088.1,	1088.1,	0.0);		
(465223.4,	3808181.9,	1087.9,	1087.9,	0.0);	(465243.4,
3808181.9,	1087.3,	1087.3,	0.0);		
(465263.4,	3808181.9,	1087.1,	1087.1,	0.0);	(465283.4,
3808181.9,	1086.9,	1086.9,	0.0);		
(465303.4,	3808181.9,	1086.3,	1086.3,	0.0);	(465323.4,
3808181.9,	1086.1,	1086.1,	0.0);		
(465343.4,	3808181.9,	1085.9,	1085.9,	0.0);	(465363.4,
3808181.9,	1085.3,	1085.3,	0.0);		
(465383.4,	3808181.9,	1085.1,	1085.1,	0.0);	(465403.4,
3808181.9,	1085.1,	1085.1,	0.0);		
(465423.4,	3808181.9,	1085.0,	1085.0,	0.0);	(465443.4,
3808181.9,	1085.0,	1085.0,	0.0);		
(465463.4,	3808181.9,	1084.9,	1084.9,	0.0);	(465483.4,
3808181.9,	1084.3,	1084.3,	0.0);		
(465503.4,	3808181.9,	1084.1,	1084.1,	0.0);	(465523.4,
3808181.9,	1084.1,	1084.1,	0.0);		
(465543.4,	3808181.9,	1084.0,	1084.0,	0.0);	(465563.4,
3808181.9,	1084.0,	1084.0,	0.0);		
(465583.4,	3808181.9,	1084.0,	1084.0,	0.0);	(465603.4,
3808181.9,	1084.0,	1084.0,	0.0);		
(465623.4,	3808181.9,	1083.6,	1083.6,	0.0);	(465643.4,
3808181.9,	1083.1,	1083.1,	0.0);		
(465663.4,	3808181.9,	1083.1,	1083.1,	0.0);	(465683.4,
3808181.9,	1083.1,	1083.1,	0.0);		
(465703.4,	3808181.9,	1082.9,	1082.9,	0.0);	(464923.4,

```

3808201.9, 1091.0, 1091.0, 0.0);
( 464943.4, 3808201.9, 1091.3, 1091.3, 0.0); ( 464963.4,
3808201.9, 1091.5, 1091.5, 0.0);
( 464983.4, 3808201.9, 1091.5, 1091.5, 0.0); ( 465003.4,
3808201.9, 1091.5, 1091.5, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 38

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465023.4, 3808201.9, 1091.0, 1091.0, 0.0); ( 465043.4,
3808201.9, 1090.4, 1090.4, 0.0);
( 465063.4, 3808201.9, 1090.1, 1090.1, 0.0); ( 465083.4,
3808201.9, 1089.8, 1089.8, 0.0);
( 465103.4, 3808201.9, 1089.4, 1089.4, 0.0); ( 465123.4,
3808201.9, 1089.1, 1089.1, 0.0);
( 465143.4, 3808201.9, 1088.8, 1088.8, 0.0); ( 465163.4,
3808201.9, 1088.4, 1088.4, 0.0);
( 465183.4, 3808201.9, 1088.1, 1088.1, 0.0); ( 465203.4,
3808201.9, 1087.8, 1087.8, 0.0);
( 465223.4, 3808201.9, 1087.4, 1087.4, 0.0); ( 465243.4,
3808201.9, 1087.1, 1087.1, 0.0);
( 465263.4, 3808201.9, 1086.8, 1086.8, 0.0); ( 465283.4,
3808201.9, 1086.4, 1086.4, 0.0);
( 465303.4, 3808201.9, 1086.1, 1086.1, 0.0); ( 465323.4,
3808201.9, 1085.8, 1085.8, 0.0);
( 465343.4, 3808201.9, 1085.4, 1085.4, 0.0); ( 465363.4,
3808201.9, 1085.1, 1085.1, 0.0);
( 465383.4, 3808201.9, 1084.8, 1084.8, 0.0); ( 465403.4,
3808201.9, 1084.5, 1084.5, 0.0);
( 465423.4, 3808201.9, 1084.5, 1084.5, 0.0); ( 465443.4,
3808201.9, 1084.5, 1084.5, 0.0);
( 465463.4, 3808201.9, 1084.4, 1084.4, 0.0); ( 465483.4,
3808201.9, 1084.1, 1084.1, 0.0);
( 465503.4, 3808201.9, 1084.0, 1084.0, 0.0); ( 465523.4,
3808201.9, 1084.0, 1084.0, 0.0);
( 465543.4, 3808201.9, 1084.0, 1084.0, 0.0); ( 465563.4,
3808201.9, 1083.8, 1083.8, 0.0);
( 465583.4, 3808201.9, 1083.5, 1083.5, 0.0); ( 465603.4,
3808201.9, 1083.5, 1083.5, 0.0);
( 465623.4, 3808201.9, 1083.3, 1083.3, 0.0); ( 465643.4,
3808201.9, 1083.0, 1083.0, 0.0);
( 465663.4, 3808201.9, 1083.0, 1083.0, 0.0); ( 465683.4,

```

3808201.9,	1082.8,	1082.8,	0.0);		
(465703.4,	3808201.9,	1082.4,	1082.4,	0.0);	(464943.4,
3808221.9,	1090.5,	1090.5,	0.0);		
(464963.4,	3808221.9,	1090.8,	1090.8,	0.0);	(464983.4,
3808221.9,	1090.8,	1090.8,	0.0);		
(465003.4,	3808221.9,	1090.8,	1090.8,	0.0);	(465023.4,
3808221.9,	1090.4,	1090.4,	0.0);		
(465043.4,	3808221.9,	1090.0,	1090.0,	0.0);	(465063.4,
3808221.9,	1089.8,	1089.8,	0.0);		
(465083.4,	3808221.9,	1089.3,	1089.3,	0.0);	(465103.4,
3808221.9,	1088.8,	1088.8,	0.0);		
(465123.4,	3808221.9,	1088.8,	1088.8,	0.0);	(465143.4,
3808221.9,	1088.4,	1088.4,	0.0);		
(465163.4,	3808221.9,	1088.0,	1088.0,	0.0);	(465183.4,
3808221.9,	1087.8,	1087.8,	0.0);		
(465203.4,	3808221.9,	1087.4,	1087.4,	0.0);	(465223.4,
3808221.9,	1087.0,	1087.0,	0.0);		
(465243.4,	3808221.9,	1086.8,	1086.8,	0.0);	(465263.4,
3808221.9,	1086.4,	1086.4,	0.0);		
(465283.4,	3808221.9,	1086.0,	1086.0,	0.0);	(465303.4,
3808221.9,	1085.8,	1085.8,	0.0);		
(465323.4,	3808221.9,	1085.4,	1085.4,	0.0);	(465343.4,
3808221.9,	1085.0,	1085.0,	0.0);		
(465363.4,	3808221.9,	1084.8,	1084.8,	0.0);	(465383.4,
3808221.9,	1084.4,	1084.4,	0.0);		
(465403.4,	3808221.9,	1084.0,	1084.0,	0.0);	(465423.4,
3808221.9,	1084.0,	1084.0,	0.0);		
(465443.4,	3808221.9,	1084.0,	1084.0,	0.0);	(465463.4,
3808221.9,	1084.0,	1084.0,	0.0);		
(465483.4,	3808221.9,	1084.0,	1084.0,	0.0);	(465503.4,
3808221.9,	1083.9,	1083.9,	0.0);		
(465523.4,	3808221.9,	1083.8,	1083.8,	0.0);	(465543.4,
3808221.9,	1083.8,	1083.8,	0.0);		
(465563.4,	3808221.9,	1083.4,	1083.4,	0.0);	(465583.4,
3808221.9,	1083.0,	1083.0,	0.0);		
(465603.4,	3808221.9,	1083.0,	1083.0,	0.0);	(465623.4,
3808221.9,	1082.9,	1082.9,	0.0);		
(465643.4,	3808221.9,	1082.8,	1082.8,	0.0);	(465663.4,
3808221.9,	1082.8,	1082.8,	0.0);		
(465683.4,	3808221.9,	1082.4,	1082.4,	0.0);	(465703.4,
3808221.9,	1082.0,	1082.0,	0.0);		
(464963.4,	3808241.9,	1090.1,	1090.1,	0.0);	(464983.4,
3808241.9,	1090.1,	1090.1,	0.0);		
(465003.4,	3808241.9,	1090.1,	1090.1,	0.0);	(465023.4,
3808241.9,	1090.1,	1090.1,	0.0);		
(465043.4,	3808241.9,	1089.9,	1089.9,	0.0);	(465063.4,
3808241.9,	1089.3,	1089.3,	0.0);		
(465083.4,	3808241.9,	1088.7,	1088.7,	0.0);	(465103.4,
3808241.9,	1088.1,	1088.1,	0.0);		
(465123.4,	3808241.9,	1088.1,	1088.1,	0.0);	(465143.4,

```

3808241.9, 1088.1, 1088.1, 0.0);
( 465163.4, 3808241.9, 1087.9, 1087.9, 0.0); ( 465183.4,
3808241.9, 1087.3, 1087.3, 0.0);
( 465203.4, 3808241.9, 1087.1, 1087.1, 0.0); ( 465223.4,
3808241.9, 1086.9, 1086.9, 0.0);
( 465243.4, 3808241.9, 1086.3, 1086.3, 0.0); ( 465263.4,
3808241.9, 1086.1, 1086.1, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 39

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465283.4, 3808241.9, 1085.9, 1085.9, 0.0); ( 465303.4,
3808241.9, 1085.3, 1085.3, 0.0);
( 465323.4, 3808241.9, 1085.1, 1085.1, 0.0); ( 465343.4,
3808241.9, 1084.9, 1084.9, 0.0);
( 465363.4, 3808241.9, 1084.3, 1084.3, 0.0); ( 465383.4,
3808241.9, 1084.1, 1084.1, 0.0);
( 465403.4, 3808241.9, 1084.0, 1084.0, 0.0); ( 465423.4,
3808241.9, 1084.0, 1084.0, 0.0);
( 465443.4, 3808241.9, 1084.0, 1084.0, 0.0); ( 465463.4,
3808241.9, 1084.0, 1084.0, 0.0);
( 465483.4, 3808241.9, 1084.0, 1084.0, 0.0); ( 465503.4,
3808241.9, 1083.6, 1083.6, 0.0);
( 465523.4, 3808241.9, 1083.1, 1083.1, 0.0); ( 465543.4,
3808241.9, 1083.1, 1083.1, 0.0);
( 465563.4, 3808241.9, 1083.1, 1083.1, 0.0); ( 465583.4,
3808241.9, 1083.0, 1083.0, 0.0);
( 465603.4, 3808241.9, 1083.0, 1083.0, 0.0); ( 465623.4,
3808241.9, 1082.6, 1082.6, 0.0);
( 465643.4, 3808241.9, 1082.1, 1082.1, 0.0); ( 465663.4,
3808241.9, 1082.1, 1082.1, 0.0);
( 465683.4, 3808241.9, 1082.1, 1082.1, 0.0); ( 465703.4,
3808241.9, 1081.9, 1081.9, 0.0);
( 464983.4, 3808261.9, 1088.5, 1088.5, 0.0); ( 465003.4,
3808261.9, 1088.8, 1088.8, 0.0);
( 465023.4, 3808261.9, 1088.9, 1088.9, 0.0); ( 465043.4,
3808261.9, 1088.9, 1088.9, 0.0);
( 465063.4, 3808261.9, 1088.6, 1088.6, 0.0); ( 465083.4,
3808261.9, 1088.3, 1088.3, 0.0);
( 465103.4, 3808261.9, 1087.9, 1087.9, 0.0); ( 465123.4,
3808261.9, 1087.6, 1087.6, 0.0);
( 465143.4, 3808261.9, 1087.5, 1087.5, 0.0); ( 465163.4,

```


3808261.9,	1087.4,	1087.4,	0.0);		
(465183.4,	3808261.9,	1087.1,	1087.1,	0.0);	(465203.4,
3808261.9,	1086.8,	1086.8,	0.0);		
(465223.4,	3808261.9,	1086.4,	1086.4,	0.0);	(465243.4,
3808261.9,	1086.1,	1086.1,	0.0);		
(465263.4,	3808261.9,	1086.0,	1086.0,	0.0);	(465283.4,
3808261.9,	1085.9,	1085.9,	0.0);		
(465303.4,	3808261.9,	1085.2,	1085.2,	0.0);	(465323.4,
3808261.9,	1084.8,	1084.8,	0.0);		
(465343.4,	3808261.9,	1084.4,	1084.4,	0.0);	(465363.4,
3808261.9,	1084.1,	1084.1,	0.0);		
(465383.4,	3808261.9,	1083.8,	1083.8,	0.0);	(465403.4,
3808261.9,	1083.5,	1083.5,	0.0);		
(465423.4,	3808261.9,	1083.5,	1083.5,	0.0);	(465443.4,
3808261.9,	1083.5,	1083.5,	0.0);		
(465463.4,	3808261.9,	1083.5,	1083.5,	0.0);	(465483.4,
3808261.9,	1083.5,	1083.5,	0.0);		
(465503.4,	3808261.9,	1083.3,	1083.3,	0.0);	(465523.4,
3808261.9,	1083.0,	1083.0,	0.0);		
(465543.4,	3808261.9,	1083.0,	1083.0,	0.0);	(465563.4,
3808261.9,	1082.8,	1082.8,	0.0);		
(465583.4,	3808261.9,	1082.5,	1082.5,	0.0);	(465603.4,
3808261.9,	1082.5,	1082.5,	0.0);		
(465623.4,	3808261.9,	1082.3,	1082.3,	0.0);	(465643.4,
3808261.9,	1081.9,	1081.9,	0.0);		
(465663.4,	3808261.9,	1081.6,	1081.6,	0.0);	(465683.4,
3808261.9,	1081.5,	1081.5,	0.0);		
(465703.4,	3808261.9,	1081.4,	1081.4,	0.0);	(465003.4,
3808281.9,	1087.4,	1087.4,	0.0);		
(465023.4,	3808281.9,	1087.7,	1087.7,	0.0);	(465043.4,
3808281.9,	1087.8,	1087.8,	0.0);		
(465063.4,	3808281.9,	1087.6,	1087.6,	0.0);	(465083.4,
3808281.9,	1087.7,	1087.7,	0.0);		
(465103.4,	3808281.9,	1087.7,	1087.7,	0.0);	(465123.4,
3808281.9,	1087.2,	1087.2,	0.0);		
(465143.4,	3808281.9,	1087.0,	1087.0,	0.0);	(465163.4,
3808281.9,	1087.0,	1087.0,	0.0);		
(465183.4,	3808281.9,	1086.8,	1086.8,	0.0);	(465203.4,
3808281.9,	1086.4,	1086.4,	0.0);		
(465223.4,	3808281.9,	1086.0,	1086.0,	0.0);	(465243.4,
3808281.9,	1086.0,	1086.0,	0.0);		
(465263.4,	3808281.9,	1085.9,	1085.9,	0.0);	(465283.4,
3808281.9,	1085.7,	1085.7,	0.0);		
(465303.4,	3808281.9,	1085.0,	1085.0,	0.0);	(465323.4,
3808281.9,	1084.4,	1084.4,	0.0);		
(465343.4,	3808281.9,	1084.0,	1084.0,	0.0);	(465363.4,
3808281.9,	1083.8,	1083.8,	0.0);		
(465383.4,	3808281.9,	1083.4,	1083.4,	0.0);	(465403.4,
3808281.9,	1083.0,	1083.0,	0.0);		
(465423.4,	3808281.9,	1082.8,	1082.8,	0.0);	(465443.4,

```

3808281.9, 1082.8, 1082.8, 0.0);
( 465463.4, 3808281.9, 1083.0, 1083.0, 0.0); ( 465483.4,
3808281.9, 1083.0, 1083.0, 0.0);
( 465503.4, 3808281.9, 1083.0, 1083.0, 0.0); ( 465523.4,
3808281.9, 1083.0, 1083.0, 0.0);
( 465543.4, 3808281.9, 1082.8, 1082.8, 0.0); ( 465563.4,
3808281.9, 1082.4, 1082.4, 0.0);
( 465583.4, 3808281.9, 1082.0, 1082.0, 0.0); ( 465603.4,
3808281.9, 1082.0, 1082.0, 0.0);

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 40

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

```

( 465623.4, 3808281.9, 1081.9, 1081.9, 0.0); ( 465643.4,
3808281.9, 1081.7, 1081.7, 0.0);
( 465663.4, 3808281.9, 1081.2, 1081.2, 0.0); ( 465683.4,
3808281.9, 1080.9, 1080.9, 0.0);
( 465703.4, 3808281.9, 1080.8, 1080.8, 0.0); ( 465003.4,
3808301.9, 1086.2, 1086.2, 0.0);
( 465023.4, 3808301.9, 1086.7, 1086.7, 0.0); ( 465043.4,
3808301.9, 1087.0, 1087.0, 0.0);
( 465063.4, 3808301.9, 1086.5, 1086.5, 0.0); ( 465083.4,
3808301.9, 1086.7, 1086.7, 0.0);
( 465103.4, 3808301.9, 1087.1, 1087.1, 0.0); ( 465123.4,
3808301.9, 1087.0, 1087.0, 0.0);
( 465143.4, 3808301.9, 1087.0, 1087.0, 0.0); ( 465163.4,
3808301.9, 1086.9, 1086.9, 0.0);
( 465183.4, 3808301.9, 1086.3, 1086.3, 0.0); ( 465203.4,
3808301.9, 1086.1, 1086.1, 0.0);
( 465223.4, 3808301.9, 1086.0, 1086.0, 0.0); ( 465243.4,
3808301.9, 1086.0, 1086.0, 0.0);
( 465263.4, 3808301.9, 1085.6, 1085.6, 0.0); ( 465283.4,
3808301.9, 1085.0, 1085.0, 0.0);
( 465303.4, 3808301.9, 1084.3, 1084.3, 0.0); ( 465323.4,
3808301.9, 1084.1, 1084.1, 0.0);
( 465343.4, 3808301.9, 1083.9, 1083.9, 0.0); ( 465363.4,
3808301.9, 1083.3, 1083.3, 0.0);
( 465383.4, 3808301.9, 1083.1, 1083.1, 0.0); ( 465403.4,
3808301.9, 1082.9, 1082.9, 0.0);
( 465423.4, 3808301.9, 1082.3, 1082.3, 0.0); ( 465443.4,
3808301.9, 1082.1, 1082.1, 0.0);
( 465463.4, 3808301.9, 1083.0, 1083.0, 0.0); ( 465483.4,

```

3808301.9,	1083.0,	1083.0,	0.0);		
(465503.4,	3808301.9,	1083.0,	1083.0,	0.0);	(465523.4,
3808301.9,	1082.9,	1082.9,	0.0);		
(465543.4,	3808301.9,	1082.3,	1082.3,	0.0);	(465563.4,
3808301.9,	1082.1,	1082.1,	0.0);		
(465583.4,	3808301.9,	1082.0,	1082.0,	0.0);	(465603.4,
3808301.9,	1082.0,	1082.0,	0.0);		
(465623.4,	3808301.9,	1081.6,	1081.6,	0.0);	(465643.4,
3808301.9,	1081.1,	1081.1,	0.0);		
(465663.4,	3808301.9,	1081.0,	1081.0,	0.0);	(465683.4,
3808301.9,	1080.6,	1080.6,	0.0);		
(465703.4,	3808301.9,	1080.1,	1080.1,	0.0);	(465043.4,
3808321.9,	1085.9,	1085.9,	0.0);		
(465063.4,	3808321.9,	1086.0,	1086.0,	0.0);	(465083.4,
3808321.9,	1086.2,	1086.2,	0.0);		
(465103.4,	3808321.9,	1086.5,	1086.5,	0.0);	(465123.4,
3808321.9,	1086.5,	1086.5,	0.0);		
(465143.4,	3808321.9,	1086.5,	1086.5,	0.0);	(465163.4,
3808321.9,	1086.4,	1086.4,	0.0);		
(465183.4,	3808321.9,	1086.1,	1086.1,	0.0);	(465203.4,
3808321.9,	1086.0,	1086.0,	0.0);		
(465223.4,	3808321.9,	1085.9,	1085.9,	0.0);	(465243.4,
3808321.9,	1085.6,	1085.6,	0.0);		
(465263.4,	3808321.9,	1085.0,	1085.0,	0.0);	(465283.4,
3808321.9,	1084.4,	1084.4,	0.0);		
(465303.4,	3808321.9,	1084.1,	1084.1,	0.0);	(465323.4,
3808321.9,	1083.8,	1083.8,	0.0);		
(465343.4,	3808321.9,	1083.4,	1083.4,	0.0);	(465363.4,
3808321.9,	1083.1,	1083.1,	0.0);		
(465383.4,	3808321.9,	1082.8,	1082.8,	0.0);	(465403.4,
3808321.9,	1082.4,	1082.4,	0.0);		
(465423.4,	3808321.9,	1082.1,	1082.1,	0.0);	(465443.4,
3808321.9,	1082.0,	1082.0,	0.0);		
(465463.4,	3808321.9,	1082.5,	1082.5,	0.0);	(465483.4,
3808321.9,	1082.5,	1082.5,	0.0);		
(465503.4,	3808321.9,	1082.5,	1082.5,	0.0);	(465523.4,
3808321.9,	1082.4,	1082.4,	0.0);		
(465543.4,	3808321.9,	1082.1,	1082.1,	0.0);	(465563.4,
3808321.9,	1082.0,	1082.0,	0.0);		
(465583.4,	3808321.9,	1081.9,	1081.9,	0.0);	(465603.4,
3808321.9,	1081.6,	1081.6,	0.0);		
(465623.4,	3808321.9,	1081.3,	1081.3,	0.0);	(465643.4,
3808321.9,	1080.9,	1080.9,	0.0);		
(465663.4,	3808321.9,	1080.6,	1080.6,	0.0);	(465683.4,
3808321.9,	1080.3,	1080.3,	0.0);		
(465703.4,	3808321.9,	1079.9,	1079.9,	0.0);	(465083.4,
3808341.9,	1085.8,	1085.8,	0.0);		
(465103.4,	3808341.9,	1085.8,	1085.8,	0.0);	(465123.4,
3808341.9,	1086.0,	1086.0,	0.0);		
(465143.4,	3808341.9,	1086.0,	1086.0,	0.0);	(465163.4,

```

3808341.9, 1086.0, 1086.0, 0.0);
( 465183.4, 3808341.9, 1086.0, 1086.0, 0.0); ( 465203.4,
3808341.9, 1085.9, 1085.9, 0.0);
( 465223.4, 3808341.9, 1085.7, 1085.7, 0.0); ( 465243.4,
3808341.9, 1085.2, 1085.2, 0.0);
( 465263.4, 3808341.9, 1084.5, 1084.5, 0.0); ( 465283.4,
3808341.9, 1084.0, 1084.0, 0.0);
( 465303.4, 3808341.9, 1083.8, 1083.8, 0.0); ( 465323.4,
3808341.9, 1083.3, 1083.3, 0.0);
( 465343.4, 3808341.9, 1082.8, 1082.8, 0.0); ( 465363.4,
3808341.9, 1082.8, 1082.8, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 41

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465383.4, 3808341.9, 1082.4, 1082.4, 0.0); ( 465403.4,
3808341.9, 1082.0, 1082.0, 0.0);
( 465423.4, 3808341.9, 1081.8, 1081.8, 0.0); ( 465443.4,
3808341.9, 1081.8, 1081.8, 0.0);
( 465463.4, 3808341.9, 1082.0, 1082.0, 0.0); ( 465483.4,
3808341.9, 1082.0, 1082.0, 0.0);
( 465503.4, 3808341.9, 1082.0, 1082.0, 0.0); ( 465523.4,
3808341.9, 1082.0, 1082.0, 0.0);
( 465543.4, 3808341.9, 1081.8, 1081.8, 0.0); ( 465563.4,
3808341.9, 1081.8, 1081.8, 0.0);
( 465583.4, 3808341.9, 1081.7, 1081.7, 0.0); ( 465603.4,
3808341.9, 1081.2, 1081.2, 0.0);
( 465623.4, 3808341.9, 1080.9, 1080.9, 0.0); ( 465643.4,
3808341.9, 1080.7, 1080.7, 0.0);
( 465663.4, 3808341.9, 1080.2, 1080.2, 0.0); ( 465683.4,
3808341.9, 1079.9, 1079.9, 0.0);
( 465703.4, 3808341.9, 1079.7, 1079.7, 0.0); ( 465103.4,
3808361.9, 1085.2, 1085.2, 0.0);
( 465123.4, 3808361.9, 1085.8, 1085.8, 0.0); ( 465143.4,
3808361.9, 1086.0, 1086.0, 0.0);
( 465163.4, 3808361.9, 1086.0, 1086.0, 0.0); ( 465183.4,
3808361.9, 1086.0, 1086.0, 0.0);
( 465203.4, 3808361.9, 1085.6, 1085.6, 0.0); ( 465223.4,
3808361.9, 1085.1, 1085.1, 0.0);
( 465243.4, 3808361.9, 1085.0, 1085.0, 0.0); ( 465263.4,
3808361.9, 1084.5, 1084.5, 0.0);
( 465283.4, 3808361.9, 1083.9, 1083.9, 0.0); ( 465303.4,

```

3808361.9,	1083.3,	1083.3,	0.0);		
(465323.4,	3808361.9,	1082.7,	1082.7,	0.0);	(465343.4,
3808361.9,	1082.1,	1082.1,	0.0);		
(465363.4,	3808361.9,	1082.1,	1082.1,	0.0);	(465383.4,
3808361.9,	1082.1,	1082.1,	0.0);		
(465403.4,	3808361.9,	1081.9,	1081.9,	0.0);	(465423.4,
3808361.9,	1081.3,	1081.3,	0.0);		
(465443.4,	3808361.9,	1081.1,	1081.1,	0.0);	(465463.4,
3808361.9,	1082.0,	1082.0,	0.0);		
(465483.4,	3808361.9,	1082.0,	1082.0,	0.0);	(465503.4,
3808361.9,	1082.0,	1082.0,	0.0);		
(465523.4,	3808361.9,	1081.9,	1081.9,	0.0);	(465543.4,
3808361.9,	1081.3,	1081.3,	0.0);		
(465563.4,	3808361.9,	1081.1,	1081.1,	0.0);	(465583.4,
3808361.9,	1081.1,	1081.1,	0.0);		
(465603.4,	3808361.9,	1081.0,	1081.0,	0.0);	(465623.4,
3808361.9,	1080.6,	1080.6,	0.0);		
(465643.4,	3808361.9,	1080.1,	1080.1,	0.0);	(465663.4,
3808361.9,	1080.0,	1080.0,	0.0);		
(465683.4,	3808361.9,	1079.6,	1079.6,	0.0);	(465703.4,
3808361.9,	1079.1,	1079.1,	0.0);		
(465183.4,	3808381.9,	1085.0,	1085.0,	0.0);	(465203.4,
3808381.9,	1084.7,	1084.7,	0.0);		
(465223.4,	3808381.9,	1084.4,	1084.4,	0.0);	(465243.4,
3808381.9,	1084.0,	1084.0,	0.0);		
(465263.4,	3808381.9,	1083.5,	1083.5,	0.0);	(465283.4,
3808381.9,	1082.9,	1082.9,	0.0);		
(465303.4,	3808381.9,	1082.6,	1082.6,	0.0);	(465323.4,
3808381.9,	1082.0,	1082.0,	0.0);		
(465343.4,	3808381.9,	1081.5,	1081.5,	0.0);	(465363.4,
3808381.9,	1081.5,	1081.5,	0.0);		
(465383.4,	3808381.9,	1081.5,	1081.5,	0.0);	(465403.4,
3808381.9,	1081.4,	1081.4,	0.0);		
(465423.4,	3808381.9,	1081.1,	1081.1,	0.0);	(465443.4,
3808381.9,	1081.0,	1081.0,	0.0);		
(465463.4,	3808381.9,	1081.5,	1081.5,	0.0);	(465483.4,
3808381.9,	1081.5,	1081.5,	0.0);		
(465503.4,	3808381.9,	1081.5,	1081.5,	0.0);	(465523.4,
3808381.9,	1081.4,	1081.4,	0.0);		
(465543.4,	3808381.9,	1081.1,	1081.1,	0.0);	(465563.4,
3808381.9,	1080.8,	1080.8,	0.0);		
(465583.4,	3808381.9,	1080.5,	1080.5,	0.0);	(465603.4,
3808381.9,	1080.5,	1080.5,	0.0);		
(465623.4,	3808381.9,	1080.3,	1080.3,	0.0);	(465643.4,
3808381.9,	1079.9,	1079.9,	0.0);		
(465663.4,	3808381.9,	1079.6,	1079.6,	0.0);	(465683.4,
3808381.9,	1079.3,	1079.3,	0.0);		
(465703.4,	3808381.9,	1078.9,	1078.9,	0.0);	(465303.4,
3808401.9,	1081.6,	1081.6,	0.0);		
(465323.4,	3808401.9,	1081.2,	1081.2,	0.0);	(465343.4,

```

3808401.9, 1080.8, 1080.8, 0.0);
( 465363.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465383.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465403.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465423.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465443.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465463.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465483.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465503.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465523.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465543.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465563.4, 3808401.9, 1080.4, 1080.4, 0.0); ( 465583.4,
3808401.9, 1080.0, 1080.0, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 42

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465603.4, 3808401.9, 1080.0, 1080.0, 0.0); ( 465623.4,
3808401.9, 1079.9, 1079.9, 0.0);
( 465643.4, 3808401.9, 1079.7, 1079.7, 0.0); ( 465663.4,
3808401.9, 1079.2, 1079.2, 0.0);
( 465683.4, 3808401.9, 1078.9, 1078.9, 0.0); ( 465703.4,
3808401.9, 1078.7, 1078.7, 0.0);
( 465323.4, 3808421.9, 1080.2, 1080.2, 0.0); ( 465343.4,
3808421.9, 1080.1, 1080.1, 0.0);
( 465363.4, 3808421.9, 1080.1, 1080.1, 0.0); ( 465383.4,
3808421.9, 1080.1, 1080.1, 0.0);
( 465403.4, 3808421.9, 1080.1, 1080.1, 0.0); ( 465423.4,
3808421.9, 1080.1, 1080.1, 0.0);
( 465443.4, 3808421.9, 1080.1, 1080.1, 0.0); ( 465463.4,
3808421.9, 1080.1, 1080.1, 0.0);
( 465483.4, 3808421.9, 1080.1, 1080.1, 0.0); ( 465503.4,
3808421.9, 1080.1, 1080.1, 0.0);
( 465523.4, 3808421.9, 1080.1, 1080.1, 0.0); ( 465543.4,
3808421.9, 1080.1, 1080.1, 0.0);
( 465563.4, 3808421.9, 1080.1, 1080.1, 0.0); ( 465583.4,
3808421.9, 1080.0, 1080.0, 0.0);
( 465603.4, 3808421.9, 1080.0, 1080.0, 0.0); ( 465623.4,
3808421.9, 1079.6, 1079.6, 0.0);
( 465643.4, 3808421.9, 1079.1, 1079.1, 0.0); ( 465663.4,
3808421.9, 1079.0, 1079.0, 0.0);
( 465683.4, 3808421.9, 1078.6, 1078.6, 0.0); ( 465703.4,

```

3808421.9,	1078.1,	1078.1,	0.0);		
(465323.4,	3808441.9,	1079.5,	1079.5,	0.0);	(465343.4,
3808441.9,	1079.5,	1079.5,	0.0);		
(465363.4,	3808441.9,	1079.9,	1079.9,	0.0);	(465383.4,
3808441.9,	1080.0,	1080.0,	0.0);		
(465403.4,	3808441.9,	1080.0,	1080.0,	0.0);	(465423.4,
3808441.9,	1080.0,	1080.0,	0.0);		
(465443.4,	3808441.9,	1080.0,	1080.0,	0.0);	(465463.4,
3808441.9,	1080.0,	1080.0,	0.0);		
(465483.4,	3808441.9,	1080.0,	1080.0,	0.0);	(465503.4,
3808441.9,	1080.0,	1080.0,	0.0);		
(465523.4,	3808441.9,	1080.0,	1080.0,	0.0);	(465543.4,
3808441.9,	1080.0,	1080.0,	0.0);		
(465563.4,	3808441.9,	1080.0,	1080.0,	0.0);	(465583.4,
3808441.9,	1080.0,	1080.0,	0.0);		
(465603.4,	3808441.9,	1080.0,	1080.0,	0.0);	(465623.4,
3808441.9,	1079.5,	1079.5,	0.0);		
(465643.4,	3808441.9,	1078.9,	1078.9,	0.0);	(465663.4,
3808441.9,	1078.6,	1078.6,	0.0);		
(465683.4,	3808441.9,	1078.3,	1078.3,	0.0);	(465703.4,
3808441.9,	1078.0,	1078.0,	0.0);		
(465343.4,	3808461.9,	1078.9,	1078.9,	0.0);	(465363.4,
3808461.9,	1079.4,	1079.4,	0.0);		
(465383.4,	3808461.9,	1079.7,	1079.7,	0.0);	(465403.4,
3808461.9,	1079.8,	1079.8,	0.0);		
(465423.4,	3808461.9,	1079.8,	1079.8,	0.0);	(465443.4,
3808461.9,	1079.8,	1079.8,	0.0);		
(465463.4,	3808461.9,	1079.8,	1079.8,	0.0);	(465483.4,
3808461.9,	1079.8,	1079.8,	0.0);		
(465503.4,	3808461.9,	1079.9,	1079.9,	0.0);	(465523.4,
3808461.9,	1080.0,	1080.0,	0.0);		
(465543.4,	3808461.9,	1080.0,	1080.0,	0.0);	(465563.4,
3808461.9,	1080.0,	1080.0,	0.0);		
(465583.4,	3808461.9,	1080.0,	1080.0,	0.0);	(465603.4,
3808461.9,	1080.0,	1080.0,	0.0);		
(465623.4,	3808461.9,	1079.5,	1079.5,	0.0);	(465643.4,
3808461.9,	1078.9,	1078.9,	0.0);		
(465663.4,	3808461.9,	1078.2,	1078.2,	0.0);	(465683.4,
3808461.9,	1078.0,	1078.0,	0.0);		
(465703.4,	3808461.9,	1078.0,	1078.0,	0.0);	(465343.4,
3808481.9,	1078.1,	1078.1,	0.0);		
(465363.4,	3808481.9,	1078.2,	1078.2,	0.0);	(465383.4,
3808481.9,	1078.7,	1078.7,	0.0);		
(465403.4,	3808481.9,	1079.1,	1079.1,	0.0);	(465423.4,
3808481.9,	1079.1,	1079.1,	0.0);		
(465443.4,	3808481.9,	1079.1,	1079.1,	0.0);	(465463.4,
3808481.9,	1079.1,	1079.1,	0.0);		
(465483.4,	3808481.9,	1079.1,	1079.1,	0.0);	(465503.4,
3808481.9,	1079.5,	1079.5,	0.0);		
(465523.4,	3808481.9,	1080.0,	1080.0,	0.0);	(465543.4,

```

3808481.9, 1080.0, 1080.0, 0.0);
( 465563.4, 3808481.9, 1080.0, 1080.0, 0.0); ( 465583.4,
3808481.9, 1080.0, 1080.0, 0.0);
( 465603.4, 3808481.9, 1080.0, 1080.0, 0.0); ( 465623.4,
3808481.9, 1079.5, 1079.5, 0.0);
( 465643.4, 3808481.9, 1078.9, 1078.9, 0.0); ( 465663.4,
3808481.9, 1078.2, 1078.2, 0.0);
( 465683.4, 3808481.9, 1078.0, 1078.0, 0.0); ( 465703.4,
3808481.9, 1077.9, 1077.9, 0.0);
( 465463.4, 3808501.9, 1078.9, 1078.9, 0.0); ( 465483.4,
3808501.9, 1078.6, 1078.6, 0.0);
( 465503.4, 3808501.9, 1078.9, 1078.9, 0.0); ( 465523.4,
3808501.9, 1079.5, 1079.5, 0.0);
( 465543.4, 3808501.9, 1079.5, 1079.5, 0.0); ( 465563.4,
3808501.9, 1079.7, 1079.7, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 43

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465583.4, 3808501.9, 1079.9, 1079.9, 0.0); ( 465603.4,
3808501.9, 1079.6, 1079.6, 0.0);
( 465623.4, 3808501.9, 1079.3, 1079.3, 0.0); ( 465643.4,
3808501.9, 1078.9, 1078.9, 0.0);
( 465663.4, 3808501.9, 1078.2, 1078.2, 0.0); ( 465683.4,
3808501.9, 1078.0, 1078.0, 0.0);
( 465703.4, 3808501.9, 1077.9, 1077.9, 0.0); ( 465523.4,
3808521.9, 1078.8, 1078.8, 0.0);
( 465543.4, 3808521.9, 1078.8, 1078.8, 0.0); ( 465563.4,
3808521.9, 1079.3, 1079.3, 0.0);
( 465583.4, 3808521.9, 1079.7, 1079.7, 0.0); ( 465603.4,
3808521.9, 1079.2, 1079.2, 0.0);
( 465623.4, 3808521.9, 1078.9, 1078.9, 0.0); ( 465643.4,
3808521.9, 1078.7, 1078.7, 0.0);
( 465663.4, 3808521.9, 1078.2, 1078.2, 0.0); ( 465683.4,
3808521.9, 1077.9, 1077.9, 0.0);
( 465703.4, 3808521.9, 1077.7, 1077.7, 0.0); ( 463745.3,
3809562.3, 1070.0, 1070.0, 0.0);
( 463783.3, 3809562.3, 1071.2, 1071.2, 0.0); ( 463821.3,
3809562.3, 1072.9, 1079.0, 0.0);
( 463859.3, 3809562.3, 1076.2, 1076.2, 0.0); ( 463897.3,
3809562.3, 1078.8, 1078.8, 0.0);
( 463935.3, 3809562.3, 1079.3, 1079.3, 0.0); ( 463973.3,

```


3809562.3,	1079.6,	1079.6,	0.0);		
(464011.3,	3809562.3,	1078.3,	1078.3,	0.0);	(464049.3,
3809562.3,	1078.0,	1078.0,	0.0);		
(464087.3,	3809562.3,	1077.1,	1077.1,	0.0);	(464125.3,
3809562.3,	1076.5,	1076.5,	0.0);		
(464163.3,	3809562.3,	1076.0,	1076.0,	0.0);	(464201.3,
3809562.3,	1076.0,	1076.0,	0.0);		
(464239.3,	3809562.3,	1075.1,	1075.1,	0.0);	(464277.3,
3809562.3,	1074.5,	1074.5,	0.0);		
(464315.3,	3809562.3,	1074.0,	1074.0,	0.0);	(464353.3,
3809562.3,	1073.9,	1073.9,	0.0);		
(464391.3,	3809562.3,	1073.1,	1073.1,	0.0);	(464429.3,
3809562.3,	1073.0,	1073.0,	0.0);		
(464467.3,	3809562.3,	1072.2,	1072.2,	0.0);	(464505.3,
3809562.3,	1072.0,	1072.0,	0.0);		
(463745.3,	3809591.4,	1069.0,	1069.0,	0.0);	(463783.3,
3809591.4,	1070.3,	1070.3,	0.0);		
(463821.3,	3809591.4,	1071.6,	1079.0,	0.0);	(463859.3,
3809591.4,	1074.2,	1077.0,	0.0);		
(463897.3,	3809591.4,	1077.1,	1077.1,	0.0);	(463935.3,
3809591.4,	1079.0,	1079.0,	0.0);		
(463973.3,	3809591.4,	1079.1,	1079.1,	0.0);	(464011.3,
3809591.4,	1078.3,	1078.3,	0.0);		
(464049.3,	3809591.4,	1078.0,	1078.0,	0.0);	(464087.3,
3809591.4,	1076.8,	1076.8,	0.0);		
(464125.3,	3809591.4,	1076.1,	1076.1,	0.0);	(464163.3,
3809591.4,	1075.3,	1075.3,	0.0);		
(464201.3,	3809591.4,	1075.1,	1075.1,	0.0);	(464239.3,
3809591.4,	1074.7,	1074.7,	0.0);		
(464277.3,	3809591.4,	1074.1,	1074.1,	0.0);	(464315.3,
3809591.4,	1074.0,	1074.0,	0.0);		
(464353.3,	3809591.4,	1073.1,	1073.1,	0.0);	(464391.3,
3809591.4,	1073.0,	1073.0,	0.0);		
(464429.3,	3809591.4,	1072.5,	1072.5,	0.0);	(464467.3,
3809591.4,	1072.0,	1072.0,	0.0);		
(464505.3,	3809591.4,	1071.8,	1071.8,	0.0);	(463745.3,
3809620.4,	1067.1,	1067.1,	0.0);		
(463783.3,	3809620.4,	1068.6,	1068.6,	0.0);	(463821.3,
3809620.4,	1070.6,	1070.6,	0.0);		
(463859.3,	3809620.4,	1072.6,	1072.6,	0.0);	(463897.3,
3809620.4,	1075.2,	1075.2,	0.0);		
(463935.3,	3809620.4,	1077.5,	1077.5,	0.0);	(463973.3,
3809620.4,	1078.2,	1078.2,	0.0);		
(464011.3,	3809620.4,	1078.0,	1078.0,	0.0);	(464049.3,
3809620.4,	1077.2,	1077.2,	0.0);		
(464087.3,	3809620.4,	1076.1,	1076.1,	0.0);	(464125.3,
3809620.4,	1075.6,	1075.6,	0.0);		
(464163.3,	3809620.4,	1075.0,	1075.0,	0.0);	(464201.3,
3809620.4,	1074.2,	1074.2,	0.0);		
(464239.3,	3809620.4,	1074.1,	1074.1,	0.0);	(464277.3,

```

3809620.4, 1073.5, 1073.5, 0.0);
( 464315.3, 3809620.4, 1073.2, 1073.2, 0.0); ( 464353.3,
3809620.4, 1072.9, 1072.9, 0.0);
( 464391.3, 3809620.4, 1072.2, 1072.2, 0.0); ( 464429.3,
3809620.4, 1072.1, 1072.1, 0.0);
( 464467.3, 3809620.4, 1072.0, 1072.0, 0.0); ( 464505.3,
3809620.4, 1071.1, 1071.1, 0.0);
( 463745.3, 3809649.5, 1065.0, 1065.0, 0.0); ( 463783.3,
3809649.5, 1067.3, 1067.3, 0.0);
( 463821.3, 3809649.5, 1069.1, 1069.1, 0.0); ( 463859.3,
3809649.5, 1071.0, 1071.0, 0.0);
( 463897.3, 3809649.5, 1073.2, 1073.2, 0.0); ( 463935.3,
3809649.5, 1075.5, 1075.5, 0.0);
( 463973.3, 3809649.5, 1075.6, 1075.6, 0.0); ( 464011.3,
3809649.5, 1076.2, 1076.2, 0.0);
( 464049.3, 3809649.5, 1076.2, 1076.2, 0.0); ( 464087.3,
3809649.5, 1075.2, 1075.2, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 44

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464125.3, 3809649.5, 1075.1, 1075.1, 0.0); ( 464163.3,
3809649.5, 1074.4, 1074.4, 0.0);
( 464201.3, 3809649.5, 1074.0, 1074.0, 0.0); ( 464239.3,
3809649.5, 1073.8, 1073.8, 0.0);
( 464277.3, 3809649.5, 1073.1, 1073.1, 0.0); ( 464315.3,
3809649.5, 1072.3, 1072.3, 0.0);
( 464353.3, 3809649.5, 1072.2, 1072.2, 0.0); ( 464391.3,
3809649.5, 1072.0, 1072.0, 0.0);
( 464429.3, 3809649.5, 1071.5, 1071.5, 0.0); ( 464467.3,
3809649.5, 1071.2, 1071.2, 0.0);
( 464505.3, 3809649.5, 1070.9, 1070.9, 0.0); ( 463745.3,
3809678.5, 1062.4, 1067.0, 0.0);
( 463783.3, 3809678.5, 1065.0, 1065.0, 0.0); ( 463821.3,
3809678.5, 1067.7, 1067.7, 0.0);
( 463859.3, 3809678.5, 1069.1, 1069.1, 0.0); ( 463897.3,
3809678.5, 1071.3, 1071.3, 0.0);
( 463935.3, 3809678.5, 1073.6, 1073.6, 0.0); ( 463973.3,
3809678.5, 1074.2, 1074.2, 0.0);
( 464011.3, 3809678.5, 1074.4, 1074.4, 0.0); ( 464049.3,
3809678.5, 1075.2, 1075.2, 0.0);
( 464087.3, 3809678.5, 1075.0, 1075.0, 0.0); ( 464125.3,

```

3809678.5,	1074.6,	1074.6,	0.0);		
(464163.3,	3809678.5,	1074.0,	1074.0,	0.0);	(464201.3,
3809678.5,	1074.0,	1074.0,	0.0);		
(464239.3,	3809678.5,	1073.2,	1073.2,	0.0);	(464277.3,
3809678.5,	1072.6,	1072.6,	0.0);		
(464315.3,	3809678.5,	1072.0,	1072.0,	0.0);	(464353.3,
3809678.5,	1072.0,	1072.0,	0.0);		
(464391.3,	3809678.5,	1071.7,	1071.7,	0.0);	(464429.3,
3809678.5,	1071.1,	1071.1,	0.0);		
(464467.3,	3809678.5,	1071.0,	1071.0,	0.0);	(464505.3,
3809678.5,	1070.2,	1070.2,	0.0);		
(463745.3,	3809707.6,	1060.4,	1067.0,	0.0);	(463783.3,
3809707.6,	1062.8,	1067.0,	0.0);		
(463821.3,	3809707.6,	1065.5,	1065.5,	0.0);	(463859.3,
3809707.6,	1067.7,	1067.7,	0.0);		
(463897.3,	3809707.6,	1069.4,	1069.4,	0.0);	(463935.3,
3809707.6,	1071.7,	1071.7,	0.0);		
(463973.3,	3809707.6,	1072.9,	1072.9,	0.0);	(464011.3,
3809707.6,	1073.3,	1073.3,	0.0);		
(464049.3,	3809707.6,	1074.2,	1074.2,	0.0);	(464087.3,
3809707.6,	1074.3,	1074.3,	0.0);		
(464125.3,	3809707.6,	1074.1,	1074.1,	0.0);	(464163.3,
3809707.6,	1074.0,	1074.0,	0.0);		
(464201.3,	3809707.6,	1073.3,	1073.3,	0.0);	(464239.3,
3809707.6,	1072.8,	1072.8,	0.0);		
(464277.3,	3809707.6,	1072.1,	1072.1,	0.0);	(464315.3,
3809707.6,	1072.0,	1072.0,	0.0);		
(464353.3,	3809707.6,	1071.3,	1071.3,	0.0);	(464391.3,
3809707.6,	1071.2,	1071.2,	0.0);		
(464429.3,	3809707.6,	1070.5,	1070.5,	0.0);	(464467.3,
3809707.6,	1070.3,	1070.3,	0.0);		
(464505.3,	3809707.6,	1070.0,	1070.0,	0.0);	(463745.3,
3809736.7,	1059.1,	1059.1,	0.0);		
(463783.3,	3809736.7,	1060.8,	1067.0,	0.0);	(463821.3,
3809736.7,	1062.7,	1068.0,	0.0);		
(463859.3,	3809736.7,	1065.2,	1068.0,	0.0);	(463897.3,
3809736.7,	1067.5,	1067.5,	0.0);		
(463935.3,	3809736.7,	1069.2,	1069.2,	0.0);	(463973.3,
3809736.7,	1071.4,	1071.4,	0.0);		
(464011.3,	3809736.7,	1072.8,	1072.8,	0.0);	(464049.3,
3809736.7,	1073.3,	1073.3,	0.0);		
(464087.3,	3809736.7,	1074.0,	1074.0,	0.0);	(464125.3,
3809736.7,	1074.0,	1074.0,	0.0);		
(464163.3,	3809736.7,	1074.0,	1074.0,	0.0);	(464201.3,
3809736.7,	1073.0,	1073.0,	0.0);		
(464239.3,	3809736.7,	1072.7,	1072.7,	0.0);	(464277.3,
3809736.7,	1072.0,	1072.0,	0.0);		
(464315.3,	3809736.7,	1071.4,	1071.4,	0.0);	(464353.3,
3809736.7,	1071.0,	1071.0,	0.0);		
(464391.3,	3809736.7,	1070.7,	1070.7,	0.0);	(464429.3,

```

3809736.7, 1070.1, 1070.1, 0.0);
( 464467.3, 3809736.7, 1070.0, 1070.0, 0.0); ( 464505.3,
3809736.7, 1069.9, 1069.9, 0.0);
( 463745.3, 3809765.7, 1058.2, 1058.2, 0.0); ( 463783.3,
3809765.7, 1059.5, 1059.5, 0.0);
( 463821.3, 3809765.7, 1060.8, 1068.0, 0.0); ( 463859.3,
3809765.7, 1063.0, 1063.0, 0.0);
( 463897.3, 3809765.7, 1065.5, 1065.5, 0.0); ( 463935.3,
3809765.7, 1066.8, 1070.0, 0.0);
( 463973.3, 3809765.7, 1068.2, 1072.0, 0.0); ( 464011.3,
3809765.7, 1071.5, 1071.5, 0.0);
( 464049.3, 3809765.7, 1073.0, 1073.0, 0.0); ( 464087.3,
3809765.7, 1073.5, 1073.5, 0.0);
( 464125.3, 3809765.7, 1074.0, 1074.0, 0.0); ( 464163.3,
3809765.7, 1074.0, 1074.0, 0.0);
( 464201.3, 3809765.7, 1073.0, 1073.0, 0.0); ( 464239.3,
3809765.7, 1072.7, 1072.7, 0.0);
( 464277.3, 3809765.7, 1072.0, 1072.0, 0.0); ( 464315.3,
3809765.7, 1071.2, 1071.2, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 45

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464353.3, 3809765.7, 1070.9, 1070.9, 0.0); ( 464391.3,
3809765.7, 1070.2, 1070.2, 0.0);
( 464429.3, 3809765.7, 1070.0, 1070.0, 0.0); ( 464467.3,
3809765.7, 1070.0, 1070.0, 0.0);
( 464505.3, 3809765.7, 1069.3, 1069.3, 0.0); ( 463745.3,
3809794.8, 1057.3, 1057.3, 0.0);
( 463783.3, 3809794.8, 1057.8, 1057.8, 0.0); ( 463821.3,
3809794.8, 1059.1, 1059.1, 0.0);
( 463859.3, 3809794.8, 1060.6, 1067.0, 0.0); ( 463897.3,
3809794.8, 1062.9, 1065.0, 0.0);
( 463935.3, 3809794.8, 1064.2, 1072.0, 0.0); ( 463973.3,
3809794.8, 1065.6, 1073.0, 0.0);
( 464011.3, 3809794.8, 1068.7, 1073.0, 0.0); ( 464049.3,
3809794.8, 1072.3, 1072.3, 0.0);
( 464087.3, 3809794.8, 1073.1, 1073.1, 0.0); ( 464125.3,
3809794.8, 1073.4, 1073.4, 0.0);
( 464163.3, 3809794.8, 1073.4, 1073.4, 0.0); ( 464201.3,
3809794.8, 1073.0, 1073.0, 0.0);
( 464239.3, 3809794.8, 1072.3, 1072.3, 0.0); ( 464277.3,

```

3809794.8,	1071.6,	1071.6,	0.0);		
(464315.3,	3809794.8,	1071.1,	1071.1,	0.0);	(464353.3,
3809794.8,	1070.3,	1070.3,	0.0);		
(464391.3,	3809794.8,	1070.0,	1070.0,	0.0);	(464429.3,
3809794.8,	1070.0,	1070.0,	0.0);		
(464467.3,	3809794.8,	1069.4,	1069.4,	0.0);	(464505.3,
3809794.8,	1069.0,	1069.0,	0.0);		
(463745.3,	3809823.8,	1056.5,	1056.5,	0.0);	(463783.3,
3809823.8,	1056.4,	1056.4,	0.0);		
(463821.3,	3809823.8,	1056.6,	1056.6,	0.0);	(463859.3,
3809823.8,	1058.2,	1065.0,	0.0);		
(463897.3,	3809823.8,	1060.1,	1066.0,	0.0);	(463935.3,
3809823.8,	1061.4,	1073.0,	0.0);		
(463973.3,	3809823.8,	1063.1,	1073.0,	0.0);	(464011.3,
3809823.8,	1065.6,	1073.0,	0.0);		
(464049.3,	3809823.8,	1069.5,	1072.0,	0.0);	(464087.3,
3809823.8,	1072.1,	1072.1,	0.0);		
(464125.3,	3809823.8,	1073.0,	1073.0,	0.0);	(464163.3,
3809823.8,	1073.0,	1073.0,	0.0);		
(464201.3,	3809823.8,	1072.4,	1072.4,	0.0);	(464239.3,
3809823.8,	1072.0,	1072.0,	0.0);		
(464277.3,	3809823.8,	1071.4,	1071.4,	0.0);	(464315.3,
3809823.8,	1070.5,	1070.5,	0.0);		
(464353.3,	3809823.8,	1070.0,	1070.0,	0.0);	(464391.3,
3809823.8,	1069.8,	1069.8,	0.0);		
(464429.3,	3809823.8,	1069.4,	1069.4,	0.0);	(464467.3,
3809823.8,	1069.0,	1069.0,	0.0);		
(464505.3,	3809823.8,	1068.4,	1068.4,	0.0);	(463745.3,
3809852.9,	1056.2,	1078.0,	0.0);		
(463783.3,	3809852.9,	1055.9,	1055.9,	0.0);	(463821.3,
3809852.9,	1055.0,	1055.0,	0.0);		
(463859.3,	3809852.9,	1056.2,	1065.0,	0.0);	(463897.3,
3809852.9,	1057.3,	1072.0,	0.0);		
(463935.3,	3809852.9,	1058.6,	1073.0,	0.0);	(463973.3,
3809852.9,	1060.5,	1073.0,	0.0);		
(464011.3,	3809852.9,	1062.7,	1073.0,	0.0);	(464049.3,
3809852.9,	1066.2,	1073.0,	0.0);		
(464087.3,	3809852.9,	1069.2,	1073.0,	0.0);	(464125.3,
3809852.9,	1071.0,	1071.0,	0.0);		
(464163.3,	3809852.9,	1071.3,	1071.3,	0.0);	(464201.3,
3809852.9,	1070.9,	1070.9,	0.0);		
(464239.3,	3809852.9,	1070.9,	1070.9,	0.0);	(464277.3,
3809852.9,	1070.6,	1070.6,	0.0);		
(464315.3,	3809852.9,	1070.1,	1070.1,	0.0);	(464353.3,
3809852.9,	1069.4,	1069.4,	0.0);		
(464391.3,	3809852.9,	1069.3,	1069.3,	0.0);	(464429.3,
3809852.9,	1069.0,	1069.0,	0.0);		
(464467.3,	3809852.9,	1068.5,	1068.5,	0.0);	(464505.3,
3809852.9,	1068.0,	1068.0,	0.0);		
(463745.3,	3809882.0,	1056.2,	1078.0,	0.0);	(463783.3,

```

3809882.0, 1055.3, 1055.3, 0.0);
( 463821.3, 3809882.0, 1054.3, 1054.3, 0.0); ( 463859.3,
3809882.0, 1054.6, 1054.6, 0.0);
( 463897.3, 3809882.0, 1054.9, 1072.0, 0.0); ( 463935.3,
3809882.0, 1055.8, 1073.0, 0.0);
( 463973.3, 3809882.0, 1058.1, 1073.0, 0.0); ( 464011.3,
3809882.0, 1060.3, 1073.0, 0.0);
( 464049.3, 3809882.0, 1063.3, 1073.0, 0.0); ( 464087.3,
3809882.0, 1065.9, 1073.0, 0.0);
( 464125.3, 3809882.0, 1067.9, 1073.0, 0.0); ( 464163.3,
3809882.0, 1068.4, 1068.4, 0.0);
( 464201.3, 3809882.0, 1068.9, 1068.9, 0.0); ( 464239.3,
3809882.0, 1068.9, 1068.9, 0.0);
( 464277.3, 3809882.0, 1069.2, 1069.2, 0.0); ( 464315.3,
3809882.0, 1069.5, 1069.5, 0.0);
( 464353.3, 3809882.0, 1069.0, 1069.0, 0.0); ( 464391.3,
3809882.0, 1069.0, 1069.0, 0.0);
( 464429.3, 3809882.0, 1068.7, 1068.7, 0.0); ( 464467.3,
3809882.0, 1068.0, 1068.0, 0.0);
( 464505.3, 3809882.0, 1067.9, 1067.9, 0.0); ( 463745.3,
3809911.0, 1055.7, 1078.0, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 46

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 463783.3, 3809911.0, 1054.4, 1076.0, 0.0); ( 463821.3,
3809911.0, 1053.8, 1053.8, 0.0);
( 463859.3, 3809911.0, 1053.5, 1053.5, 0.0); ( 463897.3,
3809911.0, 1053.5, 1072.0, 0.0);
( 463935.3, 3809911.0, 1053.8, 1073.0, 0.0); ( 463973.3,
3809911.0, 1055.7, 1073.0, 0.0);
( 464011.3, 3809911.0, 1057.9, 1073.0, 0.0); ( 464049.3,
3809911.0, 1060.9, 1073.0, 0.0);
( 464087.3, 3809911.0, 1063.4, 1073.0, 0.0); ( 464125.3,
3809911.0, 1065.3, 1073.0, 0.0);
( 464163.3, 3809911.0, 1066.4, 1066.4, 0.0); ( 464201.3,
3809911.0, 1067.5, 1067.5, 0.0);
( 464239.3, 3809911.0, 1067.6, 1067.6, 0.0); ( 464277.3,
3809911.0, 1068.3, 1068.3, 0.0);
( 464315.3, 3809911.0, 1068.5, 1068.5, 0.0); ( 464353.3,
3809911.0, 1068.5, 1068.5, 0.0);
( 464391.3, 3809911.0, 1068.5, 1068.5, 0.0); ( 464429.3,

```

3809911.0,	1068.2,	1068.2,	0.0);		
(464467.3,	3809911.0,	1068.0,	1068.0,	0.0);	(464505.3,
3809911.0,	1067.4,	1067.4,	0.0);		
(463745.3,	3809940.1,	1055.0,	1079.0,	0.0);	(463783.3,
3809940.1,	1053.5,	1078.0,	0.0);		
(463821.3,	3809940.1,	1053.1,	1073.0,	0.0);	(463859.3,
3809940.1,	1052.5,	1052.5,	0.0);		
(463897.3,	3809940.1,	1052.5,	1052.5,	0.0);	(463935.3,
3809940.1,	1052.7,	1073.0,	0.0);		
(463973.3,	3809940.1,	1054.0,	1073.0,	0.0);	(464011.3,
3809940.1,	1055.3,	1073.0,	0.0);		
(464049.3,	3809940.1,	1058.1,	1073.0,	0.0);	(464087.3,
3809940.1,	1060.5,	1073.0,	0.0);		
(464125.3,	3809940.1,	1062.6,	1065.0,	0.0);	(464163.3,
3809940.1,	1064.7,	1064.7,	0.0);		
(464201.3,	3809940.1,	1066.5,	1066.5,	0.0);	(464239.3,
3809940.1,	1067.2,	1067.2,	0.0);		
(464277.3,	3809940.1,	1067.5,	1067.5,	0.0);	(464315.3,
3809940.1,	1067.9,	1067.9,	0.0);		
(464353.3,	3809940.1,	1068.0,	1068.0,	0.0);	(464391.3,
3809940.1,	1068.0,	1068.0,	0.0);		
(464429.3,	3809940.1,	1068.0,	1068.0,	0.0);	(464467.3,
3809940.1,	1067.6,	1067.6,	0.0);		
(464505.3,	3809940.1,	1067.0,	1067.0,	0.0);	(463745.3,
3809969.1,	1056.0,	1078.0,	0.0);		
(463783.3,	3809969.1,	1053.3,	1076.0,	0.0);	(463821.3,
3809969.1,	1052.3,	1073.0,	0.0);		
(463859.3,	3809969.1,	1051.7,	1072.0,	0.0);	(463897.3,
3809969.1,	1051.6,	1051.6,	0.0);		
(463935.3,	3809969.1,	1051.7,	1072.0,	0.0);	(463973.3,
3809969.1,	1052.8,	1073.0,	0.0);		
(464011.3,	3809969.1,	1053.4,	1073.0,	0.0);	(464049.3,
3809969.1,	1055.1,	1073.0,	0.0);		
(464087.3,	3809969.1,	1057.6,	1073.0,	0.0);	(464125.3,
3809969.1,	1060.4,	1065.0,	0.0);		
(464163.3,	3809969.1,	1062.8,	1062.8,	0.0);	(464201.3,
3809969.1,	1065.2,	1065.2,	0.0);		
(464239.3,	3809969.1,	1066.7,	1066.7,	0.0);	(464277.3,
3809969.1,	1067.0,	1067.0,	0.0);		
(464315.3,	3809969.1,	1067.5,	1067.5,	0.0);	(464353.3,
3809969.1,	1068.0,	1068.0,	0.0);		
(464391.3,	3809969.1,	1068.0,	1068.0,	0.0);	(464429.3,
3809969.1,	1067.7,	1067.7,	0.0);		
(464467.3,	3809969.1,	1067.0,	1067.0,	0.0);	(464505.3,
3809969.1,	1066.9,	1066.9,	0.0);		
(463745.3,	3809998.2,	1058.8,	1073.0,	0.0);	(463783.3,
3809998.2,	1054.6,	1073.0,	0.0);		
(463821.3,	3809998.2,	1052.5,	1073.0,	0.0);	(463859.3,
3809998.2,	1051.4,	1073.0,	0.0);		
(463897.3,	3809998.2,	1051.0,	1070.0,	0.0);	(463935.3,

```

3809998.2, 1050.8, 1050.8, 0.0);
( 463973.3, 3809998.2, 1051.6, 1073.0, 0.0); ( 464011.3,
3809998.2, 1052.3, 1073.0, 0.0);
( 464049.3, 3809998.2, 1053.6, 1073.0, 0.0); ( 464087.3,
3809998.2, 1055.7, 1073.0, 0.0);
( 464125.3, 3809998.2, 1058.7, 1061.0, 0.0); ( 464163.3,
3809998.2, 1061.3, 1061.3, 0.0);
( 464201.3, 3809998.2, 1063.7, 1063.7, 0.0); ( 464239.3,
3809998.2, 1065.5, 1065.5, 0.0);
( 464277.3, 3809998.2, 1066.6, 1066.6, 0.0); ( 464315.3,
3809998.2, 1067.0, 1067.0, 0.0);
( 464353.3, 3809998.2, 1067.6, 1067.6, 0.0); ( 464391.3,
3809998.2, 1067.6, 1067.6, 0.0);
( 464429.3, 3809998.2, 1067.2, 1067.2, 0.0); ( 464467.3,
3809998.2, 1067.0, 1067.0, 0.0);
( 464505.3, 3809998.2, 1066.5, 1066.5, 0.0); ( 463745.3,
3810027.3, 1061.8, 1073.0, 0.0);
( 463783.3, 3810027.3, 1056.8, 1073.0, 0.0); ( 463821.3,
3810027.3, 1053.6, 1073.0, 0.0);
( 463859.3, 3810027.3, 1051.7, 1073.0, 0.0); ( 463897.3,
3810027.3, 1051.0, 1072.0, 0.0);
( 463935.3, 3810027.3, 1050.1, 1050.1, 0.0); ( 463973.3,
3810027.3, 1050.8, 1050.8, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 47

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464011.3, 3810027.3, 1051.4, 1073.0, 0.0); ( 464049.3,
3810027.3, 1052.6, 1073.0, 0.0);
( 464087.3, 3810027.3, 1054.0, 1061.0, 0.0); ( 464125.3,
3810027.3, 1056.6, 1061.0, 0.0);
( 464163.3, 3810027.3, 1059.7, 1059.7, 0.0); ( 464201.3,
3810027.3, 1062.3, 1062.3, 0.0);
( 464239.3, 3810027.3, 1063.9, 1063.9, 0.0); ( 464277.3,
3810027.3, 1065.6, 1065.6, 0.0);
( 464315.3, 3810027.3, 1066.6, 1066.6, 0.0); ( 464353.3,
3810027.3, 1067.0, 1067.0, 0.0);
( 464391.3, 3810027.3, 1067.0, 1067.0, 0.0); ( 464429.3,
3810027.3, 1067.0, 1067.0, 0.0);
( 464467.3, 3810027.3, 1066.7, 1066.7, 0.0); ( 464505.3,
3810027.3, 1065.9, 1065.9, 0.0);
( 463745.3, 3810056.3, 1065.1, 1073.0, 0.0); ( 463783.3,

```


3810056.3,	1059.2,	1073.0,	0.0);		
(463821.3,	3810056.3,	1054.8,	1073.0,	0.0);	(463859.3,
3810056.3,	1052.5,	1073.0,	0.0);		
(463897.3,	3810056.3,	1051.1,	1073.0,	0.0);	(463935.3,
3810056.3,	1050.0,	1071.0,	0.0);		
(463973.3,	3810056.3,	1050.3,	1050.3,	0.0);	(464011.3,
3810056.3,	1050.6,	1050.6,	0.0);		
(464049.3,	3810056.3,	1051.3,	1051.3,	0.0);	(464087.3,
3810056.3,	1052.6,	1052.6,	0.0);		
(464125.3,	3810056.3,	1054.5,	1063.0,	0.0);	(464163.3,
3810056.3,	1057.6,	1059.0,	0.0);		
(464201.3,	3810056.3,	1060.4,	1060.4,	0.0);	(464239.3,
3810056.3,	1062.6,	1062.6,	0.0);		
(464277.3,	3810056.3,	1064.1,	1064.1,	0.0);	(464315.3,
3810056.3,	1065.5,	1065.5,	0.0);		
(464353.3,	3810056.3,	1066.7,	1066.7,	0.0);	(464391.3,
3810056.3,	1067.0,	1067.0,	0.0);		
(464429.3,	3810056.3,	1066.8,	1066.8,	0.0);	(464467.3,
3810056.3,	1066.1,	1066.1,	0.0);		
(464505.3,	3810056.3,	1065.5,	1065.5,	0.0);	(463745.3,
3810085.4,	1068.3,	1068.3,	0.0);		
(463783.3,	3810085.4,	1061.8,	1073.0,	0.0);	(463821.3,
3810085.4,	1056.5,	1073.0,	0.0);		
(463859.3,	3810085.4,	1053.3,	1073.0,	0.0);	(463897.3,
3810085.4,	1051.4,	1073.0,	0.0);		
(463935.3,	3810085.4,	1050.3,	1071.0,	0.0);	(463973.3,
3810085.4,	1050.0,	1050.0,	0.0);		
(464011.3,	3810085.4,	1049.8,	1049.8,	0.0);	(464049.3,
3810085.4,	1049.7,	1049.7,	0.0);		
(464087.3,	3810085.4,	1051.1,	1051.1,	0.0);	(464125.3,
3810085.4,	1052.9,	1059.0,	0.0);		
(464163.3,	3810085.4,	1055.5,	1061.0,	0.0);	(464201.3,
3810085.4,	1058.2,	1058.2,	0.0);		
(464239.3,	3810085.4,	1060.8,	1060.8,	0.0);	(464277.3,
3810085.4,	1062.7,	1062.7,	0.0);		
(464315.3,	3810085.4,	1064.2,	1064.2,	0.0);	(464353.3,
3810085.4,	1065.5,	1065.5,	0.0);		
(464391.3,	3810085.4,	1066.2,	1066.2,	0.0);	(464429.3,
3810085.4,	1065.9,	1065.9,	0.0);		
(464467.3,	3810085.4,	1065.4,	1065.4,	0.0);	(464505.3,
3810085.4,	1064.7,	1064.7,	0.0);		
(463745.3,	3810114.4,	1070.4,	1070.4,	0.0);	(463783.3,
3810114.4,	1064.9,	1072.0,	0.0);		
(463821.3,	3810114.4,	1058.8,	1073.0,	0.0);	(463859.3,
3810114.4,	1055.5,	1073.0,	0.0);		
(463897.3,	3810114.4,	1052.5,	1072.0,	0.0);	(463935.3,
3810114.4,	1050.8,	1071.0,	0.0);		
(463973.3,	3810114.4,	1049.7,	1068.0,	0.0);	(464011.3,
3810114.4,	1049.2,	1049.2,	0.0);		
(464049.3,	3810114.4,	1048.7,	1048.7,	0.0);	(464087.3,

```

3810114.4, 1049.7, 1049.7, 0.0);
( 464125.3, 3810114.4, 1050.9, 1057.0, 0.0); ( 464163.3,
3810114.4, 1053.0, 1063.0, 0.0);
( 464201.3, 3810114.4, 1055.5, 1063.0, 0.0); ( 464239.3,
3810114.4, 1058.9, 1058.9, 0.0);
( 464277.3, 3810114.4, 1061.2, 1061.2, 0.0); ( 464315.3,
3810114.4, 1062.3, 1062.3, 0.0);
( 464353.3, 3810114.4, 1063.2, 1063.2, 0.0); ( 464391.3,
3810114.4, 1063.7, 1063.7, 0.0);
( 464429.3, 3810114.4, 1064.3, 1064.3, 0.0); ( 464467.3,
3810114.4, 1063.8, 1063.8, 0.0);
( 464505.3, 3810114.4, 1063.8, 1063.8, 0.0); ( 463745.3,
3810143.5, 1071.2, 1071.2, 0.0);
( 463783.3, 3810143.5, 1066.8, 1071.0, 0.0); ( 463821.3,
3810143.5, 1062.4, 1071.0, 0.0);
( 463859.3, 3810143.5, 1058.3, 1071.0, 0.0); ( 463897.3,
3810143.5, 1053.6, 1072.0, 0.0);
( 463935.3, 3810143.5, 1050.8, 1071.0, 0.0); ( 463973.3,
3810143.5, 1048.9, 1069.0, 0.0);
( 464011.3, 3810143.5, 1048.8, 1068.0, 0.0); ( 464049.3,
3810143.5, 1048.0, 1067.0, 0.0);
( 464087.3, 3810143.5, 1048.0, 1048.0, 0.0); ( 464125.3,
3810143.5, 1049.1, 1049.1, 0.0);
( 464163.3, 3810143.5, 1051.0, 1063.0, 0.0); ( 464201.3,
3810143.5, 1053.3, 1061.0, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

```

PAGE 48

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464239.3, 3810143.5, 1056.2, 1061.0, 0.0); ( 464277.3,
3810143.5, 1059.4, 1061.0, 0.0);
( 464315.3, 3810143.5, 1060.7, 1060.7, 0.0); ( 464353.3,
3810143.5, 1060.9, 1060.9, 0.0);
( 464391.3, 3810143.5, 1061.8, 1061.8, 0.0); ( 464429.3,
3810143.5, 1062.2, 1062.2, 0.0);
( 464467.3, 3810143.5, 1062.7, 1062.7, 0.0); ( 464505.3,
3810143.5, 1062.9, 1062.9, 0.0);
( 464383.8, 3807479.3, 1110.0, 1110.0, 0.0); ( 464355.0,
3807405.2, 1111.0, 1111.0, 0.0);
( 464402.1, 3807352.1, 1111.8, 1111.8, 0.0); ( 464367.2,
3807296.3, 1112.6, 1112.6, 0.0);
( 464358.5, 3807238.0, 1114.7, 1114.7, 0.0); ( 464385.5,

```

```

^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      04/06/22
*** AERMET - VERSION 14134 ***      ***
***      13:53:49

```

*** MODELOPTs: RegDFault CONC ELEV URBAN

PROCESSING ***

(1=YES; 0=NO)

[illegible]

[illegible]

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

10.80, 1.54, 3.09, 5.14, 8.23,

```

^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      04/06/22
*** AERMET - VERSION 14134 ***      ***
***      13:53:49

```

PAGE 50

```
*** MODELOPTs:      RegDFault  CONC  ELEV  URBAN
```

DATA *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL

Surface file: ..\I15 Industrial Park8.16.21\723825\723825R.SFC

Met Version: 14134

Profile file: ..\I15 Industrial Park8.16.21\723825\723825R.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 23131

Name: UNKNOWN

Upper air station no.: 3160

Name: DESERT ROCK

Year: 2009

Year: 2009

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN
ALBEDO	REF	WS	WD	HT	REF	TA	HT							

.....

09 01 02	2 01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0					

09	01	02	2	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
----	----	----	---	----	--------	--------	--------	--------	-------	-------	----------	------	------

1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	07	-25.6	0.245	-9.000	-9.000	-999.	291.	46.9	0.28	1.40
1.00	2.86	149.	10.0	275.1	2.0								
09	01	02	2	08	1.5	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.54	999.00	999.	-9.0	279.6	2.0								
09	01	02	2	09	28.7	0.290	0.429	0.012	89.	375.	-69.3	0.27	1.40
0.32	2.36	210.	10.0	284.1	2.0								
09	01	02	2	10	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.24	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	11	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.21	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	12	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.20	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	13	141.6	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.21	0.00	0.	10.0	292.1	2.0								
09	01	02	2	14	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.22	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	15	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.25	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	16	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.35	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.63	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								
09	01	02	2	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.	-9.0	999.0	-9.0								

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
09	01	02	01	10.0	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

PAGE 51

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
462160.55	3809377.75	0.22446	462051.48
3809270.62	0.19643		
462014.47	3809029.10	0.13634	462010.58
3808855.75	0.08571		
461936.56	3808886.92	0.08101	461936.56
3808997.94	0.10386		
461909.30	3808768.10	0.06347	461835.28
3808894.71	0.07146		
461845.02	3808995.99	0.08746	461833.33
3809114.80	0.11735		
461843.07	3809210.24	0.14143	461809.96
3809297.89	0.15101		
461856.71	3809385.54	0.16678	461841.13
3809482.92	0.16735		
462004.74	3809379.69	0.19168	461763.22
3808793.43	0.05378		
461753.48	3808699.93	0.05159	461835.28
3808686.30	0.05241		
461823.60	3808579.17	0.04545	461761.27

3808585.02	0.04282		
462301.19	3807807.15	0.06094	462304.78
3807868.16	0.05990		
462216.84	3807882.52	0.05218	462116.34
3807886.11	0.04563		
462114.55	3807789.20	0.04460	462012.25
3807887.90	0.04035		
462008.66	3807975.84	0.04371	461917.14
3807972.25	0.03958		
461922.52	3808187.60	0.05035	461908.17
3808288.10	0.05100		
461848.94	3808377.83	0.04777	461831.00
3808494.48	0.04579		
462421.43	3808393.98	0.10329	462459.11
3808501.66	0.11223		
462437.58	3808580.62	0.11527	462654.73
3809189.00	0.40459		
462559.49	3809194.32	0.35279	465763.86
3807935.19	0.18414		
465819.84	3807935.19	0.17617	465875.82
3807935.19	0.16871		
465931.80	3807935.19	0.16178	465987.78
3807935.19	0.15527		
466043.76	3807935.19	0.14918	466099.74
3807935.19	0.14346		
466155.72	3807935.19	0.13808	466211.70
3807935.19	0.13301		
466267.68	3807935.19	0.12824	466323.66
3807935.19	0.12366		
466379.64	3807935.19	0.11943	466435.62
3807935.19	0.11542		
466491.60	3807935.19	0.11163	466547.58
3807935.19	0.10784		
466603.56	3807935.19	0.10439	466659.54
3807935.19	0.10112		
466715.52	3807935.19	0.09801	466771.50
3807935.19	0.09504		
466827.48	3807935.19	0.09213	466883.46
3807935.19	0.08942		
465763.86	3808001.41	0.19221	465819.84
3808001.41	0.18377		
465875.82	3808001.41	0.17586	465931.80
3808001.41	0.16849		
465987.78	3808001.41	0.16172	466043.76
3808001.41	0.15514		
466099.74	3808001.41	0.14929	466155.72
3808001.41	0.14361		
466211.70	3808001.41	0.13829	466267.68
3808001.41	0.13324		
466323.66	3808001.41	0.12846	466379.64

3808001.41	0.12395		
466435.62	3808001.41	0.11968	466491.60
3808001.41	0.11564		
466547.58	3808001.41	0.11175	466603.56
3808001.41	0.10815		
466659.54	3808001.41	0.10473	466715.52
3808001.41	0.10127		
466771.50	3808001.41	0.09818	466827.48
3808001.41	0.09522		
466883.46	3808001.41	0.09232	465763.86
3808067.63	0.20133		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 52

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465819.84	3808067.63	0.19226	465875.82
3808067.63	0.18387		
465931.80	3808067.63	0.17604	465987.78
3808067.63	0.16872		
466043.76	3808067.63	0.16188	466099.74
3808067.63	0.15547		
466155.72	3808067.63	0.14946	466211.70
3808067.63	0.14378		
466267.68	3808067.63	0.13844	466323.66
3808067.63	0.13338		

466379.64	3808067.63	0.12860	466435.62
3808067.63	0.12421		
466491.60	3808067.63	0.11981	466547.58
3808067.63	0.11576		
466603.56	3808067.63	0.11192	466659.54
3808067.63	0.10829		
466715.52	3808067.63	0.10486	466771.50
3808067.63	0.10160		
466827.48	3808067.63	0.09841	466883.46
3808067.63	0.09533		
465763.86	3808133.85	0.21132	465819.84
3808133.85	0.20156		
465875.82	3808133.85	0.19252	465931.80
3808133.85	0.18410		
465987.78	3808133.85	0.17649	466043.76
3808133.85	0.16911		
466099.74	3808133.85	0.16221	466155.72
3808133.85	0.15574		
466211.70	3808133.85	0.14966	466267.68
3808133.85	0.14396		
466323.66	3808133.85	0.13861	466379.64
3808133.85	0.13359		
466435.62	3808133.85	0.12884	466491.60
3808133.85	0.12434		
466547.58	3808133.85	0.12004	466603.56
3808133.85	0.11600		
466659.54	3808133.85	0.11218	466715.52
3808133.85	0.10853		
466771.50	3808133.85	0.10493	466827.48
3808133.85	0.10167		
466883.46	3808133.85	0.09853	465763.86
3808200.07	0.22199		
465819.84	3808200.07	0.21145	465875.82
3808200.07	0.20168		
465931.80	3808200.07	0.19285	465987.78
3808200.07	0.18438		
466043.76	3808200.07	0.17649	466099.74
3808200.07	0.16911		
466155.72	3808200.07	0.16220	466211.70
3808200.07	0.15573		
466267.68	3808200.07	0.14965	466323.66
3808200.07	0.14413		
466379.64	3808200.07	0.13874	466435.62
3808200.07	0.13367		
466491.60	3808200.07	0.12887	466547.58
3808200.07	0.12435		
466603.56	3808200.07	0.12007	466659.54
3808200.07	0.11601		
466715.52	3808200.07	0.11218	466771.50
3808200.07	0.10849		

466827.48	3808200.07	0.10495	466883.46
3808200.07	0.10166		
465763.86	3808266.29	0.23267	465819.84
3808266.29	0.22164		
465875.82	3808266.29	0.21130	465931.80
3808266.29	0.20152		
465987.78	3808266.29	0.19244	466043.76
3808266.29	0.18399		
466099.74	3808266.29	0.17611	466155.72
3808266.29	0.16874		
466211.70	3808266.29	0.16187	466267.68
3808266.29	0.15552		
466323.66	3808266.29	0.14945	466379.64
3808266.29	0.14391		
466435.62	3808266.29	0.13856	466491.60
3808266.29	0.13341		
466547.58	3808266.29	0.12860	466603.56
3808266.29	0.12406		
466659.54	3808266.29	0.11987	466715.52
3808266.29	0.11575		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 53

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
-----	-----	-----	-----
-----	-----	-----	-----
466771.50	3808266.29	0.11193	466827.48

3808266.29	0.10824		
466883.46	3808266.29	0.10478	465763.86
3808332.51	0.24351		
465819.84	3808332.51	0.23185	465875.82
3808332.51	0.22055		
465931.80	3808332.51	0.21009	465987.78
3808332.51	0.20040		
466043.76	3808332.51	0.19139	466099.74
3808332.51	0.18300		
466155.72	3808332.51	0.17526	466211.70
3808332.51	0.16794		
466267.68	3808332.51	0.16108	466323.66
3808332.51	0.15494		
466379.64	3808332.51	0.14888	466435.62
3808332.51	0.14318		
466491.60	3808332.51	0.13781	466547.58
3808332.51	0.13275		
466603.56	3808332.51	0.12822	466659.54
3808332.51	0.12374		
466715.52	3808332.51	0.11946	466771.50
3808332.51	0.11524		
466827.48	3808332.51	0.11143	466883.46
3808332.51	0.10782		
465763.86	3808398.73	0.25390	465819.84
3808398.73	0.24139		
465875.82	3808398.73	0.22935	465931.80
3808398.73	0.21827		
465987.78	3808398.73	0.20798	466043.76
3808398.73	0.19842		
466099.74	3808398.73	0.18973	466155.72
3808398.73	0.18140		
466211.70	3808398.73	0.17363	466267.68
3808398.73	0.16676		
466323.66	3808398.73	0.15995	466379.64
3808398.73	0.15359		
466435.62	3808398.73	0.14775	466491.60
3808398.73	0.14216		
466547.58	3808398.73	0.13688	466603.56
3808398.73	0.13194		
466659.54	3808398.73	0.12724	466715.52
3808398.73	0.12275		
466771.50	3808398.73	0.11855	466827.48
3808398.73	0.11453		
466883.46	3808398.73	0.11074	465763.86
3808464.95	0.26342		
465819.84	3808464.95	0.25005	465875.82
3808464.95	0.23729		
465931.80	3808464.95	0.22565	465987.78
3808464.95	0.21492		
466043.76	3808464.95	0.20513	466099.74

3808464.95	0.19576		
466155.72	3808464.95	0.18704	466211.70
3808464.95	0.17892		
466267.68	3808464.95	0.17165	466323.66
3808464.95	0.16454		
466379.64	3808464.95	0.15806	466435.62
3808464.95	0.15184		
466491.60	3808464.95	0.14615	466547.58
3808464.95	0.14062		
466603.56	3808464.95	0.13542	466659.54
3808464.95	0.13051		
466715.52	3808464.95	0.12589	466771.50
3808464.95	0.12153		
466827.48	3808464.95	0.11740	466883.46
3808464.95	0.11348		
465763.86	3808531.17	0.27196	465819.84
3808531.17	0.25751		
465875.82	3808531.17	0.24423	465931.80
3808531.17	0.23199		
465987.78	3808531.17	0.22100	466043.76
3808531.17	0.21066		
466099.74	3808531.17	0.20108	466155.72
3808531.17	0.19203		
466211.70	3808531.17	0.18362	466267.68
3808531.17	0.17598		
466323.66	3808531.17	0.16880	466379.64
3808531.17	0.16195		
466435.62	3808531.17	0.15569	466491.60
3808531.17	0.14961		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 54

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

466547.58	3808531.17	0.14391		466603.56
3808531.17	0.13853			
466659.54	3808531.17	0.13347		466715.52
3808531.17	0.12871			
466771.50	3808531.17	0.12417		466827.48
3808531.17	0.11996			
466883.46	3808531.17	0.11593		465763.86
3808597.39	0.27844			
465819.84	3808597.39	0.26409		465875.82
3808597.39	0.25033			
465931.80	3808597.39	0.23731		465987.78
3808597.39	0.22597			
466043.76	3808597.39	0.21555		466099.74
3808597.39	0.20555			
466155.72	3808597.39	0.19633		466211.70
3808597.39	0.18776			
466267.68	3808597.39	0.17967		466323.66
3808597.39	0.17238			
466379.64	3808597.39	0.16549		466435.62
3808597.39	0.15886			
466491.60	3808597.39	0.15273		466547.58
3808597.39	0.14692			
466603.56	3808597.39	0.14138		466659.54
3808597.39	0.13617			
466715.52	3808597.39	0.13127		466771.50
3808597.39	0.12663			
466827.48	3808597.39	0.12225		466883.46
3808597.39	0.11820			
465763.86	3808663.61	0.28319		465819.84
3808663.61	0.26875			
465875.82	3808663.61	0.25485		465931.80
3808663.61	0.24204			
465987.78	3808663.61	0.23023		466043.76
3808663.61	0.21927			
466099.74	3808663.61	0.20927		466155.72
3808663.61	0.19977			
466211.70	3808663.61	0.19090		466267.68
3808663.61	0.18265			
466323.66	3808663.61	0.17533		466379.64
3808663.61	0.16810			
466435.62	3808663.61	0.16168		466491.60
3808663.61	0.15530			

466547.58	3808663.61	0.14929	466603.56
3808663.61	0.14364		
466659.54	3808663.61	0.13831	466715.52
3808663.61	0.13332		
466771.50	3808663.61	0.12861	466827.48
3808663.61	0.12432		
466883.46	3808663.61	0.12007	465763.86
3808729.83	0.28706		
465819.84	3808729.83	0.27266	465875.82
3808729.83	0.25862		
465931.80	3808729.83	0.24549	465987.78
3808729.83	0.23339		
466043.76	3808729.83	0.22224	466099.74
3808729.83	0.21189		
466155.72	3808729.83	0.20228	466211.70
3808729.83	0.19330		
466267.68	3808729.83	0.18497	466323.66
3808729.83	0.17755		
466379.64	3808729.83	0.17039	466435.62
3808729.83	0.16355		
466491.60	3808729.83	0.15730	466547.58
3808729.83	0.15121		
466603.56	3808729.83	0.14549	466659.54
3808729.83	0.14040		
466715.52	3808729.83	0.13529	466771.50
3808729.83	0.13050		
466827.48	3808729.83	0.12604	466883.46
3808729.83	0.12175		
465763.86	3808796.05	0.28841	465819.84
3808796.05	0.27484		
465875.82	3808796.05	0.26031	465931.80
3808796.05	0.24740		
465987.78	3808796.05	0.23535	466043.76
3808796.05	0.22424		
466099.74	3808796.05	0.21391	466155.72
3808796.05	0.20430		
466211.70	3808796.05	0.19534	466267.68
3808796.05	0.18695		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 55

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,

```

, L0000011      L0000006      , L0000007      , L0000008      , L0000009      , L0000010
, L0000012      , L0000012      , L0000013      ,
, L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
, L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466323.66	3808796.05	0.17923	466379.64
3808796.05	0.17195		
466435.62	3808796.05	0.16529	466491.60
3808796.05	0.15878		
466547.58	3808796.05	0.15270	466603.56
3808796.05	0.14715		
466659.54	3808796.05	0.14173	466715.52
3808796.05	0.13669		
466771.50	3808796.05	0.13188	466827.48
3808796.05	0.12730		
466883.46	3808796.05	0.12311	465763.86
3808862.27	0.28731		
465819.84	3808862.27	0.27363	465875.82
3808862.27	0.26065		
465931.80	3808862.27	0.24788	465987.78
3808862.27	0.23600		
466043.76	3808862.27	0.22496	466099.74
3808862.27	0.21491		
466155.72	3808862.27	0.20512	466211.70
3808862.27	0.19619		
466267.68	3808862.27	0.18810	466323.66
3808862.27	0.18028		
466379.64	3808862.27	0.17308	466435.62
3808862.27	0.16627		
466491.60	3808862.27	0.15987	466547.58
3808862.27	0.15387		
466603.56	3808862.27	0.14810	466659.54
3808862.27	0.14286		
466715.52	3808862.27	0.13771	466771.50
3808862.27	0.13290		
466827.48	3808862.27	0.12840	466883.46
3808862.27	0.12410		
465763.86	3808928.49	0.28381	465819.84

3808928.49	0.27053		
465875.82	3808928.49	0.25848	465931.80
3808928.49	0.24679		
465987.78	3808928.49	0.23571	466043.76
3808928.49	0.22540		
466099.74	3808928.49	0.21499	466155.72
3808928.49	0.20557		
466211.70	3808928.49	0.19676	466267.68
3808928.49	0.18848		
466323.66	3808928.49	0.18069	466379.64
3808928.49	0.17339		
466435.62	3808928.49	0.16675	466491.60
3808928.49	0.16044		
466547.58	3808928.49	0.15440	466603.56
3808928.49	0.14892		
466659.54	3808928.49	0.14349	466715.52
3808928.49	0.13846		
466771.50	3808928.49	0.13361	466827.48
3808928.49	0.12916		
466883.46	3808928.49	0.12481	465763.86
3808994.71	0.28189		
465819.84	3808994.71	0.26804	465875.82
3808994.71	0.25590		
465931.80	3808994.71	0.24508	465987.78
3808994.71	0.23504		
466043.76	3808994.71	0.22462	466099.74
3808994.71	0.21461		
466155.72	3808994.71	0.20512	466211.70
3808994.71	0.19648		
466267.68	3808994.71	0.18835	466323.66
3808994.71	0.18071		
466379.64	3808994.71	0.17353	466435.62
3808994.71	0.16678		
466491.60	3808994.71	0.16059	466547.58
3808994.71	0.15484		
466603.56	3808994.71	0.14921	466659.54
3808994.71	0.14381		
466715.52	3808994.71	0.13902	466771.50
3808994.71	0.13415		
466827.48	3808994.71	0.12955	466883.46
3808994.71	0.12534		
465763.86	3809060.93	0.27957	465819.84
3809060.93	0.26616		
465875.82	3809060.93	0.25422	465931.80
3809060.93	0.24318		
465987.78	3809060.93	0.23284	466043.76
3809060.93	0.22308		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***

*** 13:53:49

PAGE 56

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466099.74	3809060.93	0.21308	466155.72
3809060.93	0.20412		
466211.70	3809060.93	0.19556	466267.68
3809060.93	0.18764		
466323.66	3809060.93	0.18015	466379.64
3809060.93	0.17310		
466435.62	3809060.93	0.16670	466491.60
3809060.93	0.16059		
466547.58	3809060.93	0.15464	466603.56
3809060.93	0.14913		
466659.54	3809060.93	0.14409	466715.52
3809060.93	0.13901		
466771.50	3809060.93	0.13423	466827.48
3809060.93	0.12977		
466883.46	3809060.93	0.12558	465763.86
3809127.15	0.27712		
465819.84	3809127.15	0.26437	465875.82
3809127.15	0.25266		
465931.80	3809127.15	0.24147	465987.78
3809127.15	0.23101		
466043.76	3809127.15	0.22050	466099.74
3809127.15	0.21071		
466155.72	3809127.15	0.20187	466211.70
3809127.15	0.19435		

466267.68	3809127.15	0.18685	466323.66
3809127.15	0.17962		
466379.64	3809127.15	0.17262	466435.62
3809127.15	0.16617		
466491.60	3809127.15	0.16007	466547.58
3809127.15	0.15434		
466603.56	3809127.15	0.14898	466659.54
3809127.15	0.14371		
466715.52	3809127.15	0.13883	466771.50
3809127.15	0.13416		
466827.48	3809127.15	0.12968	466883.46
3809127.15	0.12556		
465763.86	3809193.37	0.27288	465819.84
3809193.37	0.26130		
465875.82	3809193.37	0.24992	465931.80
3809193.37	0.23900		
465987.78	3809193.37	0.22807	466043.76
3809193.37	0.21689		
466099.74	3809193.37	0.20824	466155.72
3809193.37	0.19978		
466211.70	3809193.37	0.19230	466267.68
3809193.37	0.18523		
466323.66	3809193.37	0.17836	466379.64
3809193.37	0.17179		
466435.62	3809193.37	0.16537	466491.60
3809193.37	0.15939		
466547.58	3809193.37	0.15373	466603.56
3809193.37	0.14849		
466659.54	3809193.37	0.14331	466715.52
3809193.37	0.13855		
466771.50	3809193.37	0.13388	466827.48
3809193.37	0.12955		
466883.46	3809193.37	0.12537	465763.86
3809259.59	0.26715		
465819.84	3809259.59	0.25611	465875.82
3809259.59	0.24521		
465931.80	3809259.59	0.23491	465987.78
3809259.59	0.22436		
466043.76	3809259.59	0.21444	466099.74
3809259.59	0.20536		
466155.72	3809259.59	0.19776	466211.70
3809259.59	0.19054		
466267.68	3809259.59	0.18370	466323.66
3809259.59	0.17671		
466379.64	3809259.59	0.17029	466435.62
3809259.59	0.16423		
466491.60	3809259.59	0.15832	466547.58
3809259.59	0.15295		
466603.56	3809259.59	0.14765	466659.54
3809259.59	0.14263		

466715.52	3809259.59	0.13805	466771.50
3809259.59	0.13345		
466827.48	3809259.59	0.12917	466883.46
3809259.59	0.12505		
464503.41	3807141.91	0.16530	464523.41
3807141.91	0.16498		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 57

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464543.41	3807141.91	0.16297	464563.41
3807141.91	0.16045		
464583.41	3807141.91	0.15979	464603.41
3807141.91	0.15772		
464623.41	3807141.91	0.15514	464643.41
3807141.91	0.15369		
464663.41	3807141.91	0.15118	464683.41
3807141.91	0.14832		
464703.41	3807141.91	0.14680	464723.41
3807141.91	0.14381		
464743.41	3807141.91	0.14009	464763.41
3807141.91	0.13687		
464783.41	3807141.91	0.13331	464803.41
3807141.91	0.12998		
464823.41	3807141.91	0.12889	464843.41

3807141.91	0.12624		
464863.41	3807141.91	0.12287	464883.41
3807141.91	0.12021		
464903.41	3807141.91	0.11926	464923.41
3807141.91	0.11888		
464503.41	3807161.91	0.16821	464523.41
3807161.91	0.16778		
464543.41	3807161.91	0.16560	464563.41
3807161.91	0.16290		
464583.41	3807161.91	0.16211	464603.41
3807161.91	0.16102		
464623.41	3807161.91	0.15942	464643.41
3807161.91	0.15614		
464663.41	3807161.91	0.15412	464683.41
3807161.91	0.15240		
464703.41	3807161.91	0.14893	464723.41
3807161.91	0.14514		
464743.41	3807161.91	0.14166	464763.41
3807161.91	0.14054		
464783.41	3807161.91	0.13758	464803.41
3807161.91	0.13387		
464823.41	3807161.91	0.13061	464843.41
3807161.91	0.12714		
464863.41	3807161.91	0.12417	464883.41
3807161.91	0.12409		
464903.41	3807161.91	0.12237	464923.41
3807161.91	0.12035		
464503.41	3807181.91	0.17290	464523.41
3807181.91	0.17104		
464543.41	3807181.91	0.16914	464563.41
3807181.91	0.16712		
464583.41	3807181.91	0.16489	464603.41
3807181.91	0.16344		
464623.41	3807181.91	0.16195	464643.41
3807181.91	0.15812		
464663.41	3807181.91	0.15610	464683.41
3807181.91	0.15457		
464703.41	3807181.91	0.15053	464723.41
3807181.91	0.14760		
464743.41	3807181.91	0.14523	464763.41
3807181.91	0.14287		
464783.41	3807181.91	0.13944	464803.41
3807181.91	0.13588		
464823.41	3807181.91	0.13407	464843.41
3807181.91	0.13111		
464863.41	3807181.91	0.12786	464883.41
3807181.91	0.12643		
464903.41	3807181.91	0.12563	464923.41
3807181.91	0.12507		
464503.41	3807201.91	0.17755	464523.41

3807201.91	0.17427		
464543.41	3807201.91	0.17263	464563.41
3807201.91	0.17136		
464583.41	3807201.91	0.16821	464603.41
3807201.91	0.16607		
464623.41	3807201.91	0.16408	464643.41
3807201.91	0.16061		
464663.41	3807201.91	0.15831	464683.41
3807201.91	0.15629		
464703.41	3807201.91	0.15272	464723.41
3807201.91	0.15058		
464743.41	3807201.91	0.14877	464763.41
3807201.91	0.14464		
464783.41	3807201.91	0.14109	464803.41
3807201.91	0.13828		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 58

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.13767	464843.41
3807201.91	0.13570		
464863.41	3807201.91	0.13315	464883.41
3807201.91	0.12973		
464903.41	3807201.91	0.12920	464923.41
3807201.91	0.13100		

464503.41	3807221.91	0.18062	464523.41
3807221.91	0.17713		
464543.41	3807221.91	0.17533	464563.41
3807221.91	0.17424		
464583.41	3807221.91	0.17280	464603.41
3807221.91	0.16985		
464623.41	3807221.91	0.16646	464643.41
3807221.91	0.16490		
464663.41	3807221.91	0.16180	464683.41
3807221.91	0.15830		
464703.41	3807221.91	0.15697	464723.41
3807221.91	0.15402		
464743.41	3807221.91	0.15012	464763.41
3807221.91	0.14588		
464783.41	3807221.91	0.14405	464803.41
3807221.91	0.14313		
464823.41	3807221.91	0.13983	464843.41
3807221.91	0.13925		
464863.41	3807221.91	0.13960	464883.41
3807221.91	0.13616		
464903.41	3807221.91	0.13368	464923.41
3807221.91	0.13321		
464503.41	3807241.91	0.18397	464523.41
3807241.91	0.18172		
464543.41	3807241.91	0.17925	464563.41
3807241.91	0.17683		
464583.41	3807241.91	0.17565	464603.41
3807241.91	0.17239		
464623.41	3807241.91	0.16853	464643.41
3807241.91	0.16730		
464663.41	3807241.91	0.16516	464683.41
3807241.91	0.16248		
464703.41	3807241.91	0.15978	464723.41
3807241.91	0.15589		
464743.41	3807241.91	0.15183	464763.41
3807241.91	0.14965		
464783.41	3807241.91	0.14756	464803.41
3807241.91	0.14564		
464823.41	3807241.91	0.14447	464843.41
3807241.91	0.14370		
464863.41	3807241.91	0.14351	464883.41
3807241.91	0.14003		
464903.41	3807241.91	0.14251	464923.41
3807241.91	0.14317		
464503.41	3807261.91	0.18731	464523.41
3807261.91	0.18627		
464543.41	3807261.91	0.18313	464563.41
3807261.91	0.17937		
464583.41	3807261.91	0.17805	464603.41
3807261.91	0.17503		

464623.41	3807261.91	0.17141	464643.41
3807261.91	0.16942		
464663.41	3807261.91	0.16813	464683.41
3807261.91	0.16664		
464703.41	3807261.91	0.16198	464723.41
3807261.91	0.15793		
464743.41	3807261.91	0.15465	464763.41
3807261.91	0.15374		
464783.41	3807261.91	0.15135	464803.41
3807261.91	0.14896		
464823.41	3807261.91	0.14958	464843.41
3807261.91	0.14969		
464863.41	3807261.91	0.14960	464883.41
3807261.91	0.14606		
464903.41	3807261.91	0.14859	464923.41
3807261.91	0.15896		
464503.41	3807281.91	0.19045	464523.41
3807281.91	0.18926		
464543.41	3807281.91	0.18590	464563.41
3807281.91	0.18191		
464583.41	3807281.91	0.18045	464603.41
3807281.91	0.17874		
464623.41	3807281.91	0.17650	464643.41
3807281.91	0.17214		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 59

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
464663.41	3807281.91	0.16996	464683.41
3807281.91	0.16842		
464703.41	3807281.91	0.16361	464723.41
3807281.91	0.16139		
464743.41	3807281.91	0.16014	464763.41
3807281.91	0.15629		
464783.41	3807281.91	0.15537	464803.41
3807281.91	0.15595		
464823.41	3807281.91	0.15264	464843.41
3807281.91	0.15822		
464863.41	3807281.91	0.15996	464883.41
3807281.91	0.15632		
464903.41	3807281.91	0.16915	464923.41
3807281.91	0.17288		
464503.41	3807301.91	0.19581	464523.41
3807301.91	0.19282		
464543.41	3807301.91	0.18982	464563.41
3807301.91	0.18671		
464583.41	3807301.91	0.18343	464603.41
3807301.91	0.18131		
464623.41	3807301.91	0.17929	464643.41
3807301.91	0.17423		
464663.41	3807301.91	0.17179	464683.41
3807301.91	0.17020		
464703.41	3807301.91	0.16525	464723.41
3807301.91	0.16341		
464743.41	3807301.91	0.16309	464763.41
3807301.91	0.16153		
464783.41	3807301.91	0.16039	464803.41
3807301.91	0.15989		
464823.41	3807301.91	0.15580	464843.41
3807301.91	0.16083		
464863.41	3807301.91	0.16879	464883.41
3807301.91	0.17654		
464903.41	3807301.91	0.17731	464923.41
3807301.91	0.17872		
464503.41	3807321.91	0.20113	464523.41
3807321.91	0.19633		
464543.41	3807321.91	0.19367	464563.41
3807321.91	0.19149		
464583.41	3807321.91	0.18635	464603.41
3807321.91	0.18356		
464623.41	3807321.91	0.18143	464643.41
3807321.91	0.17616		
464663.41	3807321.91	0.17363	464683.41
3807321.91	0.17213		
464703.41	3807321.91	0.16792	464723.41

3807321.91	0.16585		
464743.41	3807321.91	0.16517	464763.41
3807321.91	0.16695		
464783.41	3807321.91	0.16600	464803.41
3807321.91	0.16185		
464823.41	3807321.91	0.15949	464843.41
3807321.91	0.16500		
464863.41	3807321.91	0.18101	464883.41
3807321.91	0.18462		
464903.41	3807321.91	0.18480	464923.41
3807321.91	0.18129		
464503.41	3807341.91	0.20444	464523.41
3807341.91	0.19936		
464543.41	3807341.91	0.19650	464563.41
3807341.91	0.19415		
464583.41	3807341.91	0.18875	464603.41
3807341.91	0.18580		
464623.41	3807341.91	0.18356	464643.41
3807341.91	0.17809		
464663.41	3807341.91	0.17548	464683.41
3807341.91	0.17451		
464703.41	3807341.91	0.17353	464723.41
3807341.91	0.17040		
464743.41	3807341.91	0.16693	464763.41
3807341.91	0.16882		
464783.41	3807341.91	0.16790	464803.41
3807341.91	0.16476		
464823.41	3807341.91	0.17172	464843.41
3807341.91	0.18766		
464863.41	3807341.91	0.19158	464883.41
3807341.91	0.18949		
464903.41	3807341.91	0.18735	464923.41
3807341.91	0.18665		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 60

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026

, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464503.41	3807361.91	0.20809	464523.41
3807361.91	0.20461		
464543.41	3807361.91	0.20093	464563.41
3807361.91	0.19680		
464583.41	3807361.91	0.19114	464603.41
3807361.91	0.18804		
464623.41	3807361.91	0.18607	464643.41
3807361.91	0.18267		
464663.41	3807361.91	0.17931	464683.41
3807361.91	0.17645		
464703.41	3807361.91	0.17621	464723.41
3807361.91	0.17517		
464743.41	3807361.91	0.17345	464763.41
3807361.91	0.17220		
464783.41	3807361.91	0.17683	464803.41
3807361.91	0.17758		
464823.41	3807361.91	0.19455	464843.41
3807361.91	0.19677		
464863.41	3807361.91	0.19800	464883.41
3807361.91	0.19390		
464903.41	3807361.91	0.20438	464923.41
3807361.91	0.20506		
464503.41	3807381.91	0.21274	464523.41
3807381.91	0.21008		
464543.41	3807381.91	0.20533	464563.41
3807381.91	0.19957		
464583.41	3807381.91	0.19441	464603.41
3807381.91	0.19096		
464623.41	3807381.91	0.18856	464643.41
3807381.91	0.18732		
464663.41	3807381.91	0.18384	464683.41
3807381.91	0.17974		
464703.41	3807381.91	0.17851	464723.41
3807381.91	0.17938		
464743.41	3807381.91	0.18169	464763.41
3807381.91	0.17874		
464783.41	3807381.91	0.18361	464803.41
3807381.91	0.19176		

464823.41	3807381.91	0.20468	464843.41
3807381.91	0.20517		
464863.41	3807381.91	0.20098	464883.41
3807381.91	0.20192		
464903.41	3807381.91	0.21201	464923.41
3807381.91	0.22591		
464503.41	3807401.91	0.21969	464523.41
3807401.91	0.21420		
464543.41	3807401.91	0.20827	464563.41
3807401.91	0.20272		
464583.41	3807401.91	0.20020	464603.41
3807401.91	0.19566		
464623.41	3807401.91	0.19075	464643.41
3807401.91	0.18948		
464663.41	3807401.91	0.18830	464683.41
3807401.91	0.18663		
464703.41	3807401.91	0.18186	464723.41
3807401.91	0.18153		
464743.41	3807401.91	0.18511	464763.41
3807401.91	0.19239		
464783.41	3807401.91	0.19130	464803.41
3807401.91	0.19439		
464823.41	3807401.91	0.20762	464843.41
3807401.91	0.20815		
464863.41	3807401.91	0.20705	464883.41
3807401.91	0.22129		
464903.41	3807401.91	0.22058	464923.41
3807401.91	0.23243		
464503.41	3807421.91	0.22401	464523.41
3807421.91	0.21764		
464543.41	3807421.91	0.21276	464563.41
3807421.91	0.20854		
464583.41	3807421.91	0.20426	464603.41
3807421.91	0.20024		
464623.41	3807421.91	0.19639	464643.41
3807421.91	0.19262		
464663.41	3807421.91	0.19102	464683.41
3807421.91	0.19049		
464703.41	3807421.91	0.18845	464723.41
3807421.91	0.18692		
464743.41	3807421.91	0.18799	464763.41
3807421.91	0.19635		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 61

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464783.41	3807421.91	0.20784	464803.41
3807421.91	0.21202		
464823.41	3807421.91	0.21272	464843.41
3807421.91	0.22712		
464863.41	3807421.91	0.22751	464883.41
3807421.91	0.22822		
464903.41	3807421.91	0.25119	464923.41
3807421.91	0.25037		
464503.41	3807441.91	0.22775	464523.41
3807441.91	0.22191		
464543.41	3807441.91	0.21797	464563.41
3807441.91	0.21449		
464583.41	3807441.91	0.20871	464603.41
3807441.91	0.20516		
464623.41	3807441.91	0.20229	464643.41
3807441.91	0.19698		
464663.41	3807441.91	0.19430	464683.41
3807441.91	0.19334		
464703.41	3807441.91	0.19528	464723.41
3807441.91	0.19524		
464743.41	3807441.91	0.19753	464763.41
3807441.91	0.19986		
464783.41	3807441.91	0.21837	464803.41
3807441.91	0.22415		
464823.41	3807441.91	0.21921	464843.41
3807441.91	0.23425		
464863.41	3807441.91	0.24859	464883.41
3807441.91	0.24376		
464903.41	3807441.91	0.25733	464923.41

3807441.91	0.25921		
464503.41	3807461.91	0.23193	464523.41
3807461.91	0.22904		
464543.41	3807461.91	0.22382	464563.41
3807461.91	0.21805		
464583.41	3807461.91	0.21564	464603.41
3807461.91	0.21082		
464623.41	3807461.91	0.20553	464643.41
3807461.91	0.20415		
464663.41	3807461.91	0.20017	464683.41
3807461.91	0.19584		
464703.41	3807461.91	0.19792	464723.41
3807461.91	0.20681		
464743.41	3807461.91	0.20868	464763.41
3807461.91	0.20548		
464783.41	3807461.91	0.22168	464803.41
3807461.91	0.22764		
464823.41	3807461.91	0.22265	464843.41
3807461.91	0.23800		
464863.41	3807461.91	0.25265	464883.41
3807461.91	0.24774		
464903.41	3807461.91	0.26157	464923.41
3807461.91	0.26348		
464503.41	3807481.91	0.23568	464523.41
3807481.91	0.23330		
464543.41	3807481.91	0.22953	464563.41
3807481.91	0.22498		
464583.41	3807481.91	0.22046	464603.41
3807481.91	0.21637		
464623.41	3807481.91	0.21259	464643.41
3807481.91	0.20897		
464663.41	3807481.91	0.20633	464683.41
3807481.91	0.20407		
464703.41	3807481.91	0.20238	464723.41
3807481.91	0.21088		
464743.41	3807481.91	0.21865	464763.41
3807481.91	0.21322		
464783.41	3807481.91	0.22516	464803.41
3807481.91	0.23128		
464823.41	3807481.91	0.22626	464843.41
3807481.91	0.24190		
464863.41	3807481.91	0.26125	464883.41
3807481.91	0.27092		
464903.41	3807481.91	0.26872	464923.41
3807481.91	0.27071		
464503.41	3807501.91	0.24093	464523.41
3807501.91	0.23849		
464543.41	3807501.91	0.23566	464563.41
3807501.91	0.23212		
464583.41	3807501.91	0.22582	464603.41

3807501.91 0.22241

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

PAGE 62

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464623.41	3807501.91	0.21993	464643.41
3807501.91	0.21443		
464663.41	3807501.91	0.21305	464683.41
3807501.91	0.21436		
464703.41	3807501.91	0.21062	464723.41
3807501.91	0.21604		
464743.41	3807501.91	0.22268	464763.41
3807501.91	0.22100		
464783.41	3807501.91	0.23064	464803.41
3807501.91	0.23528		
464823.41	3807501.91	0.23611	464843.41
3807501.91	0.24755		
464863.41	3807501.91	0.26791	464883.41
3807501.91	0.27949		
464903.41	3807501.91	0.27754	464923.41
3807501.91	0.27937		
464503.41	3807521.91	0.25028	464523.41
3807521.91	0.24808		
464543.41	3807521.91	0.24263	464563.41
3807521.91	0.23632		

464583.41	3807521.91	0.23434	464603.41
3807521.91	0.22942		
464623.41	3807521.91	0.22396	464643.41
3807521.91	0.22469		
464663.41	3807521.91	0.22129	464683.41
3807521.91	0.21897		
464703.41	3807521.91	0.22725	464723.41
3807521.91	0.22569		
464743.41	3807521.91	0.22842	464763.41
3807521.91	0.24239		
464783.41	3807521.91	0.24120	464803.41
3807521.91	0.24293		
464823.41	3807521.91	0.25924	464843.41
3807521.91	0.25809		
464863.41	3807521.91	0.27256	464883.41
3807521.91	0.28433		
464903.41	3807521.91	0.28232	464923.41
3807521.91	0.28414		
464503.41	3807541.91	0.25989	464523.41
3807541.91	0.25447		
464543.41	3807541.91	0.24949	464563.41
3807541.91	0.24481		
464583.41	3807541.91	0.24026	464603.41
3807541.91	0.23677		
464623.41	3807541.91	0.23368	464643.41
3807541.91	0.23121		
464663.41	3807541.91	0.23635	464683.41
3807541.91	0.23571		
464703.41	3807541.91	0.23482	464723.41
3807541.91	0.24576		
464743.41	3807541.91	0.25028	464763.41
3807541.91	0.25081		
464783.41	3807541.91	0.24874	464803.41
3807541.91	0.24728		
464823.41	3807541.91	0.26522	464843.41
3807541.91	0.29451		
464863.41	3807541.91	0.29310	464883.41
3807541.91	0.29004		
464903.41	3807541.91	0.29905	464923.41
3807541.91	0.29545		
464503.41	3807561.91	0.26874	464523.41
3807561.91	0.26122		
464543.41	3807561.91	0.25693	464563.41
3807561.91	0.25363		
464583.41	3807561.91	0.24689	464603.41
3807561.91	0.24476		
464623.41	3807561.91	0.24562	464643.41
3807561.91	0.24080		
464663.41	3807561.91	0.24625	464683.41
3807561.91	0.25308		

464703.41	3807561.91	0.25060	464723.41
3807561.91	0.26080		
464743.41	3807561.91	0.26521	464763.41
3807561.91	0.25902		
464783.41	3807561.91	0.25714	464803.41
3807561.91	0.26651		
464823.41	3807561.91	0.27082	464843.41
3807561.91	0.30225		
464863.41	3807561.91	0.30399	464883.41
3807561.91	0.29803		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 63

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464903.41	3807561.91	0.30542	464923.41
3807561.91	0.30396		
464503.41	3807581.91	0.27427	464523.41
3807581.91	0.27158		
464543.41	3807581.91	0.26549	464563.41
3807581.91	0.25875		
464583.41	3807581.91	0.25895	464603.41
3807581.91	0.25448		
464623.41	3807581.91	0.25122	464643.41
3807581.91	0.25985		
464663.41	3807581.91	0.25744	464683.41

3807581.91	0.25986		
464703.41	3807581.91	0.27490	464723.41
3807581.91	0.27296		
464743.41	3807581.91	0.27000	464763.41
3807581.91	0.26375		
464783.41	3807581.91	0.28006	464803.41
3807581.91	0.28355		
464823.41	3807581.91	0.27862	464843.41
3807581.91	0.30776		
464863.41	3807581.91	0.30949	464883.41
3807581.91	0.30338		
464903.41	3807581.91	0.31084	464923.41
3807581.91	0.31105		
464503.41	3807601.91	0.28556	464523.41
3807601.91	0.28477		
464543.41	3807601.91	0.27877	464563.41
3807601.91	0.27031		
464583.41	3807601.91	0.26684	464603.41
3807601.91	0.27193		
464623.41	3807601.91	0.27049	464643.41
3807601.91	0.26878		
464663.41	3807601.91	0.28042	464683.41
3807601.91	0.28479		
464703.41	3807601.91	0.28471	464723.41
3807601.91	0.28174		
464743.41	3807601.91	0.27794	464763.41
3807601.91	0.29196		
464783.41	3807601.91	0.29170	464803.41
3807601.91	0.30910		
464823.41	3807601.91	0.31990	464843.41
3807601.91	0.31674		
464863.41	3807601.91	0.31853	464883.41
3807601.91	0.32270		
464903.41	3807601.91	0.31765	464923.41
3807601.91	0.31655		
464503.41	3807621.91	0.29974	464523.41
3807621.91	0.29816		
464543.41	3807621.91	0.29366	464563.41
3807621.91	0.28442		
464583.41	3807621.91	0.27823	464603.41
3807621.91	0.28360		
464623.41	3807621.91	0.29054	464643.41
3807621.91	0.28699		
464663.41	3807621.91	0.29775	464683.41
3807621.91	0.30198		
464703.41	3807621.91	0.29432	464723.41
3807621.91	0.29156		
464743.41	3807621.91	0.30145	464763.41
3807621.91	0.30572		
464783.41	3807621.91	0.32347	464803.41

3807621.91	0.33114		
464823.41	3807621.91	0.33079	464843.41
3807621.91	0.33214		
464863.41	3807621.91	0.33428	464883.41
3807621.91	0.33052		
464903.41	3807621.91	0.32863	464923.41
3807621.91	0.32364		
464503.41	3807641.91	0.31580	464523.41
3807641.91	0.30665		
464543.41	3807641.91	0.29916	464563.41
3807641.91	0.29141		
464583.41	3807641.91	0.30036	464603.41
3807641.91	0.29679		
464623.41	3807641.91	0.29870	464643.41
3807641.91	0.31491		
464663.41	3807641.91	0.31193	464683.41
3807641.91	0.30781		
464703.41	3807641.91	0.30005	464723.41
3807641.91	0.31776		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 64

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464743.41	3807641.91	0.32105	464763.41
3807641.91	0.31487		

464783.41	3807641.91	0.34689	464803.41
3807641.91	0.34511		
464823.41	3807641.91	0.33858	464843.41
3807641.91	0.34880		
464863.41	3807641.91	0.34415	464883.41
3807641.91	0.33723		
464903.41	3807641.91	0.33667	464923.41
3807641.91	0.33198		
464503.41	3807661.91	0.34525	464523.41
3807661.91	0.33395		
464543.41	3807661.91	0.32308	464563.41
3807661.91	0.31393		
464583.41	3807661.91	0.31109	464603.41
3807661.91	0.32345		
464623.41	3807661.91	0.32748	464643.41
3807661.91	0.32653		
464663.41	3807661.91	0.34592	464683.41
3807661.91	0.34300		
464703.41	3807661.91	0.33443	464723.41
3807661.91	0.33134		
464743.41	3807661.91	0.35042	464763.41
3807661.91	0.36191		
464783.41	3807661.91	0.35771	464803.41
3807661.91	0.35911		
464823.41	3807661.91	0.36320	464843.41
3807661.91	0.35695		
464863.41	3807661.91	0.35465	464883.41
3807661.91	0.34998		
464903.41	3807661.91	0.34439	464923.41
3807661.91	0.33842		
464503.41	3807681.91	0.38442	464523.41
3807681.91	0.37215		
464543.41	3807681.91	0.36036	464563.41
3807681.91	0.34908		
464583.41	3807681.91	0.33836	464603.41
3807681.91	0.34373		
464623.41	3807681.91	0.34783	464643.41
3807681.91	0.34668		
464663.41	3807681.91	0.36074	464683.41
3807681.91	0.38166		
464703.41	3807681.91	0.38396	464723.41
3807681.91	0.37554		
464743.41	3807681.91	0.37581	464763.41
3807681.91	0.37472		
464783.41	3807681.91	0.37556	464803.41
3807681.91	0.37732		
464823.41	3807681.91	0.37247	464843.41
3807681.91	0.36973		
464863.41	3807681.91	0.36355	464883.41
3807681.91	0.35816		

464903.41	3807681.91	0.35175	464923.41
3807681.91	0.34452		
464523.41	3807701.91	0.40543	464543.41
3807701.91	0.39280		
464563.41	3807701.91	0.38073	464583.41
3807701.91	0.36925		
464603.41	3807701.91	0.36053	464623.41
3807701.91	0.36039		
464643.41	3807701.91	0.38142	464663.41
3807701.91	0.37737		
464683.41	3807701.91	0.39475	464703.41
3807701.91	0.40840		
464723.41	3807701.91	0.40160	464743.41
3807701.91	0.39219		
464763.41	3807701.91	0.38405	464783.41
3807701.91	0.39491		
464803.41	3807701.91	0.38897	464823.41
3807701.91	0.38050		
464843.41	3807701.91	0.37925	464863.41
3807701.91	0.37337		
464883.41	3807701.91	0.36540	464903.41
3807701.91	0.35824		
464923.41	3807701.91	0.35078	464543.41
3807721.91	0.43838		
464563.41	3807721.91	0.39631	464583.41
3807721.91	0.38436		
464603.41	3807721.91	0.37306	464623.41
3807721.91	0.36826		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 65

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

464643.41	3807721.91	0.39167		464663.41
3807721.91	0.43183			
464683.41	3807721.91	0.42731		464703.41
3807721.91	0.42054			
464723.41	3807721.91	0.41424		464743.41
3807721.91	0.40867			
464763.41	3807721.91	0.41253		464783.41
3807721.91	0.40469			
464803.41	3807721.91	0.40136		464823.41
3807721.91	0.39540			
464843.41	3807721.91	0.38843		464863.41
3807721.91	0.38106			
464883.41	3807721.91	0.37284		464903.41
3807721.91	0.36486			
464923.41	3807721.91	0.35710		464943.41
3807721.91	0.34956			
464963.41	3807721.91	0.34221		464983.41
3807721.91	0.33506			
465003.41	3807721.91	0.32810		465023.41
3807721.91	0.32132			
465043.41	3807721.91	0.31472		465063.41
3807721.91	0.30828			
465083.41	3807721.91	0.30202		465103.41
3807721.91	0.29594			
465123.41	3807721.91	0.29010		465143.41
3807721.91	0.28435			
465163.41	3807721.91	0.27873		465183.41
3807721.91	0.27335			
465203.41	3807721.91	0.26806		465223.41
3807721.91	0.26286			
465243.41	3807721.91	0.25780		465263.41
3807721.91	0.25287			
465283.41	3807721.91	0.24809		465303.41
3807721.91	0.24352			
465323.41	3807721.91	0.23899		465343.41
3807721.91	0.23457			
465363.41	3807721.91	0.23036		465383.41
3807721.91	0.22619			
464543.41	3807741.91	0.49845		464563.41
3807741.91	0.43794			
464583.41	3807741.91	0.42119		464603.41
3807741.91	0.40001			
464623.41	3807741.91	0.39865		464643.41

3807741.91	0.40624		
464663.41	3807741.91	0.44756	464683.41
3807741.91	0.44497		
464703.41	3807741.91	0.43382	464723.41
3807741.91	0.42887		
464743.41	3807741.91	0.43001	464763.41
3807741.91	0.42366		
464783.41	3807741.91	0.41976	464803.41
3807741.91	0.41199		
464823.41	3807741.91	0.40518	464843.41
3807741.91	0.39721		
464863.41	3807741.91	0.38836	464883.41
3807741.91	0.37988		
464903.41	3807741.91	0.37158	464923.41
3807741.91	0.36351		
464943.41	3807741.91	0.35569	464963.41
3807741.91	0.34808		
464983.41	3807741.91	0.34070	465003.41
3807741.91	0.33343		
465023.41	3807741.91	0.32642	465043.41
3807741.91	0.31962		
465063.41	3807741.91	0.31292	465083.41
3807741.91	0.30650		
465103.41	3807741.91	0.30030	465123.41
3807741.91	0.29425		
465143.41	3807741.91	0.28827	465163.41
3807741.91	0.28243		
465183.41	3807741.91	0.27686	465203.41
3807741.91	0.27147		
465223.41	3807741.91	0.26622	465243.41
3807741.91	0.26096		
465263.41	3807741.91	0.25596	465283.41
3807741.91	0.25114		
465303.41	3807741.91	0.24642	465323.41
3807741.91	0.24174		
465343.41	3807741.91	0.23716	465363.41
3807741.91	0.23282		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 66

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010

```

, L0000011      , L0000012      , L0000013      ,
                  L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
                  L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
465383.41	3807741.91	0.22862	464543.41
3807761.91	0.57603		
464563.41	3807761.91	0.52680	464583.41
3807761.91	0.48041		
464603.41	3807761.91	0.43633	464623.41
3807761.91	0.42710		
464643.41	3807761.91	0.47113	464663.41
3807761.91	0.46272		
464683.41	3807761.91	0.45493	464703.41
3807761.91	0.44339		
464723.41	3807761.91	0.45165	464743.41
3807761.91	0.44396		
464763.41	3807761.91	0.43342	464783.41
3807761.91	0.43118		
464803.41	3807761.91	0.42371	464823.41
3807761.91	0.41391		
464843.41	3807761.91	0.40497	464863.41
3807761.91	0.39579		
464883.41	3807761.91	0.38701	464903.41
3807761.91	0.37840		
464923.41	3807761.91	0.37004	464943.41
3807761.91	0.36194		
464963.41	3807761.91	0.35406	464983.41
3807761.91	0.34642		
465003.41	3807761.91	0.33891	465023.41
3807761.91	0.33158		
465043.41	3807761.91	0.32447	465063.41
3807761.91	0.31768		
465083.41	3807761.91	0.31111	465103.41
3807761.91	0.30470		
465123.41	3807761.91	0.29832	465143.41
3807761.91	0.29221		
465163.41	3807761.91	0.28631	465183.41
3807761.91	0.28043		

465203.41	3807761.91	0.27485	465223.41
3807761.91	0.26949		
465243.41	3807761.91	0.26425	465263.41
3807761.91	0.25919		
465283.41	3807761.91	0.25423	465303.41
3807761.91	0.24925		
465323.41	3807761.91	0.24452	465343.41
3807761.91	0.23994		
465363.41	3807761.91	0.23534	465383.41
3807761.91	0.23102		
464543.41	3807781.91	0.60753	464563.41
3807781.91	0.58730		
464583.41	3807781.91	0.55966	464603.41
3807781.91	0.54115		
464623.41	3807781.91	0.50980	464643.41
3807781.91	0.49143		
464663.41	3807781.91	0.49725	464683.41
3807781.91	0.48628		
464703.41	3807781.91	0.47384	464723.41
3807781.91	0.46357		
464743.41	3807781.91	0.45880	464763.41
3807781.91	0.45109		
464783.41	3807781.91	0.44226	464803.41
3807781.91	0.43303		
464823.41	3807781.91	0.42280	464843.41
3807781.91	0.41297		
464863.41	3807781.91	0.40349	464883.41
3807781.91	0.39429		
464903.41	3807781.91	0.38537	464923.41
3807781.91	0.37671		
464943.41	3807781.91	0.36829	464963.41
3807781.91	0.36012		
464983.41	3807781.91	0.35217	465003.41
3807781.91	0.34445		
465023.41	3807781.91	0.33689	465043.41
3807781.91	0.32953		
465063.41	3807781.91	0.32256	465083.41
3807781.91	0.31571		
465103.41	3807781.91	0.30903	465123.41
3807781.91	0.30254		
465143.41	3807781.91	0.29623	465163.41
3807781.91	0.29010		
465183.41	3807781.91	0.28416	465203.41
3807781.91	0.27847		
465223.41	3807781.91	0.27296	465243.41
3807781.91	0.26750		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***

*** 13:53:49

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3807781.91	0.26228	465283.41
3807781.91	0.25724		
465303.41	3807781.91	0.25224	465323.41
3807781.91	0.24737		
465343.41	3807781.91	0.24264	465363.41
3807781.91	0.23805		
465383.41	3807781.91	0.23367	464543.41
3807801.91	0.62395		
464563.41	3807801.91	0.60674	464583.41
3807801.91	0.58973		
464603.41	3807801.91	0.57171	464623.41
3807801.91	0.55022		
464643.41	3807801.91	0.52478	464663.41
3807801.91	0.51176		
464683.41	3807801.91	0.50453	464703.41
3807801.91	0.49144		
464723.41	3807801.91	0.48163	464743.41
3807801.91	0.47171		
464763.41	3807801.91	0.46296	464783.41
3807801.91	0.45293		
464803.41	3807801.91	0.44192	464823.41
3807801.91	0.43133		
464843.41	3807801.91	0.42116	464863.41
3807801.91	0.41131		
464883.41	3807801.91	0.40172	464903.41

3807801.91	0.39246		
464923.41	3807801.91	0.38345	464943.41
3807801.91	0.37474		
464963.41	3807801.91	0.36625	464983.41
3807801.91	0.35798		
465003.41	3807801.91	0.35005	465023.41
3807801.91	0.34227		
465043.41	3807801.91	0.33470	465063.41
3807801.91	0.32747		
465083.41	3807801.91	0.32035	465103.41
3807801.91	0.31342		
465123.41	3807801.91	0.30683	465143.41
3807801.91	0.30031		
465163.41	3807801.91	0.29397	465183.41
3807801.91	0.28801		
465203.41	3807801.91	0.28218	465223.41
3807801.91	0.27649		
465243.41	3807801.91	0.27082	465263.41
3807801.91	0.26546		
465283.41	3807801.91	0.26032	465303.41
3807801.91	0.25529		
465323.41	3807801.91	0.25029	465343.41
3807801.91	0.24542		
465363.41	3807801.91	0.24087	465383.41
3807801.91	0.23641		
464543.41	3807821.91	0.63968	464563.41
3807821.91	0.62222		
464583.41	3807821.91	0.60531	464603.41
3807821.91	0.58834		
464623.41	3807821.91	0.57003	464643.41
3807821.91	0.54840		
464663.41	3807821.91	0.52684	464683.41
3807821.91	0.51629		
464703.41	3807821.91	0.50266	464723.41
3807821.91	0.49558		
464743.41	3807821.91	0.48595	464763.41
3807821.91	0.47367		
464783.41	3807821.91	0.46247	464803.41
3807821.91	0.45105		
464823.41	3807821.91	0.44015	464843.41
3807821.91	0.42952		
464863.41	3807821.91	0.41924	464883.41
3807821.91	0.40931		
464903.41	3807821.91	0.39967	464923.41
3807821.91	0.39034		
464943.41	3807821.91	0.38123	464963.41
3807821.91	0.37246		
464983.41	3807821.91	0.36398	465003.41
3807821.91	0.35564		
465023.41	3807821.91	0.34766	465043.41

```

3807821.91      0.33995
      465063.41      3807821.91      0.33232      465083.41
3807821.91      0.32505
      465103.41      3807821.91      0.31804      465123.41
3807821.91      0.31106
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
***
13:53:49

```

PAGE 68

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0000001      , L0000002
, L0000003      , L0000004      , L0000005      ,
      L0000006      , L0000007      , L0000008      , L0000009      , L0000010
, L0000011      , L0000012      , L0000013      ,
      L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
      L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807821.91	0.30444	465163.41
3807821.91	0.29811		
465183.41	3807821.91	0.29199	465203.41
3807821.91	0.28589		
465223.41	3807821.91	0.27993	465243.41
3807821.91	0.27432		
465263.41	3807821.91	0.26891	465283.41
3807821.91	0.26363		
465303.41	3807821.91	0.25830	465323.41
3807821.91	0.25327		
465343.41	3807821.91	0.24846	465363.41
3807821.91	0.24382		
465383.41	3807821.91	0.23916	464543.41
3807841.91	0.65397		
464563.41	3807841.91	0.63587	464583.41
3807841.91	0.61988		

464603.41	3807841.91	0.60350	464623.41
3807841.91	0.58657		
464643.41	3807841.91	0.56999	464663.41
3807841.91	0.55254		
464683.41	3807841.91	0.53577	464723.41
3807841.91	0.50920		
464743.41	3807841.91	0.49745	464763.41
3807841.91	0.48461		
464783.41	3807841.91	0.47232	464803.41
3807841.91	0.46051		
464823.41	3807841.91	0.44908	464843.41
3807841.91	0.43804		
464863.41	3807841.91	0.42736	464883.41
3807841.91	0.41701		
464903.41	3807841.91	0.40699	464923.41
3807841.91	0.39729		
464943.41	3807841.91	0.38789	464963.41
3807841.91	0.37878		
464983.41	3807841.91	0.36996	465003.41
3807841.91	0.36143		
465023.41	3807841.91	0.35315	465043.41
3807841.91	0.34514		
465063.41	3807841.91	0.33738	465083.41
3807841.91	0.32986		
465103.41	3807841.91	0.32258	465123.41
3807841.91	0.31553		
465143.41	3807841.91	0.30869	465163.41
3807841.91	0.30209		
465183.41	3807841.91	0.29583	465203.41
3807841.91	0.28967		
465223.41	3807841.91	0.28365	465243.41
3807841.91	0.27779		
465263.41	3807841.91	0.27223	465283.41
3807841.91	0.26686		
465303.41	3807841.91	0.26154	465323.41
3807841.91	0.25647		
465343.41	3807841.91	0.25158	465363.41
3807841.91	0.24670		
465383.41	3807841.91	0.24198	464503.41
3807861.91	0.71285		
464523.41	3807861.91	0.68942	464543.41
3807861.91	0.66812		
464563.41	3807861.91	0.64895	464583.41
3807861.91	0.63319		
464603.41	3807861.91	0.61758	464723.41
3807861.91	0.52242		
464743.41	3807861.91	0.50851	464763.41
3807861.91	0.49513		
464783.41	3807861.91	0.48241	464803.41
3807861.91	0.47015		

464823.41	3807861.91	0.45822	464843.41
3807861.91	0.44674		
464863.41	3807861.91	0.43561	464883.41
3807861.91	0.42487		
464903.41	3807861.91	0.41446	464923.41
3807861.91	0.40435		
464943.41	3807861.91	0.39467	464963.41
3807861.91	0.38523		
464983.41	3807861.91	0.37605	465003.41
3807861.91	0.36732		
465023.41	3807861.91	0.35876	465043.41
3807861.91	0.35044		
465063.41	3807861.91	0.34255	465083.41
3807861.91	0.33478		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 69

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465103.41	3807861.91	0.32723	465123.41
3807861.91	0.32009		
465143.41	3807861.91	0.31304	465163.41
3807861.91	0.30618		
465183.41	3807861.91	0.29971	465203.41
3807861.91	0.29350		
465223.41	3807861.91	0.28745	465243.41

3807861.91	0.28138		
465263.41	3807861.91	0.27567	465283.41
3807861.91	0.27021		
465303.41	3807861.91	0.26488	465323.41
3807861.91	0.25974		
465343.41	3807861.91	0.25474	465363.41
3807861.91	0.24969		
465383.41	3807861.91	0.24490	464503.41
3807881.91	0.73220		
464523.41	3807881.91	0.70745	464543.41
3807881.91	0.68512		
464723.41	3807881.91	0.53437	464743.41
3807881.91	0.51986		
464763.41	3807881.91	0.50593	464783.41
3807881.91	0.49270		
464803.41	3807881.91	0.47996	464823.41
3807881.91	0.46759		
464843.41	3807881.91	0.45561	464863.41
3807881.91	0.44406		
464883.41	3807881.91	0.43283	464903.41
3807881.91	0.42205		
464923.41	3807881.91	0.41167	464943.41
3807881.91	0.40149		
464963.41	3807881.91	0.39178	464983.41
3807881.91	0.38244		
465003.41	3807881.91	0.37322	465023.41
3807881.91	0.36446		
465043.41	3807881.91	0.35604	465063.41
3807881.91	0.34769		
465083.41	3807881.91	0.33979	465103.41
3807881.91	0.33219		
465123.41	3807881.91	0.32462	465143.41
3807881.91	0.31748		
465163.41	3807881.91	0.31062	465183.41
3807881.91	0.30375		
465203.41	3807881.91	0.29732	465223.41
3807881.91	0.29119		
465243.41	3807881.91	0.28522	465263.41
3807881.91	0.27947		
465283.41	3807881.91	0.27387	465303.41
3807881.91	0.26819		
465323.41	3807881.91	0.26290	465343.41
3807881.91	0.25784		
465363.41	3807881.91	0.25291	465383.41
3807881.91	0.24797		
464723.41	3807901.91	0.54692	464743.41
3807901.91	0.53157		
464763.41	3807901.91	0.51720	464783.41
3807901.91	0.50335		
464803.41	3807901.91	0.49001	464823.41

3807901.91	0.47716		
464843.41	3807901.91	0.46472	464863.41
3807901.91	0.45275		
464883.41	3807901.91	0.44108	464903.41
3807901.91	0.42983		
464923.41	3807901.91	0.41902	464943.41
3807901.91	0.40859		
464963.41	3807901.91	0.39864	464983.41
3807901.91	0.38903		
465003.41	3807901.91	0.37948	465023.41
3807901.91	0.37035		
465043.41	3807901.91	0.36159	465063.41
3807901.91	0.35315		
465083.41	3807901.91	0.34498	465103.41
3807901.91	0.33709		
465123.41	3807901.91	0.32947	465143.41
3807901.91	0.32210		
465163.41	3807901.91	0.31498	465183.41
3807901.91	0.30810		
465203.41	3807901.91	0.30158	465223.41
3807901.91	0.29530		
465243.41	3807901.91	0.28905	465263.41
3807901.91	0.28314		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 70

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465283.41	3807901.91	0.27745		465303.41
3807901.91	0.27180			
465323.41	3807901.91	0.26632		465343.41
3807901.91	0.26104			
465363.41	3807901.91	0.25607		465383.41
3807901.91	0.25114			
464723.41	3807921.91	0.55983		464743.41
3807921.91	0.54378			
464763.41	3807921.91	0.52877		464783.41
3807921.91	0.51430			
464803.41	3807921.91	0.50038		464823.41
3807921.91	0.48699			
464843.41	3807921.91	0.47407		464863.41
3807921.91	0.46164			
464883.41	3807921.91	0.44952		464903.41
3807921.91	0.43781			
464923.41	3807921.91	0.42656		464943.41
3807921.91	0.41595			
464963.41	3807921.91	0.40569		464983.41
3807921.91	0.39573			
465003.41	3807921.91	0.38588		465023.41
3807921.91	0.37640			
465043.41	3807921.91	0.36732		465063.41
3807921.91	0.35877			
465083.41	3807921.91	0.35034		465103.41
3807921.91	0.34216			
465123.41	3807921.91	0.33448		465143.41
3807921.91	0.32689			
465163.41	3807921.91	0.31951		465183.41
3807921.91	0.31260			
465203.41	3807921.91	0.30597		465223.41
3807921.91	0.29953			
465243.41	3807921.91	0.29305		465263.41
3807921.91	0.28693			
465283.41	3807921.91	0.28110		465303.41
3807921.91	0.27553			
465323.41	3807921.91	0.26993		465343.41
3807921.91	0.26446			
465363.41	3807921.91	0.25940		465383.41
3807921.91	0.25445			
464723.41	3807941.91	0.57259		464743.41
3807941.91	0.55647			
464763.41	3807941.91	0.54063		464783.41
3807941.91	0.52555			
464803.41	3807941.91	0.51105		464823.41
3807941.91	0.49711			
464843.41	3807941.91	0.48366		464863.41
3807941.91	0.47062			

464883.41	3807941.91	0.45798	464903.41
3807941.91	0.44598		
464923.41	3807941.91	0.43456	464943.41
3807941.91	0.42361		
464963.41	3807941.91	0.41285	464983.41
3807941.91	0.40237		
465003.41	3807941.91	0.39219	465023.41
3807941.91	0.38263		
465043.41	3807941.91	0.37349	465063.41
3807941.91	0.36440		
465083.41	3807941.91	0.35586	465103.41
3807941.91	0.34767		
465123.41	3807941.91	0.33949	465143.41
3807941.91	0.33183		
465163.41	3807941.91	0.32448	465183.41
3807941.91	0.31710		
465203.41	3807941.91	0.31025	465223.41
3807941.91	0.30373		
465243.41	3807941.91	0.29738	465263.41
3807941.91	0.29104		
465283.41	3807941.91	0.28488	465303.41
3807941.91	0.27920		
465323.41	3807941.91	0.27367	465343.41
3807941.91	0.26831		
465363.41	3807941.91	0.26315	465383.41
3807941.91	0.25795		
465403.41	3807941.91	0.25285	465423.41
3807941.91	0.24812		
465443.41	3807941.91	0.24357	465463.41
3807941.91	0.23923		
465483.41	3807941.91	0.23490	465503.41
3807941.91	0.23074		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 71

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465523.41	3807941.91	0.22666	465543.41
3807941.91	0.22248		
465563.41	3807941.91	0.21857	465583.41
3807941.91	0.21485		
465603.41	3807941.91	0.21126	465623.41
3807941.91	0.20761		
465643.41	3807941.91	0.20401	465663.41
3807941.91	0.20067		
465683.41	3807941.91	0.19729	465703.41
3807941.91	0.19397		
464723.41	3807961.91	0.58443	464743.41
3807961.91	0.56895		
464763.41	3807961.91	0.55286	464783.41
3807961.91	0.53714		
464803.41	3807961.91	0.52202	464823.41
3807961.91	0.50749		
464843.41	3807961.91	0.49352	464863.41
3807961.91	0.48007		
464883.41	3807961.91	0.46697	464903.41
3807961.91	0.45460		
464923.41	3807961.91	0.44281	464943.41
3807961.91	0.43130		
464963.41	3807961.91	0.42024	464983.41
3807961.91	0.40957		
465003.41	3807961.91	0.39909	465023.41
3807961.91	0.38930		
465043.41	3807961.91	0.37995	465063.41
3807961.91	0.37056		
465083.41	3807961.91	0.36164	465103.41
3807961.91	0.35313		
465123.41	3807961.91	0.34494	465143.41
3807961.91	0.33702		
465163.41	3807961.91	0.32938	465183.41
3807961.91	0.32202		
465203.41	3807961.91	0.31490	465223.41
3807961.91	0.30806		
465243.41	3807961.91	0.30165	465263.41
3807961.91	0.29532		
465283.41	3807961.91	0.28916	465303.41

3807961.91	0.28337		
465323.41	3807961.91	0.27762	465343.41
3807961.91	0.27202		
465363.41	3807961.91	0.26678	465383.41
3807961.91	0.26158		
465403.41	3807961.91	0.25647	465423.41
3807961.91	0.25151		
465443.41	3807961.91	0.24683	465463.41
3807961.91	0.24260		
465483.41	3807961.91	0.23807	465503.41
3807961.91	0.23379		
465523.41	3807961.91	0.22967	465543.41
3807961.91	0.22553		
465563.41	3807961.91	0.22162	465583.41
3807961.91	0.21784		
465603.41	3807961.91	0.21403	465623.41
3807961.91	0.21034		
465643.41	3807961.91	0.20675	465663.41
3807961.91	0.20325		
465683.41	3807961.91	0.19984	465703.41
3807961.91	0.19656		
464743.41	3807981.91	0.58107	464763.41
3807981.91	0.56515		
464783.41	3807981.91	0.54902	464803.41
3807981.91	0.53336		
464823.41	3807981.91	0.51812	464843.41
3807981.91	0.50365		
464863.41	3807981.91	0.48983	464883.41
3807981.91	0.47626		
464903.41	3807981.91	0.46347	464923.41
3807981.91	0.45127		
464943.41	3807981.91	0.43928	464963.41
3807981.91	0.42791		
464983.41	3807981.91	0.41704	465003.41
3807981.91	0.40635		
465023.41	3807981.91	0.39625	465043.41
3807981.91	0.38658		
465063.41	3807981.91	0.37704	465083.41
3807981.91	0.36776		
465103.41	3807981.91	0.35887	465123.41
3807981.91	0.35072		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***

13:53:49

PAGE 72

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807981.91	0.34253	465163.41
3807981.91	0.33453		
465183.41	3807981.91	0.32715	465203.41
3807981.91	0.31982		
465223.41	3807981.91	0.31271	465243.41
3807981.91	0.30618		
465263.41	3807981.91	0.29986	465283.41
3807981.91	0.29373		
465303.41	3807981.91	0.28774	465323.41
3807981.91	0.28176		
465343.41	3807981.91	0.27594	465363.41
3807981.91	0.27052		
465383.41	3807981.91	0.26531	465403.41
3807981.91	0.26025		
465423.41	3807981.91	0.25508	465443.41
3807981.91	0.25028		
465463.41	3807981.91	0.24611	465483.41
3807981.91	0.24139		
465503.41	3807981.91	0.23701	465523.41
3807981.91	0.23283		
465543.41	3807981.91	0.22871	465563.41
3807981.91	0.22476		
465583.41	3807981.91	0.22089	465603.41
3807981.91	0.21692		
465623.41	3807981.91	0.21319	465643.41
3807981.91	0.20959		
465663.41	3807981.91	0.20593	465683.41
3807981.91	0.20254		
465703.41	3807981.91	0.19931	464763.41
3808001.91	0.57709		

464783.41	3808001.91	0.56098	464803.41
3808001.91	0.54494		
464823.41	3808001.91	0.52900	464843.41
3808001.91	0.51400		
464863.41	3808001.91	0.49968	464883.41
3808001.91	0.48557		
464903.41	3808001.91	0.47236	464923.41
3808001.91	0.45984		
464943.41	3808001.91	0.44777	464963.41
3808001.91	0.43595		
464983.41	3808001.91	0.42453	465003.41
3808001.91	0.41386		
465023.41	3808001.91	0.40336	465043.41
3808001.91	0.39321		
465063.41	3808001.91	0.38374	465083.41
3808001.91	0.37434		
465103.41	3808001.91	0.36522	465123.41
3808001.91	0.35686		
465143.41	3808001.91	0.34847	465163.41
3808001.91	0.34022		
465183.41	3808001.91	0.33231	465203.41
3808001.91	0.32494		
465223.41	3808001.91	0.31796	465243.41
3808001.91	0.31127		
465263.41	3808001.91	0.30481	465283.41
3808001.91	0.29849		
465303.41	3808001.91	0.29206	465323.41
3808001.91	0.28606		
465343.41	3808001.91	0.28032	465363.41
3808001.91	0.27448		
465383.41	3808001.91	0.26910	465403.41
3808001.91	0.26398		
465423.41	3808001.91	0.25898	465443.41
3808001.91	0.25417		
465463.41	3808001.91	0.24959	465483.41
3808001.91	0.24502		
465503.41	3808001.91	0.24063	465523.41
3808001.91	0.23632		
465543.41	3808001.91	0.23189	465563.41
3808001.91	0.22779		
465583.41	3808001.91	0.22389	465603.41
3808001.91	0.22006		
465623.41	3808001.91	0.21618	465643.41
3808001.91	0.21238		
465663.41	3808001.91	0.20886	465683.41
3808001.91	0.20547		
465703.41	3808001.91	0.20214	464763.41
3808021.91	0.58780		
464783.41	3808021.91	0.57188	464803.41
3808021.91	0.55606		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 73

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3808021.91	0.54003	464843.41
3808021.91	0.52468		
464863.41	3808021.91	0.50992	464883.41
3808021.91	0.49559		
464903.41	3808021.91	0.48183	464923.41
3808021.91	0.46869		
464943.41	3808021.91	0.45634	464963.41
3808021.91	0.44432		
464983.41	3808021.91	0.43269	465003.41
3808021.91	0.42150		
465023.41	3808021.91	0.41078	465043.41
3808021.91	0.40048		
465063.41	3808021.91	0.39055	465083.41
3808021.91	0.38101		
465103.41	3808021.91	0.37185	465123.41
3808021.91	0.36300		
465143.41	3808021.91	0.35449	465163.41
3808021.91	0.34626		
465183.41	3808021.91	0.33809	465203.41
3808021.91	0.33056		
465223.41	3808021.91	0.32342	465243.41

3808021.91	0.31631		
465263.41	3808021.91	0.30962	465283.41
3808021.91	0.30321		
465303.41	3808021.91	0.29682	465323.41
3808021.91	0.29063		
465343.41	3808021.91	0.28464	465363.41
3808021.91	0.27885		
465383.41	3808021.91	0.27341	465403.41
3808021.91	0.26816		
465423.41	3808021.91	0.26288	465443.41
3808021.91	0.25792		
465463.41	3808021.91	0.25346	465483.41
3808021.91	0.24865		
465503.41	3808021.91	0.24412	465523.41
3808021.91	0.23975		
465543.41	3808021.91	0.23537	465563.41
3808021.91	0.23110		
465583.41	3808021.91	0.22699	465603.41
3808021.91	0.22313		
465623.41	3808021.91	0.21927	465643.41
3808021.91	0.21550		
465663.41	3808021.91	0.21196	465683.41
3808021.91	0.20840		
465703.41	3808021.91	0.20489	464783.41
3808041.91	0.58244		
464803.41	3808041.91	0.56690	464823.41
3808041.91	0.55117		
464843.41	3808041.91	0.53565	464863.41
3808041.91	0.52058		
464883.41	3808041.91	0.50604	464903.41
3808041.91	0.49181		
464923.41	3808041.91	0.47810	464943.41
3808041.91	0.46537		
464963.41	3808041.91	0.45318	464983.41
3808041.91	0.44138		
465003.41	3808041.91	0.42959	465023.41
3808041.91	0.41857		
465043.41	3808041.91	0.40809	465063.41
3808041.91	0.39772		
465083.41	3808041.91	0.38799	465103.41
3808041.91	0.37868		
465123.41	3808041.91	0.36944	465143.41
3808041.91	0.36077		
465163.41	3808041.91	0.35248	465183.41
3808041.91	0.34421		
465203.41	3808041.91	0.33646	465223.41
3808041.91	0.32904		
465243.41	3808041.91	0.32161	465263.41
3808041.91	0.31465		
465283.41	3808041.91	0.30805	465303.41

3808041.91	0.30175		
465323.41	3808041.91	0.29540	465343.41
3808041.91	0.28919		
465363.41	3808041.91	0.28341	465383.41
3808041.91	0.27788		
465403.41	3808041.91	0.27249	465423.41
3808041.91	0.26698		
465443.41	3808041.91	0.26187	465463.41
3808041.91	0.25747		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 74

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465483.41	3808041.91	0.25244	465503.41
3808041.91	0.24773		
465523.41	3808041.91	0.24324	465543.41
3808041.91	0.23895		
465563.41	3808041.91	0.23457	465583.41
3808041.91	0.23029		
465603.41	3808041.91	0.22636	465623.41
3808041.91	0.22253		
465643.41	3808041.91	0.21880	465663.41
3808041.91	0.21512		
465683.41	3808041.91	0.21140	465703.41
3808041.91	0.20777		

464803.41	3808061.91	0.57826	464823.41
3808061.91	0.56226		
464843.41	3808061.91	0.54675	464863.41
3808061.91	0.53166		
464883.41	3808061.91	0.51666	464903.41
3808061.91	0.50225		
464923.41	3808061.91	0.48846	464943.41
3808061.91	0.47533		
464963.41	3808061.91	0.46274	464983.41
3808061.91	0.45059		
465003.41	3808061.91	0.43844	465023.41
3808061.91	0.42682		
465043.41	3808061.91	0.41577	465063.41
3808061.91	0.40552		
465083.41	3808061.91	0.39537	465103.41
3808061.91	0.38555		
465123.41	3808061.91	0.37646	465143.41
3808061.91	0.36742		
465163.41	3808061.91	0.35866	465183.41
3808061.91	0.35057		
465203.41	3808061.91	0.34248	465223.41
3808061.91	0.33463		
465243.41	3808061.91	0.32739	465263.41
3808061.91	0.32013		
465283.41	3808061.91	0.31308	465303.41
3808061.91	0.30664		
465323.41	3808061.91	0.30037	465343.41
3808061.91	0.29422		
465363.41	3808061.91	0.28798	465383.41
3808061.91	0.28222		
465403.41	3808061.91	0.27677	465423.41
3808061.91	0.27144		
465443.41	3808061.91	0.26631	465463.41
3808061.91	0.26143		
465483.41	3808061.91	0.25656	465503.41
3808061.91	0.25164		
465523.41	3808061.91	0.24684	465543.41
3808061.91	0.24246		
465563.41	3808061.91	0.23816	465583.41
3808061.91	0.23398		
465603.41	3808061.91	0.22996	465623.41
3808061.91	0.22605		
465643.41	3808061.91	0.22219	465663.41
3808061.91	0.21821		
465683.41	3808061.91	0.21449	465703.41
3808061.91	0.21096		
464823.41	3808081.91	0.57451	464843.41
3808081.91	0.55832		
464863.41	3808081.91	0.54263	464883.41
3808081.91	0.52763		

464903.41	3808081.91	0.51326	464923.41
3808081.91	0.49940		
464943.41	3808081.91	0.48583	464963.41
3808081.91	0.47262		
464983.41	3808081.91	0.45987	465003.41
3808081.91	0.44768		
465023.41	3808081.91	0.43576	465043.41
3808081.91	0.42431		
465063.41	3808081.91	0.41385	465083.41
3808081.91	0.40338		
465103.41	3808081.91	0.39316	465123.41
3808081.91	0.38358		
465143.41	3808081.91	0.37438	465163.41
3808081.91	0.36553		
465183.41	3808081.91	0.35698	465203.41
3808081.91	0.34877		
465223.41	3808081.91	0.34086	465243.41
3808081.91	0.33320		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 75

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3808081.91	0.32583	465283.41
3808081.91	0.31878		
465303.41	3808081.91	0.31218	465323.41

3808081.91	0.30561		
465343.41	3808081.91	0.29918	465363.41
3808081.91	0.29298		
465383.41	3808081.91	0.28714	465403.41
3808081.91	0.28153		
465423.41	3808081.91	0.27588	465443.41
3808081.91	0.27057		
465463.41	3808081.91	0.26581	465483.41
3808081.91	0.26066		
465503.41	3808081.91	0.25568	465523.41
3808081.91	0.25086		
465543.41	3808081.91	0.24616	465563.41
3808081.91	0.24174		
465583.41	3808081.91	0.23752	465603.41
3808081.91	0.23341		
465623.41	3808081.91	0.22941	465643.41
3808081.91	0.22549		
465663.41	3808081.91	0.22155	465683.41
3808081.91	0.21782		
465703.41	3808081.91	0.21421	464843.41
3808101.91	0.57051		
464863.41	3808101.91	0.55439	464883.41
3808101.91	0.53943		
464903.41	3808101.91	0.52490	464923.41
3808101.91	0.51075		
464943.41	3808101.91	0.49674	464963.41
3808101.91	0.48297		
464983.41	3808101.91	0.46969	465003.41
3808101.91	0.45729		
465023.41	3808101.91	0.44514	465043.41
3808101.91	0.43343		
465063.41	3808101.91	0.42252	465083.41
3808101.91	0.41169		
465103.41	3808101.91	0.40113	465123.41
3808101.91	0.39109		
465143.41	3808101.91	0.38177	465163.41
3808101.91	0.37288		
465183.41	3808101.91	0.36378	465203.41
3808101.91	0.35536		
465223.41	3808101.91	0.34734	465243.41
3808101.91	0.33931		
465263.41	3808101.91	0.33188	465283.41
3808101.91	0.32485		
465303.41	3808101.91	0.31796	465323.41
3808101.91	0.31107		
465343.41	3808101.91	0.30438	465363.41
3808101.91	0.29817		
465383.41	3808101.91	0.29223	465403.41
3808101.91	0.28644		
465423.41	3808101.91	0.28052	465443.41

3808101.91	0.27503		
465463.41	3808101.91	0.27033	465483.41
3808101.91	0.26493		
465503.41	3808101.91	0.25987	465523.41
3808101.91	0.25501		
465543.41	3808101.91	0.25007	465563.41
3808101.91	0.24551		
465583.41	3808101.91	0.24119	465603.41
3808101.91	0.23698		
465623.41	3808101.91	0.23290	465643.41
3808101.91	0.22891		
465663.41	3808101.91	0.22498	465683.41
3808101.91	0.22119		
465703.41	3808101.91	0.21748	464863.41
3808121.91	0.56824		
464883.41	3808121.91	0.55272	464903.41
3808121.91	0.53726		
464923.41	3808121.91	0.52223	464943.41
3808121.91	0.50776		
464963.41	3808121.91	0.49384	464983.41
3808121.91	0.48042		
465003.41	3808121.91	0.46714	465023.41
3808121.91	0.45476		
465043.41	3808121.91	0.44298	465063.41
3808121.91	0.43126		
465083.41	3808121.91	0.41994	465103.41
3808121.91	0.40913		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 76

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)		Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)		CONC		

	465123.41	3808121.91	0.39925	465143.41
3808121.91		0.38980		
	465163.41	3808121.91	0.38063	465183.41
3808121.91		0.37127		
	465203.41	3808121.91	0.36231	465223.41
3808121.91		0.35378		
	465243.41	3808121.91	0.34595	465263.41
3808121.91		0.33844		
	465283.41	3808121.91	0.33113	465303.41
3808121.91		0.32366		
	465323.41	3808121.91	0.31672	465343.41
3808121.91		0.31009		
	465363.41	3808121.91	0.30334	465383.41
3808121.91		0.29714		
	465403.41	3808121.91	0.29127	465423.41
3808121.91		0.28552		
	465443.41	3808121.91	0.28000	465463.41
3808121.91		0.27477		
	465483.41	3808121.91	0.26953	465503.41
3808121.91		0.26423		
	465523.41	3808121.91	0.25906	465543.41
3808121.91		0.25429		
	465563.41	3808121.91	0.24970	465583.41
3808121.91		0.24527		
	465603.41	3808121.91	0.24096	465623.41
3808121.91		0.23676		
	465643.41	3808121.91	0.23263	465663.41
3808121.91		0.22836		
	465683.41	3808121.91	0.22441	465703.41
3808121.91		0.22066		
	464883.41	3808141.91	0.56580	464903.41
3808141.91		0.55027		
	464923.41	3808141.91	0.53498	464943.41
3808141.91		0.51999		
	464963.41	3808141.91	0.50566	464983.41
3808141.91		0.49183		
	465003.41	3808141.91	0.47799	465023.41
3808141.91		0.46523		
	465043.41	3808141.91	0.45311	465063.41
3808141.91		0.44091		
	465083.41	3808141.91	0.42918	465103.41
3808141.91		0.41804		
	465123.41	3808141.91	0.40793	465143.41
3808141.91		0.39797		

465163.41	3808141.91	0.38828	465183.41
3808141.91	0.37899		
465203.41	3808141.91	0.36981	465223.41
3808141.91	0.36097		
465243.41	3808141.91	0.35298	465263.41
3808141.91	0.34505		
465283.41	3808141.91	0.33731	465303.41
3808141.91	0.32986		
465323.41	3808141.91	0.32265	465343.41
3808141.91	0.31568		
465363.41	3808141.91	0.30897	465383.41
3808141.91	0.30266		
465403.41	3808141.91	0.29659	465423.41
3808141.91	0.29048		
465443.41	3808141.91	0.28475	465463.41
3808141.91	0.27929		
465483.41	3808141.91	0.27399	465503.41
3808141.91	0.26870		
465523.41	3808141.91	0.26350	465543.41
3808141.91	0.25844		
465563.41	3808141.91	0.25368	465583.41
3808141.91	0.24914		
465603.41	3808141.91	0.24472	465623.41
3808141.91	0.24043		
465643.41	3808141.91	0.23622	465663.41
3808141.91	0.23198		
465683.41	3808141.91	0.22785	465703.41
3808141.91	0.22387		
464883.41	3808161.91	0.57931	464903.41
3808161.91	0.56385		
464923.41	3808161.91	0.54836	464943.41
3808161.91	0.53282		
464963.41	3808161.91	0.51796	464983.41
3808161.91	0.50366		
465003.41	3808161.91	0.48948	465023.41
3808161.91	0.47620		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 77

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,

```

          L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
          L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465043.41	3808161.91	0.46354	465063.41
3808161.91	0.45091		
465083.41	3808161.91	0.43889	465103.41
3808161.91	0.42748		
465123.41	3808161.91	0.41689	465143.41
3808161.91	0.40641		
465163.41	3808161.91	0.39629	465183.41
3808161.91	0.38690		
465203.41	3808161.91	0.37758	465223.41
3808161.91	0.36855		
465243.41	3808161.91	0.36018	465263.41
3808161.91	0.35184		
465283.41	3808161.91	0.34375	465303.41
3808161.91	0.33626		
465323.41	3808161.91	0.32877	465343.41
3808161.91	0.32149		
465363.41	3808161.91	0.31475	465383.41
3808161.91	0.30831		
465403.41	3808161.91	0.30204	465423.41
3808161.91	0.29561		
465443.41	3808161.91	0.28968	465463.41
3808161.91	0.28405		
465483.41	3808161.91	0.27852	465503.41
3808161.91	0.27322		
465523.41	3808161.91	0.26803	465543.41
3808161.91	0.26270		
465563.41	3808161.91	0.25779	465583.41
3808161.91	0.25313		
465603.41	3808161.91	0.24860	465623.41
3808161.91	0.24415		
465643.41	3808161.91	0.23981	465663.41
3808161.91	0.23566		
465683.41	3808161.91	0.23141	465703.41
3808161.91	0.22722		
464903.41	3808181.91	0.57780	464923.41

3808181.91	0.56181		
464943.41	3808181.91	0.54570	464963.41
3808181.91	0.53031		
464983.41	3808181.91	0.51558	465003.41
3808181.91	0.50141		
465023.41	3808181.91	0.48746	465043.41
3808181.91	0.47391		
465063.41	3808181.91	0.46081	465083.41
3808181.91	0.44873		
465103.41	3808181.91	0.43726	465123.41
3808181.91	0.42579		
465143.41	3808181.91	0.41515	465163.41
3808181.91	0.40501		
465183.41	3808181.91	0.39482	465203.41
3808181.91	0.38536		
465223.41	3808181.91	0.37635	465243.41
3808181.91	0.36725		
465263.41	3808181.91	0.35882	465283.41
3808181.91	0.35077		
465303.41	3808181.91	0.34260	465323.41
3808181.91	0.33504		
465343.41	3808181.91	0.32782	465363.41
3808181.91	0.32046		
465383.41	3808181.91	0.31372	465403.41
3808181.91	0.30734		
465423.41	3808181.91	0.30110	465443.41
3808181.91	0.29511		
465463.41	3808181.91	0.28926	465483.41
3808181.91	0.28323		
465503.41	3808181.91	0.27767	465523.41
3808181.91	0.27242		
465543.41	3808181.91	0.26727	465563.41
3808181.91	0.26231		
465583.41	3808181.91	0.25752	465603.41
3808181.91	0.25287		
465623.41	3808181.91	0.24810	465643.41
3808181.91	0.24343		
465663.41	3808181.91	0.23917	465683.41
3808181.91	0.23500		
465703.41	3808181.91	0.23088	464923.41
3808201.91	0.57508		
464943.41	3808201.91	0.55895	464963.41
3808201.91	0.54318		
464983.41	3808201.91	0.52793	465003.41
3808201.91	0.51336		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465023.41	3808201.91	0.49884	465043.41
3808201.91	0.48475		
465063.41	3808201.91	0.47163	465083.41
3808201.91	0.45903		
465103.41	3808201.91	0.44694	465123.41
3808201.91	0.43539		
465143.41	3808201.91	0.42427	465163.41
3808201.91	0.41359		
465183.41	3808201.91	0.40335	465203.41
3808201.91	0.39348		
465223.41	3808201.91	0.38398	465243.41
3808201.91	0.37487		
465263.41	3808201.91	0.36607	465283.41
3808201.91	0.35759		
465303.41	3808201.91	0.34943	465323.41
3808201.91	0.34154		
465343.41	3808201.91	0.33393	465363.41
3808201.91	0.32661		
465383.41	3808201.91	0.31951	465403.41
3808201.91	0.31270		
465423.41	3808201.91	0.30637	465443.41
3808201.91	0.30024		
465463.41	3808201.91	0.29427	465483.41
3808201.91	0.28826		
465503.41	3808201.91	0.28262	465523.41
3808201.91	0.27723		

465543.41	3808201.91	0.27200	465563.41
3808201.91	0.26676		
465583.41	3808201.91	0.26165	465603.41
3808201.91	0.25687		
465623.41	3808201.91	0.25210	465643.41
3808201.91	0.24743		
465663.41	3808201.91	0.24307	465683.41
3808201.91	0.23868		
465703.41	3808201.91	0.23435	464943.41
3808221.91	0.57267		
464963.41	3808221.91	0.55654	464983.41
3808221.91	0.54072		
465003.41	3808221.91	0.52560	465023.41
3808221.91	0.51065		
465043.41	3808221.91	0.49621	465063.41
3808221.91	0.48285		
465083.41	3808221.91	0.46957	465103.41
3808221.91	0.45677		
465123.41	3808221.91	0.44521	465143.41
3808221.91	0.43367		
465163.41	3808221.91	0.42247	465183.41
3808221.91	0.41210		
465203.41	3808221.91	0.40182	465223.41
3808221.91	0.39187		
465243.41	3808221.91	0.38266	465263.41
3808221.91	0.37349		
465283.41	3808221.91	0.36461	465303.41
3808221.91	0.35640		
465323.41	3808221.91	0.34819	465343.41
3808221.91	0.34022		
465363.41	3808221.91	0.33286	465383.41
3808221.91	0.32548		
465403.41	3808221.91	0.31833	465423.41
3808221.91	0.31181		
465443.41	3808221.91	0.30551	465463.41
3808221.91	0.29941		
465483.41	3808221.91	0.29350	465503.41
3808221.91	0.28770		
465523.41	3808221.91	0.28208	465543.41
3808221.91	0.27670		
465563.41	3808221.91	0.27122	465583.41
3808221.91	0.26585		
465603.41	3808221.91	0.26096	465623.41
3808221.91	0.25614		
465643.41	3808221.91	0.25146	465663.41
3808221.91	0.24698		
465683.41	3808221.91	0.24239	465703.41
3808221.91	0.23789		
464963.41	3808241.91	0.57036	464983.41
3808241.91	0.55392		

465003.41	3808241.91	0.53823	465023.41
3808241.91	0.52313		
465043.41	3808241.91	0.50855	465063.41
3808241.91	0.49403		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 79

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -			
- - - - -			
465083.41	3808241.91	0.48006	465103.41
3808241.91	0.46679		
465123.41	3808241.91	0.45483	465143.41
3808241.91	0.44326		
465163.41	3808241.91	0.43203	465183.41
3808241.91	0.42074		
465203.41	3808241.91	0.41029	465223.41
3808241.91	0.40035		
465243.41	3808241.91	0.39031	465263.41
3808241.91	0.38102		
465283.41	3808241.91	0.37217	465303.41
3808241.91	0.36320		
465323.41	3808241.91	0.35491	465343.41
3808241.91	0.34699		
465363.41	3808241.91	0.33894	465383.41
3808241.91	0.33150		
465403.41	3808241.91	0.32449	465423.41

3808241.91	0.31777		
465443.41	3808241.91	0.31127	465463.41
3808241.91	0.30498		
465483.41	3808241.91	0.29889	465503.41
3808241.91	0.29268		
465523.41	3808241.91	0.28661	465543.41
3808241.91	0.28109		
465563.41	3808241.91	0.27569	465583.41
3808241.91	0.27045		
465603.41	3808241.91	0.26541	465623.41
3808241.91	0.26026		
465643.41	3808241.91	0.25521	465663.41
3808241.91	0.25062		
465683.41	3808241.91	0.24612	465703.41
3808241.91	0.24167		
464983.41	3808261.91	0.56562	465003.41
3808261.91	0.55004		
465023.41	3808261.91	0.53473	465043.41
3808261.91	0.51980		
465063.41	3808261.91	0.50514	465083.41
3808261.91	0.49112		
465103.41	3808261.91	0.47769	465123.41
3808261.91	0.46477		
465143.41	3808261.91	0.45274	465163.41
3808261.91	0.44126		
465183.41	3808261.91	0.42993	465203.41
3808261.91	0.41900		
465223.41	3808261.91	0.40851	465243.41
3808261.91	0.39845		
465263.41	3808261.91	0.38902	465283.41
3808261.91	0.37994		
465303.41	3808261.91	0.37058	465323.41
3808261.91	0.36179		
465343.41	3808261.91	0.35344	465363.41
3808261.91	0.34542		
465383.41	3808261.91	0.33765	465403.41
3808261.91	0.33021		
465423.41	3808261.91	0.32330	465443.41
3808261.91	0.31662		
465463.41	3808261.91	0.31016	465483.41
3808261.91	0.30391		
465503.41	3808261.91	0.29766	465523.41
3808261.91	0.29159		
465543.41	3808261.91	0.28592	465563.41
3808261.91	0.28023		
465583.41	3808261.91	0.27469	465603.41
3808261.91	0.26953		
465623.41	3808261.91	0.26437	465643.41
3808261.91	0.25929		
465663.41	3808261.91	0.25434	465683.41

3808261.91	0.24970		
465703.41	3808261.91	0.24522	465003.41
3808281.91	0.56172		
465023.41	3808281.91	0.54618	465043.41
3808281.91	0.53100		
465063.41	3808281.91	0.51611	465083.41
3808281.91	0.50214		
465103.41	3808281.91	0.48874	465123.41
3808281.91	0.47509		
465143.41	3808281.91	0.46252	465163.41
3808281.91	0.45070		
465183.41	3808281.91	0.43921	465203.41
3808281.91	0.42781		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 80

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808281.91	0.41683	465243.41
3808281.91	0.40683		
465263.41	3808281.91	0.39710	465283.41
3808281.91	0.38758		
465303.41	3808281.91	0.37792	465323.41
3808281.91	0.36871		
465343.41	3808281.91	0.35998	465363.41
3808281.91	0.35191		

465383.41	3808281.91	0.34384	465403.41
3808281.91	0.33600		
465423.41	3808281.91	0.32876	465443.41
3808281.91	0.32185		
465463.41	3808281.91	0.31540	465483.41
3808281.91	0.30897		
465503.41	3808281.91	0.30274	465523.41
3808281.91	0.29670		
465543.41	3808281.91	0.29076	465563.41
3808281.91	0.28478		
465583.41	3808281.91	0.27897	465603.41
3808281.91	0.27368		
465623.41	3808281.91	0.26848	465643.41
3808281.91	0.26336		
465663.41	3808281.91	0.25815	465683.41
3808281.91	0.25329		
465703.41	3808281.91	0.24868	465003.41
3808301.91	0.57374		
465023.41	3808301.91	0.55802	465043.41
3808301.91	0.54286		
465063.41	3808301.91	0.52661	465083.41
3808301.91	0.51248		
465103.41	3808301.91	0.49934	465123.41
3808301.91	0.48588		
465143.41	3808301.91	0.47307	465163.41
3808301.91	0.46070		
465183.41	3808301.91	0.44818	465203.41
3808301.91	0.43661		
465223.41	3808301.91	0.42575	465243.41
3808301.91	0.41539		
465263.41	3808301.91	0.40497	465283.41
3808301.91	0.39471		
465303.41	3808301.91	0.38474	465323.41
3808301.91	0.37560		
465343.41	3808301.91	0.36693	465363.41
3808301.91	0.35812		
465383.41	3808301.91	0.34998	465403.41
3808301.91	0.34222		
465423.41	3808301.91	0.33431	465443.41
3808301.91	0.32707		
465463.41	3808301.91	0.32107	465483.41
3808301.91	0.31445		
465503.41	3808301.91	0.30805	465523.41
3808301.91	0.30176		
465543.41	3808301.91	0.29529	465563.41
3808301.91	0.28930		
465583.41	3808301.91	0.28362	465603.41
3808301.91	0.27818		
465623.41	3808301.91	0.27262	465643.41
3808301.91	0.26716		

465663.41	3808301.91	0.26214	465683.41
3808301.91	0.25705		
465703.41	3808301.91	0.25208	465043.41
3808321.91	0.55400		
465063.41	3808321.91	0.53839	465083.41
3808321.91	0.52378		
465103.41	3808321.91	0.50985	465123.41
3808321.91	0.49607		
465143.41	3808321.91	0.48287	465163.41
3808321.91	0.47014		
465183.41	3808321.91	0.45758	465203.41
3808321.91	0.44583		
465223.41	3808321.91	0.43460	465243.41
3808321.91	0.42344		
465263.41	3808321.91	0.41247	465283.41
3808321.91	0.40188		
465303.41	3808321.91	0.39204	465323.41
3808321.91	0.38255		
465343.41	3808321.91	0.37341	465363.41
3808321.91	0.36464		
465383.41	3808321.91	0.35617	465403.41
3808321.91	0.34800		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 81

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -	465423.41	3808321.91	0.34014	465443.41
3808321.91	0.33278			
	465463.41	3808321.91	0.32624	465483.41
3808321.91	0.31945			
	465503.41	3808321.91	0.31287	465523.41
3808321.91	0.30646			
	465543.41	3808321.91	0.30004	465563.41
3808321.91	0.29401			
	465583.41	3808321.91	0.28820	465603.41
3808321.91	0.28235			
	465623.41	3808321.91	0.27669	465643.41
3808321.91	0.27122			
	465663.41	3808321.91	0.26590	465683.41
3808321.91	0.26075			
	465703.41	3808321.91	0.25576	465083.41
3808341.91	0.53510			
	465103.41	3808341.91	0.52026	465123.41
3808341.91	0.50626			
	465143.41	3808341.91	0.49269	465163.41
3808341.91	0.47963			
	465183.41	3808341.91	0.46711	465203.41
3808341.91	0.45498			
	465223.41	3808341.91	0.44319	465243.41
3808341.91	0.43145			
	465263.41	3808341.91	0.42005	465283.41
3808341.91	0.40917			
	465303.41	3808341.91	0.39928	465323.41
3808341.91	0.38931			
	465343.41	3808341.91	0.37966	465363.41
3808341.91	0.37102			
	465383.41	3808341.91	0.36228	465403.41
3808341.91	0.35375			
	465423.41	3808341.91	0.34589	465443.41
3808341.91	0.33838			
	465463.41	3808341.91	0.33138	465483.41
3808341.91	0.32441			
	465503.41	3808341.91	0.31768	465523.41
3808341.91	0.31114			
	465543.41	3808341.91	0.30472	465563.41
3808341.91	0.29859			
	465583.41	3808341.91	0.29260	465603.41
3808341.91	0.28645			
	465623.41	3808341.91	0.28072	465643.41
3808341.91	0.27521			
	465663.41	3808341.91	0.26962	465683.41
3808341.91	0.26440			
	465703.41	3808341.91	0.25939	465103.41
3808361.91	0.53060			
	465123.41	3808361.91	0.51693	465143.41

3808361.91	0.50314		
465163.41	3808361.91	0.48963	465183.41
3808361.91	0.47669		
465203.41	3808361.91	0.46373	465223.41
3808361.91	0.45117		
465243.41	3808361.91	0.43968	465263.41
3808361.91	0.42814		
465283.41	3808361.91	0.41683	465303.41
3808361.91	0.40606		
465323.41	3808361.91	0.39565	465343.41
3808361.91	0.38574		
465363.41	3808361.91	0.37688	465383.41
3808361.91	0.36825		
465403.41	3808361.91	0.35982	465423.41
3808361.91	0.35125		
465443.41	3808361.91	0.34341	465463.41
3808361.91	0.33692		
465483.41	3808361.91	0.32976	465503.41
3808361.91	0.32285		
465523.41	3808361.91	0.31607	465543.41
3808361.91	0.30910		
465563.41	3808361.91	0.30269	465583.41
3808361.91	0.29665		
465603.41	3808361.91	0.29072	465623.41
3808361.91	0.28472		
465643.41	3808361.91	0.27887	465663.41
3808361.91	0.27349		
465683.41	3808361.91	0.26804	465703.41
3808361.91	0.26271		
465183.41	3808381.91	0.48464	465203.41
3808381.91	0.47143		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 82

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	0.45877	465243.41
3808381.91	0.44658		
465263.41	3808381.91	0.43462	465283.41
3808381.91	0.42306		
465303.41	3808381.91	0.41239	465323.41
3808381.91	0.40181		
465343.41	3808381.91	0.39164	465363.41
3808381.91	0.38256		
465383.41	3808381.91	0.37381	465403.41
3808381.91	0.36532		
465423.41	3808381.91	0.35683	465443.41
3808381.91	0.34889		
465463.41	3808381.91	0.34183	465483.41
3808381.91	0.33451		
465503.41	3808381.91	0.32743	465523.41
3808381.91	0.32054		
465543.41	3808381.91	0.31363	465563.41
3808381.91	0.30695		
465583.41	3808381.91	0.30053	465603.41
3808381.91	0.29456		
465623.41	3808381.91	0.28860	465643.41
3808381.91	0.28275		
465663.41	3808381.91	0.27706	465683.41
3808381.91	0.27156		
465703.41	3808381.91	0.26624	465303.41
3808401.91	0.41816		
465323.41	3808401.91	0.40760	465343.41
3808401.91	0.39734		
465363.41	3808401.91	0.38806	465383.41
3808401.91	0.37911		
465403.41	3808401.91	0.37049	465423.41
3808401.91	0.36218		
465443.41	3808401.91	0.35416	465463.41
3808401.91	0.34643		
465483.41	3808401.91	0.33895	465503.41
3808401.91	0.33173		
465523.41	3808401.91	0.32475	465543.41
3808401.91	0.31800		
465563.41	3808401.91	0.31114	465583.41
3808401.91	0.30444		

465603.41	3808401.91	0.29835	465623.41
3808401.91	0.29238		
465643.41	3808401.91	0.28650	465663.41
3808401.91	0.28054		
465683.41	3808401.91	0.27499	465703.41
3808401.91	0.26965		
465323.41	3808421.91	0.41277	465343.41
3808421.91	0.40282		
465363.41	3808421.91	0.39333	465383.41
3808421.91	0.38420		
465403.41	3808421.91	0.37540	465423.41
3808421.91	0.36692		
465443.41	3808421.91	0.35874	465463.41
3808421.91	0.35084		
465483.41	3808421.91	0.34322	465503.41
3808421.91	0.33586		
465523.41	3808421.91	0.32875	465543.41
3808421.91	0.32187		
465563.41	3808421.91	0.31516	465583.41
3808421.91	0.30866		
465603.41	3808421.91	0.30244	465623.41
3808421.91	0.29608		
465643.41	3808421.91	0.28986	465663.41
3808421.91	0.28414		
465683.41	3808421.91	0.27835	465703.41
3808421.91	0.27270		
465323.41	3808441.91	0.41805	465343.41
3808441.91	0.40809		
465363.41	3808441.91	0.39890	465383.41
3808441.91	0.38973		
465403.41	3808441.91	0.38074	465423.41
3808441.91	0.37207		
465443.41	3808441.91	0.36371	465463.41
3808441.91	0.35565		
465483.41	3808441.91	0.34787	465503.41
3808441.91	0.34036		
465523.41	3808441.91	0.33310	465543.41
3808441.91	0.32608		
465563.41	3808441.91	0.31930	465583.41
3808441.91	0.31274		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 83

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465603.41	3808441.91	0.30639	465623.41
3808441.91	0.29986		
465643.41	3808441.91	0.29341	465663.41
3808441.91	0.28738		
465683.41	3808441.91	0.28156	465703.41
3808441.91	0.27598		
465343.41	3808461.91	0.41301	465363.41
3808461.91	0.40393		
465383.41	3808461.91	0.39478	465403.41
3808461.91	0.38576		
465423.41	3808461.91	0.37692	465443.41
3808461.91	0.36840		
465463.41	3808461.91	0.36020	465483.41
3808461.91	0.35227		
465503.41	3808461.91	0.34471	465523.41
3808461.91	0.33742		
465543.41	3808461.91	0.33027	465563.41
3808461.91	0.32336		
465583.41	3808461.91	0.31667	465603.41
3808461.91	0.31020		
465623.41	3808461.91	0.30355	465643.41
3808461.91	0.29693		
465663.41	3808461.91	0.29053	465683.41
3808461.91	0.28471		
465703.41	3808461.91	0.27923	465343.41
3808481.91	0.41745		
465363.41	3808481.91	0.40759	465383.41
3808481.91	0.39856		
465403.41	3808481.91	0.38991	465423.41
3808481.91	0.38094		
465443.41	3808481.91	0.37230	465463.41

3808481.91	0.36396		
465483.41	3808481.91	0.35591	465503.41
3808481.91	0.34857		
465523.41	3808481.91	0.34155	465543.41
3808481.91	0.33427		
465563.41	3808481.91	0.32723	465583.41
3808481.91	0.32043		
465603.41	3808481.91	0.31385	465623.41
3808481.91	0.30709		
465643.41	3808481.91	0.30036	465663.41
3808481.91	0.29386		
465683.41	3808481.91	0.28794	465703.41
3808481.91	0.28231		
465463.41	3808501.91	0.36801	465483.41
3808501.91	0.35944		
465503.41	3808501.91	0.35195	465523.41
3808501.91	0.34492		
465543.41	3808501.91	0.33754	465563.41
3808501.91	0.33064		
465583.41	3808501.91	0.32395	465603.41
3808501.91	0.31695		
465623.41	3808501.91	0.31021	465643.41
3808501.91	0.30364		
465663.41	3808501.91	0.29703	465683.41
3808501.91	0.29103		
465703.41	3808501.91	0.28529	465523.41
3808521.91	0.34789		
465543.41	3808521.91	0.34043	465563.41
3808521.91	0.33367		
465583.41	3808521.91	0.32712	465603.41
3808521.91	0.31985		
465623.41	3808521.91	0.31308	465643.41
3808521.91	0.30659		
465663.41	3808521.91	0.30001	465683.41
3808521.91	0.29388		
465703.41	3808521.91	0.28800	463745.31
3809562.31	1.08864		
463783.31	3809562.31	1.08858	463821.31
3809562.31	1.08786		
463859.31	3809562.31	1.09325	463897.31
3809562.31	1.09086		
463935.31	3809562.31	1.07148	463973.31
3809562.31	1.04796		
464011.31	3809562.31	1.01317	464049.31
3809562.31	0.98152		
464087.31	3809562.31	0.94489	464125.31
3809562.31	0.90907		
464163.31	3809562.31	0.87283	464201.31
3809562.31	0.83870		

▲ *** AERMOD - VERSION 19191 ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 84
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3
 **

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
464239.31	3809562.31	0.80142	464277.31
3809562.31	0.76654		
464315.31	3809562.31	0.73355	464353.31
3809562.31	0.70350		
464391.31	3809562.31	0.67258	464429.31
3809562.31	0.64593		
464467.31	3809562.31	0.61824	464505.31
3809562.31	0.59423		
463745.31	3809591.37	1.03904	463783.31
3809591.37	1.03871		
463821.31	3809591.37	1.03584	463859.31
3809591.37	1.03753		
463897.31	3809591.37	1.03697	463935.31
3809591.37	1.02699		
463973.31	3809591.37	1.00385	464011.31
3809591.37	0.97378		
464049.31	3809591.37	0.94414	464087.31
3809591.37	0.90832		
464125.31	3809591.37	0.87388	464163.31
3809591.37	0.83891		
464201.31	3809591.37	0.80636	464239.31
3809591.37	0.77328		

464277.31	3809591.37	0.74000	464315.31
3809591.37	0.71041		
464353.31	3809591.37	0.67920	464391.31
3809591.37	0.65221		
464429.31	3809591.37	0.62532	464467.31
3809591.37	0.60033		
464505.31	3809591.37	0.57762	463745.31
3809620.43	0.98759		
463783.31	3809620.43	0.98832	463821.31
3809620.43	0.98919		
463859.31	3809620.43	0.98744	463897.31
3809620.43	0.98566		
463935.31	3809620.43	0.97893	463973.31
3809620.43	0.96055		
464011.31	3809620.43	0.93564	464049.31
3809620.43	0.90523		
464087.31	3809620.43	0.87235	464125.31
3809620.43	0.84076		
464163.31	3809620.43	0.80871	464201.31
3809620.43	0.77527		
464239.31	3809620.43	0.74560	464277.31
3809620.43	0.71449		
464315.31	3809620.43	0.68547	464353.31
3809620.43	0.65803		
464391.31	3809620.43	0.63042	464429.31
3809620.43	0.60636		
464467.31	3809620.43	0.58375	464505.31
3809620.43	0.56009		
463745.31	3809649.49	0.93909	463783.31
3809649.49	0.94397		
463821.31	3809649.49	0.94349	463859.31
3809649.49	0.94123		
463897.31	3809649.49	0.93799	463935.31
3809649.49	0.93158		
463973.31	3809649.49	0.91227	464011.31
3809649.49	0.89242		
464049.31	3809649.49	0.86797	464087.31
3809649.49	0.83736		
464125.31	3809649.49	0.80968	464163.31
3809649.49	0.77877		
464201.31	3809649.49	0.74912	464239.31
3809649.49	0.72036		
464277.31	3809649.49	0.69067	464315.31
3809649.49	0.66179		
464353.31	3809649.49	0.63622	464391.31
3809649.49	0.61178		
464429.31	3809649.49	0.58766	464467.31
3809649.49	0.56560		
464505.31	3809649.49	0.54449	463745.31
3809678.55	0.89187		

463783.31	3809678.55	0.89735	463821.31
3809678.55	0.90134		
463859.31	3809678.55	0.89693	463897.31
3809678.55	0.89365		
463935.31	3809678.55	0.88839	463973.31
3809678.55	0.87253		
464011.31	3809678.55	0.85236	464049.31
3809678.55	0.83299		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 85

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464087.31	3809678.55	0.80751	464125.31
3809678.55	0.78031		
464163.31	3809678.55	0.75176	464201.31
3809678.55	0.72492		
464239.31	3809678.55	0.69565	464277.31
3809678.55	0.66777		
464315.31	3809678.55	0.64115	464353.31
3809678.55	0.61721		
464391.31	3809678.55	0.59368	464429.31
3809678.55	0.57035		
464467.31	3809678.55	0.54985	464505.31
3809678.55	0.52854		
463745.31	3809707.61	0.85068	463783.31

3809707.61	0.85475		
463821.31	3809707.61	0.85816	463859.31
3809707.61	0.85746		
463897.31	3809707.61	0.85271	463935.31
3809707.61	0.84784		
463973.31	3809707.61	0.83545	464011.31
3809707.61	0.81760		
464049.31	3809707.61	0.80020	464087.31
3809707.61	0.77731		
464125.31	3809707.61	0.75264	464163.31
3809707.61	0.72729		
464201.31	3809707.61	0.69956	464239.31
3809707.61	0.67294		
464277.31	3809707.61	0.64633	464315.31
3809707.61	0.62234		
464353.31	3809707.61	0.59746	464391.31
3809707.61	0.57560		
464429.31	3809707.61	0.55337	464467.31
3809707.61	0.53342		
464505.31	3809707.61	0.51447	463745.31
3809736.67	0.81556		
463783.31	3809736.67	0.81590	463821.31
3809736.67	0.81584		
463859.31	3809736.67	0.81653	463897.31
3809736.67	0.81414		
463935.31	3809736.67	0.80748	463973.31
3809736.67	0.80015		
464011.31	3809736.67	0.78765	464049.31
3809736.67	0.76948		
464087.31	3809736.67	0.75052	464125.31
3809736.67	0.72774		
464163.31	3809736.67	0.70425	464201.31
3809736.67	0.67703		
464239.31	3809736.67	0.65238	464277.31
3809736.67	0.62698		
464315.31	3809736.67	0.60274	464353.31
3809736.67	0.57996		
464391.31	3809736.67	0.55870	464429.31
3809736.67	0.53752		
464467.31	3809736.67	0.51886	464505.31
3809736.67	0.50115		
463745.31	3809765.73	0.78351	463783.31
3809765.73	0.78250		
463821.31	3809765.73	0.78041	463859.31
3809765.73	0.77938		
463897.31	3809765.73	0.77819	463935.31
3809765.73	0.77020		
463973.31	3809765.73	0.76078	464011.31
3809765.73	0.75619		
464049.31	3809765.73	0.74295	464087.31

3809765.73	0.72439		
464125.31	3809765.73	0.70463	464163.31
3809765.73	0.68236		
464201.31	3809765.73	0.65652	464239.31
3809765.73	0.63309		
464277.31	3809765.73	0.60890	464315.31
3809765.73	0.58503		
464353.31	3809765.73	0.56384	464391.31
3809765.73	0.54229		
464429.31	3809765.73	0.52317	464467.31
3809765.73	0.50559		
464505.31	3809765.73	0.48721	463745.31
3809794.79	0.75371		
463783.31	3809794.79	0.75019	463821.31
3809794.79	0.74771		
463859.31	3809794.79	0.74450	463897.31
3809794.79	0.74249		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 86

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463935.31	3809794.79	0.73500	463973.31
3809794.79	0.72605		
464011.31	3809794.79	0.72127	464049.31
3809794.79	0.71654		

464087.31	3809794.79	0.69999	464125.31
3809794.79	0.68059		
464163.31	3809794.79	0.65954	464201.31
3809794.79	0.63690		
464239.31	3809794.79	0.61341	464277.31
3809794.79	0.59060		
464315.31	3809794.79	0.56858	464353.31
3809794.79	0.54699		
464391.31	3809794.79	0.52744	464429.31
3809794.79	0.50968		
464467.31	3809794.79	0.49147	464505.31
3809794.79	0.47457		
463745.31	3809823.85	0.72584	463783.31
3809823.85	0.72035		
463821.31	3809823.85	0.71456	463859.31
3809823.85	0.71190		
463897.31	3809823.85	0.70833	463935.31
3809823.85	0.70135		
463973.31	3809823.85	0.69402	464011.31
3809823.85	0.68777		
464049.31	3809823.85	0.68449	464087.31
3809823.85	0.67498		
464125.31	3809823.85	0.65865	464163.31
3809823.85	0.63870		
464201.31	3809823.85	0.61658	464239.31
3809823.85	0.59517		
464277.31	3809823.85	0.57355	464315.31
3809823.85	0.55162		
464353.31	3809823.85	0.53162	464391.31
3809823.85	0.51317		
464429.31	3809823.85	0.49529	464467.31
3809823.85	0.47837		
464505.31	3809823.85	0.46172	463745.31
3809852.91	0.70099		
463783.31	3809852.91	0.69530	463821.31
3809852.91	0.68638		
463859.31	3809852.91	0.68250	463897.31
3809852.91	0.67681		
463935.31	3809852.91	0.67024	463973.31
3809852.91	0.66395		
464011.31	3809852.91	0.65708	464049.31
3809852.91	0.65281		
464087.31	3809852.91	0.64541	464125.31
3809852.91	0.63298		
464163.31	3809852.91	0.61499	464201.31
3809852.91	0.59460		
464239.31	3809852.91	0.57540	464277.31
3809852.91	0.55573		
464315.31	3809852.91	0.53578	464353.31
3809852.91	0.51633		

464391.31	3809852.91	0.49886	464429.31
3809852.91	0.48198		
464467.31	3809852.91	0.46542	464505.31
3809852.91	0.44982		
463745.31	3809881.97	0.67847	463783.31
3809881.97	0.67146		
463821.31	3809881.97	0.66265	463859.31
3809881.97	0.65647		
463897.31	3809881.97	0.64894	463935.31
3809881.97	0.64131		
463973.31	3809881.97	0.63647	464011.31
3809881.97	0.63009		
464049.31	3809881.97	0.62449	464087.31
3809881.97	0.61628		
464125.31	3809881.97	0.60539	464163.31
3809881.97	0.58918		
464201.31	3809881.97	0.57263	464239.31
3809881.97	0.55448		
464277.31	3809881.97	0.53729	464315.31
3809881.97	0.52024		
464353.31	3809881.97	0.50205	464391.31
3809881.97	0.48570		
464429.31	3809881.97	0.46936	464467.31
3809881.97	0.45325		
464505.31	3809881.97	0.43902	463745.31
3809911.03	0.65588		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 87

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)

463783.31	3809911.03	0.64786	463821.31
3809911.03	0.64068		
463859.31	3809911.03	0.63319	463897.31
3809911.03	0.62524		
463935.31	3809911.03	0.61659	463973.31
3809911.03	0.61081		
464011.31	3809911.03	0.60466	464049.31
3809911.03	0.59942		
464087.31	3809911.03	0.59136	464125.31
3809911.03	0.58079		
464163.31	3809911.03	0.56726	464201.31
3809911.03	0.55318		
464239.31	3809911.03	0.53635	464277.31
3809911.03	0.52082		
464315.31	3809911.03	0.50452	464353.31
3809911.03	0.48822		
464391.31	3809911.03	0.47257	464429.31
3809911.03	0.45694		
464467.31	3809911.03	0.44240	464505.31
3809911.03	0.42780		
463745.31	3809940.09	0.63360	463783.31
3809940.09	0.62554		
463821.31	3809940.09	0.61938	463859.31
3809940.09	0.61152		
463897.31	3809940.09	0.60401	463935.31
3809940.09	0.59565		
463973.31	3809940.09	0.58860	464011.31
3809940.09	0.58040		
464049.31	3809940.09	0.57470	464087.31
3809940.09	0.56701		
464125.31	3809940.09	0.55768	464163.31
3809940.09	0.54749		
464201.31	3809940.09	0.53592	464239.31
3809940.09	0.52102		
464277.31	3809940.09	0.50557	464315.31
3809940.09	0.49044		
464353.31	3809940.09	0.47499	464391.31
3809940.09	0.45999		
464429.31	3809940.09	0.44565	464467.31
3809940.09	0.43117		
464505.31	3809940.09	0.41718	463745.31
3809969.15	0.61697		
463783.31	3809969.15	0.60621	463821.31
3809969.15	0.59885		
463859.31	3809969.15	0.59138	463897.31

3809969.15	0.58390		
463935.31	3809969.15	0.57599	463973.31
3809969.15	0.56889		
464011.31	3809969.15	0.55952	464049.31
3809969.15	0.55139		
464087.31	3809969.15	0.54433	464125.31
3809969.15	0.53697		
464163.31	3809969.15	0.52801	464201.31
3809969.15	0.51849		
464239.31	3809969.15	0.50646	464277.31
3809969.15	0.49153		
464315.31	3809969.15	0.47721	464353.31
3809969.15	0.46338		
464391.31	3809969.15	0.44895	464429.31
3809969.15	0.43460		
464467.31	3809969.15	0.42022	464505.31
3809969.15	0.40758		
463745.31	3809998.21	0.60635	463783.31
3809998.21	0.59139		
463821.31	3809998.21	0.58162	463859.31
3809998.21	0.57329		
463897.31	3809998.21	0.56574	463935.31
3809998.21	0.55735		
463973.31	3809998.21	0.55008	464011.31
3809998.21	0.54140		
464049.31	3809998.21	0.53285	464087.31
3809998.21	0.52516		
464125.31	3809998.21	0.51879	464163.31
3809998.21	0.51068		
464201.31	3809998.21	0.50158	464239.31
3809998.21	0.49086		
464277.31	3809998.21	0.47850	464315.31
3809998.21	0.46452		
464353.31	3809998.21	0.45138	464391.31
3809998.21	0.43752		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 88

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018

, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464429.31	3809998.21	0.42354	464467.31
3809998.21	0.41055		
464505.31	3809998.21	0.39770	463745.31
3810027.27	0.59655		
463783.31	3810027.27	0.57973	463821.31
3810027.27	0.56741		
463859.31	3810027.27	0.55768	463897.31
3810027.27	0.54973		
463935.31	3810027.27	0.54029	463973.31
3810027.27	0.53311		
464011.31	3810027.27	0.52476	464049.31
3810027.27	0.51642		
464087.31	3810027.27	0.50767	464125.31
3810027.27	0.50055		
464163.31	3810027.27	0.49405	464201.31
3810027.27	0.48586		
464239.31	3810027.27	0.47524	464277.31
3810027.27	0.46446		
464315.31	3810027.27	0.45242	464353.31
3810027.27	0.43952		
464391.31	3810027.27	0.42621	464429.31
3810027.27	0.41346		
464467.31	3810027.27	0.40072	464505.31
3810027.27	0.38796		
463745.31	3810056.33	0.58790	463783.31
3810056.33	0.56918		
463821.31	3810056.33	0.55408	463859.31
3810056.33	0.54364		
463897.31	3810056.33	0.53453	463935.31
3810056.33	0.52515		
463973.31	3810056.33	0.51756	464011.31
3810056.33	0.50905		
464049.31	3810056.33	0.50010	464087.31
3810056.33	0.49164		
464125.31	3810056.33	0.48343	464163.31
3810056.33	0.47722		

464201.31	3810056.33	0.46976	464239.31
3810056.33	0.46089		
464277.31	3810056.33	0.45027	464315.31
3810056.33	0.43961		
464353.31	3810056.33	0.42867	464391.31
3810056.33	0.41643		
464429.31	3810056.33	0.40375	464467.31
3810056.33	0.39081		
464505.31	3810056.33	0.37886	463745.31
3810085.39	0.57948		
463783.31	3810085.39	0.55933	463821.31
3810085.39	0.54252		
463859.31	3810085.39	0.53047	463897.31
3810085.39	0.52059		
463935.31	3810085.39	0.51143	463973.31
3810085.39	0.50313		
464011.31	3810085.39	0.49392	464049.31
3810085.39	0.48403		
464087.31	3810085.39	0.47610	464125.31
3810085.39	0.46812		
464163.31	3810085.39	0.46108	464201.31
3810085.39	0.45385		
464239.31	3810085.39	0.44616	464277.31
3810085.39	0.43686		
464315.31	3810085.39	0.42692	464353.31
3810085.39	0.41655		
464391.31	3810085.39	0.40555	464429.31
3810085.39	0.39332		
464467.31	3810085.39	0.38118	464505.31
3810085.39	0.36935		
463745.31	3810114.45	0.56830	463783.31
3810114.45	0.55154		
463821.31	3810114.45	0.53296	463859.31
3810114.45	0.52066		
463897.31	3810114.45	0.50873	463935.31
3810114.45	0.49880		
463973.31	3810114.45	0.48935	464011.31
3810114.45	0.48004		
464049.31	3810114.45	0.46992	464087.31
3810114.45	0.46155		
464125.31	3810114.45	0.45301	464163.31
3810114.45	0.44529		
464201.31	3810114.45	0.43809	464239.31
3810114.45	0.43201		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464277.31	3810114.45	0.42393	464315.31
3810114.45	0.41372		
464353.31	3810114.45	0.40316	464391.31
3810114.45	0.39231		
464429.31	3810114.45	0.38207	464467.31
3810114.45	0.37038		
464505.31	3810114.45	0.36012	463745.31
3810143.51	0.55414		
463783.31	3810143.51	0.54079	463821.31
3810143.51	0.52669		
463859.31	3810143.51	0.51276	463897.31
3810143.51	0.49745		
463935.31	3810143.51	0.48589	463973.31
3810143.51	0.47519		
464011.31	3810143.51	0.46697	464049.31
3810143.51	0.45689		
464087.31	3810143.51	0.44726	464125.31
3810143.51	0.43890		
464163.31	3810143.51	0.43129	464201.31
3810143.51	0.42389		
464239.31	3810143.51	0.41722	464277.31
3810143.51	0.41110		
464315.31	3810143.51	0.40154	464353.31
3810143.51	0.39031		
464391.31	3810143.51	0.38055	464429.31
3810143.51	0.37050		
464467.31	3810143.51	0.36092	464505.31

3810143.51	0.35135		
464383.78	3807479.29	0.27760	464355.03
3807405.24	0.25752		
464402.07	3807352.10	0.22678	464367.23
3807296.35	0.21660		
464358.52	3807237.99	0.19548	464385.52
3807161.33	0.17624		
464944.35	3809244.89	0.52800	465700.32
3809255.46	0.28132		
465716.18	3808536.49	0.28593	465544.37
3808533.85	0.34168		
465420.13	3808486.27	0.38323	465348.77
3808491.56	0.41685		
465317.05	3808443.98	0.42187	465327.62
3808406.97	0.40674		
465108.23	3808369.97	0.53126	464999.86
3808301.24	0.57632		
464722.31	3807973.48	0.59161	464717.03
3807836.03	0.50852		
464344.33	3807936.47	0.79306	464349.61
3807780.52	0.79601		
464386.62	3807785.81	0.76076	464521.43
3807859.82	0.68983		
464537.28	3807719.72	0.44354	464426.27
3807613.99	0.34648		
464368.43	3807532.62	0.32004	464324.60
3807121.91	0.17224		
464123.31	3807123.54	0.20499	463930.13
3806909.26	0.14892		
463831.11	3806906.01	0.15209	463821.36
3806720.95	0.11275		
463727.21	3806727.44	0.11165	463598.97
3806334.59	0.06892		
463001.06	3806361.54	0.03666	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 90

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018

, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
462160.55	3809377.75	5.52131	(09022407)	462051.48
3809270.62	5.35024	(09022407)		
462014.47	3809029.10	6.17593	(10042219)	462010.58
3808855.75	6.17903	(10042219)		
461936.56	3808886.92	6.06317	(10042219)	461936.56
3808997.94	6.70712	(10042219)		
461909.30	3808768.10	3.90806	(10042219)	461835.28
3808894.71	5.43939	(10042219)		
461845.02	3808995.99	6.42965	(10042219)	461833.33
3809114.80	5.61172	(10042219)		
461843.07	3809210.24	4.62078	(09022407)	461809.96
3809297.89	4.59680	(09022407)		
461856.71	3809385.54	4.68918	(09022407)	461841.13
3809482.92	4.57611	(09022407)		
462004.74	3809379.69	5.17947	(09022407)	461763.22
3808793.43	3.43237	(10042219)		
461753.48	3808699.93	3.54357	(09021520)	461835.28
3808686.30	3.81642	(09021520)		
461823.60	3808579.17	6.06574	(09021520)	461761.27
3808585.02	5.70346	(09021520)		
462301.19	3807807.15	12.51860	(10021207)	462304.78
3807868.16	9.21892	(09020119)		
462216.84	3807882.52	10.20763	(09020119)	462116.34
3807886.11	10.56482	(09020119)		
462114.55	3807789.20	7.17340	(09020119)	462012.25
3807887.90	10.63588	(09020119)		
462008.66	3807975.84	11.70619	(09020119)	461917.14
3807972.25	11.06332	(09020119)		
461922.52	3808187.60	19.17488	(10021620)	461908.17
3808288.10	19.10215	(10021620)		
461848.94	3808377.83	13.18978	(10021620)	461831.00
3808494.48	8.41406	(09021520)		
462421.43	3808393.98	20.56191	(10021620)	462459.11
3808501.66	12.53173	(09021520)		
462437.58	3808580.62	9.04756	(09021520)	462654.73
3809189.00	7.66096	(09022407)		

462559.49	3809194.32	7.58573	(09022407)	465763.86
3807935.19	3.44441 (09010519)			
465819.84	3807935.19	3.36577	(09010519)	465875.82
3807935.19	3.28672 (09010519)			
465931.80	3807935.19	3.20916	(09010519)	465987.78
3807935.19	3.13212 (09010519)			
466043.76	3807935.19	3.05623	(09010519)	466099.74
3807935.19	2.98167 (09010519)			
466155.72	3807935.19	2.90857	(09010519)	466211.70
3807935.19	2.83695 (09010519)			
466267.68	3807935.19	2.76720	(09010519)	466323.66
3807935.19	2.69718 (09010519)			
466379.64	3807935.19	2.63129	(09010519)	466435.62
3807935.19	2.56713 (09010519)			
466491.60	3807935.19	2.50475	(09010519)	466547.58
3807935.19	2.43910 (09010519)			
466603.56	3807935.19	2.37934	(09010519)	466659.54
3807935.19	2.32137 (09010519)			
466715.52	3807935.19	2.26528	(09010519)	466771.50
3807935.19	2.21029 (09010519)			
466827.48	3807935.19	2.15503	(09010519)	466883.46
3807935.19	2.10315 (09010519)			
465763.86	3808001.41	3.79970	(09010519)	465819.84
3808001.41	3.69046 (09010519)			
465875.82	3808001.41	3.58329	(09010519)	465931.80
3808001.41	3.47920 (09010519)			
465987.78	3808001.41	3.38133	(09010519)	466043.76
3808001.41	3.28056 (09010519)			
466099.74	3808001.41	3.19124	(09010519)	466155.72
3808001.41	3.10017 (09010519)			
466211.70	3808001.41	3.01275	(09010519)	466267.68
3808001.41	2.92761 (09010519)			
466323.66	3808001.41	2.84488	(09010519)	466379.64
3808001.41	2.76514 (09010519)			
466435.62	3808001.41	2.68822	(09010519)	466491.60
3808001.41	2.61404 (09010519)			
466547.58	3808001.41	2.54095	(09010519)	466603.56
3808001.41	2.47269 (09010519)			
466659.54	3808001.41	2.40699	(09010519)	466715.52
3808001.41	2.33813 (09010519)			
466771.50	3808001.41	2.27709	(09010519)	466827.48
3808001.41	2.21765 (09010519)			
466883.46	3808001.41	2.15825	(09010519)	465763.86
3808067.63	4.09643 (09010519)			

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***

*** 13:53:49

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465819.84	3808067.63	3.95604	(09010519)	465875.82
3808067.63	3.82286	(09010519)		
465931.80	3808067.63	3.69526	(09010519)	465987.78
3808067.63	3.57326	(09010519)		
466043.76	3808067.63	3.45652	(09010519)	466099.74
3808067.63	3.34482	(09010519)		
466155.72	3808067.63	3.23821	(09010519)	466211.70
3808067.63	3.13558	(09010519)		
466267.68	3808067.63	3.03752	(09010519)	466323.66
3808067.63	2.94274	(09010519)		
466379.64	3808067.63	2.85200	(09010519)	466435.62
3808067.63	2.76863	(09010519)		
466491.60	3808067.63	2.68188	(09010519)	466547.58
3808067.63	2.60205	(09010519)		
466603.56	3808067.63	2.52561	(09010519)	466659.54
3808067.63	2.45245	(09010519)		
466715.52	3808067.63	2.38302	(09010519)	466771.50
3808067.63	2.31630	(09010519)		
466827.48	3808067.63	2.24983	(09010519)	466883.46
3808067.63	2.18484	(09010519)		
465763.86	3808133.85	4.30781	(09010519)	465819.84
3808133.85	4.14122	(09010519)		
465875.82	3808133.85	3.98438	(09010519)	465931.80
3808133.85	3.83585	(09010519)		
465987.78	3808133.85	3.70101	(09010519)	466043.76
3808133.85	3.56667	(09010519)		
466099.74	3808133.85	3.43934	(09010519)	466155.72

3808133.85	3.31837	(09010519)		
466211.70	3808133.85	3.20347	(09010519)	466267.68
3808133.85	3.09463	(09010519)		
466323.66	3808133.85	2.99138	(09010519)	466379.64
3808133.85	2.89385	(09010519)		
466435.62	3808133.85	2.80046	(09010519)	466491.60
3808133.85	2.71153	(09010519)		
466547.58	3808133.85	2.62520	(09010519)	466603.56
3808133.85	2.54402	(09010519)		
466659.54	3808133.85	2.46777	(10032206)	466715.52
3808133.85	2.40326	(10032206)		
466771.50	3808133.85	2.33775	(10032206)	466827.48
3808133.85	2.27890	(10032206)		
466883.46	3808133.85	2.22145	(10032206)	465763.86
3808200.07	4.41561	(09010519)		
465819.84	3808200.07	4.22962	(09010519)	465875.82
3808200.07	4.05523	(09010519)		
465931.80	3808200.07	3.89752	(09010519)	465987.78
3808200.07	3.74308	(09010519)		
466043.76	3808200.07	3.61354	(10032206)	466099.74
3808200.07	3.49214	(10032206)		
466155.72	3808200.07	3.37691	(10032206)	466211.70
3808200.07	3.26745	(10032206)		
466267.68	3808200.07	3.16347	(10032206)	466323.66
3808200.07	3.06924	(10032206)		
466379.64	3808200.07	2.97488	(10032206)	466435.62
3808200.07	2.88488	(10032206)		
466491.60	3808200.07	2.79904	(10032206)	466547.58
3808200.07	2.71712	(10032206)		
466603.56	3808200.07	2.63888	(10032206)	466659.54
3808200.07	2.56410	(10032206)		
466715.52	3808200.07	2.49273	(10032206)	466771.50
3808200.07	2.42331	(10032206)		
466827.48	3808200.07	2.35557	(10032206)	466883.46
3808200.07	2.29285	(10032206)		
465763.86	3808266.29	4.56685	(10032206)	465819.84
3808266.29	4.39059	(10032206)		
465875.82	3808266.29	4.22183	(10032206)	465931.80
3808266.29	4.05918	(10032206)		
465987.78	3808266.29	3.90628	(10032206)	466043.76
3808266.29	3.76235	(10032206)		
466099.74	3808266.29	3.62669	(10032206)	466155.72
3808266.29	3.49868	(10032206)		
466211.70	3808266.29	3.37814	(10032206)	466267.68
3808266.29	3.26659	(10032206)		
466323.66	3808266.29	3.15812	(10032206)	466379.64
3808266.29	3.05931	(10032206)		
466435.62	3808266.29	2.96220	(10032206)	466491.60
3808266.29	2.86723	(10032206)		
466547.58	3808266.29	2.77828	(10032206)	466603.56

3808266.29 2.69363 (10032206)
 466659.54 3808266.29 2.61562 (10032206) 466715.52
 3808266.29 2.53720 (10032206)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 92

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466771.50	3808266.29	2.46486	(10032206)	466827.48
3808266.29	2.39382 (10032206)			
466883.46	3808266.29	2.32718	(10032206)	465763.86
3808332.51	4.67753 (10032206)			
465819.84	3808332.51	4.49108	(10032206)	465875.82
3808332.51	4.30450 (10032206)			
465931.80	3808332.51	4.13021	(10032206)	465987.78
3808332.51	3.96712 (10032206)			
466043.76	3808332.51	3.81413	(10032206)	466099.74
3808332.51	3.67062 (10032206)			
466155.72	3808332.51	3.53758	(10032206)	466211.70
3808332.51	3.41045 (10032206)			
466267.68	3808332.51	3.29006	(10032206)	466323.66
3808332.51	3.18367 (10032206)			
466379.64	3808332.51	3.07568	(10032206)	466435.62
3808332.51	2.97331 (10032206)			
466491.60	3808332.51	2.87633	(10032206)	466547.58
3808332.51	2.78426 (10032206)			

466603.56	3808332.51	2.70314	(10032206)	466659.54
3808332.51	2.62070 (10032206)			
466715.52	3808332.51	2.54137	(10032206)	466771.50
3808332.51	2.46126 (10032206)			
466827.48	3808332.51	2.39019	(10032206)	466883.46
3808332.51	2.32211 (10032206)			
465763.86	3808398.73	4.63774	(10032206)	465819.84
3808398.73	4.44699 (10032206)			
465875.82	3808398.73	4.25779	(10032206)	465931.80
3808398.73	4.08231 (10032206)			
465987.78	3808398.73	3.91766	(10032206)	466043.76
3808398.73	3.76353 (10032206)			
466099.74	3808398.73	3.62337	(10032206)	466155.72
3808398.73	3.48639 (10032206)			
466211.70	3808398.73	3.35777	(10032206)	466267.68
3808398.73	3.24600 (10032206)			
466323.66	3808398.73	3.13143	(10032206)	466379.64
3808398.73	3.02387 (10032206)			
466435.62	3808398.73	2.92546	(10032206)	466491.60
3808398.73	2.82965 (10032206)			
466547.58	3808398.73	2.73878	(10032206)	466603.56
3808398.73	2.65323 (10032206)			
466659.54	3808398.73	2.57135	(10032206)	466715.52
3808398.73	2.49209 (10032206)			
466771.50	3808398.73	2.41772	(10032206)	466827.48
3808398.73	2.34605 (10032206)			
466883.46	3808398.73	2.27815	(10032206)	465763.86
3808464.95	4.45117 (10032206)			
465819.84	3808464.95	4.26602	(10032206)	465875.82
3808464.95	4.08394 (10032206)			
465931.80	3808464.95	3.91691	(10032206)	465987.78
3808464.95	3.76182 (10032206)			
466043.76	3808464.95	3.62010	(10032206)	466099.74
3808464.95	3.48084 (10032206)			
466155.72	3808464.95	3.35017	(10032206)	466211.70
3808464.95	3.22757 (10032206)			
466267.68	3808464.95	3.11897	(10032206)	466323.66
3808464.95	3.00971 (10032206)			
466379.64	3808464.95	2.91056	(10032206)	466435.62
3808464.95	2.81346 (10032206)			
466491.60	3808464.95	2.72538	(10032206)	466547.58
3808464.95	2.63758 (10032206)			
466603.56	3808464.95	2.55438	(10032206)	466659.54
3808464.95	2.47546 (10032206)			
466715.52	3808464.95	2.40073	(10032206)	466771.50
3808464.95	2.32968 (10032206)			
466827.48	3808464.95	2.26194	(10032206)	466883.46
3808464.95	2.19743 (10032206)			
465763.86	3808531.17	4.42041	(09031319)	465819.84
3808531.17	4.19723 (09031319)			

465875.82	3808531.17	3.99052	(09031319)	465931.80
3808531.17	3.79857	(09031319)		
465987.78	3808531.17	3.62669	(09031319)	466043.76
3808531.17	3.46304	(09031319)		
466099.74	3808531.17	3.31069	(09031319)	466155.72
3808531.17	3.16517	(09031319)		
466211.70	3808531.17	3.02939	(09031319)	466267.68
3808531.17	2.92761	(10032206)		
466323.66	3808531.17	2.83159	(10032206)	466379.64
3808531.17	2.73813	(10032206)		
466435.62	3808531.17	2.65304	(10032206)	466491.60
3808531.17	2.56813	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 93

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466547.58	3808531.17	2.48765	(10032206)	466603.56
3808531.17	2.41122	(10032206)		
466659.54	3808531.17	2.33847	(10032206)	466715.52
3808531.17	2.26981	(10032206)		
466771.50	3808531.17	2.20344	(10032206)	466827.48
3808531.17	2.14193	(10032206)		
466883.46	3808531.17	2.08239	(10032206)	465763.86
3808597.39	4.84265	(09031319)		
465819.84	3808597.39	4.61774	(09031319)	465875.82

3808597.39	4.39585 (09031319)		
465931.80	3808597.39	4.18117 (09031319)	465987.78
3808597.39	3.99633 (09031319)		
466043.76	3808597.39	3.82532 (09031319)	466099.74
3808597.39	3.65757 (09031319)		
466155.72	3808597.39	3.50194 (09031319)	466211.70
3808597.39	3.35640 (09031319)		
466267.68	3808597.39	3.21716 (09031319)	466323.66
3808597.39	3.09240 (09031319)		
466379.64	3808597.39	2.97336 (09031319)	466435.62
3808597.39	2.85693 (09031319)		
466491.60	3808597.39	2.74943 (09031319)	466547.58
3808597.39	2.64649 (09031319)		
466603.56	3808597.39	2.54763 (09031319)	466659.54
3808597.39	2.45404 (09031319)		
466715.52	3808597.39	2.36580 (09031319)	466771.50
3808597.39	2.28203 (09031319)		
466827.48	3808597.39	2.20250 (09031319)	466883.46
3808597.39	2.12907 (09031319)		
465763.86	3808663.61	5.05406 (09031319)	465819.84
3808663.61	4.84033 (09031319)		
465875.82	3808663.61	4.62555 (09031319)	465931.80
3808663.61	4.42400 (09031319)		
465987.78	3808663.61	4.23516 (09031319)	466043.76
3808663.61	4.05671 (09031319)		
466099.74	3808663.61	3.89268 (09031319)	466155.72
3808663.61	3.73328 (09031319)		
466211.70	3808663.61	3.58217 (09031319)	466267.68
3808663.61	3.44026 (09031319)		
466323.66	3808663.61	3.31518 (09031319)	466379.64
3808663.61	3.18793 (09031319)		
466435.62	3808663.61	3.07601 (09031319)	466491.60
3808663.61	2.96133 (09031319)		
466547.58	3808663.61	2.85224 (09031319)	466603.56
3808663.61	2.74884 (09031319)		
466659.54	3808663.61	2.65067 (09031319)	466715.52
3808663.61	2.55820 (09031319)		
466771.50	3808663.61	2.47024 (09031319)	466827.48
3808663.61	2.39052 (09031319)		
466883.46	3808663.61	2.31011 (09031319)	465763.86
3808729.83	5.04435 (09031319)		
465819.84	3808729.83	4.86122 (09031319)	465875.82
3808729.83	4.66908 (09031319)		
465931.80	3808729.83	4.48249 (09031319)	465987.78
3808729.83	4.30608 (09031319)		
466043.76	3808729.83	4.13973 (09031319)	466099.74
3808729.83	3.98178 (09031319)		
466155.72	3808729.83	3.83192 (09031319)	466211.70
3808729.83	3.68876 (09031319)		
466267.68	3808729.83	3.55360 (09031319)	466323.66

3808729.83	3.43408	(09031319)		
466379.64	3808729.83	3.31492	(09031319)	466435.62
3808729.83	3.19826	(09031319)		
466491.60	3808729.83	3.09127	(09031319)	466547.58
3808729.83	2.98411	(09031319)		
466603.56	3808729.83	2.88202	(09031319)	466659.54
3808729.83	2.79222	(09031319)		
466715.52	3808729.83	2.69886	(09031319)	466771.50
3808729.83	2.61037	(09031319)		
466827.48	3808729.83	2.52784	(09031319)	466883.46
3808729.83	2.44707	(09031319)		
465763.86	3808796.05	5.39895	(09010419)	465819.84
3808796.05	5.16129	(09010419)		
465875.82	3808796.05	4.88759	(09010419)	465931.80
3808796.05	4.64106	(09010419)		
465987.78	3808796.05	4.40562	(09010419)	466043.76
3808796.05	4.18465	(09010419)		
466099.74	3808796.05	3.97597	(09010419)	466155.72
3808796.05	3.79797	(09031319)		
466211.70	3808796.05	3.67378	(09031319)	466267.68
3808796.05	3.55404	(09031319)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 94

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -
 - - - - -

466323.66	3808796.05	3.44166	(09031319)	466379.64
3808796.05	3.33270 (09031319)			
466435.62	3808796.05	3.23193	(09031319)	466491.60
3808796.05	3.12901 (09031319)			
466547.58	3808796.05	3.03104	(09031319)	466603.56
3808796.05	2.94130 (09031319)			
466659.54	3808796.05	2.85027	(09031319)	466715.52
3808796.05	2.76483 (09031319)			
466771.50	3808796.05	2.68154	(09031319)	466827.48
3808796.05	2.60065 (09031319)			
466883.46	3808796.05	2.52664	(09031319)	465763.86
3808862.27	5.46478 (09010419)			
465819.84	3808862.27	5.26108	(09010419)	465875.82
3808862.27	5.05449 (09010419)			
465931.80	3808862.27	4.83589	(09010419)	465987.78
3808862.27	4.62433 (09010419)			
466043.76	3808862.27	4.42081	(09010419)	466099.74
3808862.27	4.23114 (09010419)			
466155.72	3808862.27	4.03862	(09010419)	466211.70
3808862.27	3.85997 (09010419)			
466267.68	3808862.27	3.69571	(09010419)	466323.66
3808862.27	3.53288 (09010419)			
466379.64	3808862.27	3.38061	(09010419)	466435.62
3808862.27	3.23420 (09010419)			
466491.60	3808862.27	3.09484	(09010419)	466547.58
3808862.27	2.99155 (09031319)			
466603.56	3808862.27	2.90886	(09031319)	466659.54
3808862.27	2.83344 (09031319)			
466715.52	3808862.27	2.75550	(09031319)	466771.50
3808862.27	2.68118 (09031319)			
466827.48	3808862.27	2.61069	(09031319)	466883.46
3808862.27	2.54168 (09031319)			
465763.86	3808928.49	5.28342	(09120320)	465819.84
3808928.49	5.09032 (09010419)			
465875.82	3808928.49	4.95159	(09010419)	465931.80
3808928.49	4.79986 (09010419)			
465987.78	3808928.49	4.64309	(09010419)	466043.76
3808928.49	4.48838 (09010419)			
466099.74	3808928.49	4.31607	(09010419)	466155.72
3808928.49	4.15505 (09010419)			
466211.70	3808928.49	3.99841	(09010419)	466267.68
3808928.49	3.84507 (09010419)			
466323.66	3808928.49	3.69592	(09010419)	466379.64
3808928.49	3.55182 (09010419)			
466435.62	3808928.49	3.41834	(09010419)	466491.60
3808928.49	3.28786 (09010419)			
466547.58	3808928.49	3.15989	(09010419)	466603.56
3808928.49	3.04205 (09010419)			
466659.54	3808928.49	2.92242	(09010419)	466715.52
3808928.49	2.81001 (09010419)			

466771.50	3808928.49	2.69976	(09010419)	466827.48
3808928.49	2.59764	(09010419)		
466883.46	3808928.49	2.49644	(09010419)	465763.86
3808994.71	5.24768	(09120320)		
465819.84	3808994.71	5.05733	(09120320)	465875.82
3808994.71	4.88274	(09120320)		
465931.80	3808994.71	4.71904	(09120320)	465987.78
3808994.71	4.55641	(09120320)		
466043.76	3808994.71	4.36938	(09120320)	466099.74
3808994.71	4.23273	(09010419)		
466155.72	3808994.71	4.10299	(09010419)	466211.70
3808994.71	3.97938	(09010419)		
466267.68	3808994.71	3.85523	(09010419)	466323.66
3808994.71	3.73232	(09010419)		
466379.64	3808994.71	3.61088	(09010419)	466435.62
3808994.71	3.49156	(09010419)		
466491.60	3808994.71	3.37879	(09010419)	466547.58
3808994.71	3.27095	(09010419)		
466603.56	3808994.71	3.16006	(09010419)	466659.54
3808994.71	3.05010	(09010419)		
466715.52	3808994.71	2.95163	(09010419)	466771.50
3808994.71	2.84706	(09010419)		
466827.48	3808994.71	2.74596	(09010419)	466883.46
3808994.71	2.65253	(09010419)		
465763.86	3809060.93	4.99276	(09120320)	465819.84
3809060.93	4.87105	(09120320)		
465875.82	3809060.93	4.75359	(09120320)	465931.80
3809060.93	4.63116	(09120320)		
465987.78	3809060.93	4.50246	(09120320)	466043.76
3809060.93	4.36807	(09120320)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 95

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	4.21034	(09120320)	466155.72
3809060.93	4.06276	(09120320)		
466211.70	3809060.93	3.91162	(09120320)	466267.68
3809060.93	3.76521	(09120320)		
466323.66	3809060.93	3.63477	(09010419)	466379.64
3809060.93	3.54254	(09010419)		
466435.62	3809060.93	3.45567	(09010419)	466491.60
3809060.93	3.36617	(09010419)		
466547.58	3809060.93	3.27201	(09010419)	466603.56
3809060.93	3.18117	(09010419)		
466659.54	3809060.93	3.09559	(09010419)	466715.52
3809060.93	3.00268	(09010419)		
466771.50	3809060.93	2.91214	(09010419)	466827.48
3809060.93	2.82512	(09010419)		
466883.46	3809060.93	2.74087	(09010419)	465763.86
3809127.15	5.05906	(10021420)		
465819.84	3809127.15	4.77031	(10021420)	465875.82
3809127.15	4.49133	(10021420)		
465931.80	3809127.15	4.38504	(09120320)	465987.78
3809127.15	4.30132	(09120320)		
466043.76	3809127.15	4.19260	(09120320)	466099.74
3809127.15	4.07935	(09120320)		
466155.72	3809127.15	3.96966	(09120320)	466211.70
3809127.15	3.87572	(09120320)		
466267.68	3809127.15	3.76805	(09120320)	466323.66
3809127.15	3.65395	(09120320)		
466379.64	3809127.15	3.53462	(09120320)	466435.62
3809127.15	3.41902	(09120320)		
466491.60	3809127.15	3.30399	(09120320)	466547.58
3809127.15	3.19085	(09120320)		
466603.56	3809127.15	3.11197	(09010419)	466659.54
3809127.15	3.03978	(09010419)		
466715.52	3809127.15	2.96948	(09010419)	466771.50
3809127.15	2.89781	(09010419)		
466827.48	3809127.15	2.82456	(09010419)	466883.46
3809127.15	2.75542	(09010419)		
465763.86	3809193.37	5.17931	(10021420)	465819.84
3809193.37	4.96364	(10021420)		
465875.82	3809193.37	4.72915	(10021420)	465931.80
3809193.37	4.48681	(10021420)		
465987.78	3809193.37	4.22996	(10021420)	466043.76

3809193.37	3.95726	(10021420)		
466099.74	3809193.37	3.82189	(09120320)	466155.72
3809193.37	3.75938	(09120320)		
466211.70	3809193.37	3.70132	(09120320)	466267.68
3809193.37	3.63630	(09120320)		
466323.66	3809193.37	3.56113	(09120320)	466379.64
3809193.37	3.47984	(09120320)		
466435.62	3809193.37	3.38980	(09120320)	466491.60
3809193.37	3.30000	(09120320)		
466547.58	3809193.37	3.20871	(09120320)	466603.56
3809193.37	3.11937	(09120320)		
466659.54	3809193.37	3.02389	(09120320)	466715.52
3809193.37	2.93283	(09120320)		
466771.50	3809193.37	2.83811	(09120320)	466827.48
3809193.37	2.75276	(09010419)		
466883.46	3809193.37	2.69779	(09010419)	465763.86
3809259.59	5.07226	(10021420)		
465819.84	3809259.59	4.92827	(10021420)	465875.82
3809259.59	4.75667	(10021420)		
465931.80	3809259.59	4.57296	(10021420)	465987.78
3809259.59	4.36138	(10021420)		
466043.76	3809259.59	4.14665	(10021420)	466099.74
3809259.59	3.93799	(10021420)		
466155.72	3809259.59	3.75272	(10021420)	466211.70
3809259.59	3.56783	(10021420)		
466267.68	3809259.59	3.40832	(09120320)	466323.66
3809259.59	3.36180	(09120320)		
466379.64	3809259.59	3.31339	(09120320)	466435.62
3809259.59	3.25999	(09120320)		
466491.60	3809259.59	3.19742	(09120320)	466547.58
3809259.59	3.13663	(09120320)		
466603.56	3809259.59	3.06741	(09120320)	466659.54
3809259.59	2.99587	(09120320)		
466715.52	3809259.59	2.92745	(09120320)	466771.50
3809259.59	2.85064	(09120320)		
466827.48	3809259.59	2.77550	(09120320)	466883.46
3809259.59	2.69878	(09120320)		
464503.41	3807141.91	21.05445	(10112518)	464523.41

3807141.91 21.32919 (10112518)
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 96

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002

```

, L0000003      , L0000004      , L0000005      ,
                  L0000006      , L0000007      , L0000008      , L0000009      , L0000010
, L0000011      , L0000012      , L0000013      ,
                  L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
                  L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464543.41	3807141.91	21.52521	(10112518)	464563.41
3807141.91	21.56378	(10112518)		
464583.41	3807141.91	21.22932	(10112518)	464603.41
3807141.91	20.81820	(10112518)		
464623.41	3807141.91	20.26587	(10112518)	464643.41
3807141.91	19.43225	(10112518)		
464663.41	3807141.91	19.45014	(09011918)	464683.41
3807141.91	19.85930	(09011918)		
464703.41	3807141.91	19.93800	(09011918)	464723.41
3807141.91	20.03413	(09011918)		
464743.41	3807141.91	20.06407	(09011918)	464763.41
3807141.91	19.87491	(09011918)		
464783.41	3807141.91	19.57804	(09011918)	464803.41
3807141.91	19.11233	(09011918)		
464823.41	3807141.91	18.27972	(09011918)	464843.41
3807141.91	17.52737	(09011918)		
464863.41	3807141.91	16.75587	(09011918)	464883.41
3807141.91	15.84739	(09011918)		
464903.41	3807141.91	14.77259	(09011918)	464923.41
3807141.91	13.66333	(09011918)		
464503.41	3807161.91	21.59887	(10112518)	464523.41
3807161.91	21.79687	(10112518)		
464543.41	3807161.91	21.90809	(10112518)	464563.41
3807161.91	21.85490	(10112518)		
464583.41	3807161.91	21.42913	(10112518)	464603.41
3807161.91	20.81587	(10112518)		
464623.41	3807161.91	20.06335	(10112518)	464643.41
3807161.91	19.57434	(09011918)		
464663.41	3807161.91	19.95228	(09011918)	464683.41
3807161.91	20.11546	(09011918)		
464703.41	3807161.91	20.32708	(09011918)	464723.41
3807161.91	20.41425	(09011918)		

464743.41	3807161.91	20.30049	(09011918)	464763.41
3807161.91	19.74344	(09011918)		
464783.41	3807161.91	19.27727	(09011918)	464803.41
3807161.91	18.76900	(09011918)		
464823.41	3807161.91	18.09174	(09011918)	464843.41
3807161.91	17.33267	(09011918)		
464863.41	3807161.91	16.44336	(09011918)	464883.41
3807161.91	15.28722	(09011918)		
464903.41	3807161.91	14.24391	(09011918)	464923.41
3807161.91	13.21103	(09011918)		
464503.41	3807181.91	22.00833	(10112518)	464523.41
3807181.91	22.20134	(10112518)		
464543.41	3807181.91	22.18504	(10112518)	464563.41
3807181.91	21.96304	(10112518)		
464583.41	3807181.91	21.54593	(10112518)	464603.41
3807181.91	20.85684	(10112518)		
464623.41	3807181.91	19.98937	(10112518)	464643.41
3807181.91	20.25133	(09011918)		
464663.41	3807181.91	20.53142	(09011918)	464683.41
3807181.91	20.56769	(09011918)		
464703.41	3807181.91	20.73782	(09011918)	464723.41
3807181.91	20.60353	(09011918)		
464743.41	3807181.91	20.24224	(09011918)	464763.41
3807181.91	19.73496	(09011918)		
464783.41	3807181.91	19.22077	(09011918)	464803.41
3807181.91	18.59551	(09011918)		
464823.41	3807181.91	17.69230	(09011918)	464843.41
3807181.91	16.82471	(09011918)		
464863.41	3807181.91	15.90982	(09011918)	464883.41
3807181.91	14.82282	(09011918)		
464903.41	3807181.91	13.71172	(09011918)	464923.41
3807181.91	12.60668	(09011918)		
464503.41	3807201.91	22.38929	(10112518)	464523.41
3807201.91	22.57794	(10112518)		
464543.41	3807201.91	22.43172	(10112518)	464563.41
3807201.91	22.02961	(10112518)		
464583.41	3807201.91	21.57462	(10112518)	464603.41
3807201.91	20.83398	(10112518)		
464623.41	3807201.91	20.33487	(09011918)	464643.41
3807201.91	20.84308	(09011918)		
464663.41	3807201.91	21.04689	(09011918)	464683.41
3807201.91	21.03297	(09011918)		
464703.41	3807201.91	21.02852	(09011918)	464723.41
3807201.91	20.68338	(09011918)		
464743.41	3807201.91	20.14751	(09011918)	464763.41
3807201.91	19.74204	(09011918)		
464783.41	3807201.91	19.13456	(09011918)	464803.41
3807201.91	18.33654	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
*** 13:53:49

PAGE 97

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3807201.91	17.25639	(09011918)	464843.41
3807201.91	16.25297	(09011918)		
464863.41	3807201.91	15.27436	(09011918)	464883.41
3807201.91	14.29369	(09011918)		
464903.41	3807201.91	13.15367	(09011918)	464923.41
3807201.91	12.00397	(09011918)		
464503.41	3807221.91	22.85174	(10112518)	464523.41
3807221.91	22.94610	(10112518)		
464543.41	3807221.91	22.70276	(10112518)	464563.41
3807221.91	22.17437	(10112518)		
464583.41	3807221.91	21.45571	(10112518)	464603.41
3807221.91	20.67237	(10112518)		
464623.41	3807221.91	21.00716	(09011918)	464643.41
3807221.91	21.19969	(09011918)		
464663.41	3807221.91	21.37315	(09011918)	464683.41
3807221.91	21.41495	(09011918)		
464703.41	3807221.91	21.02418	(09011918)	464723.41
3807221.91	20.66428	(09011918)		
464743.41	3807221.91	20.26163	(09011918)	464763.41
3807221.91	19.74824	(09011918)		
464783.41	3807221.91	18.86348	(09011918)	464803.41
3807221.91	17.81458	(09011918)		
464823.41	3807221.91	16.91575	(09011918)	464843.41

3807221.91	15.77379	(09011918)	
464863.41	3807221.91	14.58255	(09011918) 464883.41
3807221.91	13.59920	(09011918)	
464903.41	3807221.91	12.56208	(09011918) 464923.41
3807221.91	11.49790	(09011918)	
464503.41	3807241.91	23.26358	(10112518) 464523.41
3807241.91	23.15879	(10112518)	
464543.41	3807241.91	22.84104	(10112518) 464563.41
3807241.91	22.29659	(10112518)	
464583.41	3807241.91	21.44466	(10112518) 464603.41
3807241.91	21.16779	(09011918)	
464623.41	3807241.91	21.67869	(09011918) 464643.41
3807241.91	21.72582	(09011918)	
464663.41	3807241.91	21.67079	(09011918) 464683.41
3807241.91	21.49397	(09011918)	
464703.41	3807241.91	21.14760	(09011918) 464723.41
3807241.91	20.77784	(09011918)	
464743.41	3807241.91	20.27290	(09011918) 464763.41
3807241.91	19.44100	(09011918)	
464783.41	3807241.91	18.50365	(09011918) 464803.41
3807241.91	17.47912	(09011918)	
464823.41	3807241.91	16.36992	(09011918) 464843.41
3807241.91	15.23203	(09011918)	
464863.41	3807241.91	14.10790	(09011918) 464883.41
3807241.91	13.08907	(09011918)	
464903.41	3807241.91	11.96993	(09011918) 464923.41
3807241.91	10.87026	(09011918)	
464503.41	3807261.91	23.64110	(10112518) 464523.41
3807261.91	23.33481	(10112518)	
464543.41	3807261.91	22.94162	(10112518) 464563.41
3807261.91	22.37182	(10112518)	
464583.41	3807261.91	21.41931	(10112518) 464603.41
3807261.91	21.85484	(09011918)	
464623.41	3807261.91	22.22919	(09011918) 464643.41
3807261.91	22.23893	(09011918)	
464663.41	3807261.91	21.96879	(09011918) 464683.41
3807261.91	21.53233	(09011918)	
464703.41	3807261.91	21.28887	(09011918) 464723.41
3807261.91	20.81407	(09011918)	
464743.41	3807261.91	20.11204	(09011918) 464763.41
3807261.91	19.06868	(09011918)	
464783.41	3807261.91	18.08697	(09011918) 464803.41
3807261.91	17.06243	(09011918)	
464823.41	3807261.91	15.79952	(09011918) 464843.41
3807261.91	14.65292	(09011918)	
464863.41	3807261.91	13.55941	(09011918) 464883.41
3807261.91	12.52260	(09011918)	
464903.41	3807261.91	11.35123	(09011918) 464923.41
3807261.91	10.13463	(09011918)	
464503.41	3807281.91	23.99147	(10112518) 464523.41

```

3807281.91      23.58260 (10112518)
      464543.41  3807281.91      23.07818 (10112518)      464563.41
3807281.91      22.39375 (10112518)
      464583.41  3807281.91      22.13257 (09011918)      464603.41
3807281.91      22.40098 (09011918)
      464623.41  3807281.91      22.50655 (09011918)      464643.41
3807281.91      22.63758 (09011918)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      04/06/22
*** AERMET - VERSION 14134 *** ***
***      13:53:49

```

PAGE 98

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0000001      , L0000002
, L0000003      , L0000004      , L0000005      ,
      L0000006      , L0000007      , L0000008      , L0000009      , L0000010
, L0000011      , L0000012      , L0000013      ,
      L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
      L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464663.41	3807281.91	22.34133	(09011918)	464683.41
3807281.91	21.79281	(09011918)		
464703.41	3807281.91	21.43170	(09011918)	464723.41
3807281.91	20.64615	(09011918)		
464743.41	3807281.91	19.65049	(09011918)	464763.41
3807281.91	18.80147	(09011918)		
464783.41	3807281.91	17.64635	(09011918)	464803.41
3807281.91	16.39131	(09011918)		
464823.41	3807281.91	15.33424	(09011918)	464843.41
3807281.91	14.05554	(09011918)		
464863.41	3807281.91	12.80795	(09011918)	464883.41
3807281.91	11.79979	(09011918)		
464903.41	3807281.91	10.53986	(09011918)	464923.41
3807281.91	9.43452	(09011918)		

464503.41	3807301.91	24.17033	(10112518)	464523.41
3807301.91	23.74532	(10112518)		
464543.41	3807301.91	23.08783	(10112518)	464563.41
3807301.91	22.32613	(09011918)		
464583.41	3807301.91	22.82956	(09011918)	464603.41
3807301.91	23.01923	(09011918)		
464623.41	3807301.91	22.97852	(09011918)	464643.41
3807301.91	23.04788	(09011918)		
464663.41	3807301.91	22.65154	(09011918)	464683.41
3807301.91	21.98713	(09011918)		
464703.41	3807301.91	21.50357	(09011918)	464723.41
3807301.91	20.56877	(09011918)		
464743.41	3807301.91	19.39541	(09011918)	464763.41
3807301.91	18.29076	(09011918)		
464783.41	3807301.91	17.12532	(09011918)	464803.41
3807301.91	15.95003	(09011918)		
464823.41	3807301.91	14.88391	(09011918)	464843.41
3807301.91	13.57338	(09011918)		
464863.41	3807301.91	12.21671	(09011918)	464883.41
3807301.91	10.98644	(09011918)		
464903.41	3807301.91	9.91582	(09011918)	464923.41
3807301.91	8.94304	(09011918)		
464503.41	3807321.91	24.30858	(10112518)	464523.41
3807321.91	23.86441	(10112518)		
464543.41	3807321.91	23.05473	(10112518)	464563.41
3807321.91	22.95322	(09011918)		
464583.41	3807321.91	23.49345	(09011918)	464603.41
3807321.91	23.62072	(09011918)		
464623.41	3807321.91	23.46517	(09011918)	464643.41
3807321.91	23.41271	(09011918)		
464663.41	3807321.91	22.89347	(09011918)	464683.41
3807321.91	22.09696	(09011918)		
464703.41	3807321.91	21.40723	(09011918)	464723.41
3807321.91	20.38828	(09011918)		
464743.41	3807321.91	19.16119	(09011918)	464763.41
3807321.91	17.76946	(09011918)		
464783.41	3807321.91	16.60865	(09011918)	464803.41
3807321.91	15.52127	(09011918)		
464823.41	3807321.91	14.33659	(09011918)	464843.41
3807321.91	13.00186	(09011918)		
464863.41	3807321.91	11.54714	(09011918)	464883.41
3807321.91	10.34829	(09011918)		
464903.41	3807321.91	9.36685	(09011918)	464923.41
3807321.91	8.49485	(09011918)		
464503.41	3807341.91	24.52823	(10112518)	464523.41
3807341.91	23.95982	(10112518)		
464543.41	3807341.91	23.32172	(09011918)	464563.41
3807341.91	23.72033	(09011918)		
464583.41	3807341.91	24.15667	(09011918)	464603.41
3807341.91	24.16797	(09011918)		

464623.41	3807341.91	23.89052	(09011918)	464643.41
3807341.91	23.70812	(09011918)		
464663.41	3807341.91	23.06131	(09011918)	464683.41
3807341.91	22.09303	(09011918)		
464703.41	3807341.91	20.99340	(09011918)	464723.41
3807341.91	19.97504	(09011918)		
464743.41	3807341.91	18.88706	(09011918)	464763.41
3807341.91	17.43283	(09011918)		
464783.41	3807341.91	16.20412	(09011918)	464803.41
3807341.91	15.00972	(09011918)		
464823.41	3807341.91	13.58863	(09011918)	464843.41
3807341.91	12.07690	(09011918)		
464863.41	3807341.91	10.81180	(09011918)	464883.41
3807341.91	9.83079	(09011918)		
464903.41	3807341.91	8.91196	(09011918)	464923.41
3807341.91	7.99732	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 99

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -				
464503.41	3807361.91	24.67671	(10112518)	464523.41
3807361.91	23.87940	(10112518)		
464543.41	3807361.91	24.03360	(09011918)	464563.41
3807361.91	24.44486	(09011918)		
464583.41	3807361.91	24.76672	(09011918)	464603.41

3807361.91	24.65381	(09011918)	
464623.41	3807361.91	24.21319	(09011918) 464643.41
3807361.91	23.69165	(09011918)	
464663.41	3807361.91	22.97768	(09011918) 464683.41
3807361.91	22.05549	(09011918)	
464703.41	3807361.91	20.78878	(09011918) 464723.41
3807361.91	19.53360	(09011918)	
464743.41	3807361.91	18.26979	(09011918) 464763.41
3807361.91	16.96255	(09011918)	
464783.41	3807361.91	15.59915	(09011918) 464803.41
3807361.91	14.23736	(09011918)	
464823.41	3807361.91	12.64118	(09011918) 464843.41
3807361.91	11.38652	(09011918)	
464863.41	3807361.91	10.28573	(09011918) 464883.41
3807361.91	9.34858	(09011918)	
464903.41	3807361.91	8.23968	(09011918) 464923.41
3807361.91	7.33819	(09011918)	
464503.41	3807381.91	24.72005	(10112518) 464523.41
3807381.91	24.17027	(09011918)	
464543.41	3807381.91	24.70682	(09011918) 464563.41
3807381.91	25.11003	(09011918)	
464583.41	3807381.91	25.24554	(09011918) 464603.41
3807381.91	25.01441	(09011918)	
464623.41	3807381.91	24.46781	(09011918) 464643.41
3807381.91	23.61272	(09011918)	
464663.41	3807381.91	22.77569	(09011918) 464683.41
3807381.91	21.83327	(09011918)	
464703.41	3807381.91	20.54606	(09011918) 464723.41
3807381.91	19.09379	(09011918)	
464743.41	3807381.91	17.61378	(09011918) 464763.41
3807381.91	16.36716	(09011918)	
464783.41	3807381.91	14.94398	(09011918) 464803.41
3807381.91	13.45363	(09011918)	
464823.41	3807381.91	11.90599	(09011918) 464843.41
3807381.91	10.78354	(09011918)	
464863.41	3807381.91	9.80460	(09011918) 464883.41
3807381.91	8.78106	(09011918)	
464903.41	3807381.91	7.70022	(09011918) 464923.41
3807381.91	6.52385	(09011918)	
464503.41	3807401.91	24.58984	(10112518) 464523.41
3807401.91	24.95478	(09011918)	
464543.41	3807401.91	25.44651	(09011918) 464563.41
3807401.91	25.68943	(09011918)	
464583.41	3807401.91	25.46058	(09011918) 464603.41
3807401.91	25.16012	(09011918)	
464623.41	3807401.91	24.67042	(09011918) 464643.41
3807401.91	23.68189	(09011918)	
464663.41	3807401.91	22.52320	(09011918) 464683.41
3807401.91	21.27901	(09011918)	
464703.41	3807401.91	20.15983	(09011918) 464723.41

3807401.91	18.71537	(09011918)	
464743.41	3807401.91	17.13141	(09011918) 464763.41
3807401.91	15.56840	(09011918)	
464783.41	3807401.91	14.23917	(09011918) 464803.41
3807401.91	12.93228	(09011918)	
464823.41	3807401.91	11.42719	(09011918) 464843.41
3807401.91	10.29903	(09011918)	
464863.41	3807401.91	9.25419	(09011918) 464883.41
3807401.91	8.03581	(09011918)	
464903.41	3807401.91	7.16925	(09011918) 464923.41
3807401.91	6.44210	(09030119)	
464503.41	3807421.91	25.14765	(09011918) 464523.41
3807421.91	25.74706	(09011918)	
464543.41	3807421.91	26.01908	(09011918) 464563.41
3807421.91	26.00396	(09011918)	
464583.41	3807421.91	25.75423	(09011918) 464603.41
3807421.91	25.25225	(09011918)	
464623.41	3807421.91	24.52054	(09011918) 464643.41
3807421.91	23.59111	(09011918)	
464663.41	3807421.91	22.34152	(09011918) 464683.41
3807421.91	20.90881	(09011918)	
464703.41	3807421.91	19.53553	(09011918) 464723.41
3807421.91	18.10713	(09011918)	
464743.41	3807421.91	16.62653	(09011918) 464763.41
3807421.91	15.00143	(09011918)	

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 100

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464783.41	3807421.91	13.43098	(09011918)	464803.41
3807421.91	12.09895	(09011918)		
464823.41	3807421.91	10.86175	(09011918)	464843.41
3807421.91	9.52548	(09011918)		
464863.41	3807421.91	8.47974	(09011918)	464883.41
3807421.91	7.52976	(09011918)		
464903.41	3807421.91	6.24896	(09030119)	464923.41
3807421.91	6.31527	(09030119)		
464503.41	3807441.91	26.01093	(09011918)	464523.41
3807441.91	26.43293	(09011918)		
464543.41	3807441.91	26.48307	(09011918)	464563.41
3807441.91	26.24718	(09011918)		
464583.41	3807441.91	25.94963	(09011918)	464603.41
3807441.91	25.24962	(09011918)		
464623.41	3807441.91	24.29075	(09011918)	464643.41
3807441.91	23.33607	(09011918)		
464663.41	3807441.91	22.04278	(09011918)	464683.41
3807441.91	20.54124	(09011918)		
464703.41	3807441.91	18.89304	(09011918)	464723.41
3807441.91	17.41770	(09011918)		
464743.41	3807441.91	15.98151	(09011918)	464763.41
3807441.91	14.41946	(09011918)		
464783.41	3807441.91	12.77279	(09011918)	464803.41
3807441.91	11.36323	(09011918)		
464823.41	3807441.91	10.28971	(09011918)	464843.41
3807441.91	8.95986	(09011918)		
464863.41	3807441.91	7.60864	(09011918)	464883.41
3807441.91	6.97280	(09030119)		
464903.41	3807441.91	6.53910	(09030119)	464923.41
3807441.91	6.50543	(09030119)		
464503.41	3807461.91	26.79975	(09011918)	464523.41
3807461.91	26.86515	(09011918)		
464543.41	3807461.91	26.84063	(09011918)	464563.41
3807461.91	26.61121	(09011918)		
464583.41	3807461.91	25.88595	(09011918)	464603.41
3807461.91	25.12315	(09011918)		
464623.41	3807461.91	24.19368	(09011918)	464643.41
3807461.91	22.82294	(09011918)		
464663.41	3807461.91	21.50916	(09011918)	464683.41
3807461.91	20.11682	(09011918)		
464703.41	3807461.91	18.40133	(09011918)	464723.41
3807461.91	16.70947	(09011918)		
464743.41	3807461.91	15.11485	(09011918)	464763.41
3807461.91	13.74714	(09011918)		
464783.41	3807461.91	12.20998	(09011918)	464803.41
3807461.91	10.82556	(09011918)		

464823.41	3807461.91	9.73454	(09011918)	464843.41
3807461.91	8.47686	(09011918)		
464863.41	3807461.91	7.21147	(09011918)	464883.41
3807461.91	7.39966	(09030119)		
464903.41	3807461.91	6.88067	(09030119)	464923.41
3807461.91	6.81050	(09030119)		
464503.41	3807481.91	27.56458	(09011918)	464523.41
3807481.91	27.44463	(09011918)		
464543.41	3807481.91	27.14613	(09011918)	464563.41
3807481.91	26.65173	(09011918)		
464583.41	3807481.91	25.91831	(09011918)	464603.41
3807481.91	24.93940	(09011918)		
464623.41	3807481.91	23.75601	(09011918)	464643.41
3807481.91	22.41609	(09011918)		
464663.41	3807481.91	20.93612	(09011918)	464683.41
3807481.91	19.37142	(09011918)		
464703.41	3807481.91	17.77615	(09011918)	464723.41
3807481.91	16.08674	(09011918)		
464743.41	3807481.91	14.43779	(09011918)	464763.41
3807481.91	13.08573	(09011918)		
464783.41	3807481.91	11.60525	(09011918)	464803.41
3807481.91	10.25495	(09011918)		
464823.41	3807481.91	9.15594	(09011918)	464843.41
3807481.91	8.09956	(09030119)		
464863.41	3807481.91	7.45886	(09030119)	464883.41
3807481.91	7.08021	(09030119)		
464903.41	3807481.91	7.14494	(09030119)	464923.41
3807481.91	7.02187	(09030119)		
464503.41	3807501.91	28.17886	(09011918)	464523.41
3807501.91	27.89583	(09011918)		
464543.41	3807501.91	27.35611	(09011918)	464563.41
3807501.91	26.61051	(09011918)		
464583.41	3807501.91	25.83725	(09011918)	464603.41
3807501.91	24.65379	(09011918)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 101

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,

L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464623.41	3807501.91	23.24783	(09011918)	464643.41
3807501.91	21.90675	(09011918)		
464663.41	3807501.91	20.28601	(09011918)	464683.41
3807501.91	18.59003	(09011918)		
464703.41	3807501.91	17.04099	(09011918)	464723.41
3807501.91	15.39282	(09011918)		
464743.41	3807501.91	13.78132	(09011918)	464763.41
3807501.91	12.35992	(09011918)		
464783.41	3807501.91	10.93629	(09011918)	464803.41
3807501.91	9.65323	(09011918)		
464823.41	3807501.91	9.05258	(09030119)	464843.41
3807501.91	8.60402	(09030119)		
464863.41	3807501.91	7.80663	(09030119)	464883.41
3807501.91	7.32629	(09030119)		
464903.41	3807501.91	7.32874	(09030119)	464923.41
3807501.91	7.13652	(09030119)		
464503.41	3807521.91	28.47412	(09011918)	464523.41
3807521.91	27.97547	(09011918)		
464543.41	3807521.91	27.43710	(09011918)	464563.41
3807521.91	26.71263	(09011918)		
464583.41	3807521.91	25.46560	(09011918)	464603.41
3807521.91	24.23811	(09011918)		
464623.41	3807521.91	22.88672	(09011918)	464643.41
3807521.91	21.15089	(09011918)		
464663.41	3807521.91	19.54378	(09011918)	464683.41
3807521.91	17.93751	(09011918)		
464703.41	3807521.91	16.15119	(09011918)	464723.41
3807521.91	14.56295	(09011918)		
464743.41	3807521.91	13.06099	(09011918)	464763.41
3807521.91	11.50688	(09011918)		
464783.41	3807521.91	10.20242	(09011918)	464803.41
3807521.91	9.44219	(09030119)		
464823.41	3807521.91	8.77735	(09030119)	464843.41
3807521.91	8.90765	(09030119)		
464863.41	3807521.91	8.24665	(09030119)	464883.41
3807521.91	7.67616	(09030119)		
464903.41	3807521.91	7.65008	(09030119)	464923.41

3807521.91	7.41148	(09030119)		
464503.41	3807541.91	28.68155	(09011918)	464523.41
3807541.91	28.21411	(09011918)		
464543.41	3807541.91	27.45685	(09011918)	464563.41
3807541.91	26.44062	(09011918)		
464583.41	3807541.91	25.20811	(09011918)	464603.41
3807541.91	23.76949	(09011918)		
464623.41	3807541.91	22.18340	(09011918)	464643.41
3807541.91	20.51213	(09011918)		
464663.41	3807541.91	18.78693	(09011918)	464683.41
3807541.91	17.05666	(09011918)		
464703.41	3807541.91	15.36713	(09011918)	464723.41
3807541.91	13.69471	(09011918)		
464743.41	3807541.91	12.18453	(09011918)	464763.41
3807541.91	10.78299	(09011918)		
464783.41	3807541.91	9.91511	(09030119)	464803.41
3807541.91	10.13778	(09030119)		
464823.41	3807541.91	9.29534	(09030119)	464843.41
3807541.91	7.97594	(09030119)		
464863.41	3807541.91	7.97124	(09030119)	464883.41
3807541.91	7.99821	(09030119)		
464903.41	3807541.91	7.47772	(09030119)	464923.41
3807541.91	7.43277	(09030119)		
464503.41	3807561.91	28.87423	(09011918)	464523.41
3807561.91	28.35639	(09011918)		
464543.41	3807561.91	27.36546	(09011918)	464563.41
3807561.91	26.08271	(09011918)		
464583.41	3807561.91	24.82935	(09011918)	464603.41
3807561.91	23.20203	(09011918)		
464623.41	3807561.91	21.42834	(09011918)	464643.41
3807561.91	19.79064	(09011918)		
464663.41	3807561.91	17.97221	(09011918)	464683.41
3807561.91	16.14971	(09011918)		
464703.41	3807561.91	14.54290	(09011918)	464723.41
3807561.91	12.88028	(09011918)		
464743.41	3807561.91	11.37302	(09011918)	464763.41
3807561.91	10.21766	(09030119)		
464783.41	3807561.91	10.45712	(09030119)	464803.41
3807561.91	9.99805	(09030119)		
464823.41	3807561.91	9.85846	(09030119)	464843.41
3807561.91	8.30064	(09030119)		
464863.41	3807561.91	8.12999	(09030119)	464883.41
3807561.91	8.21749	(09030119)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)
464903.41	3807561.91	7.69795	(09030119)	464923.41
3807561.91	7.53528	(09030119)		
464503.41	3807581.91	29.22080	(09011918)	464523.41
3807581.91	28.18601	(09011918)		
464543.41	3807581.91	27.12760	(09011918)	464563.41
3807581.91	25.88879	(09011918)		
464583.41	3807581.91	24.15164	(09011918)	464603.41
3807581.91	22.51310	(09011918)		
464623.41	3807581.91	20.82697	(09011918)	464643.41
3807581.91	18.85265	(09011918)		
464663.41	3807581.91	17.08849	(09011918)	464683.41
3807581.91	15.38948	(09011918)		
464703.41	3807581.91	13.56359	(09011918)	464723.41
3807581.91	12.04438	(09011918)		
464743.41	3807581.91	10.68375	(09011918)	464763.41
3807581.91	11.00204	(09030119)		
464783.41	3807581.91	10.19381	(09030119)	464803.41
3807581.91	10.08243	(09030119)		
464823.41	3807581.91	10.31138	(09030119)	464843.41
3807581.91	8.70544	(09030119)		
464863.41	3807581.91	8.47750	(09030119)	464883.41
3807581.91	8.54675	(09030119)		
464903.41	3807581.91	7.94333	(09030119)	464923.41
3807581.91	7.67111	(09030119)		
464503.41	3807601.91	29.11933	(09011918)	464523.41
3807601.91	27.79469	(09011918)		
464543.41	3807601.91	26.58674	(09011918)	464563.41
3807601.91	25.29236	(09011918)		

464583.41	3807601.91	23.60414	(09011918)	464603.41
3807601.91	21.78909	(09011918)		
464623.41	3807601.91	19.91762	(09011918)	464643.41
3807601.91	18.04469	(09011918)		
464663.41	3807601.91	16.13448	(09011918)	464683.41
3807601.91	14.39205	(09011918)		
464703.41	3807601.91	12.75538	(09011918)	464723.41
3807601.91	11.31284	(09011918)		
464743.41	3807601.91	11.19692	(09030119)	464763.41
3807601.91	10.51799	(09030119)		
464783.41	3807601.91	10.57639	(09030119)	464803.41
3807601.91	9.67653	(09030119)		
464823.41	3807601.91	8.99088	(09030119)	464843.41
3807601.91	8.97011	(09030119)		
464863.41	3807601.91	8.67038	(09030119)	464883.41
3807601.91	8.19578	(09030119)		
464903.41	3807601.91	8.12539	(09030119)	464923.41
3807601.91	7.85252	(09030119)		
464503.41	3807621.91	28.79604	(09011918)	464523.41
3807621.91	27.36611	(09011918)		
464543.41	3807621.91	26.02618	(09011918)	464563.41
3807621.91	24.62088	(09011918)		
464583.41	3807621.91	22.94617	(09011918)	464603.41
3807621.91	20.98580	(09011918)		
464623.41	3807621.91	18.95815	(09011918)	464643.41
3807621.91	17.16464	(09011918)		
464663.41	3807621.91	15.23716	(09011918)	464683.41
3807621.91	13.46905	(09011918)		
464703.41	3807621.91	11.98775	(09011918)	464723.41
3807621.91	11.49783	(09030119)		
464743.41	3807621.91	10.99798	(09030119)	464763.41
3807621.91	10.85302	(09030119)		
464783.41	3807621.91	9.91711	(09030119)	464803.41
3807621.91	9.36657	(09030119)		
464823.41	3807621.91	9.21351	(09030119)	464843.41
3807621.91	8.90434	(09030119)		
464863.41	3807621.91	8.50500	(09030119)	464883.41
3807621.91	8.36074	(09030119)		
464903.41	3807621.91	8.09787	(09030119)	464923.41
3807621.91	7.99097	(09031219)		
464503.41	3807641.91	28.35868	(09011918)	464523.41
3807641.91	27.16169	(09011918)		
464543.41	3807641.91	25.77816	(09011918)	464563.41
3807641.91	24.12848	(09011918)		
464583.41	3807641.91	22.00026	(09011918)	464603.41
3807641.91	20.07956	(09011918)		
464623.41	3807641.91	18.18491	(09011918)	464643.41
3807641.91	16.05744	(09011918)		
464663.41	3807641.91	14.29792	(09011918)	464683.41
3807641.91	12.71228	(09011918)		

464703.41 3807641.91 12.12213 (09030119) 464723.41
 3807641.91 11.23382 (09030119)
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 103

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464743.41	3807641.91	11.12021	(09030119)	464763.41
3807641.91	11.37938	(09030119)		
464783.41	3807641.91	9.60315	(09030119)	464803.41
3807641.91	9.49138	(09030119)		
464823.41	3807641.91	9.53874	(09030119)	464843.41
3807641.91	8.73929	(09030119)		
464863.41	3807641.91	8.60768	(09030119)	464883.41
3807641.91	8.54878	(09030119)		
464903.41	3807641.91	8.29085	(09031219)	464923.41
3807641.91	8.35487	(09031219)		
464503.41	3807661.91	27.60754	(09011918)	464523.41
3807661.91	26.39802	(09011918)		
464543.41	3807661.91	24.93993	(09011918)	464563.41
3807661.91	23.23979	(09011918)		
464583.41	3807661.91	21.20958	(09011918)	464603.41
3807661.91	19.05852	(09011918)		
464623.41	3807661.91	17.07030	(09011918)	464643.41
3807661.91	15.17157	(09011918)		
464663.41	3807661.91	13.21785	(09011918)	464683.41

3807661.91	11.63181	(09011918)		
464703.41	3807661.91	11.52632	(09030119)	464723.41
3807661.91	11.68942	(09030119)		
464743.41	3807661.91	10.69282	(09030119)	464763.41
3807661.91	9.93224	(09030119)		
464783.41	3807661.91	9.90618	(09030119)	464803.41
3807661.91	9.56780	(09030119)		
464823.41	3807661.91	9.03236	(09030119)	464843.41
3807661.91	8.94210	(09030119)		
464863.41	3807661.91	8.64687	(09030119)	464883.41
3807661.91	8.60938	(09031219)		
464903.41	3807661.91	8.67140	(09031219)	464923.41
3807661.91	8.70774	(09031219)		
464503.41	3807681.91	26.29891	(09011918)	464523.41
3807681.91	25.08464	(09011918)		
464543.41	3807681.91	23.63059	(09011918)	464563.41
3807681.91	21.98414	(09011918)		
464583.41	3807681.91	20.19872	(09011918)	464603.41
3807681.91	18.09676	(09011918)		
464623.41	3807681.91	16.02760	(09011918)	464643.41
3807681.91	14.21080	(09011918)		
464663.41	3807681.91	12.30961	(09011918)	464683.41
3807681.91	10.63766	(09030119)		
464703.41	3807681.91	10.38563	(09030119)	464723.41
3807681.91	10.58944	(09030119)		
464743.41	3807681.91	10.36874	(09030119)	464763.41
3807681.91	10.19632	(09030119)		
464783.41	3807681.91	9.84594	(09030119)	464803.41
3807681.91	9.39190	(09030119)		
464823.41	3807681.91	9.21890	(09030119)	464843.41
3807681.91	8.91238	(09030119)		
464863.41	3807681.91	8.94776	(09031219)	464883.41
3807681.91	9.00242	(09031219)		
464903.41	3807681.91	9.03163	(09031219)	464923.41
3807681.91	9.04302	(09031219)		
464523.41	3807701.91	23.83267	(09011918)	464543.41
3807701.91	22.35247	(09011918)		
464563.41	3807701.91	20.70318	(09011918)	464583.41
3807701.91	18.93945	(09011918)		
464603.41	3807701.91	17.06369	(09011918)	464623.41
3807701.91	15.14401	(09011918)		
464643.41	3807701.91	12.99870	(09011918)	464663.41
3807701.91	11.93101	(09030119)		
464683.41	3807701.91	11.10699	(09030119)	464703.41
3807701.91	10.37353	(09030119)		
464723.41	3807701.91	10.41603	(09030119)	464743.41
3807701.91	10.52685	(09030119)		
464763.41	3807701.91	10.57158	(09030119)	464783.41
3807701.91	9.67081	(09030119)		
464803.41	3807701.91	9.51027	(09030119)	464823.41


```

3807701.91      9.42817 (09030119)
      464843.41  3807701.91      9.30007 (09031219)      464863.41
3807701.91      9.34780 (09031219)
      464883.41  3807701.91      9.37717 (09031219)      464903.41
3807701.91      9.40847 (10020118)
      464923.41  3807701.91      9.48401 (10020118)      464543.41
3807721.91      20.68694 (09011918)
      464563.41  3807721.91      19.91755 (09011918)      464583.41
3807721.91      18.06985 (09011918)
      464603.41  3807721.91      16.19413 (09011918)      464623.41
3807721.91      14.28188 (09011918)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      04/06/22
*** AERMET - VERSION 14134 *** ***
***      13:53:49

```

PAGE 104

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0000001      , L0000002
, L0000003      , L0000004      , L0000005      ,
      L0000006      , L0000007      , L0000008      , L0000009      , L0000010
, L0000011      , L0000012      , L0000013      ,
      L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
      L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464643.41	3807721.91	12.52518	(09030119)	464663.41
3807721.91	10.76054	(09030119)		
464683.41	3807721.91	10.76339	(09030119)	464703.41
3807721.91	10.79709	(09030119)		
464723.41	3807721.91	10.74285	(09030119)	464743.41
3807721.91	10.62647	(09030119)		
464763.41	3807721.91	10.01703	(09030119)	464783.41
3807721.91	9.90074	(09030119)		
464803.41	3807721.91	9.60208	(09031219)	464823.41
3807721.91	9.67538	(09031219)		

464843.41	3807721.91	9.71894	(09031219)	464863.41
3807721.91	9.73148 (09031219)			
464883.41	3807721.91	9.80379	(10020118)	464903.41
3807721.91	9.87154 (10020118)			
464923.41	3807721.91	9.91234	(10020118)	464943.41
3807721.91	9.92652 (10020118)			
464963.41	3807721.91	9.91508	(10020118)	464983.41
3807721.91	9.87909 (10020118)			
465003.41	3807721.91	9.81923	(10020118)	465023.41
3807721.91	9.73738 (10020118)			
465043.41	3807721.91	9.63501	(10020118)	465063.41
3807721.91	9.51320 (10020118)			
465083.41	3807721.91	9.37405	(10020118)	465103.41
3807721.91	9.21974 (10020118)			
465123.41	3807721.91	9.05379	(10020118)	465143.41
3807721.91	8.87297 (10020118)			
465163.41	3807721.91	8.68064	(10020118)	465183.41
3807721.91	8.48172 (10020118)			
465203.41	3807721.91	8.27275	(10020118)	465223.41
3807721.91	8.05615 (10020118)			
465243.41	3807721.91	7.83400	(10020118)	465263.41
3807721.91	7.60809 (10020118)			
465283.41	3807721.91	7.38014	(10020118)	465303.41
3807721.91	7.15311 (10020118)			
465323.41	3807721.91	6.92303	(10020118)	465343.41
3807721.91	6.69275 (10020118)			
465363.41	3807721.91	6.46631	(10020118)	465383.41
3807721.91	6.23974 (10020118)			
464543.41	3807741.91	17.55055	(09011918)	464563.41
3807741.91	18.41663 (09011918)			
464583.41	3807741.91	16.81367	(09011918)	464603.41
3807741.91	15.04084 (09011918)			
464623.41	3807741.91	13.51629	(09030119)	464643.41
3807741.91	13.18261 (09030119)			
464663.41	3807741.91	11.20091	(09030119)	464683.41
3807741.91	11.04722 (09030119)			
464703.41	3807741.91	11.14659	(09030119)	464723.41
3807741.91	10.96086 (09030119)			
464743.41	3807741.91	10.43956	(09030119)	464763.41
3807741.91	10.22975 (09030119)			
464783.41	3807741.91	10.00268	(09031219)	464803.41
3807741.91	10.07527 (09031219)			
464823.41	3807741.91	10.10802	(09031219)	464843.41
3807741.91	10.13314 (10020118)			
464863.41	3807741.91	10.22083	(10020118)	464883.41
3807741.91	10.27939 (10020118)			
464903.41	3807741.91	10.30919	(10020118)	464923.41
3807741.91	10.31127 (10020118)			
464943.41	3807741.91	10.28468	(10020118)	464963.41
3807741.91	10.23369 (10020118)			

464983.41	3807741.91	10.15885	(10020118)	465003.41
3807741.91	10.05739	(10020118)		
465023.41	3807741.91	9.93702	(10020118)	465043.41
3807741.91	9.79804	(10020118)		
465063.41	3807741.91	9.63815	(10020118)	465083.41
3807741.91	9.46577	(10020118)		
465103.41	3807741.91	9.28089	(10020118)	465123.41
3807741.91	9.08252	(10020118)		
465143.41	3807741.91	8.87058	(10020118)	465163.41
3807741.91	8.64894	(10020118)		
465183.41	3807741.91	8.42346	(10020118)	465203.41
3807741.91	8.19286	(10020118)		
465223.41	3807741.91	7.95722	(10020118)	465243.41
3807741.91	7.71373	(10020118)		
465263.41	3807741.91	7.47195	(10020118)	465283.41
3807741.91	7.23092	(10020118)		
465303.41	3807741.91	6.98885	(10020118)	465323.41
3807741.91	6.74511	(10020118)		
465343.41	3807741.91	6.50281	(10020118)	465363.41
3807741.91	6.26653	(10020118)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 105

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465383.41	3807741.91	6.03431	(10020118)	464543.41

3807761.91	12.84624	(09011918)	
464563.41	3807761.91	14.33049	(09011918) 464583.41
3807761.91	14.42865	(09011918)	
464603.41	3807761.91	13.77016	(09011918) 464623.41
3807761.91	13.69359	(09030119)	
464643.41	3807761.91	11.59961	(09030119) 464663.41
3807761.91	11.63650	(09030119)	
464683.41	3807761.91	11.57566	(09030119) 464703.41
3807761.91	11.64158	(09030119)	
464723.41	3807761.91	10.77543	(09030119) 464743.41
3807761.91	10.57740	(09030119)	
464763.41	3807761.91	10.47995	(09031219) 464783.41
3807761.91	10.49277	(09031219)	
464803.41	3807761.91	10.51504	(09031219) 464823.41
3807761.91	10.58184	(10020118)	
464843.41	3807761.91	10.66120	(10020118) 464863.41
3807761.91	10.70900	(10020118)	
464883.41	3807761.91	10.72631	(10020118) 464903.41
3807761.91	10.71383	(10020118)	
464923.41	3807761.91	10.67313	(10020118) 464943.41
3807761.91	10.60369	(10020118)	
464963.41	3807761.91	10.51017	(10020118) 464983.41
3807761.91	10.39349	(10020118)	
465003.41	3807761.91	10.25117	(10020118) 465023.41
3807761.91	10.08844	(10020118)	
465043.41	3807761.91	9.90834	(10020118) 465063.41
3807761.91	9.71654	(10020118)	
465083.41	3807761.91	9.51139	(10020118) 465103.41
3807761.91	9.29338	(10020118)	
465123.41	3807761.91	9.05993	(10020118) 465143.41
3807761.91	8.82153	(10020118)	
465163.41	3807761.91	8.57722	(10020118) 465183.41
3807761.91	8.32290	(10020118)	
465203.41	3807761.91	8.06952	(10020118) 465223.41
3807761.91	7.81556	(10020118)	
465243.41	3807761.91	7.55957	(10020118) 465263.41
3807761.91	7.30416	(10020118)	
465283.41	3807761.91	7.04898	(10020118) 465303.41
3807761.91	6.79090	(10020118)	
465323.41	3807761.91	6.53909	(10020118) 465343.41
3807761.91	6.29167	(10020118)	
465363.41	3807761.91	6.04440	(10020118) 465383.41
3807761.91	5.82586	(10102019)	
464543.41	3807781.91	11.21998	(09011918) 464563.41
3807781.91	10.82514	(09030119)	
464583.41	3807781.91	10.98844	(09030119) 464603.41
3807781.91	11.11415	(09030119)	
464623.41	3807781.91	11.64981	(09030119) 464643.41
3807781.91	11.89908	(09030119)	
464663.41	3807781.91	11.30132	(09030119) 464683.41

3807781.91	11.23487	(09030119)	
464703.41	3807781.91	11.18512	(09030119) 464723.41
3807781.91	11.03853	(09030119)	
464743.41	3807781.91	10.88760	(09031219) 464763.41
3807781.91	10.93895	(09031219)	
464783.41	3807781.91	10.95372	(09031219) 464803.41
3807781.91	11.05842	(10020118)	
464823.41	3807781.91	11.12669	(10020118) 464843.41
3807781.91	11.16200	(10020118)	
464863.41	3807781.91	11.16460	(10020118) 464883.41
3807781.91	11.13567	(10020118)	
464903.41	3807781.91	11.07657	(10020118) 464923.41
3807781.91	10.98884	(10020118)	
464943.41	3807781.91	10.87464	(10020118) 464963.41
3807781.91	10.73557	(10020118)	
464983.41	3807781.91	10.57379	(10020118) 465003.41
3807781.91	10.39188	(10020118)	
465023.41	3807781.91	10.18953	(10020118) 465043.41
3807781.91	9.97074	(10020118)	
465063.41	3807781.91	9.74424	(10020118) 465083.41
3807781.91	9.50336	(10020118)	
465103.41	3807781.91	9.25160	(10020118) 465123.41
3807781.91	8.99220	(10020118)	
465143.41	3807781.91	8.72646	(10020118) 465163.41
3807781.91	8.45631	(10020118)	
465183.41	3807781.91	8.18354	(10020118) 465203.41
3807781.91	7.91201	(10020118)	
465223.41	3807781.91	7.64071	(10020118) 465243.41
3807781.91	7.36706	(10020118)	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 106

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

465263.41	3807781.91	7.09810	(10020118)	465283.41	
3807781.91	6.83281	(10020118)			
465303.41	3807781.91	6.56845	(10020118)	465323.41	
3807781.91	6.30847	(10020118)			
465343.41	3807781.91	6.05893	(10102019)	465363.41	
3807781.91	5.90938	(10102019)			
465383.41	3807781.91	5.76169	(10102019)	464543.41	
3807801.91	11.29023	(09030119)			
464563.41	3807801.91	11.39401	(09030119)	464583.41	
3807801.91	11.44805	(09030119)			
464603.41	3807801.91	11.46629	(09030119)	464623.41	
3807801.91	11.50287	(09030119)			
464643.41	3807801.91	11.71262	(09030119)	464663.41	
3807801.91	11.66159	(09030119)			
464683.41	3807801.91	11.38062	(09030119)	464703.41	
3807801.91	11.27832	(09031219)			
464723.41	3807801.91	11.36809	(09031219)	464743.41	
3807801.91	11.41591	(09031219)			
464763.41	3807801.91	11.46646	(10020118)	464783.41	
3807801.91	11.56298	(10020118)			
464803.41	3807801.91	11.61895	(10020118)	464823.41	
3807801.91	11.63942	(10020118)			
464843.41	3807801.91	11.62534	(10020118)	464863.41	
3807801.91	11.57758	(10020118)			
464883.41	3807801.91	11.49858	(10020118)	464903.41	
3807801.91	11.38914	(10020118)			
464923.41	3807801.91	11.25167	(10020118)	464943.41	
3807801.91	11.09046	(10020118)			
464963.41	3807801.91	10.90439	(10020118)	464983.41	
3807801.91	10.69717	(10020118)			
465003.41	3807801.91	10.47479	(10020118)	465023.41	
3807801.91	10.23389	(10020118)			
465043.41	3807801.91	9.97889	(10020118)	465063.41	
3807801.91	9.71642	(10020118)			
465083.41	3807801.91	9.44162	(10020118)	465103.41	
3807801.91	9.15904	(10020118)			
465123.41	3807801.91	8.87543	(10020118)	465143.41	
3807801.91	8.58487	(10020118)			
465163.41	3807801.91	8.29206	(10020118)	465183.41	
3807801.91	8.00452	(10020118)			
465203.41	3807801.91	7.71666	(10020118)	465223.41	
3807801.91	7.42956	(10020118)			

465243.41	3807801.91	7.14177	(10020118)	465263.41
3807801.91	6.86224	(10020118)		
465283.41	3807801.91	6.58936	(10020118)	465303.41
3807801.91	6.32073	(10020118)		
465323.41	3807801.91	6.14935	(10102019)	465343.41
3807801.91	5.98826	(10102019)		
465363.41	3807801.91	5.83194	(10102019)	465383.41
3807801.91	5.67522	(10102019)		
464543.41	3807821.91	11.85525	(09030119)	464563.41
3807821.91	11.92615	(09030119)		
464583.41	3807821.91	11.95342	(09030119)	464603.41
3807821.91	11.92610	(09030119)		
464623.41	3807821.91	11.86820	(09030119)	464643.41
3807821.91	11.86861	(09030119)		
464663.41	3807821.91	11.97243	(09030119)	464683.41
3807821.91	11.80124	(09031219)		
464703.41	3807821.91	11.90134	(09031219)	464723.41
3807821.91	11.91557	(09031219)		
464743.41	3807821.91	12.01535	(10020118)	464763.41
3807821.91	12.09796	(10020118)		
464783.41	3807821.91	12.13974	(10020118)	464803.41
3807821.91	12.14316	(10020118)		
464823.41	3807821.91	12.10993	(10020118)	464843.41
3807821.91	12.04116	(10020118)		
464863.41	3807821.91	11.93937	(10020118)	464883.41
3807821.91	11.80524	(10020118)		
464903.41	3807821.91	11.64367	(10020118)	464923.41
3807821.91	11.45664	(10020118)		
464943.41	3807821.91	11.24303	(10020118)	464963.41
3807821.91	11.01141	(10020118)		
464983.41	3807821.91	10.76266	(10020118)	465003.41
3807821.91	10.49411	(10020118)		
465023.41	3807821.91	10.21627	(10020118)	465043.41
3807821.91	9.92895	(10020118)		
465063.41	3807821.91	9.62835	(10020118)	465083.41
3807821.91	9.32579	(10020118)		
465103.41	3807821.91	9.02016	(10020118)	465123.41
3807821.91	8.70687	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 107

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,

```

, L0000011      L0000006      , L0000007      , L0000008      , L0000009      , L0000010
, L0000012      , L0000012      , L0000013      ,
, L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
, L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807821.91	8.39731	(10020118)	465163.41
3807821.91	8.09096	(10020118)		
465183.41	3807821.91	7.78749	(10020118)	465203.41
3807821.91	7.48256	(10020118)		
465223.41	3807821.91	7.18082	(10020118)	465243.41
3807821.91	6.88928	(10020118)		
465263.41	3807821.91	6.60435	(10020118)	465283.41
3807821.91	6.40761	(10102019)		
465303.41	3807821.91	6.23404	(10102019)	465323.41
3807821.91	6.06435	(10102019)		
465343.41	3807821.91	5.89735	(10102019)	465363.41
3807821.91	5.73216	(10102019)		
465383.41	3807821.91	5.56459	(10102019)	464543.41
3807841.91	12.37265	(09030119)		
464563.41	3807841.91	12.39918	(09030119)	464583.41
3807841.91	12.41096	(09030119)		
464603.41	3807841.91	12.35889	(09030119)	464623.41
3807841.91	12.24318	(09030119)		
464643.41	3807841.91	12.25740	(09031219)	464663.41
3807841.91	12.35804	(09031219)		
464683.41	3807841.91	12.42225	(09031219)	464723.41
3807841.91	12.59533	(10020118)		
464743.41	3807841.91	12.66684	(10020118)	464763.41
3807841.91	12.69125	(10020118)		
464783.41	3807841.91	12.67527	(10020118)	464803.41
3807841.91	12.61989	(10020118)		
464823.41	3807841.91	12.52717	(10020118)	464843.41
3807841.91	12.39944	(10020118)		
464863.41	3807841.91	12.23917	(10020118)	464883.41
3807841.91	12.04956	(10020118)		
464903.41	3807841.91	11.83304	(10020118)	464923.41
3807841.91	11.59264	(10020118)		
464943.41	3807841.91	11.33184	(10020118)	464963.41

3807841.91	11.05310	(10020118)		
464983.41	3807841.91	10.75936	(10020118)	465003.41
3807841.91	10.45372	(10020118)		
465023.41	3807841.91	10.13824	(10020118)	465043.41
3807841.91	9.81555	(10020118)		
465063.41	3807841.91	9.48820	(10020118)	465083.41
3807841.91	9.15772	(10020118)		
465103.41	3807841.91	8.82625	(10020118)	465123.41
3807841.91	8.49577	(10020118)		
465143.41	3807841.91	8.16726	(10020118)	465163.41
3807841.91	7.84301	(10020118)		
465183.41	3807841.91	7.52731	(10020118)	465203.41
3807841.91	7.21450	(10020118)		
465223.41	3807841.91	6.90692	(10020118)	465243.41
3807841.91	6.67595	(10102019)		
465263.41	3807841.91	6.49550	(10102019)	465283.41
3807841.91	6.31623	(10102019)		
465303.41	3807841.91	6.13485	(10102019)	465323.41
3807841.91	5.95732	(10102019)		
465343.41	3807841.91	5.78197	(10102019)	465363.41
3807841.91	5.60577	(10102019)		
465383.41	3807841.91	5.43233	(10102019)	464503.41
3807861.91	12.85190	(09030119)		
464523.41	3807861.91	12.86903	(09030119)	464543.41
3807861.91	12.85957	(09030119)		
464563.41	3807861.91	12.82787	(09030119)	464583.41
3807861.91	12.80661	(09030119)		
464603.41	3807861.91	12.73067	(09030119)	464723.41
3807861.91	13.27111	(10020118)		
464743.41	3807861.91	13.27567	(10020118)	464763.41
3807861.91	13.23651	(10020118)		
464783.41	3807861.91	13.15657	(10020118)	464803.41
3807861.91	13.03664	(10020118)		
464823.41	3807861.91	12.88056	(10020118)	464843.41
3807861.91	12.69018	(10020118)		
464863.41	3807861.91	12.46901	(10020118)	464883.41
3807861.91	12.22267	(10020118)		
464903.41	3807861.91	11.95039	(10020118)	464923.41
3807861.91	11.65703	(10020118)		
464943.41	3807861.91	11.34995	(10020118)	464963.41
3807861.91	11.02553	(10020118)		
464983.41	3807861.91	10.68915	(10020118)	465003.41
3807861.91	10.34864	(10020118)		
465023.41	3807861.91	9.99847	(10020118)	465043.41
3807861.91	9.64396	(10020118)		
465063.41	3807861.91	9.29275	(10020118)	465083.41
3807861.91	8.93806	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***

*** 13:53:49

PAGE 108

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465103.41	3807861.91	8.58488	(10020118)	465123.41
3807861.91	8.24022	(10020118)		
465143.41	3807861.91	7.89665	(10020118)	465163.41
3807861.91	7.55865	(10020118)		
465183.41	3807861.91	7.23249	(10020118)	465203.41
3807861.91	6.97063	(10102019)		
465223.41	3807861.91	6.77737	(10102019)	465243.41
3807861.91	6.57928	(10102019)		
465263.41	3807861.91	6.38675	(10102019)	465283.41
3807861.91	6.19777	(10102019)		
465303.41	3807861.91	6.00954	(10102019)	465323.41
3807861.91	5.82465	(10102019)		
465343.41	3807861.91	5.64210	(10102019)	465363.41
3807861.91	5.45809	(10102019)		
465383.41	3807861.91	5.28030	(10102019)	464503.41
3807881.91	13.48095	(09030119)		
464523.41	3807881.91	13.43753	(09030119)	464543.41
3807881.91	13.36951	(09030119)		
464723.41	3807881.91	13.89543	(10020118)	464743.41
3807881.91	13.83014	(10020118)		
464763.41	3807881.91	13.72076	(10020118)	464783.41
3807881.91	13.57125	(10020118)		
464803.41	3807881.91	13.38286	(10020118)	464823.41
3807881.91	13.15840	(10020118)		

464843.41	3807881.91	12.90425	(10020118)	464863.41
3807881.91	12.62342	(10020118)		
464883.41	3807881.91	12.31519	(10020118)	464903.41
3807881.91	11.99013	(10020118)		
464923.41	3807881.91	11.64962	(10020118)	464943.41
3807881.91	11.29084	(10020118)		
464963.41	3807881.91	10.92628	(10020118)	464983.41
3807881.91	10.55577	(10020118)		
465003.41	3807881.91	10.17504	(10020118)	465023.41
3807881.91	9.79711	(10020118)		
465043.41	3807881.91	9.42062	(10020118)	465063.41
3807881.91	9.04027	(10020118)		
465083.41	3807881.91	8.66883	(10020118)	465103.41
3807881.91	8.30399	(10020118)		
465123.41	3807881.91	7.93994	(10020118)	465143.41
3807881.91	7.58862	(10020118)		
465163.41	3807881.91	7.28674	(10102019)	465183.41
3807881.91	7.07227	(10102019)		
465203.41	3807881.91	6.86422	(10102019)	465223.41
3807881.91	6.65971	(10102019)		
465243.41	3807881.91	6.45615	(10102019)	465263.41
3807881.91	6.25572	(10102019)		
465283.41	3807881.91	6.05723	(10102019)	465303.41
3807881.91	5.85643	(10102019)		
465323.41	3807881.91	5.66397	(10102019)	465343.41
3807881.91	5.47712	(10102019)		
465363.41	3807881.91	5.29349	(10102019)	465383.41
3807881.91	5.11067	(10102019)		
464723.41	3807901.91	14.45888	(10020118)	464743.41
3807901.91	14.31600	(10020118)		
464763.41	3807901.91	14.13167	(10020118)	464783.41
3807901.91	13.90748	(10020118)		
464803.41	3807901.91	13.64762	(10020118)	464823.41
3807901.91	13.35444	(10020118)		
464843.41	3807901.91	13.03573	(10020118)	464863.41
3807901.91	12.69454	(10020118)		
464883.41	3807901.91	12.32897	(10020118)	464903.41
3807901.91	11.94934	(10020118)		
464923.41	3807901.91	11.55903	(10020118)	464943.41
3807901.91	11.16051	(10020118)		
464963.41	3807901.91	10.75971	(10020118)	464983.41
3807901.91	10.35611	(10020118)		
465003.41	3807901.91	9.94449	(10020118)	465023.41
3807901.91	9.53783	(10020118)		
465043.41	3807901.91	9.13716	(10020118)	465063.41
3807901.91	8.74270	(10020118)		
465083.41	3807901.91	8.35530	(10020118)	465103.41
3807901.91	7.97654	(10020118)		
465123.41	3807901.91	7.62964	(10102019)	465143.41
3807901.91	7.40206	(10102019)		

465163.41	3807901.91	7.17562	(10102019)	465183.41
3807901.91	6.95127	(10102019)		
465203.41	3807901.91	6.73242	(10102019)	465223.41
3807901.91	6.51691	(10102019)		
465243.41	3807901.91	6.30090	(10102019)	465263.41
3807901.91	6.09166	(10102019)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 109

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465283.41	3807901.91	5.88730	(10102019)	465303.41
3807901.91	5.68405	(10102019)		
465323.41	3807901.91	5.48525	(10102019)	465343.41
3807901.91	5.29192	(10102019)		
465363.41	3807901.91	5.10677	(10102019)	465383.41
3807901.91	4.92435	(10102019)		
464723.41	3807921.91	14.94172	(10020118)	464743.41
3807921.91	14.71948	(10020118)		
464763.41	3807921.91	14.45464	(10020118)	464783.41
3807921.91	14.15341	(10020118)		
464803.41	3807921.91	13.82055	(10020118)	464823.41
3807921.91	13.45919	(10020118)		
464843.41	3807921.91	13.07624	(10020118)	464863.41
3807921.91	12.67518	(10020118)		
464883.41	3807921.91	12.25534	(10020118)	464903.41

3807921.91	11.82498	(10020118)	
464923.41	3807921.91	11.38947	(10020118) 464943.41
3807921.91	10.95709	(10020118)	
464963.41	3807921.91	10.52275	(10020118) 464983.41
3807921.91	10.08857	(10020118)	
465003.41	3807921.91	9.65215	(10020118) 465023.41
3807921.91	9.22306	(10020118)	
465043.41	3807921.91	8.80385	(10020118) 465063.41
3807921.91	8.39939	(10020118)	
465083.41	3807921.91	8.00324	(10102019) 465103.41
3807921.91	7.75549	(10102019)	
465123.41	3807921.91	7.51420	(10102019) 465143.41
3807921.91	7.27087	(10102019)	
465163.41	3807921.91	7.02967	(10102019) 465183.41
3807921.91	6.79684	(10102019)	
465203.41	3807921.91	6.56894	(10102019) 465223.41
3807921.91	6.34468	(10102019)	
465243.41	3807921.91	6.11926	(10102019) 465263.41
3807921.91	5.90239	(10102019)	
465283.41	3807921.91	5.69281	(10102019) 465303.41
3807921.91	5.48989	(10102019)	
465323.41	3807921.91	5.28823	(10102019) 465343.41
3807921.91	5.09142	(10102019)	
465363.41	3807921.91	4.90539	(10102019) 465383.41
3807921.91	4.72402	(10102019)	
464723.41	3807941.91	15.31820	(10020118) 464743.41
3807941.91	15.02283	(10020118)	
464763.41	3807941.91	14.67792	(10020118) 464783.41
3807941.91	14.29865	(10020118)	
464803.41	3807941.91	13.89159	(10020118) 464823.41
3807941.91	13.46517	(10020118)	
464843.41	3807941.91	13.01918	(10020118) 464863.41
3807941.91	12.55832	(10020118)	
464883.41	3807941.91	12.08676	(10020118) 464903.41
3807941.91	11.61619	(10020118)	
464923.41	3807941.91	11.14781	(10020118) 464943.41
3807941.91	10.68220	(10020118)	
464963.41	3807941.91	10.21537	(10020118) 464983.41
3807941.91	9.75215	(10020118)	
465003.41	3807941.91	9.29607	(10020118) 465023.41
3807941.91	8.85686	(10020118)	
465043.41	3807941.91	8.43117	(10020118) 465063.41
3807941.91	8.14078	(10102019)	
465083.41	3807941.91	7.87758	(10102019) 465103.41
3807941.91	7.61824	(10102019)	
465123.41	3807941.91	7.35591	(10102019) 465143.41
3807941.91	7.10279	(10102019)	
465163.41	3807941.91	6.85543	(10102019) 465183.41
3807941.91	6.60698	(10102019)	
465203.41	3807941.91	6.36998	(10102019) 465223.41

3807941.91	6.14087	(10102019)		
465243.41	3807941.91	5.91657	(10102019)	465263.41
3807941.91	5.69406	(10102019)		
465283.41	3807941.91	5.47731	(10102019)	465303.41
3807941.91	5.27298	(10102019)		
465323.41	3807941.91	5.07404	(10102019)	465343.41
3807941.91	4.88143	(10102019)		
465363.41	3807941.91	4.69587	(10102019)	465383.41
3807941.91	4.51257	(10102019)		
465403.41	3807941.91	4.33471	(10102019)	465423.41
3807941.91	4.16720	(10102019)		
465443.41	3807941.91	4.00632	(10102019)	465463.41
3807941.91	3.89675	(09010519)		
465483.41	3807941.91	3.87203	(09010519)	465503.41
3807941.91	3.84751	(09010519)		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 110

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465523.41	3807941.91	3.82196	(09010519)	465543.41
3807941.91	3.79191	(09010519)		
465563.41	3807941.91	3.76443	(09010519)	465583.41
3807941.91	3.73821	(09010519)		
465603.41	3807941.91	3.71244	(09010519)	465623.41
3807941.91	3.68310	(09010519)		

465643.41	3807941.91	3.65281	(09010519)	465663.41
3807941.91	3.62572	(09010519)		
465683.41	3807941.91	3.59576	(09010519)	465703.41
3807941.91	3.56520	(09010519)		
464723.41	3807961.91	15.55182	(10020118)	464743.41
3807961.91	15.20457	(10020118)		
464763.41	3807961.91	14.78868	(10020118)	464783.41
3807961.91	14.33471	(10020118)		
464803.41	3807961.91	13.85813	(10020118)	464823.41
3807961.91	13.36547	(10020118)		
464843.41	3807961.91	12.86288	(10020118)	464863.41
3807961.91	12.35381	(10020118)		
464883.41	3807961.91	11.83790	(10020118)	464903.41
3807961.91	11.33025	(10020118)		
464923.41	3807961.91	10.82973	(10020118)	464943.41
3807961.91	10.33187	(10020118)		
464963.41	3807961.91	9.84417	(10020118)	464983.41
3807961.91	9.36713	(10020118)		
465003.41	3807961.91	8.89822	(10020118)	465023.41
3807961.91	8.56556	(10102019)		
465043.41	3807961.91	8.28188	(10102019)	465063.41
3807961.91	7.99254	(10102019)		
465083.41	3807961.91	7.71053	(10102019)	465103.41
3807961.91	7.43522	(10102019)		
465123.41	3807961.91	7.16559	(10102019)	465143.41
3807961.91	6.90151	(10102019)		
465163.41	3807961.91	6.64370	(10102019)	465183.41
3807961.91	6.39280	(10102019)		
465203.41	3807961.91	6.14848	(10102019)	465223.41
3807961.91	5.91194	(10102019)		
465243.41	3807961.91	5.68656	(10102019)	465263.41
3807961.91	5.46538	(10102019)		
465283.41	3807961.91	5.25079	(10102019)	465303.41
3807961.91	5.04661	(10102019)		
465323.41	3807961.91	4.84664	(10102019)	465343.41
3807961.91	4.65325	(10102019)		
465363.41	3807961.91	4.47007	(10102019)	465383.41
3807961.91	4.29147	(10102019)		
465403.41	3807961.91	4.15656	(09010519)	465423.41
3807961.91	4.12540	(09010519)		
465443.41	3807961.91	4.09624	(09010519)	465463.41
3807961.91	4.07262	(09010519)		
465483.41	3807961.91	4.04040	(09010519)	465503.41
3807961.91	4.01026	(09010519)		
465523.41	3807961.91	3.98034	(09010519)	465543.41
3807961.91	3.94772	(09010519)		
465563.41	3807961.91	3.91704	(09010519)	465583.41
3807961.91	3.88658	(09010519)		
465603.41	3807961.91	3.85333	(09010519)	465623.41
3807961.91	3.82021	(09010519)		

465643.41	3807961.91	3.78716	(09010519)	465663.41
3807961.91	3.75383	(09010519)		
465683.41	3807961.91	3.72071	(09010519)	465703.41
3807961.91	3.68829	(09010519)		
464743.41	3807981.91	15.24684	(10020118)	464763.41
3807981.91	14.77279	(10020118)		
464783.41	3807981.91	14.25346	(10020118)	464803.41
3807981.91	13.71362	(10020118)		
464823.41	3807981.91	13.15865	(10020118)	464843.41
3807981.91	12.60613	(10020118)		
464863.41	3807981.91	12.05635	(10020118)	464883.41
3807981.91	11.50296	(10020118)		
464903.41	3807981.91	10.96434	(10020118)	464923.41
3807981.91	10.43826	(10020118)		
464943.41	3807981.91	9.91780	(10020118)	464963.41
3807981.91	9.41600	(10020118)		
464983.41	3807981.91	9.02930	(10102019)	465003.41
3807981.91	8.71343	(10102019)		
465023.41	3807981.91	8.40558	(10102019)	465043.41
3807981.91	8.10358	(10102019)		
465063.41	3807981.91	7.80190	(10102019)	465083.41
3807981.91	7.50478	(10102019)		
465103.41	3807981.91	7.21574	(10102019)	465123.41
3807981.91	6.94288	(10102019)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 111

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
-------------	-------------	------	------------	-------------

Y-COORD (M)	CONC	(YYMMDDHH)	
465143.41	3807981.91	6.67035	(10102019)
3807981.91	6.40383	(10102019)	465163.41
465183.41	3807981.91	6.15217	(10102019)
3807981.91	5.90438	(10102019)	465203.41
465223.41	3807981.91	5.66443	(10102019)
3807981.91	5.43891	(10102019)	465243.41
465263.41	3807981.91	5.22119	(10102019)
3807981.91	5.01100	(10102019)	465283.41
465303.41	3807981.91	4.80725	(10102019)
3807981.91	4.60807	(10102019)	465323.41
465343.41	3807981.91	4.44697	(09010519)
3807981.91	4.41352	(09010519)	465363.41
465383.41	3807981.91	4.38055	(09010519)
3807981.91	4.34670	(09010519)	465403.41
465423.41	3807981.91	4.30757	(09010519)
3807981.91	4.27216	(09010519)	465443.41
465463.41	3807981.91	4.24616	(09010519)
3807981.91	4.20648	(09010519)	465483.41
465503.41	3807981.91	4.17059	(09010519)
3807981.91	4.13615	(09010519)	465523.41
465543.41	3807981.91	4.10050	(09010519)
3807981.91	4.06571	(09010519)	465563.41
465583.41	3807981.91	4.03029	(09010519)
3807981.91	3.99061	(09010519)	465603.41
465623.41	3807981.91	3.95377	(09010519)
3807981.91	3.91761	(09010519)	465643.41
465663.41	3807981.91	3.87827	(09010519)
3807981.91	3.84269	(09010519)	465683.41
465703.41	3807981.91	3.80870	(09010519)
3808001.91	14.61320	(10020118)	464763.41
464783.41	3808001.91	14.04427	(10020118)
3808001.91	13.45241	(10020118)	464803.41
464823.41	3808001.91	12.84431	(10020118)
3808001.91	12.24875	(10020118)	464843.41
464863.41	3808001.91	11.66332	(10020118)
3808001.91	11.07950	(10020118)	464883.41
464903.41	3808001.91	10.51831	(10020118)
3808001.91	9.97664	(10020118)	464923.41
464943.41	3808001.91	9.53050	(10102019)
3808001.91	9.18742	(10102019)	464963.41
464983.41	3808001.91	8.84776	(10102019)
3808001.91	8.52054	(10102019)	465003.41
465023.41	3808001.91	8.19433	(10102019)
3808001.91	7.87423	(10102019)	465043.41
465063.41	3808001.91	7.56859	(10102019)
3808001.91	7.26494	(10102019)	465083.41
465103.41	3808001.91	6.96888	(10102019)
			465123.41

3808001.91	6.69051	(10102019)		
465143.41	3808001.91	6.41423	(10102019)	465163.41
3808001.91	6.14424	(10102019)		
465183.41	3808001.91	5.88470	(10102019)	465203.41
3808001.91	5.63948	(10102019)		
465223.41	3808001.91	5.40592	(10102019)	465243.41
3808001.91	5.18209	(10102019)		
465263.41	3808001.91	4.96682	(10102019)	465283.41
3808001.91	4.78166	(09010519)		
465303.41	3808001.91	4.73696	(09010519)	465323.41
3808001.91	4.69601	(09010519)		
465343.41	3808001.91	4.65571	(09010519)	465363.41
3808001.91	4.60998	(09010519)		
465383.41	3808001.91	4.56909	(09010519)	465403.41
3808001.91	4.53000	(09010519)		
465423.41	3808001.91	4.48986	(09010519)	465443.41
3808001.91	4.45033	(09010519)		
465463.41	3808001.91	4.41252	(09010519)	465483.41
3808001.91	4.37201	(09010519)		
465503.41	3808001.91	4.33227	(09010519)	465523.41
3808001.91	4.29181	(09010519)		
465543.41	3808001.91	4.24639	(09010519)	465563.41
3808001.91	4.20525	(09010519)		
465583.41	3808001.91	4.16618	(09010519)	465603.41
3808001.91	4.12631	(09010519)		
465623.41	3808001.91	4.08334	(09010519)	465643.41
3808001.91	4.04000	(09010519)		
465663.41	3808001.91	4.00088	(09010519)	465683.41
3808001.91	3.96270	(09010519)		
465703.41	3808001.91	3.92407	(09010519)	464763.41
3808021.91	14.28517	(10020118)		
464783.41	3808021.91	13.67937	(10020118)	464803.41
3808021.91	13.05890	(10020118)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 112

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026

, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	12.42290	(10020118)	464843.41
3808021.91	11.79870	(10020118)		
464863.41	3808021.91	11.18821	(10020118)	464883.41
3808021.91	10.59085	(10020118)		
464903.41	3808021.91	10.07065	(10102019)	464923.41
3808021.91	9.69687	(10102019)		
464943.41	3808021.91	9.33411	(10102019)	464963.41
3808021.91	8.97414	(10102019)		
464983.41	3808021.91	8.61996	(10102019)	465003.41
3808021.91	8.27363	(10102019)		
465023.41	3808021.91	7.93716	(10102019)	465043.41
3808021.91	7.61036	(10102019)		
465063.41	3808021.91	7.29308	(10102019)	465083.41
3808021.91	6.98644	(10102019)		
465103.41	3808021.91	6.69040	(10102019)	465123.41
3808021.91	6.40443	(10102019)		
465143.41	3808021.91	6.12931	(10102019)	465163.41
3808021.91	5.86409	(10102019)		
465183.41	3808021.91	5.60490	(10102019)	465203.41
3808021.91	5.36259	(10102019)		
465223.41	3808021.91	5.14483	(09010519)	465243.41
3808021.91	5.09608	(09010519)		
465263.41	3808021.91	5.05019	(09010519)	465283.41
3808021.91	5.00489	(09010519)		
465303.41	3808021.91	4.95564	(09010519)	465323.41
3808021.91	4.90596	(09010519)		
465343.41	3808021.91	4.85619	(09010519)	465363.41
3808021.91	4.80667	(09010519)		
465383.41	3808021.91	4.76010	(09010519)	465403.41
3808021.91	4.71407	(09010519)		
465423.41	3808021.91	4.66435	(09010519)	465443.41
3808021.91	4.61774	(09010519)		
465463.41	3808021.91	4.57851	(09010519)	465483.41
3808021.91	4.52936	(09010519)		
465503.41	3808021.91	4.48332	(09010519)	465523.41
3808021.91	4.43810	(09010519)		
465543.41	3808021.91	4.39017	(09010519)	465563.41
3808021.91	4.34235	(09010519)		

465583.41	3808021.91	4.29557	(09010519)	465603.41
3808021.91	4.25231	(09010519)		
465623.41	3808021.91	4.20694	(09010519)	465643.41
3808021.91	4.16154	(09010519)		
465663.41	3808021.91	4.11933	(09010519)	465683.41
3808021.91	4.07496	(09010519)		
465703.41	3808021.91	4.02999	(09010519)	464783.41
3808041.91	13.18310	(10020118)		
464803.41	3808041.91	12.54566	(10020118)	464823.41
3808041.91	11.90057	(10020118)		
464843.41	3808041.91	11.26197	(10020118)	464863.41
3808041.91	10.67222	(10102019)		
464883.41	3808041.91	10.26680	(10102019)	464903.41
3808041.91	9.86081	(10102019)		
464923.41	3808041.91	9.46139	(10102019)	464943.41
3808041.91	9.07995	(10102019)		
464963.41	3808041.91	8.70811	(10102019)	464983.41
3808041.91	8.34471	(10102019)		
465003.41	3808041.91	7.98279	(10102019)	465023.41
3808041.91	7.63882	(10102019)		
465043.41	3808041.91	7.30855	(10102019)	465063.41
3808041.91	6.98474	(10102019)		
465083.41	3808041.91	6.67733	(10102019)	465103.41
3808041.91	6.38296	(10102019)		
465123.41	3808041.91	6.09531	(10102019)	465143.41
3808041.91	5.82344	(10102019)		
465163.41	3808041.91	5.56458	(09010519)	465183.41
3808041.91	5.50473	(09010519)		
465203.41	3808041.91	5.44852	(09010519)	465223.41
3808041.91	5.39313	(09010519)		
465243.41	3808041.91	5.33253	(09010519)	465263.41
3808041.91	5.27585	(09010519)		
465283.41	3808041.91	5.22157	(09010519)	465303.41
3808041.91	5.16890	(09010519)		
465323.41	3808041.91	5.11104	(09010519)	465343.41
3808041.91	5.05192	(09010519)		
465363.41	3808041.91	4.99783	(09010519)	465383.41
3808041.91	4.94509	(09010519)		
465403.41	3808041.91	4.89203	(09010519)	465423.41
3808041.91	4.83324	(09010519)		
465443.41	3808041.91	4.77967	(09010519)	465463.41
3808041.91	4.73811	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465483.41	3808041.91	4.68064 (09010519)	465503.41
3808041.91	4.62721 (09010519)		
465523.41	3808041.91	4.57627 (09010519)	465543.41
3808041.91	4.52700 (09010519)		
465563.41	3808041.91	4.47373 (09010519)	465583.41
3808041.91	4.42017 (09010519)		
465603.41	3808041.91	4.37242 (09010519)	465623.41
3808041.91	4.32514 (09010519)		
465643.41	3808041.91	4.27809 (09010519)	465663.41
3808041.91	4.23033 (09010519)		
465683.41	3808041.91	4.18005 (09010519)	465703.41
3808041.91	4.13005 (09010519)		
464803.41	3808061.91	11.94077 (10020118)	464823.41
3808061.91	11.28823 (10102019)		
464843.41	3808061.91	10.86103 (10102019)	464863.41
3808061.91	10.43473 (10102019)		
464883.41	3808061.91	10.00498 (10102019)	464903.41
3808061.91	9.58423 (10102019)		
464923.41	3808061.91	9.17507 (10102019)	464943.41
3808061.91	8.77952 (10102019)		
464963.41	3808061.91	8.39664 (10102019)	464983.41
3808061.91	8.02500 (10102019)		
465003.41	3808061.91	7.65763 (10102019)	465023.41
3808061.91	7.30508 (10102019)		
465043.41	3808061.91	6.96849 (10102019)	465063.41
3808061.91	6.65244 (10102019)		
465083.41	3808061.91	6.34436 (10102019)	465103.41
3808061.91	6.04853 (10102019)		
465123.41	3808061.91	5.97134 (09010519)	465143.41

3808061.91	5.90267	(09010519)		
465163.41	3808061.91	5.83265	(09010519)	465183.41
3808061.91	5.76926	(09010519)		
465203.41	3808061.91	5.70043	(09010519)	465223.41
3808061.91	5.63057	(09010519)		
465243.41	3808061.91	5.56754	(09010519)	465263.41
3808061.91	5.49937	(09010519)		
465283.41	3808061.91	5.43073	(09010519)	465303.41
3808061.91	5.37013	(09010519)		
465323.41	3808061.91	5.30873	(09010519)	465343.41
3808061.91	5.24618	(09010519)		
465363.41	3808061.91	5.17785	(09010519)	465383.41
3808061.91	5.11627	(09010519)		
465403.41	3808061.91	5.05764	(09010519)	465423.41
3808061.91	4.99848	(09010519)		
465443.41	3808061.91	4.94072	(09010519)	465463.41
3808061.91	4.88571	(09010519)		
465483.41	3808061.91	4.82809	(09010519)	465503.41
3808061.91	4.76687	(09010519)		
465523.41	3808061.91	4.70571	(09010519)	465543.41
3808061.91	4.65151	(09010519)		
465563.41	3808061.91	4.59714	(09010519)	465583.41
3808061.91	4.54317	(09010519)		
465603.41	3808061.91	4.49084	(09010519)	465623.41
3808061.91	4.43913	(09010519)		
465643.41	3808061.91	4.38691	(09010519)	465663.41
3808061.91	4.32996	(09010519)		
465683.41	3808061.91	4.27750	(09010519)	465703.41
3808061.91	4.22769	(09010519)		
464823.41	3808081.91	11.01774	(10102019)	464843.41
3808081.91	10.56040	(10102019)		
464863.41	3808081.91	10.10978	(10102019)	464883.41
3808081.91	9.67173	(10102019)		
464903.41	3808081.91	9.24651	(10102019)	464923.41
3808081.91	8.83326	(10102019)		
464943.41	3808081.91	8.42911	(10102019)	464963.41
3808081.91	8.03630	(10102019)		
464983.41	3808081.91	7.65771	(10102019)	465003.41
3808081.91	7.29537	(10102019)		
465023.41	3808081.91	6.94492	(10102019)	465043.41
3808081.91	6.61000	(10102019)		
465063.41	3808081.91	6.50459	(09010519)	465083.41
3808081.91	6.42303	(09010519)		
465103.41	3808081.91	6.33855	(09010519)	465123.41
3808081.91	6.25880	(09010519)		
465143.41	3808081.91	6.17964	(09010519)	465163.41
3808081.91	6.10098	(09010519)		
465183.41	3808081.91	6.02221	(09010519)	465203.41
3808081.91	5.94428	(09010519)		
465223.41	3808081.91	5.86711	(09010519)	465243.41

3808081.91 5.79004 (09010519)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
*** 13:53:49

PAGE 114

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3808081.91	5.71402	(09010519)	465283.41
3808081.91	5.63994 (09010519)			
465303.41	3808081.91	5.57103	(09010519)	465323.41
3808081.91	5.49879 (09010519)			
465343.41	3808081.91	5.42572	(09010519)	465363.41
3808081.91	5.35386 (09010519)			
465383.41	3808081.91	5.28642	(09010519)	465403.41
3808081.91	5.22040 (09010519)			
465423.41	3808081.91	5.15074	(09010519)	465443.41
3808081.91	5.08552 (09010519)			
465463.41	3808081.91	5.02971	(09010519)	465483.41
3808081.91	4.96281 (09010519)			
465503.41	3808081.91	4.89714	(09010519)	465523.41
3808081.91	4.83257 (09010519)			
465543.41	3808081.91	4.76855	(09010519)	465563.41
3808081.91	4.70876 (09010519)			
465583.41	3808081.91	4.65129	(09010519)	465603.41
3808081.91	4.59462 (09010519)			
465623.41	3808081.91	4.53874	(09010519)	465643.41
3808081.91	4.48293 (09010519)			

465663.41	3808081.91	4.42482	(09010519)	465683.41
3808081.91	4.37026	(09010519)		
465703.41	3808081.91	4.31699	(09010519)	464843.41
3808101.91	10.18482	(10102019)		
464863.41	3808101.91	9.72091	(10102019)	464883.41
3808101.91	9.28150	(10102019)		
464903.41	3808101.91	8.85379	(10102019)	464923.41
3808101.91	8.43840	(10102019)		
464943.41	3808101.91	8.03159	(10102019)	464963.41
3808101.91	7.63649	(10102019)		
464983.41	3808101.91	7.25777	(10102019)	465003.41
3808101.91	7.11342	(09010519)		
465023.41	3808101.91	7.01732	(09010519)	465043.41
3808101.91	6.92043	(09010519)		
465063.41	3808101.91	6.83005	(09010519)	465083.41
3808101.91	6.73323	(09010519)		
465103.41	3808101.91	6.63424	(09010519)	465123.41
3808101.91	6.53799	(09010519)		
465143.41	3808101.91	6.44936	(09010519)	465163.41
3808101.91	6.36285	(09010519)		
465183.41	3808101.91	6.26662	(09010519)	465203.41
3808101.91	6.17826	(09010519)		
465223.41	3808101.91	6.09303	(09010519)	465243.41
3808101.91	6.00266	(09010519)		
465263.41	3808101.91	5.92001	(09010519)	465283.41
3808101.91	5.84132	(09010519)		
465303.41	3808101.91	5.76167	(09010519)	465323.41
3808101.91	5.67826	(09010519)		
465343.41	3808101.91	5.59520	(09010519)	465363.41
3808101.91	5.51910	(09010519)		
465383.41	3808101.91	5.44545	(09010519)	465403.41
3808101.91	5.37222	(09010519)		
465423.41	3808101.91	5.29302	(09010519)	465443.41
3808101.91	5.22072	(09010519)		
465463.41	3808101.91	5.16318	(09010519)	465483.41
3808101.91	5.08763	(09010519)		
465503.41	3808101.91	5.01747	(09010519)	465523.41
3808101.91	4.94935	(09010519)		
465543.41	3808101.91	4.87749	(09010519)	465563.41
3808101.91	4.81216	(09010519)		
465583.41	3808101.91	4.75029	(09010519)	465603.41
3808101.91	4.68939	(09010519)		
465623.41	3808101.91	4.62947	(09010519)	465643.41
3808101.91	4.57026	(09010519)		
465663.41	3808101.91	4.51063	(09010519)	465683.41
3808101.91	4.45313	(09010519)		
465703.41	3808101.91	4.39586	(09010519)	464863.41
3808121.91	9.29725	(10102019)		
464883.41	3808121.91	8.85172	(10102019)	464903.41
3808121.91	8.41462	(10102019)		

464923.41	3808121.91	7.99298	(10102019)	464943.41
3808121.91	7.80512	(09010519)		
464963.41	3808121.91	7.69688	(09010519)	464983.41
3808121.91	7.58703	(09010519)		
465003.41	3808121.91	7.46958	(09010519)	465023.41
3808121.91	7.35966	(09010519)		
465043.41	3808121.91	7.25231	(09010519)	465063.41
3808121.91	7.13774	(09010519)		
465083.41	3808121.91	7.02321	(09010519)	465103.41
3808121.91	6.91115	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 115

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465123.41	3808121.91	6.81061	(09010519)	465143.41
3808121.91	6.71253	(09010519)		
465163.41	3808121.91	6.61412	(09010519)	465183.41
3808121.91	6.50609	(09010519)		
465203.41	3808121.91	6.40076	(09010519)	465223.41
3808121.91	6.29944	(09010519)		
465243.41	3808121.91	6.20776	(09010519)	465263.41
3808121.91	6.11867	(09010519)		
465283.41	3808121.91	6.02964	(09010519)	465303.41
3808121.91	5.93316	(09010519)		
465323.41	3808121.91	5.84449	(09010519)	465343.41

3808121.91	5.75883	(09010519)	
465363.41	3808121.91	5.66730	(09010519) 465383.41
3808121.91	5.58460	(09010519)	
465403.41	3808121.91	5.50616	(09010519) 465423.41
3808121.91	5.42787	(09010519)	
465443.41	3808121.91	5.35195	(09010519) 465463.41
3808121.91	5.27989	(09010519)	
465483.41	3808121.91	5.20544	(09010519) 465503.41
3808121.91	5.12747	(09010519)	
465523.41	3808121.91	5.05005	(09010519) 465543.41
3808121.91	4.97983	(09010519)	
465563.41	3808121.91	4.91191	(09010519) 465583.41
3808121.91	4.84562	(09010519)	
465603.41	3808121.91	4.78050	(09010519) 465623.41
3808121.91	4.71654	(09010519)	
465643.41	3808121.91	4.65241	(09010519) 465663.41
3808121.91	4.58337	(09010519)	
465683.41	3808121.91	4.52055	(09010519) 465703.41
3808121.91	4.46118	(09010519)	
464883.41	3808141.91	8.57615	(09010519) 464903.41
3808141.91	8.46290	(09010519)	
464923.41	3808141.91	8.34141	(09010519) 464943.41
3808141.91	8.21363	(09010519)	
464963.41	3808141.91	8.08694	(09010519) 464983.41
3808141.91	7.95920	(09010519)	
465003.41	3808141.91	7.82116	(09010519) 465023.41
3808141.91	7.69456	(09010519)	
465043.41	3808141.91	7.57209	(09010519) 465063.41
3808141.91	7.43963	(09010519)	
465083.41	3808141.91	7.30897	(09010519) 465103.41
3808141.91	7.18294	(09010519)	
465123.41	3808141.91	7.07122	(09010519) 465143.41
3808141.91	6.95619	(09010519)	
465163.41	3808141.91	6.84112	(09010519) 465183.41
3808141.91	6.72860	(09010519)	
465203.41	3808141.91	6.61338	(09010519) 465223.41
3808141.91	6.50030	(09010519)	
465243.41	3808141.91	6.40086	(09010519) 465263.41
3808141.91	6.29840	(09010519)	
465283.41	3808141.91	6.19597	(09010519) 465303.41
3808141.91	6.09599	(09010519)	
465323.41	3808141.91	5.99764	(09010519) 465343.41
3808141.91	5.90128	(09010519)	
465363.41	3808141.91	5.80728	(09010519) 465383.41
3808141.91	5.71929	(09010519)	
465403.41	3808141.91	5.63375	(09010519) 465423.41
3808141.91	5.54478	(09010519)	
465443.41	3808141.91	5.46166	(09010519) 465463.41
3808141.91	5.38239	(09010519)	
465483.41	3808141.91	5.30447	(09010519) 465503.41

3808141.91	5.22456	(09010519)		
465523.41	3808141.91	5.14470	(09010519)	465543.41
3808141.91	5.06603	(09010519)		
465563.41	3808141.91	4.99267	(09010519)	465583.41
3808141.91	4.92241	(09010519)		
465603.41	3808141.91	4.85350	(09010519)	465623.41
3808141.91	4.78592	(09010519)		
465643.41	3808141.91	4.71881	(09010519)	465663.41
3808141.91	4.64954	(09010519)		
465683.41	3808141.91	4.58141	(09010519)	465703.41
3808141.91	4.51547	(09010519)		
464883.41	3808161.91	9.01416	(09010519)	464903.41
3808161.91	8.89022	(09010519)		
464923.41	3808161.91	8.75378	(09010519)	464943.41
3808161.91	8.60447	(09010519)		
464963.41	3808161.91	8.45741	(09010519)	464983.41
3808161.91	8.31068	(09010519)		
465003.41	3808161.91	8.15668	(09010519)	465023.41
3808161.91	8.01138	(09010519)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 116

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465043.41	3808161.91	7.87000	(09010519)	465063.41
3808161.91	7.72128	(09010519)		

465083.41	3808161.91	7.57738	(09010519)	465103.41
3808161.91	7.43914 (09010519)			
465123.41	3808161.91	7.31140	(09010519)	465143.41
3808161.91	7.18003 (09010519)			
465163.41	3808161.91	7.05034	(09010519)	465183.41
3808161.91	6.93085 (09010519)			
465203.41	3808161.91	6.80782	(09010519)	465223.41
3808161.91	6.68642 (09010519)			
465243.41	3808161.91	6.57483	(09010519)	465263.41
3808161.91	6.45979 (09010519)			
465283.41	3808161.91	6.34629	(09010519)	465303.41
3808161.91	6.24218 (09010519)			
465323.41	3808161.91	6.13470	(09010519)	465343.41
3808161.91	6.02864 (09010519)			
465363.41	3808161.91	5.93155	(09010519)	465383.41
3808161.91	5.83812 (09010519)			
465403.41	3808161.91	5.74594	(09010519)	465423.41
3808161.91	5.64771 (09010519)			
465443.41	3808161.91	5.55808	(09010519)	465463.41
3808161.91	5.47327 (09010519)			
465483.41	3808161.91	5.38835	(09010519)	465503.41
3808161.91	5.30680 (09010519)			
465523.41	3808161.91	5.22600	(09010519)	465543.41
3808161.91	5.13987 (09010519)			
465563.41	3808161.91	5.06157	(09010519)	465583.41
3808161.91	4.98761 (09010519)			
465603.41	3808161.91	4.91517	(09010519)	465623.41
3808161.91	4.84291 (09010519)			
465643.41	3808161.91	4.77203	(09010519)	465663.41
3808161.91	4.70404 (09010519)			
465683.41	3808161.91	4.63240	(09010519)	465703.41
3808161.91	4.56108 (09010519)			
464903.41	3808181.91	9.28802	(09010519)	464923.41
3808181.91	9.13130 (09010519)			
464943.41	3808181.91	8.96073	(09010519)	464963.41
3808181.91	8.79364 (09010519)			
464983.41	3808181.91	8.62957	(09010519)	465003.41
3808181.91	8.46736 (09010519)			
465023.41	3808181.91	8.30091	(09010519)	465043.41
3808181.91	8.13414 (09010519)			
465063.41	3808181.91	7.96910	(09010519)	465083.41
3808181.91	7.81770 (09010519)			
465103.41	3808181.91	7.67267	(09010519)	465123.41
3808181.91	7.52121 (09010519)			
465143.41	3808181.91	7.38143	(09010519)	465163.41
3808181.91	7.24697 (09010519)			
465183.41	3808181.91	7.10623	(09010519)	465203.41
3808181.91	6.97665 (09010519)			
465223.41	3808181.91	6.85208	(09010519)	465243.41
3808181.91	6.72138 (09010519)			

465263.41	3808181.91	6.60128	(09010519)	465283.41
3808181.91	6.48588	(09010519)		
465303.41	3808181.91	6.36450	(09010519)	465323.41
3808181.91	6.25317	(09010519)		
465343.41	3808181.91	6.14622	(09010519)	465363.41
3808181.91	6.03347	(09010519)		
465383.41	3808181.91	5.93162	(09010519)	465403.41
3808181.91	5.83536	(09010519)		
465423.41	3808181.91	5.73999	(09010519)	465443.41
3808181.91	5.64795	(09010519)		
465463.41	3808181.91	5.55677	(09010519)	465483.41
3808181.91	5.45937	(09010519)		
465503.41	3808181.91	5.37101	(09010519)	465523.41
3808181.91	5.28780	(09010519)		
465543.41	3808181.91	5.20496	(09010519)	465563.41
3808181.91	5.12514	(09010519)		
465583.41	3808181.91	5.04757	(09010519)	465603.41
3808181.91	4.97170	(09010519)		
465623.41	3808181.91	4.89169	(09010519)	465643.41
3808181.91	4.81233	(09010519)		
465663.41	3808181.91	4.74167	(09010519)	465683.41
3808181.91	4.67168	(09010519)		
465703.41	3808181.91	4.60156	(09010519)	464923.41
3808201.91	9.46218	(09010519)		
464943.41	3808201.91	9.28240	(09010519)	464963.41
3808201.91	9.09938	(09010519)		
464983.41	3808201.91	8.91739	(09010519)	465003.41
3808201.91	8.74007	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 117

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

465023.41	3808201.91	8.55552	(09010519)	465043.41	
3808201.91	8.37162	(09010519)			
465063.41	3808201.91	8.20070	(09010519)	465083.41	
3808201.91	8.03368	(09010519)			
465103.41	3808201.91	7.87098	(09010519)	465123.41	
3808201.91	7.71379	(09010519)			
465143.41	3808201.91	7.56014	(09010519)	465163.41	
3808201.91	7.41071	(09010519)			
465183.41	3808201.91	7.26586	(09010519)	465203.41	
3808201.91	7.12448	(09010519)			
465223.41	3808201.91	6.98694	(09010519)	465243.41	
3808201.91	6.85361	(09010519)			
465263.41	3808201.91	6.72342	(09010519)	465283.41	
3808201.91	6.59673	(09010519)			
465303.41	3808201.91	6.47388	(09010519)	465323.41	
3808201.91	6.35386	(09010519)			
465343.41	3808201.91	6.23703	(09010519)	465363.41	
3808201.91	6.12371	(09010519)			
465383.41	3808201.91	6.01294	(09010519)	465403.41	
3808201.91	5.90610	(09010519)			
465423.41	3808201.91	5.80783	(09010519)	465443.41	
3808201.91	5.71194	(09010519)			
465463.41	3808201.91	5.61743	(09010519)	465483.41	
3808201.91	5.52029	(09010519)			
465503.41	3808201.91	5.42956	(09010519)	465523.41	
3808201.91	5.34278	(09010519)			
465543.41	3808201.91	5.25805	(09010519)	465563.41	
3808201.91	5.17136	(09010519)			
465583.41	3808201.91	5.08615	(09010519)	465603.41	
3808201.91	5.00745	(09010519)			
465623.41	3808201.91	4.92718	(09010519)	465643.41	
3808201.91	4.84822	(09010519)			
465663.41	3808201.91	4.77499	(09010519)	465683.41	
3808201.91	4.69997	(09010519)			
465703.41	3808201.91	4.62528	(09010519)	464943.41	
3808221.91	9.56611	(09010519)			
464963.41	3808221.91	9.36949	(09010519)	464983.41	
3808221.91	9.16993	(09010519)			
465003.41	3808221.91	8.97620	(09010519)	465023.41	
3808221.91	8.77779	(09010519)			
465043.41	3808221.91	8.58253	(09010519)	465063.41	
3808221.91	8.40261	(09010519)			
465083.41	3808221.91	8.21780	(09010519)	465103.41	

3808221.91	8.03712	(09010519)		
465123.41	3808221.91	7.87697	(09010519)	465143.41
3808221.91	7.71192	(09010519)		
465163.41	3808221.91	7.54916	(09010519)	465183.41
3808221.91	7.39977	(09010519)		
465203.41	3808221.91	7.24766	(09010519)	465223.41
3808221.91	7.09877	(09010519)		
465243.41	3808221.91	6.96232	(09010519)	465263.41
3808221.91	6.82305	(09010519)		
465283.41	3808221.91	6.68661	(09010519)	465303.41
3808221.91	6.56176	(09010519)		
465323.41	3808221.91	6.43404	(09010519)	465343.41
3808221.91	6.30879	(09010519)		
465363.41	3808221.91	6.19433	(09010519)	465383.41
3808221.91	6.07697	(09010519)		
465403.41	3808221.91	5.96222	(09010519)	465423.41
3808221.91	5.85977	(09010519)		
465443.41	3808221.91	5.75994	(09010519)	465463.41
3808221.91	5.66264	(09010519)		
465483.41	3808221.91	5.56781	(09010519)	465503.41
3808221.91	5.47372	(09010519)		
465523.41	3808221.91	5.38185	(09010519)	465543.41
3808221.91	5.29402	(09010519)		
465563.41	3808221.91	5.20216	(09010519)	465583.41
3808221.91	5.11150	(09010519)		
465603.41	3808221.91	5.03034	(09010519)	465623.41
3808221.91	4.94970	(09010519)		
465643.41	3808221.91	4.87088	(09010519)	465663.41
3808221.91	4.79546	(09010519)		
465683.41	3808221.91	4.71640	(09010519)	465703.41
3808221.91	4.63796	(09010519)		
464963.41	3808241.91	9.59937	(09010519)	464983.41
3808241.91	9.38346	(09010519)		
465003.41	3808241.91	9.17454	(09010519)	465023.41
3808241.91	8.97016	(09010519)		
465043.41	3808241.91	8.76945	(09010519)	465063.41
3808241.91	8.56317	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 118

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010

```

, L0000011      , L0000012      , L0000013      ,
                  L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
                  L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465083.41	3808241.91	8.36205	(09010519)	465103.41
3808241.91	8.16978	(09010519)		
465123.41	3808241.91	7.99989	(09010519)	465143.41
3808241.91	7.83327	(09010519)		
465163.41	3808241.91	7.66912	(09010519)	465183.41
3808241.91	7.49918	(09010519)		
465203.41	3808241.91	7.34330	(09010519)	465223.41
3808241.91	7.19432	(09010519)		
465243.41	3808241.91	7.03954	(09010519)	465263.41
3808241.91	6.89776	(09010519)		
465283.41	3808241.91	6.76221	(09010519)	465303.41
3808241.91	6.62091	(09010519)		
465323.41	3808241.91	6.49164	(09010519)	465343.41
3808241.91	6.36800	(09010519)		
465363.41	3808241.91	6.23871	(09010519)	465383.41
3808241.91	6.12055	(09010519)		
465403.41	3808241.91	6.00966	(09010519)	465423.41
3808241.91	5.90329	(09010519)		
465443.41	3808241.91	5.79977	(09010519)	465463.41
3808241.91	5.69900	(09010519)		
465483.41	3808241.91	5.60089	(09010519)	465503.41
3808241.91	5.49819	(09010519)		
465523.41	3808241.91	5.39684	(09010519)	465543.41
3808241.91	5.30666	(09010519)		
465563.41	3808241.91	5.21776	(09010519)	465583.41
3808241.91	5.13080	(09010519)		
465603.41	3808241.91	5.05539	(10032206)	465623.41
3808241.91	4.97718	(10032206)		
465643.41	3808241.91	4.89956	(10032206)	465663.41
3808241.91	4.83105	(10032206)		
465683.41	3808241.91	4.76314	(10032206)	465703.41
3808241.91	4.69498	(10032206)		
464983.41	3808261.91	9.51533	(09010519)	465003.41
3808261.91	9.30753	(09010519)		

465023.41	3808261.91	9.09796	(09010519)	465043.41
3808261.91	8.88936	(09010519)		
465063.41	3808261.91	8.67991	(09010519)	465083.41
3808261.91	8.47784	(09010519)		
465103.41	3808261.91	8.28249	(09010519)	465123.41
3808261.91	8.09268	(09010519)		
465143.41	3808261.91	7.91677	(09010519)	465163.41
3808261.91	7.74810	(09010519)		
465183.41	3808261.91	7.57802	(09010519)	465203.41
3808261.91	7.41275	(09010519)		
465223.41	3808261.91	7.25291	(09010519)	465243.41
3808261.91	7.09879	(09010519)		
465263.41	3808261.91	6.95521	(09010519)	465283.41
3808261.91	6.81584	(09010519)		
465303.41	3808261.91	6.66728	(09010519)	465323.41
3808261.91	6.52837	(09010519)		
465343.41	3808261.91	6.39659	(09010519)	465363.41
3808261.91	6.26932	(09010519)		
465383.41	3808261.91	6.14544	(09010519)	465403.41
3808261.91	6.03051	(10032206)		
465423.41	3808261.91	5.93321	(10032206)	465443.41
3808261.91	5.83837	(10032206)		
465463.41	3808261.91	5.74610	(10032206)	465483.41
3808261.91	5.65593	(10032206)		
465503.41	3808261.91	5.56384	(10032206)	465523.41
3808261.91	5.47338	(10032206)		
465543.41	3808261.91	5.38994	(10032206)	465563.41
3808261.91	5.30429	(10032206)		
465583.41	3808261.91	5.22010	(10032206)	465603.41
3808261.91	5.14276	(10032206)		
465623.41	3808261.91	5.06361	(10032206)	465643.41
3808261.91	4.98478	(10032206)		
465663.41	3808261.91	4.90739	(10032206)	465683.41
3808261.91	4.83564	(10032206)		
465703.41	3808261.91	4.76634	(10032206)	465003.41
3808281.91	9.38848	(09010519)		
465023.41	3808281.91	9.17543	(09010519)	465043.41
3808281.91	8.96324	(09010519)		
465063.41	3808281.91	8.75081	(09010519)	465083.41
3808281.91	8.55185	(09010519)		
465103.41	3808281.91	8.35915	(09010519)	465123.41
3808281.91	8.15602	(09010519)		
465143.41	3808281.91	7.97099	(09010519)	465163.41
3808281.91	7.79717	(09010519)		
465183.41	3808281.91	7.62608	(09010519)	465203.41
3808281.91	7.45304	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***

*** 13:53:49

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808281.91	7.29496	(10032206)	465243.41
3808281.91	7.15980	(10032206)		
465263.41	3808281.91	7.02631	(10032206)	465283.41
3808281.91	6.89355	(10032206)		
465303.41	3808281.91	6.75374	(10032206)	465323.41
3808281.91	6.62024	(10032206)		
465343.41	3808281.91	6.49361	(10032206)	465363.41
3808281.91	6.37854	(10032206)		
465383.41	3808281.91	6.26026	(10032206)	465403.41
3808281.91	6.14424	(10032206)		
465423.41	3808281.91	6.03895	(10032206)	465443.41
3808281.91	5.93827	(10032206)		
465463.41	3808281.91	5.84549	(10032206)	465483.41
3808281.91	5.75094	(10032206)		
465503.41	3808281.91	5.65882	(10032206)	465523.41
3808281.91	5.56868	(10032206)		
465543.41	3808281.91	5.47882	(10032206)	465563.41
3808281.91	5.38623	(10032206)		
465583.41	3808281.91	5.29554	(10032206)	465603.41
3808281.91	5.21495	(10032206)		
465623.41	3808281.91	5.13480	(10032206)	465643.41
3808281.91	5.05481	(10032206)		
465663.41	3808281.91	4.97124	(10032206)	465683.41
3808281.91	4.89432	(10032206)		
465703.41	3808281.91	4.82184	(10032206)	465003.41

3808301.91	9.42674 (09010519)		
465023.41	3808301.91	9.21370 (09010519)	465043.41
3808301.91	9.02066 (10032206)		
465063.41	3808301.91	8.80449 (10032206)	465083.41
3808301.91	8.62463 (10032206)		
465103.41	3808301.91	8.45913 (10032206)	465123.41
3808301.91	8.28060 (10032206)		
465143.41	3808301.91	8.10994 (10032206)	465163.41
3808301.91	7.94282 (10032206)		
465183.41	3808301.91	7.76719 (10032206)	465203.41
3808301.91	7.60702 (10032206)		
465223.41	3808301.91	7.45716 (10032206)	465243.41
3808301.91	7.31394 (10032206)		
465263.41	3808301.91	7.16493 (10032206)	465283.41
3808301.91	7.01546 (10032206)		
465303.41	3808301.91	6.86860 (10032206)	465323.41
3808301.91	6.73632 (10032206)		
465343.41	3808301.91	6.61085 (10032206)	465363.41
3808301.91	6.47915 (10032206)		
465383.41	3808301.91	6.35940 (10032206)	465403.41
3808301.91	6.24508 (10032206)		
465423.41	3808301.91	6.12466 (10032206)	465443.41
3808301.91	6.01686 (10032206)		
465463.41	3808301.91	5.93454 (10032206)	465483.41
3808301.91	5.83589 (10032206)		
465503.41	3808301.91	5.73988 (10032206)	465523.41
3808301.91	5.64450 (10032206)		
465543.41	3808301.91	5.54280 (10032206)	465563.41
3808301.91	5.44991 (10032206)		
465583.41	3808301.91	5.36262 (10032206)	465603.41
3808301.91	5.27902 (10032206)		
465623.41	3808301.91	5.19079 (10032206)	465643.41
3808301.91	5.10333 (10032206)		
465663.41	3808301.91	5.02459 (10032206)	465683.41
3808301.91	4.94255 (10032206)		
465703.41	3808301.91	4.86180 (10032206)	465043.41
3808321.91	9.19481 (10032206)		
465063.41	3808321.91	8.99157 (10032206)	465083.41
3808321.91	8.80194 (10032206)		
465103.41	3808321.91	8.61994 (10032206)	465123.41
3808321.91	8.43499 (10032206)		
465143.41	3808321.91	8.25643 (10032206)	465163.41
3808321.91	8.08211 (10032206)		
465183.41	3808321.91	7.90616 (10032206)	465203.41
3808321.91	7.74259 (10032206)		
465223.41	3808321.91	7.58565 (10032206)	465243.41
3808321.91	7.42557 (10032206)		
465263.41	3808321.91	7.26535 (10032206)	465283.41
3808321.91	7.10934 (10032206)		
465303.41	3808321.91	6.96599 (10032206)	465323.41

```

^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apol1\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      04/06/22
*** AERMET - VERSION 14134 ***      ***
***      13:53:49

```

PAGE 120

```
*** MODELOPTs:      RegDFault  CONC  ELEV  URBAN
```

VALUES FOR SOURCE GROUP:		ALL	*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION ***	INCLUDING SOURCE(S):	L0000001	, L0000002
, L0000003	, L0000004	, L0000005	,			
	L0000006	, L0000007	, L0000008	, L0000009	, L0000010	
, L0000011	, L0000012	, L0000013	,			
	L0000014	, L0000015	, L0000016	, L0000017	, L0000018	
, L0000019	, L0000020	, L0000021	,			
	L0000022	, L0000023	, L0000024	, L0000025	, L0000026	
, L0000027	, L0000028	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM 10 IN MICROGRAMS/M**3

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465423.41	3808321.91	6.19460	(10032206)	465443.41
3808321.91	6.08490	(10032206)		
465463.41	3808321.91	5.99117	(10032206)	465483.41
3808321.91	5.88944	(10032206)		
465503.41	3808321.91	5.79052	(10032206)	465523.41
3808321.91	5.69311	(10032206)		
465543.41	3808321.91	5.59334	(10032206)	465563.41
3808321.91	5.50057	(10032206)		
465583.41	3808321.91	5.41105	(10032206)	465603.41
3808321.91	5.31868	(10032206)		
465623.41	3808321.91	5.22920	(10032206)	465643.41
3808321.91	5.14230	(10032206)		
465663.41	3808321.91	5.05720	(10032206)	465683.41
3808321.91	4.97470	(10032206)		
465703.41	3808321.91	4.89453	(10032206)	465083.41
3808341.91	8.93470	(10032206)		

465103.41	3808341.91	8.73573	(10032206)	465123.41
3808341.91	8.54825	(10032206)		
465143.41	3808341.91	8.36385	(10032206)	465163.41
3808341.91	8.18462	(10032206)		
465183.41	3808341.91	8.01165	(10032206)	465203.41
3808341.91	7.84196	(10032206)		
465223.41	3808341.91	7.67494	(10032206)	465243.41
3808341.91	7.50427	(10032206)		
465263.41	3808341.91	7.33665	(10032206)	465283.41
3808341.91	7.17643	(10032206)		
465303.41	3808341.91	7.03383	(10032206)	465323.41
3808341.91	6.88593	(10032206)		
465343.41	3808341.91	6.74158	(10032206)	465363.41
3808341.91	6.61627	(10032206)		
465383.41	3808341.91	6.48575	(10032206)	465403.41
3808341.91	6.35689	(10032206)		
465423.41	3808341.91	6.24009	(10032206)	465443.41
3808341.91	6.12868	(10032206)		
465463.41	3808341.91	6.02616	(10032206)	465483.41
3808341.91	5.92206	(10032206)		
465503.41	3808341.91	5.82090	(10032206)	465523.41
3808341.91	5.72217	(10032206)		
465543.41	3808341.91	5.62401	(10032206)	465563.41
3808341.91	5.53035	(10032206)		
465583.41	3808341.91	5.43812	(10032206)	465603.41
3808341.91	5.34034	(10032206)		
465623.41	3808341.91	5.25039	(10032206)	465643.41
3808341.91	5.16397	(10032206)		
465663.41	3808341.91	5.07395	(10032206)	465683.41
3808341.91	4.99119	(10032206)		
465703.41	3808341.91	4.91165	(10032206)	465103.41
3808361.91	8.80645	(10032206)		
465123.41	3808361.91	8.62965	(10032206)	465143.41
3808361.91	8.44454	(10032206)		
465163.41	3808361.91	8.25961	(10032206)	465183.41
3808361.91	8.08134	(10032206)		
465203.41	3808361.91	7.89748	(10032206)	465223.41
3808361.91	7.71732	(10032206)		
465243.41	3808361.91	7.55551	(10032206)	465263.41
3808361.91	7.38813	(10032206)		
465283.41	3808361.91	7.22177	(10032206)	465303.41
3808361.91	7.06311	(10032206)		
465323.41	3808361.91	6.90847	(10032206)	465343.41
3808361.91	6.76124	(10032206)		
465363.41	3808361.91	6.63371	(10032206)	465383.41
3808361.91	6.50834	(10032206)		
465403.41	3808361.91	6.38438	(10032206)	465423.41
3808361.91	6.25425	(10032206)		
465443.41	3808361.91	6.13792	(10032206)	465463.41
3808361.91	6.04903	(10032206)		

465483.41	3808361.91	5.94298	(10032206)	465503.41
3808361.91	5.83999	(10032206)		
465523.41	3808361.91	5.73790	(10032206)	465543.41
3808361.91	5.62930	(10032206)		
465563.41	3808361.91	5.53146	(10032206)	465583.41
3808361.91	5.43988	(10032206)		
465603.41	3808361.91	5.34912	(10032206)	465623.41
3808361.91	5.25501	(10032206)		
465643.41	3808361.91	5.16245	(10032206)	465663.41
3808361.91	5.07923	(10032206)		
465683.41	3808361.91	4.99267	(10032206)	465703.41
3808361.91	4.90744	(10032206)		
465183.41	3808381.91	8.08000	(10032206)	465203.41
3808381.91	7.89573	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 121

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808381.91	7.71832	(10032206)	465243.41
3808381.91	7.54619	(10032206)		
465263.41	3808381.91	7.37423	(10032206)	465283.41
3808381.91	7.20693	(10032206)		
465303.41	3808381.91	7.05435	(10032206)	465323.41
3808381.91	6.90018	(10032206)		
465343.41	3808381.91	6.75131	(10032206)	465363.41

3808381.91	6.62266	(10032206)		
465383.41	3808381.91	6.49806	(10032206)	465403.41
3808381.91	6.37607	(10032206)		
465423.41	3808381.91	6.25117	(10032206)	465443.41
3808381.91	6.13559	(10032206)		
465463.41	3808381.91	6.03703	(10032206)	465483.41
3808381.91	5.93021	(10032206)		
465503.41	3808381.91	5.82652	(10032206)	465523.41
3808381.91	5.72458	(10032206)		
465543.41	3808381.91	5.62030	(10032206)	465563.41
3808381.91	5.51871	(10032206)		
465583.41	3808381.91	5.42129	(10032206)	465603.41
3808381.91	5.33203	(10032206)		
465623.41	3808381.91	5.24112	(10032206)	465643.41
3808381.91	5.15095	(10032206)		
465663.41	3808381.91	5.06276	(10032206)	465683.41
3808381.91	4.97736	(10032206)		
465703.41	3808381.91	4.89448	(10032206)	465303.41
3808401.91	7.00696	(10032206)		
465323.41	3808401.91	6.85810	(10032206)	465343.41
3808401.91	6.71208	(10032206)		
465363.41	3808401.91	6.58343	(10032206)	465383.41
3808401.91	6.45886	(10032206)		
465403.41	3808401.91	6.33820	(10032206)	465423.41
3808401.91	6.22128	(10032206)		
465443.41	3808401.91	6.10794	(10032206)	465463.41
3808401.91	5.99826	(10032206)		
465483.41	3808401.91	5.89161	(10032206)	465503.41
3808401.91	5.78811	(10032206)		
465523.41	3808401.91	5.68763	(10032206)	465543.41
3808401.91	5.59004	(10032206)		
465563.41	3808401.91	5.48780	(10032206)	465583.41
3808401.91	5.38720	(10032206)		
465603.41	3808401.91	5.29810	(10032206)	465623.41
3808401.91	5.20975	(10032206)		
465643.41	3808401.91	5.12184	(10032206)	465663.41
3808401.91	5.03027	(10032206)		
465683.41	3808401.91	4.94624	(10032206)	465703.41
3808401.91	4.86556	(10032206)		
465323.41	3808421.91	6.77830	(10032206)	465343.41
3808421.91	6.64435	(10032206)		
465363.41	3808421.91	6.51677	(10032206)	465383.41
3808421.91	6.39328	(10032206)		
465403.41	3808421.91	6.27367	(10032206)	465423.41
3808421.91	6.15778	(10032206)		
465443.41	3808421.91	6.04545	(10032206)	465463.41
3808421.91	5.93653	(10032206)		
465483.41	3808421.91	5.83087	(10032206)	465503.41
3808421.91	5.72834	(10032206)		
465523.41	3808421.91	5.62880	(10032206)	465543.41

3808421.91	5.53214	(10032206)		
465563.41	3808421.91	5.43702	(10032206)	465583.41
3808421.91	5.34423	(10032206)		
465603.41	3808421.91	5.25560	(10032206)	465623.41
3808421.91	5.16214	(10032206)		
465643.41	3808421.91	5.06970	(10032206)	465663.41
3808421.91	4.98679	(10032206)		
465683.41	3808421.91	4.90049	(10032206)	465703.41
3808421.91	4.81554	(10032206)		
465323.41	3808441.91	6.67801	(10032206)	465343.41
3808441.91	6.55019	(10032206)		
465363.41	3808441.91	6.43463	(10032206)	465383.41
3808441.91	6.31608	(10032206)		
465403.41	3808441.91	6.19801	(10032206)	465423.41
3808441.91	6.08362	(10032206)		
465443.41	3808441.91	5.97274	(10032206)	465463.41
3808441.91	5.86522	(10032206)		
465483.41	3808441.91	5.76093	(10032206)	465503.41
3808441.91	5.65973	(10032206)		
465523.41	3808441.91	5.56148	(10032206)	465543.41
3808441.91	5.46608	(10032206)		
465563.41	3808441.91	5.37340	(10032206)	465583.41
3808441.91	5.28333	(10032206)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 122

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465603.41	3808441.91	5.19578	(10032206)	465623.41	
3808441.91	5.10233	(10032206)			
465643.41	3808441.91	5.00863	(10032206)	465663.41	
3808441.91	4.92232	(10032206)			
465683.41	3808441.91	4.83879	(10032206)	465703.41	
3808441.91	4.75879	(10032206)			
465343.41	3808461.91	6.42856	(10032206)	465363.41	
3808461.91	6.32153	(10032206)			
465383.41	3808461.91	6.20961	(10032206)	465403.41	
3808461.91	6.09701	(10032206)			
465423.41	3808461.91	5.98505	(10032206)	465443.41	
3808461.91	5.87651	(10032206)			
465463.41	3808461.91	5.77148	(10032206)	465483.41	
3808461.91	5.66935	(10032206)			
465503.41	3808461.91	5.57221	(10032206)	465523.41	
3808461.91	5.47804	(10032206)			
465543.41	3808461.91	5.38446	(10032206)	465563.41	
3808461.91	5.29354	(10032206)			
465583.41	3808461.91	5.20518	(10032206)	465603.41	
3808461.91	5.11927	(10032206)			
465623.41	3808461.91	5.02753	(10032206)	465643.41	
3808461.91	4.93445	(10032206)			
465663.41	3808461.91	4.84399	(10032206)	465683.41	
3808461.91	4.76423	(10032206)			
465703.41	3808461.91	4.68990	(10032206)	465343.41	
3808481.91	6.27906	(10032206)			
465363.41	3808481.91	6.16352	(10032206)	465383.41	
3808481.91	6.06050	(10032206)			
465403.41	3808481.91	5.96170	(10032206)	465423.41	
3808481.91	5.85338	(10032206)			
465443.41	3808481.91	5.74834	(10032206)	465463.41	
3808481.91	5.64644	(10032206)			
465483.41	3808481.91	5.54756	(10032206)	465503.41	
3808481.91	5.46008	(10032206)			
465523.41	3808481.91	5.37640	(10032206)	465543.41	
3808481.91	5.28527	(10032206)			
465563.41	3808481.91	5.19670	(10032206)	465583.41	
3808481.91	5.11061	(10032206)			
465603.41	3808481.91	5.02690	(10032206)	465623.41	
3808481.91	4.93742	(10032206)			
465643.41	3808481.91	4.84658	(10032206)	465663.41	
3808481.91	4.75829	(10032206)			
465683.41	3808481.91	4.68048	(10032206)	465703.41	
3808481.91	4.60663	(10032206)			
465463.41	3808501.91	5.60688	(09031319)	465483.41	
3808501.91	5.48519	(09031319)			
465503.41	3808501.91	5.38281	(09031319)	465523.41	
3808501.91	5.28762	(09031319)			

465543.41	3808501.91	5.18365	(09031319)	465563.41
3808501.91	5.08727	(09031319)		
465583.41	3808501.91	4.99957	(10032206)	465603.41
3808501.91	4.91226	(10032206)		
465623.41	3808501.91	4.82780	(10032206)	465643.41
3808501.91	4.74484	(10032206)		
465663.41	3808501.91	4.65919	(10032206)	465683.41
3808501.91	4.58375	(10032206)		
465703.41	3808501.91	4.51183	(10032206)	465523.41
3808521.91	5.48782	(09031319)		
465543.41	3808521.91	5.38045	(09031319)	465563.41
3808521.91	5.28552	(09031319)		
465583.41	3808521.91	5.19290	(09031319)	465603.41
3808521.91	5.08382	(09031319)		
465623.41	3808521.91	4.98334	(09031319)	465643.41
3808521.91	4.88694	(09031319)		
465663.41	3808521.91	4.78728	(09031319)	465683.41
3808521.91	4.69550	(09031319)		
465703.41	3808521.91	4.60739	(09031319)	463745.31
3809562.31	8.53290	(09040203)		
463783.31	3809562.31	9.02568	(09011307)	463821.31
3809562.31	9.46125	(09011307)		
463859.31	3809562.31	9.77699	(09011307)	463897.31
3809562.31	9.82115	(09011307)		
463935.31	3809562.31	9.86446	(09011120)	463973.31
3809562.31	10.12755	(09011120)		
464011.31	3809562.31	10.05725	(09011120)	464049.31
3809562.31	9.80574	(09011120)		
464087.31	3809562.31	9.29764	(09011120)	464125.31
3809562.31	9.27329	(10010907)		
464163.31	3809562.31	9.37545	(10010907)	464201.31
3809562.31	9.28978	(10010907)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22

*** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 123

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464239.31	3809562.31	9.21782	(10022820)	464277.31
3809562.31	9.47166	(10022820)		
464315.31	3809562.31	9.52847	(10022820)	464353.31
3809562.31	9.39927	(10022820)		
464391.31	3809562.31	9.12986	(09031705)	464429.31
3809562.31	8.96403	(09040202)		
464467.31	3809562.31	8.79090	(09040202)	464505.31
3809562.31	8.48626	(09040202)		
463745.31	3809591.37	8.21828	(09040203)	463783.31
3809591.37	8.74905	(09011307)		
463821.31	3809591.37	9.13418	(09011307)	463859.31
3809591.37	9.39124	(09011307)		
463897.31	3809591.37	9.44034	(09011307)	463935.31
3809591.37	9.55739	(09011120)		
463973.31	3809591.37	9.80640	(09011120)	464011.31
3809591.37	9.77860	(09011120)		
464049.31	3809591.37	9.55016	(09011120)	464087.31
3809591.37	9.05948	(09011120)		
464125.31	3809591.37	8.94441	(10010907)	464163.31
3809591.37	9.06419	(10010907)		
464201.31	3809591.37	9.01097	(10010907)	464239.31
3809591.37	8.83851	(10022820)		
464277.31	3809591.37	9.12436	(10022820)	464315.31
3809591.37	9.25365	(10022820)		
464353.31	3809591.37	9.14249	(10022820)	464391.31
3809591.37	8.90854	(09031705)		
464429.31	3809591.37	8.67765	(09040202)	464467.31
3809591.37	8.59089	(09040202)		
464505.31	3809591.37	8.35649	(09040202)	463745.31
3809620.43	7.91499	(09011307)		
463783.31	3809620.43	8.44836	(09011307)	463821.31
3809620.43	8.84095	(09011307)		
463859.31	3809620.43	9.04306	(09011307)	463897.31
3809620.43	9.06804	(09011307)		
463935.31	3809620.43	9.19787	(09011120)	463973.31
3809620.43	9.47834	(09011120)		
464011.31	3809620.43	9.49881	(09011120)	464049.31
3809620.43	9.26207	(09011120)		
464087.31	3809620.43	8.81277	(09011120)	464125.31

3809620.43	8.62818	(10010907)		
464163.31	3809620.43	8.78387	(10010907)	464201.31
3809620.43	8.73171	(10010907)		
464239.31	3809620.43	8.53262	(10010907)	464277.31
3809620.43	8.77886	(10022820)		
464315.31	3809620.43	8.93580	(10022820)	464353.31
3809620.43	8.91123	(10022820)		
464391.31	3809620.43	8.68099	(10022820)	464429.31
3809620.43	8.48957	(09031705)		
464467.31	3809620.43	8.38752	(09040202)	464505.31
3809620.43	8.18436	(09040202)		
463745.31	3809649.49	7.64735	(09011307)	463783.31
3809649.49	8.18709	(09011307)		
463821.31	3809649.49	8.54011	(09011307)	463859.31
3809649.49	8.71738	(09011307)		
463897.31	3809649.49	8.71652	(09011307)	463935.31
3809649.49	8.83071	(09011120)		
463973.31	3809649.49	9.08033	(09011120)	464011.31
3809649.49	9.14701	(09011120)		
464049.31	3809649.49	8.97800	(09011120)	464087.31
3809649.49	8.56253	(09011120)		
464125.31	3809649.49	8.32558	(10010907)	464163.31
3809649.49	8.49514	(10010907)		
464201.31	3809649.49	8.49958	(10010907)	464239.31
3809649.49	8.33089	(10010907)		
464277.31	3809649.49	8.44602	(10022820)	464315.31
3809649.49	8.62139	(10022820)		
464353.31	3809649.49	8.65181	(10022820)	464391.31
3809649.49	8.50551	(10022820)		
464429.31	3809649.49	8.29117	(09031705)	464467.31
3809649.49	8.13809	(09040202)		
464505.31	3809649.49	8.01800	(09040202)	463745.31
3809678.55	7.37346	(09011307)		
463783.31	3809678.55	7.88701	(09011307)	463821.31
3809678.55	8.25910	(09011307)		
463859.31	3809678.55	8.39596	(09011307)	463897.31
3809678.55	8.38472	(09011307)		
463935.31	3809678.55	8.49376	(09011120)	463973.31
3809678.55	8.76276	(09011120)		
464011.31	3809678.55	8.81667	(09011120)	464049.31
3809678.55	8.70661	(09011120)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 124

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464087.31	3809678.55	8.35782	(09011120)	464125.31
3809678.55	8.03415 (10010907)			
464163.31	3809678.55	8.23102	(10010907)	464201.31
3809678.55	8.27941 (10010907)			
464239.31	3809678.55	8.12165	(10010907)	464277.31
3809678.55	8.11718 (10022820)			
464315.31	3809678.55	8.33834	(10022820)	464353.31
3809678.55	8.41780 (10022820)			
464391.31	3809678.55	8.31852	(10022820)	464429.31
3809678.55	8.09421 (09031705)			
464467.31	3809678.55	7.90789	(09040202)	464505.31
3809678.55	7.82345 (09040202)			
463745.31	3809707.61	7.13887	(09011307)	463783.31
3809707.61	7.61010 (09011307)			
463821.31	3809707.61	7.95256	(09011307)	463859.31
3809707.61	8.11067 (09011307)			
463897.31	3809707.61	8.07493	(09011307)	463935.31
3809707.61	8.17525 (09031206)			
463973.31	3809707.61	8.46253	(09011120)	464011.31
3809707.61	8.53481 (09011120)			
464049.31	3809707.61	8.44810	(09011120)	464087.31
3809707.61	8.13713 (09011120)			
464125.31	3809707.61	7.75483	(10010907)	464163.31
3809707.61	7.98831 (10010907)			
464201.31	3809707.61	8.03362	(10010907)	464239.31
3809707.61	7.92488 (10010907)			
464277.31	3809707.61	7.80145	(10022820)	464315.31
3809707.61	8.07073 (10022820)			
464353.31	3809707.61	8.15792	(10022820)	464391.31
3809707.61	8.11402 (10022820)			

464429.31	3809707.61	7.89226	(10022820)	464467.31
3809707.61	7.73141 (09031705)			
464505.31	3809707.61	7.63925	(09040202)	463745.31
3809736.67	6.94701 (09011307)			
463783.31	3809736.67	7.35576	(09011307)	463821.31
3809736.67	7.64002 (09011307)			
463859.31	3809736.67	7.79676	(09011307)	463897.31
3809736.67	7.77791 (09011307)			
463935.31	3809736.67	7.85496	(09031206)	463973.31
3809736.67	8.17099 (09011120)			
464011.31	3809736.67	8.29773	(09011120)	464049.31
3809736.67	8.20259 (09011120)			
464087.31	3809736.67	7.94495	(09011120)	464125.31
3809736.67	7.50349 (09011120)			
464163.31	3809736.67	7.75481	(10010907)	464201.31
3809736.67	7.81337 (10010907)			
464239.31	3809736.67	7.74393	(10010907)	464277.31
3809736.67	7.50817 (10022820)			
464315.31	3809736.67	7.78266	(10022820)	464353.31
3809736.67	7.91926 (10022820)			
464391.31	3809736.67	7.91171	(10022820)	464429.31
3809736.67	7.73955 (10022820)			
464467.31	3809736.67	7.57751	(09031705)	464505.31
3809736.67	7.44961 (09040202)			
463745.31	3809765.73	6.77184	(09011307)	463783.31
3809765.73	7.14351 (09011307)			
463821.31	3809765.73	7.38663	(09011307)	463859.31
3809765.73	7.51080 (09011307)			
463897.31	3809765.73	7.49764	(09011307)	463935.31
3809765.73	7.55622 (09031206)			
463973.31	3809765.73	7.82179	(09011120)	464011.31
3809765.73	8.03270 (09011120)			
464049.31	3809765.73	7.99641	(09011120)	464087.31
3809765.73	7.75035 (09011120)			
464125.31	3809765.73	7.35578	(09011120)	464163.31
3809765.73	7.52809 (10010907)			
464201.31	3809765.73	7.60963	(10010907)	464239.31
3809765.73	7.56887 (10010907)			
464277.31	3809765.73	7.36644	(10010907)	464315.31
3809765.73	7.51395 (10022820)			
464353.31	3809765.73	7.69030	(10022820)	464391.31
3809765.73	7.70268 (10022820)			
464429.31	3809765.73	7.59366	(10022820)	464467.31
3809765.73	7.42738 (09031705)			
464505.31	3809765.73	7.23418	(09040202)	463745.31
3809794.79	6.60701 (09011307)			
463783.31	3809794.79	6.93068	(09011307)	463821.31
3809794.79	7.15065 (09011307)			
463859.31	3809794.79	7.23782	(09011307)	463897.31
3809794.79	7.20948 (09011307)			

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 125

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463935.31	3809794.79	7.26929	(09031206)	463973.31
3809794.79	7.51525	(09011120)		
464011.31	3809794.79	7.71617	(09011120)	464049.31
3809794.79	7.78241	(09011120)		
464087.31	3809794.79	7.56677	(09011120)	464125.31
3809794.79	7.18790	(09011120)		
464163.31	3809794.79	7.28384	(10010907)	464201.31
3809794.79	7.40917	(10010907)		
464239.31	3809794.79	7.37910	(10010907)	464277.31
3809794.79	7.21189	(10010907)		
464315.31	3809794.79	7.25675	(10022820)	464353.31
3809794.79	7.44075	(10022820)		
464391.31	3809794.79	7.50545	(10022820)	464429.31
3809794.79	7.44629	(10022820)		
464467.31	3809794.79	7.24827	(09031705)	464505.31
3809794.79	7.09752	(09031705)		
463745.31	3809823.85	6.45042	(09011307)	463783.31
3809823.85	6.73259	(09011307)		
463821.31	3809823.85	6.89895	(09011307)	463859.31
3809823.85	6.97943	(09011307)		
463897.31	3809823.85	6.92807	(09011307)	463935.31

3809823.85	6.98957	(09031206)		
463973.31	3809823.85	7.23067	(09011120)	464011.31
3809823.85	7.40618	(09011120)		
464049.31	3809823.85	7.49037	(09011120)	464087.31
3809823.85	7.36682	(09011120)		
464125.31	3809823.85	7.03556	(09011120)	464163.31
3809823.85	7.05792	(10010907)		
464201.31	3809823.85	7.19263	(10010907)	464239.31
3809823.85	7.19938	(10010907)		
464277.31	3809823.85	7.06364	(10010907)	464315.31
3809823.85	6.98734	(10022820)		
464353.31	3809823.85	7.20510	(10022820)	464391.31
3809823.85	7.30604	(10022820)		
464429.31	3809823.85	7.27055	(10022820)	464467.31
3809823.85	7.10826	(10022820)		
464505.31	3809823.85	6.95541	(09031705)	463745.31
3809852.91	6.31425	(09011307)		
463783.31	3809852.91	6.57514	(09011307)	463821.31
3809852.91	6.69140	(09011307)		
463859.31	3809852.91	6.74702	(09011307)	463897.31
3809852.91	6.66658	(09011307)		
463935.31	3809852.91	6.72885	(09031206)	463973.31
3809852.91	6.96057	(09011120)		
464011.31	3809852.91	7.12076	(09011120)	464049.31
3809852.91	7.19266	(09011120)		
464087.31	3809852.91	7.10192	(09011120)	464125.31
3809852.91	6.82985	(09011120)		
464163.31	3809852.91	6.79256	(10010907)	464201.31
3809852.91	6.94836	(10010907)		
464239.31	3809852.91	6.99130	(10010907)	464277.31
3809852.91	6.89562	(10010907)		
464315.31	3809852.91	6.72972	(10022820)	464353.31
3809852.91	6.96368	(10022820)		
464391.31	3809852.91	7.09600	(10022820)	464429.31
3809852.91	7.09964	(10022820)		
464467.31	3809852.91	6.97112	(10022820)	464505.31
3809852.91	6.81419	(09031705)		
463745.31	3809881.97	6.19293	(09011307)	463783.31
3809881.97	6.42189	(09011307)		
463821.31	3809881.97	6.52435	(09011307)	463859.31
3809881.97	6.54393	(09011307)		
463897.31	3809881.97	6.43758	(09011307)	463935.31
3809881.97	6.48435	(09031206)		
463973.31	3809881.97	6.71318	(09011120)	464011.31
3809881.97	6.87234	(09011120)		
464049.31	3809881.97	6.92741	(09011120)	464087.31
3809881.97	6.83266	(09011120)		
464125.31	3809881.97	6.59153	(09011120)	464163.31
3809881.97	6.49731	(10010907)		
464201.31	3809881.97	6.69820	(10010907)	464239.31


```

3809881.97      6.76036 (10010907)
      464277.31  3809881.97      6.71007 (10010907)      464315.31
3809881.97      6.53782 (10010907)
      464353.31  3809881.97      6.73158 (10022820)      464391.31
3809881.97      6.89523 (10022820)
      464429.31  3809881.97      6.92856 (10022820)      464467.31
3809881.97      6.83351 (10022820)
      464505.31  3809881.97      6.67797 (09031705)      463745.31
3809911.03      6.06255 (09011307)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      04/06/22
*** AERMET - VERSION 14134 *** ***
***      13:53:49

```

PAGE 126

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0000001      , L0000002
, L0000003      , L0000004      , L0000005      ,
      L0000006      , L0000007      , L0000008      , L0000009      , L0000010
, L0000011      , L0000012      , L0000013      ,
      L0000014      , L0000015      , L0000016      , L0000017      , L0000018
, L0000019      , L0000020      , L0000021      ,
      L0000022      , L0000023      , L0000024      , L0000025      , L0000026
, L0000027      , L0000028      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463783.31	3809911.03	6.26308	(09011307)	463821.31
3809911.03	6.36925	(09011307)		
463859.31	3809911.03	6.36451	(09011307)	463897.31
3809911.03	6.24840	(09011307)		
463935.31	3809911.03	6.28053	(09031206)	463973.31
3809911.03	6.48045	(09011120)		
464011.31	3809911.03	6.63558	(09011120)	464049.31
3809911.03	6.69457	(09011120)		
464087.31	3809911.03	6.60686	(09011120)	464125.31
3809911.03	6.38029	(09011120)		
464163.31	3809911.03	6.24530	(10010907)	464201.31
3809911.03	6.47501	(10010907)		

464239.31	3809911.03	6.55947	(10010907)	464277.31
3809911.03	6.54303	(10010907)		
464315.31	3809911.03	6.39722	(10010907)	464353.31
3809911.03	6.50148	(10022820)		
464391.31	3809911.03	6.68751	(10022820)	464429.31
3809911.03	6.75091	(10022820)		
464467.31	3809911.03	6.70541	(10022820)	464505.31
3809911.03	6.53670	(10022820)		
463745.31	3809940.09	5.92754	(09011307)	463783.31
3809940.09	6.11042	(09011307)		
463821.31	3809940.09	6.21472	(09011307)	463859.31
3809940.09	6.19661	(09011307)		
463897.31	3809940.09	6.08109	(09011307)	463935.31
3809940.09	6.11398	(09031206)		
463973.31	3809940.09	6.28302	(09011120)	464011.31
3809940.09	6.40648	(09011120)		
464049.31	3809940.09	6.45852	(09011120)	464087.31
3809940.09	6.38031	(09011120)		
464125.31	3809940.09	6.17904	(09011120)	464163.31
3809940.09	6.01633	(10010907)		
464201.31	3809940.09	6.27549	(10010907)	464239.31
3809940.09	6.39032	(10010907)		
464277.31	3809940.09	6.38533	(10010907)	464315.31
3809940.09	6.27056	(10010907)		
464353.31	3809940.09	6.27630	(10022820)	464391.31
3809940.09	6.48197	(10022820)		
464429.31	3809940.09	6.58258	(10022820)	464467.31
3809940.09	6.56014	(10022820)		
464505.31	3809940.09	6.42707	(10022820)	463745.31
3809969.15	5.84474	(09011307)		
463783.31	3809969.15	5.98357	(09011307)	463821.31
3809969.15	6.06216	(09011307)		
463859.31	3809969.15	6.04009	(09011307)	463897.31
3809969.15	5.92090	(09011307)		
463935.31	3809969.15	5.95674	(09031206)	463973.31
3809969.15	6.11027	(09011120)		
464011.31	3809969.15	6.21363	(09011120)	464049.31
3809969.15	6.23361	(09011120)		
464087.31	3809969.15	6.16742	(09011120)	464125.31
3809969.15	6.00027	(09011120)		
464163.31	3809969.15	5.78818	(10010907)	464201.31
3809969.15	6.06964	(10010907)		
464239.31	3809969.15	6.22600	(10010907)	464277.31
3809969.15	6.23767	(10010907)		
464315.31	3809969.15	6.14798	(10010907)	464353.31
3809969.15	6.07163	(10022820)		
464391.31	3809969.15	6.29489	(10022820)	464429.31
3809969.15	6.41027	(10022820)		
464467.31	3809969.15	6.40933	(10022820)	464505.31
3809969.15	6.32286	(10022820)		

463745.31	3809998.21	5.81999	(09011307)	463783.31
3809998.21	5.90103	(09011307)		
463821.31	3809998.21	5.94144	(09011307)	463859.31
3809998.21	5.90173	(09011307)		
463897.31	3809998.21	5.77799	(09011307)	463935.31
3809998.21	5.80603	(09031206)		
463973.31	3809998.21	5.94336	(09011120)	464011.31
3809998.21	6.05015	(09011120)		
464049.31	3809998.21	6.06394	(09011120)	464087.31
3809998.21	5.99323	(09011120)		
464125.31	3809998.21	5.84669	(09011120)	464163.31
3809998.21	5.62063	(09102505)		
464201.31	3809998.21	5.86692	(10010907)	464239.31
3809998.21	6.04284	(10010907)		
464277.31	3809998.21	6.09787	(10010907)	464315.31
3809998.21	6.02578	(10010907)		
464353.31	3809998.21	5.86282	(10010907)	464391.31
3809998.21	6.09715	(10022820)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 127

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464429.31	3809998.21	6.23094	(10022820)	464467.31
3809998.21	6.27121	(10022820)		
464505.31	3809998.21	6.20314	(10022820)	463745.31

3810027.27	5.79924	(09011307)	
463783.31	3810027.27	5.84883	(09011307) 463821.31
3810027.27	5.85053	(09011307)	
463859.31	3810027.27	5.78744	(09011307) 463897.31
3810027.27	5.65543	(09011307)	
463935.31	3810027.27	5.66918	(09031206) 463973.31
3810027.27	5.79442	(09011120)	
464011.31	3810027.27	5.90056	(09011120) 464049.31
3810027.27	5.91628	(09011120)	
464087.31	3810027.27	5.83507	(09011120) 464125.31
3810027.27	5.68621	(09011120)	
464163.31	3810027.27	5.48561	(09102505) 464201.31
3810027.27	5.67644	(10010907)	
464239.31	3810027.27	5.85505	(10010907) 464277.31
3810027.27	5.93860	(10010907)	
464315.31	3810027.27	5.90532	(10010907) 464353.31
3810027.27	5.76067	(10010907)	
464391.31	3810027.27	5.89744	(10022820) 464429.31
3810027.27	6.06162	(10022820)	
464467.31	3810027.27	6.12227	(10022820) 464505.31
3810027.27	6.07607	(10022820)	
463745.31	3810056.33	5.78631	(09011307) 463783.31
3810056.33	5.80453	(09011307)	
463821.31	3810056.33	5.76506	(09011307) 463859.31
3810056.33	5.68697	(09011307)	
463897.31	3810056.33	5.53799	(09011307) 463935.31
3810056.33	5.55084	(09031206)	
463973.31	3810056.33	5.65873	(09011120) 464011.31
3810056.33	5.75848	(09011120)	
464049.31	3810056.33	5.76531	(09011120) 464087.31
3810056.33	5.69068	(09011120)	
464125.31	3810056.33	5.53428	(09011120) 464163.31
3810056.33	5.34237	(09102505)	
464201.31	3810056.33	5.47823	(10010907) 464239.31
3810056.33	5.68049	(10010907)	
464277.31	3810056.33	5.77206	(10010907) 464315.31
3810056.33	5.76857	(10010907)	
464353.31	3810056.33	5.66596	(10010907) 464391.31
3810056.33	5.71805	(10022820)	
464429.31	3810056.33	5.89290	(10022820) 464467.31
3810056.33	5.96486	(10022820)	
464505.31	3810056.33	5.95121	(10022820) 463745.31
3810085.39	5.77169	(09011307)	
463783.31	3810085.39	5.76391	(09011307) 463821.31
3810085.39	5.69606	(09011307)	
463859.31	3810085.39	5.59283	(09011307) 463897.31
3810085.39	5.43148	(09011307)	
463935.31	3810085.39	5.44550	(09031206) 463973.31
3810085.39	5.53308	(09011120)	
464011.31	3810085.39	5.61970	(09011120) 464049.31

3810085.39	5.61303	(09011120)		
464087.31	3810085.39	5.54794	(09011120)	464125.31
3810085.39	5.40053	(09011120)		
464163.31	3810085.39	5.20224	(09102505)	464201.31
3810085.39	5.28016	(10010907)		
464239.31	3810085.39	5.49736	(10010907)	464277.31
3810085.39	5.61167	(10010907)		
464315.31	3810085.39	5.62781	(10010907)	464353.31
3810085.39	5.54639	(10010907)		
464391.31	3810085.39	5.51949	(10022820)	464429.31
3810085.39	5.70834	(10022820)		
464467.31	3810085.39	5.80585	(10022820)	464505.31
3810085.39	5.81096	(10022820)		
463745.31	3810114.45	5.72277	(09011307)	463783.31
3810114.45	5.74271	(09011307)		
463821.31	3810114.45	5.64677	(09011307)	463859.31
3810114.45	5.53494	(09011307)		
463897.31	3810114.45	5.34604	(09011307)	463935.31
3810114.45	5.34966	(09031206)		
463973.31	3810114.45	5.41206	(09011120)	464011.31
3810114.45	5.49319	(09011120)		
464049.31	3810114.45	5.48242	(09011120)	464087.31
3810114.45	5.41377	(09011120)		
464125.31	3810114.45	5.26442	(09011120)	464163.31
3810114.45	5.06130	(09102505)		
464201.31	3810114.45	5.08195	(10010907)	464239.31
3810114.45	5.31889	(10010907)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 ***
 *** 13:53:49

PAGE 128

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002
 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010
 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018
 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026
 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
464277.31	3810114.45	5.45385 (10010907)	464315.31
3810114.45	5.47411 (10010907)		
464353.31	3810114.45	5.40162 (10010907)	464391.31
3810114.45	5.28433 (10022820)		
464429.31	3810114.45	5.50720 (10022820)	464467.31
3810114.45	5.62185 (10022820)		
464505.31	3810114.45	5.66839 (10022820)	463745.31
3810143.51	5.63676 (09011307)		
463783.31	3810143.51	5.68395 (09011307)	463821.31
3810143.51	5.63267 (09011307)		
463859.31	3810143.51	5.49656 (09011307)	463897.31
3810143.51	5.26410 (09011307)		
463935.31	3810143.51	5.24702 (09031206)	463973.31
3810143.51	5.28270 (09011120)		
464011.31	3810143.51	5.37360 (09011120)	464049.31
3810143.51	5.36236 (09011120)		
464087.31	3810143.51	5.27870 (09011120)	464125.31
3810143.51	5.13694 (09011120)		
464163.31	3810143.51	4.93841 (09102505)	464201.31
3810143.51	4.90214 (10010907)		
464239.31	3810143.51	5.12868 (10010907)	464277.31
3810143.51	5.29353 (10010907)		
464315.31	3810143.51	5.33033 (10010907)	464353.31
3810143.51	5.25860 (10010907)		
464391.31	3810143.51	5.12653 (10010907)	464429.31
3810143.51	5.29848 (10022820)		
464467.31	3810143.51	5.45547 (10022820)	464505.31
3810143.51	5.52723 (10022820)		
464383.78	3807479.29	27.70507 (09120417)	464355.03
3807405.24	24.48654 (09120417)		
464402.07	3807352.10	24.43085 (09120417)	464367.23
3807296.35	20.83711 (09120417)		
464358.52	3807237.99	19.06842 (09031218)	464385.52
3807161.33	17.67379 (09031218)		
464944.35	3809244.89	8.92673 (10012420)	465700.32
3809255.46	5.23885 (10021420)		
465716.18	3808536.49	4.66728 (09031319)	465544.37
3808533.85	5.48266 (09031319)		
465420.13	3808486.27	5.83922 (10032206)	465348.77
3808491.56	6.16946 (10032206)		
465317.05	3808443.98	6.70825 (10032206)	465327.62
3808406.97	6.80973 (10032206)		
465108.23	3808369.97	8.77657 (10032206)	464999.86
3808301.24	9.46723 (09010519)		

464722.31	3807973.48	15.63315	(10020118)	464717.03
3807836.03	12.34776	(10020118)		
464344.33	3807936.47	37.44482	(09011918)	464349.61
3807780.52	17.79092	(09011918)		
464386.62	3807785.81	17.21859	(09011918)	464521.43
3807859.82	12.80850	(09030119)		
464537.28	3807719.72	21.03494	(09011918)	464426.27
3807613.99	28.76584	(09011918)		
464368.43	3807532.62	28.13592	(09120417)	464324.60
3807121.91	20.01005	(09123118)		
464123.31	3807123.54	19.75147	(09123118)	463930.13
3806909.26	17.05246	(09111519)		
463831.11	3806906.01	12.60065	(09120318)	463821.36
3806720.95	10.88769	(10102005)		
463727.21	3806727.44	10.68217	(09032718)	463598.97
3806334.59	9.87298	(09032718)		
463001.06	3806361.54	6.55206	(09022219)	

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 04/06/22
 *** AERMET - VERSION 14134 *** ***
 *** 13:53:49

PAGE 129

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (16656

HRS) RESULTS ***

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

GROUP ID		NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG)	OF TYPE	GRID-ID		
- - - - -				
- - - - -				
ALL	1ST HIGHEST VALUE IS	1.09325 AT (	463859.31, 3809562.31, 1076.17,	
1076.17,	0.00) DC			
	2ND HIGHEST VALUE IS	1.09086 AT (	463897.31, 3809562.31, 1078.84,	
1078.84,	0.00) DC			
	3RD HIGHEST VALUE IS	1.08864 AT (	463745.31, 3809562.31, 1069.96,	
1069.96,	0.00) DC			
	4TH HIGHEST VALUE IS	1.08858 AT (	463783.31, 3809562.31, 1071.23,	
1071.23,	0.00) DC			
	5TH HIGHEST VALUE IS	1.08786 AT (	463821.31, 3809562.31, 1072.92,	
1079.00,	0.00) DC			

6TH HIGHEST VALUE IS 1.07148 AT (463935.31, 3809562.31, 1079.28,
1079.28, 0.00) DC
7TH HIGHEST VALUE IS 1.04796 AT (463973.31, 3809562.31, 1079.56,
1079.56, 0.00) DC
8TH HIGHEST VALUE IS 1.03904 AT (463745.31, 3809591.37, 1069.00,
1069.00, 0.00) DC
9TH HIGHEST VALUE IS 1.03871 AT (463783.31, 3809591.37, 1070.26,
1070.26, 0.00) DC
10TH HIGHEST VALUE IS 1.03753 AT (463859.31, 3809591.37, 1074.24,
1077.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

PAGE 130

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 1-HR

RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3

**

GROUP ID	NETWORK	DATE	RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)	AVERAGE CONC OF TYPE GRID-ID	(YYMMDDHH)	
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -

ALL HIGH 1ST HIGH VALUE IS 37.44482 ON 09011918: AT (464344.33,
3807936.47, 1104.00, 1104.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 04/06/22
*** AERMET - VERSION 14134 *** ***
*** 13:53:49

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 4 Warning Message(s)
A Total of 14077 Informational Message(s)

A Total of 16656 Hours Were Processed

A Total of 1464 Calm Hours Identified

A Total of 12613 Missing Hours Identified (75.73 Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
Data May Not Be Acceptable for Regulatory Applications.
See Section 5.3.2 of "Meteorological Monitoring Guidance
for Regulatory Modeling Applications" (EPA-454/R-99-005).

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****

MX W441 1449 METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
09030309
MX W441 1450 METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
09030310
MX W441 1452 METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
09030312
MX W441 1453 METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
09030313

*** AERMOD Finishes Successfully ***

HARP2 - HRACalc (dated 21081) 4/25/2022 11:51:50 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 0.9

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 0.9
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: RMP

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05

Soil mixing depth (m): 0.01

Dermal climate: Mixed

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\Users\dlarocca\Desktop\Air Quality

Work\HARP2\Poplar18Const\POPLAR18CONST\hra\Const10monthCancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\dlarocca\Desktop\Air Quality

Work\HARP2\Poplar18Const\POPLAR18CONST\hra\Const10monthCancerRiskSumByRec.csv

HRA ran successfully

*HARP - HRACalc v21081 4/25/2022 11:51:50 AM - Cancer Risk - Input File: C:\Users\dlarocca\Desktop\Air Quality Work\HARP2\Poplar18Const\POPLAR18CONST\hra\Const10monthHRAInput.hra

REC	GRP	NETID	X	Y	RISK_SUM	SCENARIO	INH_RISK	SOIL_RISK	DERMAL_RISK	MILK_RISK	WATER_RISK	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_RISK	EGG_RISK
1	ALL		462160.6	3809378	7.85E-08	0.9YrCance	7.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	ALL		462051.5	3809271	6.87E-08	0.9YrCance	6.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	ALL		462014.5	3809029	4.77E-08	0.9YrCance	4.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	ALL		462010.6	3808856	3.00E-08	0.9YrCance	3.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	ALL		461936.6	3808887	2.83E-08	0.9YrCance	2.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	ALL		461936.6	3808998	3.63E-08	0.9YrCance	3.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	ALL		461909.3	3808768	2.22E-08	0.9YrCance	2.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	ALL		461835.3	3808895	2.50E-08	0.9YrCance	2.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	ALL		461845	3808996	3.06E-08	0.9YrCance	3.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	ALL		461833.3	3809115	4.10E-08	0.9YrCance	4.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	ALL		461843.1	3809210	4.95E-08	0.9YrCance	4.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	ALL		461810	3809298	5.28E-08	0.9YrCance	5.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	ALL		461856.7	3809386	5.83E-08	0.9YrCance	5.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	ALL		461841.1	3809483	5.85E-08	0.9YrCance	5.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	ALL		462004.7	3809380	6.70E-08	0.9YrCance	6.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ALL		461763.2	3808793	1.88E-08	0.9YrCance	1.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	ALL		461753.5	3808700	1.80E-08	0.9YrCance	1.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	ALL		461835.3	3808686	1.83E-08	0.9YrCance	1.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	ALL		461823.6	3808579	1.59E-08	0.9YrCance	1.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	ALL		461761.3	3808585	1.50E-08	0.9YrCance	1.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	ALL		462301.2	3807807	2.13E-08	0.9YrCance	2.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	ALL		462304.8	3807868	2.09E-08	0.9YrCance	2.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	ALL		462216.8	3807883	1.82E-08	0.9YrCance	1.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	ALL		462116.3	3807886	1.60E-08	0.9YrCance	1.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25	ALL		462114.6	3807789	1.56E-08	0.9YrCance	1.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
26	ALL		462012.3	3807888	1.41E-08	0.9YrCance	1.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
27	ALL		462008.7	3807976	1.53E-08	0.9YrCance	1.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
28	ALL		461917.1	3807972	1.38E-08	0.9YrCance	1.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
29	ALL		461922.5	3808188	1.76E-08	0.9YrCance	1.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
30	ALL		461908.2	3808288	1.78E-08	0.9YrCance	1.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
31	ALL		461848.9	3808378	1.67E-08	0.9YrCance	1.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32	ALL		461831	3808494	1.60E-08	0.9YrCance	1.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
33	ALL		462421.4	3808394	3.61E-08	0.9YrCance	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
34	ALL		462459.1	3808502	3.92E-08	0.9YrCance	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
35	ALL		462437.6	3808581	4.03E-08	0.9YrCance	4.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
36	ALL		462654.7	3809189	1.41E-07	0.9YrCance	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
37	ALL		462559.5	3809194	1.23E-07	0.9YrCance	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
38	ALL		465763.9	3807935	6.44E-08	0.9YrCance	6.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39	ALL		465819.8	3807935	6.16E-08	0.9YrCance	6.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
40	ALL		465875.8	3807935	5.90E-08	0.9YrCance	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
41	ALL		465931.8	3807935	5.66E-08	0.9YrCance	5.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42	ALL		465987.8	3807935	5.43E-08	0.9YrCance	5.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

43	ALL	466043.8	3807935	5.22E-08	0.9YrCance	5.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
44	ALL	466099.7	3807935	5.02E-08	0.9YrCance	5.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
45	ALL	466155.7	3807935	4.83E-08	0.9YrCance	4.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
46	ALL	466211.7	3807935	4.65E-08	0.9YrCance	4.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
47	ALL	466267.7	3807935	4.48E-08	0.9YrCance	4.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
48	ALL	466323.7	3807935	4.32E-08	0.9YrCance	4.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
49	ALL	466379.6	3807935	4.18E-08	0.9YrCance	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50	ALL	466435.6	3807935	4.04E-08	0.9YrCance	4.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
51	ALL	466491.6	3807935	3.90E-08	0.9YrCance	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
52	ALL	466547.6	3807935	3.77E-08	0.9YrCance	3.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
53	ALL	466603.6	3807935	3.65E-08	0.9YrCance	3.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
54	ALL	466659.5	3807935	3.54E-08	0.9YrCance	3.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55	ALL	466715.5	3807935	3.43E-08	0.9YrCance	3.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
56	ALL	466771.5	3807935	3.32E-08	0.9YrCance	3.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57	ALL	466827.5	3807935	3.22E-08	0.9YrCance	3.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
58	ALL	466883.5	3807935	3.13E-08	0.9YrCance	3.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
59	ALL	465763.9	3808001	6.72E-08	0.9YrCance	6.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
60	ALL	465819.8	3808001	6.43E-08	0.9YrCance	6.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
61	ALL	465875.8	3808001	6.15E-08	0.9YrCance	6.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
62	ALL	465931.8	3808001	5.89E-08	0.9YrCance	5.89E-08	0.00E+00	0.00E+00								

87	ALL	466155.7	3808068	5.23E-08	0.9YrCance	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
88	ALL	466211.7	3808068	5.03E-08	0.9YrCance	5.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
89	ALL	466267.7	3808068	4.84E-08	0.9YrCance	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
90	ALL	466323.7	3808068	4.66E-08	0.9YrCance	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
91	ALL	466379.6	3808068	4.50E-08	0.9YrCance	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
92	ALL	466435.6	3808068	4.34E-08	0.9YrCance	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
93	ALL	466491.6	3808068	4.19E-08	0.9YrCance	4.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
94	ALL	466547.6	3808068	4.05E-08	0.9YrCance	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95	ALL	466603.6	3808068	3.91E-08	0.9YrCance	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
96	ALL	466659.5	3808068	3.79E-08	0.9YrCance	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
97	ALL	466715.5	3808068	3.67E-08	0.9YrCance	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
98	ALL	466771.5	3808068	3.55E-08	0.9YrCance	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
99	ALL	466827.5	3808068	3.44E-08	0.9YrCance	3.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
100	ALL	466883.5	3808068	3.33E-08	0.9YrCance	3.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
101	ALL	465763.9	3808134	7.39E-08	0.9YrCance	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
102	ALL	465819.8	3808134	7.05E-08	0.9YrCance	7.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
103	ALL	465875.8	3808134	6.73E-08	0.9YrCance	6.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
104	ALL	465931.8	3808134	6.44E-08	0.9YrCance	6.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
105	ALL	465987.8	3808134	6.17E-08	0.9YrCance	6.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106	ALL	466043.8	3808134	5.91E-08	0.9YrCance	5.91E-08	0.00E+00	0.00								

131	ALL	466267.7	3808200	5.23E-08	0.9YrCance	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
132	ALL	466323.7	3808200	5.04E-08	0.9YrCance	5.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
133	ALL	466379.6	3808200	4.85E-08	0.9YrCance	4.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
134	ALL	466435.6	3808200	4.67E-08	0.9YrCance	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
135	ALL	466491.6	3808200	4.51E-08	0.9YrCance	4.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
136	ALL	466547.6	3808200	4.35E-08	0.9YrCance	4.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
137	ALL	466603.6	3808200	4.20E-08	0.9YrCance	4.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
138	ALL	466659.5	3808200	4.06E-08	0.9YrCance	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
139	ALL	466715.5	3808200	3.92E-08	0.9YrCance	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
140	ALL	466771.5	3808200	3.79E-08	0.9YrCance	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
141	ALL	466827.5	3808200	3.67E-08	0.9YrCance	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
142	ALL	466883.5	3808200	3.55E-08	0.9YrCance	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
143	ALL	465763.9	3808266	8.14E-08	0.9YrCance	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
144	ALL	465819.8	3808266	7.75E-08	0.9YrCance	7.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
145	ALL	465875.8	3808266	7.39E-08	0.9YrCance	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
146	ALL	465931.8	3808266	7.05E-08	0.9YrCance	7.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
147	ALL	465987.8	3808266	6.73E-08	0.9YrCance	6.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
148	ALL	466043.8	3808266	6.43E-08	0.9YrCance	6.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
149	ALL	466099.7	3808266	6.16E-08	0.9YrCance	6.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
150	ALL	466155.7	3808266	5.90E-08	0.9YrCance	5.90E-08	0.00									

175	ALL	466379.6	3808333	5.21E-08	0.9YrCance	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
176	ALL	466435.6	3808333	5.01E-08	0.9YrCance	5.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
177	ALL	466491.6	3808333	4.82E-08	0.9YrCance	4.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
178	ALL	466547.6	3808333	4.64E-08	0.9YrCance	4.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
179	ALL	466603.6	3808333	4.48E-08	0.9YrCance	4.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
180	ALL	466659.5	3808333	4.33E-08	0.9YrCance	4.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
181	ALL	466715.5	3808333	4.18E-08	0.9YrCance	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
182	ALL	466771.5	3808333	4.03E-08	0.9YrCance	4.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
183	ALL	466827.5	3808333	3.90E-08	0.9YrCance	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
184	ALL	466883.5	3808333	3.77E-08	0.9YrCance	3.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
185	ALL	465763.9	3808399	8.88E-08	0.9YrCance	8.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
186	ALL	465819.8	3808399	8.44E-08	0.9YrCance	8.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
187	ALL	465875.8	3808399	8.02E-08	0.9YrCance	8.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
188	ALL	465931.8	3808399	7.63E-08	0.9YrCance	7.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
189	ALL	465987.8	3808399	7.27E-08	0.9YrCance	7.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
190	ALL	466043.8	3808399	6.94E-08	0.9YrCance	6.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
191	ALL	466099.7	3808399	6.63E-08	0.9YrCance	6.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
192	ALL	466155.7	3808399	6.34E-08	0.9YrCance	6.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
193	ALL	466211.7	3808399	6.07E-08	0.9YrCance	6.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
194	ALL	466267.7	3808399	5.83E-08	0.9YrCance	5.83E-08	0.00									

219	ALL	466491.6	3808465	5.11E-08	0.9YrCance	5.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
220	ALL	466547.6	3808465	4.92E-08	0.9YrCance	4.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221	ALL	466603.6	3808465	4.74E-08	0.9YrCance	4.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222	ALL	466659.5	3808465	4.56E-08	0.9YrCance	4.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
223	ALL	466715.5	3808465	4.40E-08	0.9YrCance	4.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
224	ALL	466771.5	3808465	4.25E-08	0.9YrCance	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
225	ALL	466827.5	3808465	4.11E-08	0.9YrCance	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
226	ALL	466883.5	3808465	3.97E-08	0.9YrCance	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
227	ALL	465763.9	3808531	9.51E-08	0.9YrCance	9.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
228	ALL	465819.8	3808531	9.00E-08	0.9YrCance	9.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
229	ALL	465875.8	3808531	8.54E-08	0.9YrCance	8.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
230	ALL	465931.8	3808531	8.11E-08	0.9YrCance	8.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
231	ALL	465987.8	3808531	7.73E-08	0.9YrCance	7.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
232	ALL	466043.8	3808531	7.37E-08	0.9YrCance	7.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
233	ALL	466099.7	3808531	7.03E-08	0.9YrCance	7.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
234	ALL	466155.7	3808531	6.71E-08	0.9YrCance	6.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
235	ALL	466211.7	3808531	6.42E-08	0.9YrCance	6.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
236	ALL	466267.7	3808531	6.15E-08	0.9YrCance	6.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
237	ALL	466323.7	3808531	5.90E-08	0.9YrCance	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
238	ALL	466379.6	3808531	5.66E-08	0.9YrCance	5.66E-08	0.00									

263	ALL	466603.6	3808597	4.94E-08	0.9YrCance	4.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
264	ALL	466659.5	3808597	4.76E-08	0.9YrCance	4.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
265	ALL	466715.5	3808597	4.59E-08	0.9YrCance	4.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
266	ALL	466771.5	3808597	4.43E-08	0.9YrCance	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
267	ALL	466827.5	3808597	4.27E-08	0.9YrCance	4.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
268	ALL	466883.5	3808597	4.13E-08	0.9YrCance	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
269	ALL	465763.9	3808664	9.90E-08	0.9YrCance	9.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
270	ALL	465819.8	3808664	9.40E-08	0.9YrCance	9.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
271	ALL	465875.8	3808664	8.91E-08	0.9YrCance	8.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
272	ALL	465931.8	3808664	8.46E-08	0.9YrCance	8.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
273	ALL	465987.8	3808664	8.05E-08	0.9YrCance	8.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
274	ALL	466043.8	3808664	7.67E-08	0.9YrCance	7.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
275	ALL	466099.7	3808664	7.32E-08	0.9YrCance	7.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
276	ALL	466155.7	3808664	6.99E-08	0.9YrCance	6.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
277	ALL	466211.7	3808664	6.68E-08	0.9YrCance	6.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
278	ALL	466267.7	3808664	6.39E-08	0.9YrCance	6.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
279	ALL	466323.7	3808664	6.13E-08	0.9YrCance	6.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
280	ALL	466379.6	3808664	5.88E-08	0.9YrCance	5.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
281	ALL	466435.6	3808664	5.65E-08	0.9YrCance	5.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
282	ALL	466491.6	3808664	5.43E-08	0.9YrCance	5.43E-08	0.00									

307	ALL	466715.5	3808730	4.73E-08	0.9YrCance	4.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
308	ALL	466771.5	3808730	4.56E-08	0.9YrCance	4.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
309	ALL	466827.5	3808730	4.41E-08	0.9YrCance	4.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
310	ALL	466883.5	3808730	4.26E-08	0.9YrCance	4.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
311	ALL	465763.9	3808796	1.01E-07	0.9YrCance	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
312	ALL	465819.8	3808796	9.61E-08	0.9YrCance	9.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
313	ALL	465875.8	3808796	9.10E-08	0.9YrCance	9.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
314	ALL	465931.8	3808796	8.65E-08	0.9YrCance	8.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
315	ALL	465987.8	3808796	8.23E-08	0.9YrCance	8.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
316	ALL	466043.8	3808796	7.84E-08	0.9YrCance	7.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
317	ALL	466099.7	3808796	7.48E-08	0.9YrCance	7.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
318	ALL	466155.7	3808796	7.14E-08	0.9YrCance	7.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
319	ALL	466211.7	3808796	6.83E-08	0.9YrCance	6.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
320	ALL	466267.7	3808796	6.54E-08	0.9YrCance	6.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
321	ALL	466323.7	3808796	6.27E-08	0.9YrCance	6.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
322	ALL	466379.6	3808796	6.01E-08	0.9YrCance	6.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
323	ALL	466435.6	3808796	5.78E-08	0.9YrCance	5.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
324	ALL	466491.6	3808796	5.55E-08	0.9YrCance	5.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
325	ALL	466547.6	3808796	5.34E-08	0.9YrCance	5.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
326	ALL	466603.6	3808796	5.15E-08	0.9YrCance	5.15E-08	0.00									

351	ALL	466827.5	3808862	4.49E-08	0.9YrCance	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
352	ALL	466883.5	3808862	4.34E-08	0.9YrCance	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
353	ALL	465763.9	3808928	9.92E-08	0.9YrCance	9.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
354	ALL	465819.8	3808928	9.46E-08	0.9YrCance	9.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
355	ALL	465875.8	3808928	9.04E-08	0.9YrCance	9.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
356	ALL	465931.8	3808928	8.63E-08	0.9YrCance	8.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
357	ALL	465987.8	3808928	8.24E-08	0.9YrCance	8.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
358	ALL	466043.8	3808928	7.88E-08	0.9YrCance	7.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
359	ALL	466099.7	3808928	7.52E-08	0.9YrCance	7.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
360	ALL	466155.7	3808928	7.19E-08	0.9YrCance	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
361	ALL	466211.7	3808928	6.88E-08	0.9YrCance	6.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
362	ALL	466267.7	3808928	6.59E-08	0.9YrCance	6.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
363	ALL	466323.7	3808928	6.32E-08	0.9YrCance	6.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
364	ALL	466379.6	3808928	6.06E-08	0.9YrCance	6.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
365	ALL	466435.6	3808928	5.83E-08	0.9YrCance	5.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
366	ALL	466491.6	3808928	5.61E-08	0.9YrCance	5.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
367	ALL	466547.6	3808928	5.40E-08	0.9YrCance	5.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
368	ALL	466603.6	3808928	5.21E-08	0.9YrCance	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
369	ALL	466659.5	3808928	5.02E-08	0.9YrCance	5.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
370	ALL	466715.5	3808928	4.84E-08	0.9YrCance	4.84E-08	0.00									

395	ALL	465763.9	3809061	9.78E-08	0.9YrCance	9.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
396	ALL	465819.8	3809061	9.31E-08	0.9YrCance	9.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
397	ALL	465875.8	3809061	8.89E-08	0.9YrCance	8.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
398	ALL	465931.8	3809061	8.50E-08	0.9YrCance	8.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
399	ALL	465987.8	3809061	8.14E-08	0.9YrCance	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
400	ALL	466043.8	3809061	7.80E-08	0.9YrCance	7.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
401	ALL	466099.7	3809061	7.45E-08	0.9YrCance	7.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
402	ALL	466155.7	3809061	7.14E-08	0.9YrCance	7.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
403	ALL	466211.7	3809061	6.84E-08	0.9YrCance	6.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
404	ALL	466267.7	3809061	6.56E-08	0.9YrCance	6.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
405	ALL	466323.7	3809061	6.30E-08	0.9YrCance	6.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
406	ALL	466379.6	3809061	6.05E-08	0.9YrCance	6.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
407	ALL	466435.6	3809061	5.83E-08	0.9YrCance	5.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
408	ALL	466491.6	3809061	5.62E-08	0.9YrCance	5.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
409	ALL	466547.6	3809061	5.41E-08	0.9YrCance	5.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
410	ALL	466603.6	3809061	5.21E-08	0.9YrCance	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
411	ALL	466659.5	3809061	5.04E-08	0.9YrCance	5.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
412	ALL	466715.5	3809061	4.86E-08	0.9YrCance	4.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
413	ALL	466771.5	3809061	4.69E-08	0.9YrCance	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
414	ALL	466827.5	3809061	4.54E-08	0.9YrCance	4.54E-08	0.00									

439	ALL	465875.8	3809193	8.74E-08	0.9YrCance	8.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
440	ALL	465931.8	3809193	8.36E-08	0.9YrCance	8.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
441	ALL	465987.8	3809193	7.97E-08	0.9YrCance	7.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
442	ALL	466043.8	3809193	7.58E-08	0.9YrCance	7.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
443	ALL	466099.7	3809193	7.28E-08	0.9YrCance	7.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
444	ALL	466155.7	3809193	6.99E-08	0.9YrCance	6.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
445	ALL	466211.7	3809193	6.72E-08	0.9YrCance	6.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
446	ALL	466267.7	3809193	6.48E-08	0.9YrCance	6.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
447	ALL	466323.7	3809193	6.24E-08	0.9YrCance	6.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
448	ALL	466379.6	3809193	6.01E-08	0.9YrCance	6.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
449	ALL	466435.6	3809193	5.78E-08	0.9YrCance	5.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
450	ALL	466491.6	3809193	5.57E-08	0.9YrCance	5.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
451	ALL	466547.6	3809193	5.38E-08	0.9YrCance	5.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
452	ALL	466603.6	3809193	5.19E-08	0.9YrCance	5.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
453	ALL	466659.5	3809193	5.01E-08	0.9YrCance	5.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
454	ALL	466715.5	3809193	4.84E-08	0.9YrCance	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
455	ALL	466771.5	3809193	4.68E-08	0.9YrCance	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
456	ALL	466827.5	3809193	4.53E-08	0.9YrCance	4.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
457	ALL	466883.5	3809193	4.38E-08	0.9YrCance	4.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
458	ALL	465763.9	3809260	9.34E-08	0.9YrCance	9.34E-08	0.00									

483	ALL	464583.4	3807142	5.59E-08	0.9YrCance	5.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
484	ALL	464603.4	3807142	5.51E-08	0.9YrCance	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
485	ALL	464623.4	3807142	5.42E-08	0.9YrCance	5.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
486	ALL	464643.4	3807142	5.37E-08	0.9YrCance	5.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
487	ALL	464663.4	3807142	5.29E-08	0.9YrCance	5.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
488	ALL	464683.4	3807142	5.19E-08	0.9YrCance	5.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
489	ALL	464703.4	3807142	5.13E-08	0.9YrCance	5.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
490	ALL	464723.4	3807142	5.03E-08	0.9YrCance	5.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
491	ALL	464743.4	3807142	4.90E-08	0.9YrCance	4.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
492	ALL	464763.4	3807142	4.79E-08	0.9YrCance	4.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
493	ALL	464783.4	3807142	4.66E-08	0.9YrCance	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
494	ALL	464803.4	3807142	4.54E-08	0.9YrCance	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
495	ALL	464823.4	3807142	4.51E-08	0.9YrCance	4.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
496	ALL	464843.4	3807142	4.41E-08	0.9YrCance	4.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
497	ALL	464863.4	3807142	4.30E-08	0.9YrCance	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
498	ALL	464883.4	3807142	4.20E-08	0.9YrCance	4.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
499	ALL	464903.4	3807142	4.17E-08	0.9YrCance	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
500	ALL	464923.4	3807142	4.16E-08	0.9YrCance	4.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
501	ALL	464503.4	3807162	5.88E-08	0.9YrC												

527	ALL	464583.4	3807182	5.77E-08	0.9YrCance	5.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
528	ALL	464603.4	3807182	5.71E-08	0.9YrCance	5.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
529	ALL	464623.4	3807182	5.66E-08	0.9YrCance	5.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
530	ALL	464643.4	3807182	5.53E-08	0.9YrCance	5.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
531	ALL	464663.4	3807182	5.46E-08	0.9YrCance	5.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
532	ALL	464683.4	3807182	5.40E-08	0.9YrCance	5.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
533	ALL	464703.4	3807182	5.26E-08	0.9YrCance	5.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
534	ALL	464723.4	3807182	5.16E-08	0.9YrCance	5.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
535	ALL	464743.4	3807182	5.08E-08	0.9YrCance	5.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
536	ALL	464763.4	3807182	5.00E-08	0.9YrCance	5.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
537	ALL	464783.4	3807182	4.88E-08	0.9YrCance	4.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
538	ALL	464803.4	3807182	4.75E-08	0.9YrCance	4.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
539	ALL	464823.4	3807182	4.69E-08	0.9YrCance	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
540	ALL	464843.4	3807182	4.58E-08	0.9YrCance	4.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
541	ALL	464863.4	3807182	4.47E-08	0.9YrCance	4.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
542	ALL	464883.4	3807182	4.42E-08	0.9YrCance	4.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
543	ALL	464903.4	3807182	4.39E-08	0.9YrCance	4.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
544	ALL	464923.4	3807182	4.37E-08	0.9YrCance	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
545	ALL	464503.4	3807202	6.21E-08	0.9YrCance	6.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
546	ALL	464523.4	3807202	6.09E-08	0.9YrCance	6.09E-08	0.00									

571	ALL	464583.4	3807222	6.04E-08	0.9YrCance	6.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
572	ALL	464603.4	3807222	5.94E-08	0.9YrCance	5.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
573	ALL	464623.4	3807222	5.82E-08	0.9YrCance	5.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
574	ALL	464643.4	3807222	5.77E-08	0.9YrCance	5.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
575	ALL	464663.4	3807222	5.66E-08	0.9YrCance	5.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
576	ALL	464683.4	3807222	5.54E-08	0.9YrCance	5.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
577	ALL	464703.4	3807222	5.49E-08	0.9YrCance	5.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
578	ALL	464723.4	3807222	5.39E-08	0.9YrCance	5.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
579	ALL	464743.4	3807222	5.25E-08	0.9YrCance	5.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
580	ALL	464763.4	3807222	5.10E-08	0.9YrCance	5.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
581	ALL	464783.4	3807222	5.04E-08	0.9YrCance	5.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
582	ALL	464803.4	3807222	5.00E-08	0.9YrCance	5.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
583	ALL	464823.4	3807222	4.89E-08	0.9YrCance	4.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
584	ALL	464843.4	3807222	4.87E-08	0.9YrCance	4.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
585	ALL	464863.4	3807222	4.88E-08	0.9YrCance	4.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
586	ALL	464883.4	3807222	4.76E-08	0.9YrCance	4.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
587	ALL	464903.4	3807222	4.67E-08	0.9YrCance	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
588	ALL	464923.4	3807222	4.66E-08	0.9YrCance	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
589	ALL	464503.4	3807242	6.43E-08	0.9YrCance	6.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
590	ALL	464523.4	3807242	6.35E-08	0.9YrCance	6.35E-08	0.00									

615	ALL	464583.4	3807262	6.23E-08	0.9YrCance	6.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
616	ALL	464603.4	3807262	6.12E-08	0.9YrCance	6.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
617	ALL	464623.4	3807262	5.99E-08	0.9YrCance	5.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
618	ALL	464643.4	3807262	5.92E-08	0.9YrCance	5.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
619	ALL	464663.4	3807262	5.88E-08	0.9YrCance	5.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
620	ALL	464683.4	3807262	5.83E-08	0.9YrCance	5.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
621	ALL	464703.4	3807262	5.66E-08	0.9YrCance	5.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
622	ALL	464723.4	3807262	5.52E-08	0.9YrCance	5.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
623	ALL	464743.4	3807262	5.41E-08	0.9YrCance	5.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
624	ALL	464763.4	3807262	5.38E-08	0.9YrCance	5.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
625	ALL	464783.4	3807262	5.29E-08	0.9YrCance	5.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
626	ALL	464803.4	3807262	5.21E-08	0.9YrCance	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
627	ALL	464823.4	3807262	5.23E-08	0.9YrCance	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
628	ALL	464843.4	3807262	5.23E-08	0.9YrCance	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
629	ALL	464863.4	3807262	5.23E-08	0.9YrCance	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
630	ALL	464883.4	3807262	5.11E-08	0.9YrCance	5.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
631	ALL	464903.4	3807262	5.20E-08	0.9YrCance	5.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
632	ALL	464923.4	3807262	5.56E-08	0.9YrCance	5.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
633	ALL	464503.4	3807282	6.66E-08	0.9YrC												

659	ALL	464583.4	3807302	6.41E-08	0.9YrCance	6.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
660	ALL	464603.4	3807302	6.34E-08	0.9YrCance	6.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
661	ALL	464623.4	3807302	6.27E-08	0.9YrCance	6.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
662	ALL	464643.4	3807302	6.09E-08	0.9YrCance	6.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
663	ALL	464663.4	3807302	6.01E-08	0.9YrCance	6.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
664	ALL	464683.4	3807302	5.95E-08	0.9YrCance	5.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
665	ALL	464703.4	3807302	5.78E-08	0.9YrCance	5.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
666	ALL	464723.4	3807302	5.71E-08	0.9YrCance	5.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
667	ALL	464743.4	3807302	5.70E-08	0.9YrCance	5.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
668	ALL	464763.4	3807302	5.65E-08	0.9YrCance	5.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
669	ALL	464783.4	3807302	5.61E-08	0.9YrCance	5.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
670	ALL	464803.4	3807302	5.59E-08	0.9YrCance	5.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
671	ALL	464823.4	3807302	5.45E-08	0.9YrCance	5.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
672	ALL	464843.4	3807302	5.62E-08	0.9YrCance	5.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
673	ALL	464863.4	3807302	5.90E-08	0.9YrCance	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
674	ALL	464883.4	3807302	6.17E-08	0.9YrCance	6.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
675	ALL	464903.4	3807302	6.20E-08	0.9YrCance	6.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
676	ALL	464923.4	3807302	6.25E-08	0.9YrCance	6.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
677	ALL	464503.4	3807322	7.03E-08	0.9YrCance	7.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
678	ALL	464523.4	3807322	6.86E-08	0.9YrCance	6.86E-08	0.00									

703	ALL	464583.4	3807342	6.60E-08	0.9YrCance	6.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
704	ALL	464603.4	3807342	6.50E-08	0.9YrCance	6.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
705	ALL	464623.4	3807342	6.42E-08	0.9YrCance	6.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
706	ALL	464643.4	3807342	6.23E-08	0.9YrCance	6.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
707	ALL	464663.4	3807342	6.14E-08	0.9YrCance	6.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
708	ALL	464683.4	3807342	6.10E-08	0.9YrCance	6.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
709	ALL	464703.4	3807342	6.07E-08	0.9YrCance	6.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
710	ALL	464723.4	3807342	5.96E-08	0.9YrCance	5.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
711	ALL	464743.4	3807342	5.84E-08	0.9YrCance	5.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
712	ALL	464763.4	3807342	5.90E-08	0.9YrCance	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
713	ALL	464783.4	3807342	5.87E-08	0.9YrCance	5.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
714	ALL	464803.4	3807342	5.76E-08	0.9YrCance	5.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
715	ALL	464823.4	3807342	6.00E-08	0.9YrCance	6.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
716	ALL	464843.4	3807342	6.56E-08	0.9YrCance	6.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
717	ALL	464863.4	3807342	6.70E-08	0.9YrCance	6.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
718	ALL	464883.4	3807342	6.63E-08	0.9YrCance	6.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
719	ALL	464903.4	3807342	6.55E-08	0.9YrCance	6.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
720	ALL	464923.4	3807342	6.53E-08	0.9YrCance	6.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
721	ALL	464503.4	3807362	7.28E-08	0.9YrCance	7.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
722	ALL	464523.4	3807362	7.15E-08	0.9YrCance	7.15E-08	0.00									

747	ALL	464583.4	3807382	6.80E-08	0.9YrCance	6.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
748	ALL	464603.4	3807382	6.68E-08	0.9YrCance	6.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
749	ALL	464623.4	3807382	6.59E-08	0.9YrCance	6.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
750	ALL	464643.4	3807382	6.55E-08	0.9YrCance	6.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
751	ALL	464663.4	3807382	6.43E-08	0.9YrCance	6.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
752	ALL	464683.4	3807382	6.28E-08	0.9YrCance	6.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
753	ALL	464703.4	3807382	6.24E-08	0.9YrCance	6.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
754	ALL	464723.4	3807382	6.27E-08	0.9YrCance	6.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
755	ALL	464743.4	3807382	6.35E-08	0.9YrCance	6.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
756	ALL	464763.4	3807382	6.25E-08	0.9YrCance	6.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
757	ALL	464783.4	3807382	6.42E-08	0.9YrCance	6.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
758	ALL	464803.4	3807382	6.71E-08	0.9YrCance	6.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
759	ALL	464823.4	3807382	7.16E-08	0.9YrCance	7.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
760	ALL	464843.4	3807382	7.17E-08	0.9YrCance	7.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
761	ALL	464863.4	3807382	7.03E-08	0.9YrCance	7.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
762	ALL	464883.4	3807382	7.06E-08	0.9YrCance	7.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
763	ALL	464903.4	3807382	7.41E-08	0.9YrCance	7.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
764	ALL	464923.4	3807382	7.90E-08	0.9YrCance	7.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
765	ALL	464503.4	3807402	7.68E-08	0.9YrCance	7.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
766	ALL	464523.4	3807402	7.49E-08	0.9YrCance	7.49E-08	0.00									

791	ALL	464583.4	3807422	7.14E-08	0.9YrCance	7.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
792	ALL	464603.4	3807422	7.00E-08	0.9YrCance	7.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
793	ALL	464623.4	3807422	6.87E-08	0.9YrCance	6.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
794	ALL	464643.4	3807422	6.74E-08	0.9YrCance	6.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
795	ALL	464663.4	3807422	6.68E-08	0.9YrCance	6.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
796	ALL	464683.4	3807422	6.66E-08	0.9YrCance	6.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
797	ALL	464703.4	3807422	6.59E-08	0.9YrCance	6.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
798	ALL	464723.4	3807422	6.54E-08	0.9YrCance	6.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
799	ALL	464743.4	3807422	6.57E-08	0.9YrCance	6.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
800	ALL	464763.4	3807422	6.87E-08	0.9YrCance	6.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
801	ALL	464783.4	3807422	7.27E-08	0.9YrCance	7.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
802	ALL	464803.4	3807422	7.41E-08	0.9YrCance	7.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803	ALL	464823.4	3807422	7.44E-08	0.9YrCance	7.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
804	ALL	464843.4	3807422	7.94E-08	0.9YrCance	7.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
805	ALL	464863.4	3807422	7.96E-08	0.9YrCance	7.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
806	ALL	464883.4	3807422	7.98E-08	0.9YrCance	7.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
807	ALL	464903.4	3807422	8.78E-08	0.9YrCance	8.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
808	ALL	464923.4	3807422	8.75E-08	0.9YrCance	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
809	ALL	464503.4	3807442	7.96E-08	0.9YrCance	7.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
810	ALL	464523.4	3807442	7.76E-08	0.9YrCance	7.76E-08	0.00									

835	ALL	464583.4	3807462	7.54E-08	0.9YrCance	7.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
836	ALL	464603.4	3807462	7.37E-08	0.9YrCance	7.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
837	ALL	464623.4	3807462	7.19E-08	0.9YrCance	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
838	ALL	464643.4	3807462	7.14E-08	0.9YrCance	7.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
839	ALL	464663.4	3807462	7.00E-08	0.9YrCance	7.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
840	ALL	464683.4	3807462	6.85E-08	0.9YrCance	6.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
841	ALL	464703.4	3807462	6.92E-08	0.9YrCance	6.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
842	ALL	464723.4	3807462	7.23E-08	0.9YrCance	7.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
843	ALL	464743.4	3807462	7.30E-08	0.9YrCance	7.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
844	ALL	464763.4	3807462	7.18E-08	0.9YrCance	7.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
845	ALL	464783.4	3807462	7.75E-08	0.9YrCance	7.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
846	ALL	464803.4	3807462	7.96E-08	0.9YrCance	7.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
847	ALL	464823.4	3807462	7.79E-08	0.9YrCance	7.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
848	ALL	464843.4	3807462	8.32E-08	0.9YrCance	8.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
849	ALL	464863.4	3807462	8.83E-08	0.9YrCance	8.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
850	ALL	464883.4	3807462	8.66E-08	0.9YrCance	8.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
851	ALL	464903.4	3807462	9.15E-08	0.9YrCance	9.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
852	ALL	464923.4	3807462	9.21E-08	0.9YrCance	9.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
853	ALL	464503.4	3807482	8.24E-08	0.9YrCance	8.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
854	ALL	464523.4	3807482	8.16E-08	0.9YrCance	8.16E-08	0.00									

879	ALL	464583.4	3807502	7.90E-08	0.9YrCance	7.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
880	ALL	464603.4	3807502	7.78E-08	0.9YrCance	7.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
881	ALL	464623.4	3807502	7.69E-08	0.9YrCance	7.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
882	ALL	464643.4	3807502	7.50E-08	0.9YrCance	7.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
883	ALL	464663.4	3807502	7.45E-08	0.9YrCance	7.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
884	ALL	464683.4	3807502	7.50E-08	0.9YrCance	7.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
885	ALL	464703.4	3807502	7.36E-08	0.9YrCance	7.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
886	ALL	464723.4	3807502	7.55E-08	0.9YrCance	7.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
887	ALL	464743.4	3807502	7.79E-08	0.9YrCance	7.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
888	ALL	464763.4	3807502	7.73E-08	0.9YrCance	7.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
889	ALL	464783.4	3807502	8.06E-08	0.9YrCance	8.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
890	ALL	464803.4	3807502	8.23E-08	0.9YrCance	8.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
891	ALL	464823.4	3807502	8.26E-08	0.9YrCance	8.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
892	ALL	464843.4	3807502	8.66E-08	0.9YrCance	8.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
893	ALL	464863.4	3807502	9.37E-08	0.9YrCance	9.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
894	ALL	464883.4	3807502	9.77E-08	0.9YrCance	9.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
895	ALL	464903.4	3807502	9.70E-08	0.9YrCance	9.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
896	ALL	464923.4	3807502	9.77E-08	0.9YrCance	9.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
897	ALL	464503.4	3807522	8.75E-08	0.9YrCance	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
898	ALL	464523.4	3807522	8.67E-08	0.9YrCance	8.67E-08	0.00									

923	ALL	464583.4	3807542	8.40E-08	0.9YrCance	8.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
924	ALL	464603.4	3807542	8.28E-08	0.9YrCance	8.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
925	ALL	464623.4	3807542	8.17E-08	0.9YrCance	8.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
926	ALL	464643.4	3807542	8.08E-08	0.9YrCance	8.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
927	ALL	464663.4	3807542	8.26E-08	0.9YrCance	8.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
928	ALL	464683.4	3807542	8.24E-08	0.9YrCance	8.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
929	ALL	464703.4	3807542	8.21E-08	0.9YrCance	8.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
930	ALL	464723.4	3807542	8.59E-08	0.9YrCance	8.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
931	ALL	464743.4	3807542	8.75E-08	0.9YrCance	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
932	ALL	464763.4	3807542	8.77E-08	0.9YrCance	8.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
933	ALL	464783.4	3807542	8.70E-08	0.9YrCance	8.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
934	ALL	464803.4	3807542	8.65E-08	0.9YrCance	8.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
935	ALL	464823.4	3807542	9.27E-08	0.9YrCance	9.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
936	ALL	464843.4	3807542	1.03E-07	0.9YrCance	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
937	ALL	464863.4	3807542	1.02E-07	0.9YrCance	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
938	ALL	464883.4	3807542	1.01E-07	0.9YrCance	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
939	ALL	464903.4	3807542	1.05E-07	0.9YrCance	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
940	ALL	464923.4	3807542	1.03E-07	0.9YrCance	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
941	ALL	464503.4	3807562	9.40E-08	0.9YrCance	9.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
942	ALL	464523.4	3807562	9.13E-08	0.9YrCance	9.13E-08	0.00									

[illegible]

[illegible]

[illegible]

[illegible]

1143	ALL	465083.4	3807722	1.06E-07	0.9YrCance	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1144	ALL	465103.4	3807722	1.03E-07	0.9YrCance	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1145	ALL	465123.4	3807722	1.01E-07	0.9YrCance	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1146	ALL	465143.4	3807722	9.94E-08	0.9YrCance	9.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1147	ALL	465163.4	3807722	9.75E-08	0.9YrCance	9.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1148	ALL	465183.4	3807722	9.56E-08	0.9YrCance	9.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1149	ALL	465203.4	3807722	9.37E-08	0.9YrCance	9.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1150	ALL	465223.4	3807722	9.19E-08	0.9YrCance	9.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1151	ALL	465243.4	3807722	9.01E-08	0.9YrCance	9.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1152	ALL	465263.4	3807722	8.84E-08	0.9YrCance	8.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1153	ALL	465283.4	3807722	8.67E-08	0.9YrCance	8.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1154	ALL	465303.4	3807722	8.51E-08	0.9YrCance	8.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1155	ALL	465323.4	3807722	8.36E-08	0.9YrCance	8.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1156	ALL	465343.4	3807722	8.20E-08	0.9YrCance	8.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1157	ALL	465363.4	3807722	8.05E-08	0.9YrCance	8.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1158	ALL	465383.4	3807722	7.91E-08	0.9YrCance	7.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1159	ALL	464543.4	3807742	1.74E-07	0.9YrCance	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1160	ALL	464563.4	3807742	1.53E-07	0.9YrCance	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1161	ALL	464583.4	3807742														

1187	ALL	465103.4	3807742	1.05E-07	0.9YrCance	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1188	ALL	465123.4	3807742	1.03E-07	0.9YrCance	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1189	ALL	465143.4	3807742	1.01E-07	0.9YrCance	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1190	ALL	465163.4	3807742	9.88E-08	0.9YrCance	9.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1191	ALL	465183.4	3807742	9.68E-08	0.9YrCance	9.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1192	ALL	465203.4	3807742	9.49E-08	0.9YrCance	9.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1193	ALL	465223.4	3807742	9.31E-08	0.9YrCance	9.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1194	ALL	465243.4	3807742	9.12E-08	0.9YrCance	9.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1195	ALL	465263.4	3807742	8.95E-08	0.9YrCance	8.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1196	ALL	465283.4	3807742	8.78E-08	0.9YrCance	8.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1197	ALL	465303.4	3807742	8.62E-08	0.9YrCance	8.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1198	ALL	465323.4	3807742	8.45E-08	0.9YrCance	8.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1199	ALL	465343.4	3807742	8.29E-08	0.9YrCance	8.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200	ALL	465363.4	3807742	8.14E-08	0.9YrCance	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1201	ALL	465383.4	3807742	7.99E-08	0.9YrCance	7.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1202	ALL	464543.4	3807762	2.01E-07	0.9YrCance	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1203	ALL	464563.4	3807762	1.84E-07	0.9YrCance	1.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1204	ALL	464583.4	3807762	1.68E-07	0.9YrCance	1.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1205	ALL	464603.4	3807762														

1231		465123.4	3807762	1.04E-07	0.9YrCance	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1232	ALL	465143.4	3807762	1.02E-07	0.9YrCance	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1233	ALL	465163.4	3807762	1.00E-07	0.9YrCance	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1234	ALL	465183.4	3807762	9.81E-08	0.9YrCance	9.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1235	ALL	465203.4	3807762	9.61E-08	0.9YrCance	9.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1236	ALL	465223.4	3807762	9.42E-08	0.9YrCance	9.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1237	ALL	465243.4	3807762	9.24E-08	0.9YrCance	9.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1238	ALL	465263.4	3807762	9.06E-08	0.9YrCance	9.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1239	ALL	465283.4	3807762	8.89E-08	0.9YrCance	8.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1240	ALL	465303.4	3807762	8.72E-08	0.9YrCance	8.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1241	ALL	465323.4	3807762	8.55E-08	0.9YrCance	8.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1242	ALL	465343.4	3807762	8.39E-08	0.9YrCance	8.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1243	ALL	465363.4	3807762	8.23E-08	0.9YrCance	8.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1244	ALL	465383.4	3807762	8.08E-08	0.9YrCance	8.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1245	ALL	464543.4	3807782	2.12E-07	0.9YrCance	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1246	ALL	464563.4	3807782	2.05E-07	0.9YrCance	2.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1247	ALL	464583.4	3807782	1.96E-07	0.9YrCance	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1248	ALL	464603.4	3807782	1.89E-07	0.9YrCance	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1249	ALL	464623.4	3807782	1.78E-07	0.9YrCance	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1250	ALL	464643.4	3807782	1.72E-07	0.9YrCance											

1275		465143.4	3807782	1.04E-07	0.9YrCance	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1276	ALL	465163.4	3807782	1.01E-07	0.9YrCance	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1277	ALL	465183.4	3807782	9.94E-08	0.9YrCance	9.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1278	ALL	465203.4	3807782	9.74E-08	0.9YrCance	9.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1279	ALL	465223.4	3807782	9.54E-08	0.9YrCance	9.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1280	ALL	465243.4	3807782	9.35E-08	0.9YrCance	9.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1281	ALL	465263.4	3807782	9.17E-08	0.9YrCance	9.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1282	ALL	465283.4	3807782	8.99E-08	0.9YrCance	8.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1283	ALL	465303.4	3807782	8.82E-08	0.9YrCance	8.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1284	ALL	465323.4	3807782	8.65E-08	0.9YrCance	8.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1285	ALL	465343.4	3807782	8.48E-08	0.9YrCance	8.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1286	ALL	465363.4	3807782	8.32E-08	0.9YrCance	8.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1287	ALL	465383.4	3807782	8.17E-08	0.9YrCance	8.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1288	ALL	464543.4	3807802	2.18E-07	0.9YrCance	2.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1289	ALL	464563.4	3807802	2.12E-07	0.9YrCance	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1290	ALL	464583.4	3807802	2.06E-07	0.9YrCance	2.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1291	ALL	464603.4	3807802	2.00E-07	0.9YrCance	2.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1292	ALL	464623.4	3807802	1.92E-07	0.9YrCance	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1293	ALL	464643.4	3807802	1.													

1319 ALL		465163.4	3807802	1.03E-07	0.9YrCance	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1320 ALL		465183.4	3807802	1.01E-07	0.9YrCance	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1321 ALL		465203.4	3807802	9.87E-08	0.9YrCance	9.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1322 ALL		465223.4	3807802	9.67E-08	0.9YrCance	9.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1323 ALL		465243.4	3807802	9.47E-08	0.9YrCance	9.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1324 ALL		465263.4	3807802	9.28E-08	0.9YrCance	9.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1325 ALL		465283.4	3807802	9.10E-08	0.9YrCance	9.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1326 ALL		465303.4	3807802	8.93E-08	0.9YrCance	8.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1327 ALL		465323.4	3807802	8.75E-08	0.9YrCance	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1328 ALL		465343.4	3807802	8.58E-08	0.9YrCance	8.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1329 ALL		465363.4	3807802	8.42E-08	0.9YrCance	8.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1330 ALL		465383.4	3807802	8.27E-08	0.9YrCance	8.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1331 ALL		464543.4	3807822	2.24E-07	0.9YrCance	2.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1332 ALL		464563.4	3807822	2.18E-07	0.9YrCance	2.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1333 ALL		464583.4	3807822	2.12E-07	0.9YrCance	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1334 ALL		464603.4	3807822	2.06E-07	0.9YrCance	2.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1335 ALL		464623.4	3807822	1.99E-07	0.9YrCance	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1336 ALL		464643.4	3807822	1.92E-07	0.9YrCance	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1337 ALL		464663.4	3807822	1.84E-07	0.9YrC												

1363	ALL	465183.4	3807822	1.02E-07	0.9YrCance	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1364	ALL	465203.4	3807822	1.00E-07	0.9YrCance	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1365	ALL	465223.4	3807822	9.79E-08	0.9YrCance	9.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1366	ALL	465243.4	3807822	9.59E-08	0.9YrCance	9.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1367	ALL	465263.4	3807822	9.40E-08	0.9YrCance	9.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1368	ALL	465283.4	3807822	9.22E-08	0.9YrCance	9.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1369	ALL	465303.4	3807822	9.03E-08	0.9YrCance	9.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1370	ALL	465323.4	3807822	8.86E-08	0.9YrCance	8.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1371	ALL	465343.4	3807822	8.69E-08	0.9YrCance	8.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1372	ALL	465363.4	3807822	8.53E-08	0.9YrCance	8.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1373	ALL	465383.4	3807822	8.36E-08	0.9YrCance	8.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1374	ALL	464543.4	3807842	2.29E-07	0.9YrCance	2.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1375	ALL	464563.4	3807842	2.22E-07	0.9YrCance	2.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1376	ALL	464583.4	3807842	2.17E-07	0.9YrCance	2.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1377	ALL	464603.4	3807842	2.11E-07	0.9YrCance	2.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1378	ALL	464623.4	3807842	2.05E-07	0.9YrCance	2.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1379	ALL	464643.4	3807842	1.99E-07	0.9YrCance	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1380	ALL	464663.4	3807842	1.93E-07	0.9YrCance	1.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1381	ALL	464683.4	3807842														

1407	ALL	465223.4	3807842	9.92E-08	0.9YrCance	9.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1408	ALL	465243.4	3807842	9.71E-08	0.9YrCance	9.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1409	ALL	465263.4	3807842	9.52E-08	0.9YrCance	9.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1410	ALL	465283.4	3807842	9.33E-08	0.9YrCance	9.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1411	ALL	465303.4	3807842	9.14E-08	0.9YrCance	9.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1412	ALL	465323.4	3807842	8.97E-08	0.9YrCance	8.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1413	ALL	465343.4	3807842	8.80E-08	0.9YrCance	8.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1414	ALL	465363.4	3807842	8.63E-08	0.9YrCance	8.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1415	ALL	465383.4	3807842	8.46E-08	0.9YrCance	8.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1416	ALL	464503.4	3807862	2.49E-07	0.9YrCance	2.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1417	ALL	464523.4	3807862	2.41E-07	0.9YrCance	2.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1418	ALL	464543.4	3807862	2.34E-07	0.9YrCance	2.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1419	ALL	464563.4	3807862	2.27E-07	0.9YrCance	2.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1420	ALL	464583.4	3807862	2.21E-07	0.9YrCance	2.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1421	ALL	464603.4	3807862	2.16E-07	0.9YrCance	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1422	ALL	464723.4	3807862	1.83E-07	0.9YrCance	1.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1423	ALL	464743.4	3807862	1.78E-07	0.9YrCance	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1424	ALL	464763.4	3807862	1.73E-07	0.9YrCance	1.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1425	ALL	464783.4	3807862														

[illegible]

1495 ALL		464763.4	3807902	1.81E-07	0.9YrCance	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1496 ALL		464783.4	3807902	1.76E-07	0.9YrCance	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1497 ALL		464803.4	3807902	1.71E-07	0.9YrCance	1.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1498 ALL		464823.4	3807902	1.67E-07	0.9YrCance	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1499 ALL		464843.4	3807902	1.62E-07	0.9YrCance	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500 ALL		464863.4	3807902	1.58E-07	0.9YrCance	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1501 ALL		464883.4	3807902	1.54E-07	0.9YrCance	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1502 ALL		464903.4	3807902	1.50E-07	0.9YrCance	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1503 ALL		464923.4	3807902	1.47E-07	0.9YrCance	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1504 ALL		464943.4	3807902	1.43E-07	0.9YrCance	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1505 ALL		464963.4	3807902	1.39E-07	0.9YrCance	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1506 ALL		464983.4	3807902	1.36E-07	0.9YrCance	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1507 ALL		465003.4	3807902	1.33E-07	0.9YrCance	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1508 ALL		465023.4	3807902	1.30E-07	0.9YrCance	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1509 ALL		465043.4	3807902	1.26E-07	0.9YrCance	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1510 ALL		465063.4	3807902	1.23E-07	0.9YrCance	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1511 ALL		465083.4	3807902	1.21E-07	0.9YrCance	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1512 ALL		465103.4	3807902	1.18E-07	0.9YrCance	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1513 ALL		465123.4	3807902	1.15E-07	0.9YrC												

[illegible]

1583		465163.4	3807942	1.13E-07	0.9YrCance	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1584	ALL	465183.4	3807942	1.11E-07	0.9YrCance	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1585	ALL	465203.4	3807942	1.08E-07	0.9YrCance	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1586	ALL	465223.4	3807942	1.06E-07	0.9YrCance	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1587	ALL	465243.4	3807942	1.04E-07	0.9YrCance	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1588	ALL	465263.4	3807942	1.02E-07	0.9YrCance	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1589	ALL	465283.4	3807942	9.96E-08	0.9YrCance	9.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1590	ALL	465303.4	3807942	9.76E-08	0.9YrCance	9.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1591	ALL	465323.4	3807942	9.57E-08	0.9YrCance	9.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1592	ALL	465343.4	3807942	9.38E-08	0.9YrCance	9.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1593	ALL	465363.4	3807942	9.20E-08	0.9YrCance	9.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1594	ALL	465383.4	3807942	9.02E-08	0.9YrCance	9.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1595	ALL	465403.4	3807942	8.84E-08	0.9YrCance	8.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1596	ALL	465423.4	3807942	8.68E-08	0.9YrCance	8.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1597	ALL	465443.4	3807942	8.52E-08	0.9YrCance	8.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1598	ALL	465463.4	3807942	8.36E-08	0.9YrCance	8.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1599	ALL	465483.4	3807942	8.21E-08	0.9YrCance	8.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600	ALL	465503.4	3807942	8.07E-08	0.9YrCance	8.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1601	ALL	465523.4	3807942	7.													

[illegible]

[illegible]

1715	ALL	464863.4	3808002	1.75E-07	0.9YrCance	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1716	ALL	464883.4	3808002	1.70E-07	0.9YrCance	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1717	ALL	464903.4	3808002	1.65E-07	0.9YrCance	1.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1718	ALL	464923.4	3808002	1.61E-07	0.9YrCance	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1719	ALL	464943.4	3808002	1.57E-07	0.9YrCance	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1720	ALL	464963.4	3808002	1.52E-07	0.9YrCance	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1721	ALL	464983.4	3808002	1.48E-07	0.9YrCance	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1722	ALL	465003.4	3808002	1.45E-07	0.9YrCance	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1723	ALL	465023.4	3808002	1.41E-07	0.9YrCance	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1724	ALL	465043.4	3808002	1.37E-07	0.9YrCance	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1725	ALL	465063.4	3808002	1.34E-07	0.9YrCance	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1726	ALL	465083.4	3808002	1.31E-07	0.9YrCance	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1727	ALL	465103.4	3808002	1.28E-07	0.9YrCance	1.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1728	ALL	465123.4	3808002	1.25E-07	0.9YrCance	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1729	ALL	465143.4	3808002	1.22E-07	0.9YrCance	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1730	ALL	465163.4	3808002	1.19E-07	0.9YrCance	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1731	ALL	465183.4	3808002	1.16E-07	0.9YrCance	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1732	ALL	465203.4	3808002	1.14E-07	0.9YrCance	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1733	ALL	465223.4	3808002														

1759	ALL	464783.4	3808022	2.00E-07	0.9YrCance	2.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1760	ALL	464803.4	3808022	1.94E-07	0.9YrCance	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1761	ALL	464823.4	3808022	1.89E-07	0.9YrCance	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1762	ALL	464843.4	3808022	1.83E-07	0.9YrCance	1.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1763	ALL	464863.4	3808022	1.78E-07	0.9YrCance	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1764	ALL	464883.4	3808022	1.73E-07	0.9YrCance	1.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1765	ALL	464903.4	3808022	1.68E-07	0.9YrCance	1.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1766	ALL	464923.4	3808022	1.64E-07	0.9YrCance	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1767	ALL	464943.4	3808022	1.60E-07	0.9YrCance	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1768	ALL	464963.4	3808022	1.55E-07	0.9YrCance	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1769	ALL	464983.4	3808022	1.51E-07	0.9YrCance	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1770	ALL	465003.4	3808022	1.47E-07	0.9YrCance	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1771	ALL	465023.4	3808022	1.44E-07	0.9YrCance	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1772	ALL	465043.4	3808022	1.40E-07	0.9YrCance	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1773	ALL	465063.4	3808022	1.37E-07	0.9YrCance	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1774	ALL	465083.4	3808022	1.33E-07	0.9YrCance	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1775	ALL	465103.4	3808022	1.30E-07	0.9YrCance	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1776	ALL	465123.4	3808022	1.27E-07	0.9YrCance	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1777	ALL	465143.4	3808022														

1803	ALL	465663.4	3808022	7.41E-08	0.9YrCance	7.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1804	ALL	465683.4	3808022	7.29E-08	0.9YrCance	7.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1805	ALL	465703.4	3808022	7.16E-08	0.9YrCance	7.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1806	ALL	464783.4	3808042	2.04E-07	0.9YrCance	2.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1807	ALL	464803.4	3808042	1.98E-07	0.9YrCance	1.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1808	ALL	464823.4	3808042	1.93E-07	0.9YrCance	1.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1809	ALL	464843.4	3808042	1.87E-07	0.9YrCance	1.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1810	ALL	464863.4	3808042	1.82E-07	0.9YrCance	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1811	ALL	464883.4	3808042	1.77E-07	0.9YrCance	1.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1812	ALL	464903.4	3808042	1.72E-07	0.9YrCance	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1813	ALL	464923.4	3808042	1.67E-07	0.9YrCance	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1814	ALL	464943.4	3808042	1.63E-07	0.9YrCance	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1815	ALL	464963.4	3808042	1.58E-07	0.9YrCance	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1816	ALL	464983.4	3808042	1.54E-07	0.9YrCance	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1817	ALL	465003.4	3808042	1.50E-07	0.9YrCance	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1818	ALL	465023.4	3808042	1.46E-07	0.9YrCance	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1819	ALL	465043.4	3808042	1.43E-07	0.9YrCance	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1820	ALL	465063.4	3808042	1.39E-07	0.9YrCance	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1821	ALL	465083.4	3808042														

1847	ALL	465603.4	3808042	7.91E-08	0.9YrCance	7.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1848	ALL	465623.4	3808042	7.78E-08	0.9YrCance	7.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1849	ALL	465643.4	3808042	7.65E-08	0.9YrCance	7.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1850	ALL	465663.4	3808042	7.52E-08	0.9YrCance	7.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1851	ALL	465683.4	3808042	7.39E-08	0.9YrCance	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1852	ALL	465703.4	3808042	7.26E-08	0.9YrCance	7.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1853	ALL	464803.4	3808062	2.02E-07	0.9YrCance	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1854	ALL	464823.4	3808062	1.97E-07	0.9YrCance	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1855	ALL	464843.4	3808062	1.91E-07	0.9YrCance	1.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1856	ALL	464863.4	3808062	1.86E-07	0.9YrCance	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1857	ALL	464883.4	3808062	1.81E-07	0.9YrCance	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1858	ALL	464903.4	3808062	1.76E-07	0.9YrCance	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1859	ALL	464923.4	3808062	1.71E-07	0.9YrCance	1.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1860	ALL	464943.4	3808062	1.66E-07	0.9YrCance	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1861	ALL	464963.4	3808062	1.62E-07	0.9YrCance	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1862	ALL	464983.4	3808062	1.58E-07	0.9YrCance	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1863	ALL	465003.4	3808062	1.53E-07	0.9YrCance	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1864	ALL	465023.4	3808062	1.49E-07	0.9YrCance	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1865	ALL	465043.4	3808062	1.45E-07	0.9YrCance	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1866	ALL	465063.4	3808062	1.42E-07	0.9YrCance											

1891	ALL	465563.4	3808062	8.33E-08	0.9YrCance	8.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1892	ALL	465583.4	3808062	8.18E-08	0.9YrCance	8.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1893	ALL	465603.4	3808062	8.04E-08	0.9YrCance	8.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1894	ALL	465623.4	3808062	7.90E-08	0.9YrCance	7.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1895	ALL	465643.4	3808062	7.77E-08	0.9YrCance	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1896	ALL	465663.4	3808062	7.63E-08	0.9YrCance	7.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1897	ALL	465683.4	3808062	7.50E-08	0.9YrCance	7.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1898	ALL	465703.4	3808062	7.38E-08	0.9YrCance	7.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1899	ALL	464823.4	3808082	2.01E-07	0.9YrCance	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1900	ALL	464843.4	3808082	1.95E-07	0.9YrCance	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1901	ALL	464863.4	3808082	1.90E-07	0.9YrCance	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1902	ALL	464883.4	3808082	1.84E-07	0.9YrCance	1.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1903	ALL	464903.4	3808082	1.79E-07	0.9YrCance	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1904	ALL	464923.4	3808082	1.75E-07	0.9YrCance	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1905	ALL	464943.4	3808082	1.70E-07	0.9YrCance	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1906	ALL	464963.4	3808082	1.65E-07	0.9YrCance	1.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1907	ALL	464983.4	3808082	1.61E-07	0.9YrCance	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1908	ALL	465003.4	3808082	1.57E-07	0.9YrCance	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1909	ALL	465023.4	3808082														

1935		465543.4	3808082	8.61E-08	0.9YrCance	8.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1936	ALL	465563.4	3808082	8.45E-08	0.9YrCance	8.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1937	ALL	465583.4	3808082	8.31E-08	0.9YrCance	8.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1938	ALL	465603.4	3808082	8.16E-08	0.9YrCance	8.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1939	ALL	465623.4	3808082	8.02E-08	0.9YrCance	8.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1940	ALL	465643.4	3808082	7.88E-08	0.9YrCance	7.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1941	ALL	465663.4	3808082	7.75E-08	0.9YrCance	7.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1942	ALL	465683.4	3808082	7.62E-08	0.9YrCance	7.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1943	ALL	465703.4	3808082	7.49E-08	0.9YrCance	7.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1944	ALL	464843.4	3808102	1.99E-07	0.9YrCance	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1945	ALL	464863.4	3808102	1.94E-07	0.9YrCance	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1946	ALL	464883.4	3808102	1.89E-07	0.9YrCance	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1947	ALL	464903.4	3808102	1.84E-07	0.9YrCance	1.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1948	ALL	464923.4	3808102	1.79E-07	0.9YrCance	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1949	ALL	464943.4	3808102	1.74E-07	0.9YrCance	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1950	ALL	464963.4	3808102	1.69E-07	0.9YrCance	1.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1951	ALL	464983.4	3808102	1.64E-07	0.9YrCance	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1952	ALL	465003.4	3808102	1.60E-07	0.9YrCance	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1953	ALL	465023.4	3808102	1.56E-07	0.9YrCance	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1954	ALL	465043.4	3808102	1.52E-07	0.9YrCance											

[illegible]

2023	ALL	465563.4	3808122	8.73E-08	0.9YrCance	8.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2024	ALL	465583.4	3808122	8.58E-08	0.9YrCance	8.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2025	ALL	465603.4	3808122	8.43E-08	0.9YrCance	8.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2026	ALL	465623.4	3808122	8.28E-08	0.9YrCance	8.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2027	ALL	465643.4	3808122	8.13E-08	0.9YrCance	8.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2028	ALL	465663.4	3808122	7.98E-08	0.9YrCance	7.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2029	ALL	465683.4	3808122	7.85E-08	0.9YrCance	7.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2030	ALL	465703.4	3808122	7.72E-08	0.9YrCance	7.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2031	ALL	464883.4	3808142	1.98E-07	0.9YrCance	1.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2032	ALL	464903.4	3808142	1.92E-07	0.9YrCance	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2033	ALL	464923.4	3808142	1.87E-07	0.9YrCance	1.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2034	ALL	464943.4	3808142	1.82E-07	0.9YrCance	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2035	ALL	464963.4	3808142	1.77E-07	0.9YrCance	1.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2036	ALL	464983.4	3808142	1.72E-07	0.9YrCance	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2037	ALL	465003.4	3808142	1.67E-07	0.9YrCance	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2038	ALL	465023.4	3808142	1.63E-07	0.9YrCance	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2039	ALL	465043.4	3808142	1.58E-07	0.9YrCance	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2040	ALL	465063.4	3808142	1.54E-07	0.9YrCance	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2041	ALL	465083.4	3808142														

2067	ALL	465603.4	3808142	8.56E-08	0.9YrCance	8.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2068	ALL	465623.4	3808142	8.41E-08	0.9YrCance	8.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2069	ALL	465643.4	3808142	8.26E-08	0.9YrCance	8.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2070	ALL	465663.4	3808142	8.11E-08	0.9YrCance	8.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2071	ALL	465683.4	3808142	7.97E-08	0.9YrCance	7.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2072	ALL	465703.4	3808142	7.83E-08	0.9YrCance	7.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2073	ALL	464883.4	3808162	2.03E-07	0.9YrCance	2.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2074	ALL	464903.4	3808162	1.97E-07	0.9YrCance	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2075	ALL	464923.4	3808162	1.92E-07	0.9YrCance	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2076	ALL	464943.4	3808162	1.86E-07	0.9YrCance	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2077	ALL	464963.4	3808162	1.81E-07	0.9YrCance	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2078	ALL	464983.4	3808162	1.76E-07	0.9YrCance	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2079	ALL	465003.4	3808162	1.71E-07	0.9YrCance	1.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2080	ALL	465023.4	3808162	1.67E-07	0.9YrCance	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2081	ALL	465043.4	3808162	1.62E-07	0.9YrCance	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2082	ALL	465063.4	3808162	1.58E-07	0.9YrCance	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2083	ALL	465083.4	3808162	1.53E-07	0.9YrCance	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2084	ALL	465103.4	3808162	1.49E-07	0.9YrCance	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2085	ALL	465123.4	3808162														

2111		465643.4	3808162	8.39E-08	0.9YrCance	8.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2112	ALL	465663.4	3808162	8.24E-08	0.9YrCance	8.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2113	ALL	465683.4	3808162	8.09E-08	0.9YrCance	8.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2114	ALL	465703.4	3808162	7.94E-08	0.9YrCance	7.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2115	ALL	464903.4	3808182	2.02E-07	0.9YrCance	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2116	ALL	464923.4	3808182	1.96E-07	0.9YrCance	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2117	ALL	464943.4	3808182	1.91E-07	0.9YrCance	1.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2118	ALL	464963.4	3808182	1.85E-07	0.9YrCance	1.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2119	ALL	464983.4	3808182	1.80E-07	0.9YrCance	1.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2120	ALL	465003.4	3808182	1.75E-07	0.9YrCance	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2121	ALL	465023.4	3808182	1.70E-07	0.9YrCance	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2122	ALL	465043.4	3808182	1.66E-07	0.9YrCance	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2123	ALL	465063.4	3808182	1.61E-07	0.9YrCance	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2124	ALL	465083.4	3808182	1.57E-07	0.9YrCance	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2125	ALL	465103.4	3808182	1.53E-07	0.9YrCance	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2126	ALL	465123.4	3808182	1.49E-07	0.9YrCance	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2127	ALL	465143.4	3808182	1.45E-07	0.9YrCance	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2128	ALL	465163.4	3808182	1.42E-07	0.9YrCance	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2129	ALL	465183.4	3808182	1.38E-07	0.9YrCance	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2130	ALL	465203.4	3808182	1.35E-07	0.9YrCance											

2155	ALL	465703.4	3808182	8.07E-08	0.9YrCance	8.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2156	ALL	464923.4	3808202	2.01E-07	0.9YrCance	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2157	ALL	464943.4	3808202	1.95E-07	0.9YrCance	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2158	ALL	464963.4	3808202	1.90E-07	0.9YrCance	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2159	ALL	464983.4	3808202	1.85E-07	0.9YrCance	1.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2160	ALL	465003.4	3808202	1.80E-07	0.9YrCance	1.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2161	ALL	465023.4	3808202	1.74E-07	0.9YrCance	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2162	ALL	465043.4	3808202	1.70E-07	0.9YrCance	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2163	ALL	465063.4	3808202	1.65E-07	0.9YrCance	1.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2164	ALL	465083.4	3808202	1.61E-07	0.9YrCance	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2165	ALL	465103.4	3808202	1.56E-07	0.9YrCance	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2166	ALL	465123.4	3808202	1.52E-07	0.9YrCance	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2167	ALL	465143.4	3808202	1.48E-07	0.9YrCance	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2168	ALL	465163.4	3808202	1.45E-07	0.9YrCance	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2169	ALL	465183.4	3808202	1.41E-07	0.9YrCance	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2170	ALL	465203.4	3808202	1.38E-07	0.9YrCance	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2171	ALL	465223.4	3808202	1.34E-07	0.9YrCance	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2172	ALL	465243.4	3808202	1.31E-07	0.9YrCance	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2173	ALL	465263.4	3808202														

[illegible]

2243	ALL	465123.4	3808242	1.59E-07	0.9YrCance	1.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2244	ALL	465143.4	3808242	1.55E-07	0.9YrCance	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2245	ALL	465163.4	3808242	1.51E-07	0.9YrCance	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2246	ALL	465183.4	3808242	1.47E-07	0.9YrCance	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2247	ALL	465203.4	3808242	1.43E-07	0.9YrCance	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2248	ALL	465223.4	3808242	1.40E-07	0.9YrCance	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2249	ALL	465243.4	3808242	1.36E-07	0.9YrCance	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2250	ALL	465263.4	3808242	1.33E-07	0.9YrCance	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2251	ALL	465283.4	3808242	1.30E-07	0.9YrCance	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2252	ALL	465303.4	3808242	1.27E-07	0.9YrCance	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2253	ALL	465323.4	3808242	1.24E-07	0.9YrCance	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2254	ALL	465343.4	3808242	1.21E-07	0.9YrCance	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2255	ALL	465363.4	3808242	1.19E-07	0.9YrCance	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2256	ALL	465383.4	3808242	1.16E-07	0.9YrCance	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2257	ALL	465403.4	3808242	1.13E-07	0.9YrCance	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2258	ALL	465423.4	3808242	1.11E-07	0.9YrCance	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2259	ALL	465443.4	3808242	1.09E-07	0.9YrCance	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2260	ALL	465463.4	3808242	1.07E-07	0.9YrCance	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2261	ALL	465483.4	3808242														

2287		465263.4	3808262	1.36E-07	0.9YrCance	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2288	ALL	465283.4	3808262	1.33E-07	0.9YrCance	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2289	ALL	465303.4	3808262	1.30E-07	0.9YrCance	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2290	ALL	465323.4	3808262	1.27E-07	0.9YrCance	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2291	ALL	465343.4	3808262	1.24E-07	0.9YrCance	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2292	ALL	465363.4	3808262	1.21E-07	0.9YrCance	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2293	ALL	465383.4	3808262	1.18E-07	0.9YrCance	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2294	ALL	465403.4	3808262	1.15E-07	0.9YrCance	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2295	ALL	465423.4	3808262	1.13E-07	0.9YrCance	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2296	ALL	465443.4	3808262	1.11E-07	0.9YrCance	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2297	ALL	465463.4	3808262	1.08E-07	0.9YrCance	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2298	ALL	465483.4	3808262	1.06E-07	0.9YrCance	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2299	ALL	465503.4	3808262	1.04E-07	0.9YrCance	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300	ALL	465523.4	3808262	1.02E-07	0.9YrCance	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2301	ALL	465543.4	3808262	1.00E-07	0.9YrCance	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2302	ALL	465563.4	3808262	9.80E-08	0.9YrCance	9.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2303	ALL	465583.4	3808262	9.60E-08	0.9YrCance	9.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2304	ALL	465603.4	3808262	9.42E-08	0.9YrCance	9.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2305	ALL	465623.4	3808262	9.24E-08	0.9YrCance	9.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2306	ALL	465643.4	3808262	9.07E-08	0.9YrCance											

2331	ALL	465423.4	3808282	1.15E-07	0.9YrCance	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2332	ALL	465443.4	3808282	1.13E-07	0.9YrCance	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2333	ALL	465463.4	3808282	1.10E-07	0.9YrCance	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2334	ALL	465483.4	3808282	1.08E-07	0.9YrCance	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2335	ALL	465503.4	3808282	1.06E-07	0.9YrCance	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2336	ALL	465523.4	3808282	1.04E-07	0.9YrCance	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2337	ALL	465543.4	3808282	1.02E-07	0.9YrCance	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2338	ALL	465563.4	3808282	9.96E-08	0.9YrCance	9.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2339	ALL	465583.4	3808282	9.75E-08	0.9YrCance	9.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2340	ALL	465603.4	3808282	9.57E-08	0.9YrCance	9.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2341	ALL	465623.4	3808282	9.39E-08	0.9YrCance	9.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2342	ALL	465643.4	3808282	9.21E-08	0.9YrCance	9.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2343	ALL	465663.4	3808282	9.03E-08	0.9YrCance	9.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2344	ALL	465683.4	3808282	8.86E-08	0.9YrCance	8.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2345	ALL	465703.4	3808282	8.70E-08	0.9YrCance	8.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2346	ALL	465003.4	3808302	2.01E-07	0.9YrCance	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2347	ALL	465023.4	3808302	1.95E-07	0.9YrCance	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2348	ALL	465043.4	3808302	1.90E-07	0.9YrCance	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2349	ALL	465063.4	3808302														

2375		465583.4	3808302	9.92E-08	0.9YrCance	9.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2376	ALL	465603.4	3808302	9.73E-08	0.9YrCance	9.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2377	ALL	465623.4	3808302	9.53E-08	0.9YrCance	9.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2378	ALL	465643.4	3808302	9.34E-08	0.9YrCance	9.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2379	ALL	465663.4	3808302	9.17E-08	0.9YrCance	9.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2380	ALL	465683.4	3808302	8.99E-08	0.9YrCance	8.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2381	ALL	465703.4	3808302	8.81E-08	0.9YrCance	8.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2382	ALL	465043.4	3808322	1.94E-07	0.9YrCance	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2383	ALL	465063.4	3808322	1.88E-07	0.9YrCance	1.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2384	ALL	465083.4	3808322	1.83E-07	0.9YrCance	1.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2385	ALL	465103.4	3808322	1.78E-07	0.9YrCance	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2386	ALL	465123.4	3808322	1.73E-07	0.9YrCance	1.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2387	ALL	465143.4	3808322	1.69E-07	0.9YrCance	1.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2388	ALL	465163.4	3808322	1.64E-07	0.9YrCance	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2389	ALL	465183.4	3808322	1.60E-07	0.9YrCance	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2390	ALL	465203.4	3808322	1.56E-07	0.9YrCance	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2391	ALL	465223.4	3808322	1.52E-07	0.9YrCance	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2392	ALL	465243.4	3808322	1.48E-07	0.9YrCance	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2393	ALL	465263.4	3808322	1.													

2419		465143.4	3808342	1.72E-07	0.9YrCance	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2420	ALL	465163.4	3808342	1.68E-07	0.9YrCance	1.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2421	ALL	465183.4	3808342	1.63E-07	0.9YrCance	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2422	ALL	465203.4	3808342	1.59E-07	0.9YrCance	1.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2423	ALL	465223.4	3808342	1.55E-07	0.9YrCance	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2424	ALL	465243.4	3808342	1.51E-07	0.9YrCance	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2425	ALL	465263.4	3808342	1.47E-07	0.9YrCance	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2426	ALL	465283.4	3808342	1.43E-07	0.9YrCance	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2427	ALL	465303.4	3808342	1.40E-07	0.9YrCance	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2428	ALL	465323.4	3808342	1.36E-07	0.9YrCance	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2429	ALL	465343.4	3808342	1.33E-07	0.9YrCance	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2430	ALL	465363.4	3808342	1.30E-07	0.9YrCance	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2431	ALL	465383.4	3808342	1.27E-07	0.9YrCance	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2432	ALL	465403.4	3808342	1.24E-07	0.9YrCance	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2433	ALL	465423.4	3808342	1.21E-07	0.9YrCance	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2434	ALL	465443.4	3808342	1.18E-07	0.9YrCance	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2435	ALL	465463.4	3808342	1.16E-07	0.9YrCance	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2436	ALL	465483.4	3808342	1.13E-07	0.9YrCance	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2437	ALL	465503.4	3808342	1.													

2463	ALL	465403.4	3808362	1.26E-07	0.9YrCance	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2464	ALL	465423.4	3808362	1.23E-07	0.9YrCance	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2465	ALL	465443.4	3808362	1.20E-07	0.9YrCance	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2466	ALL	465463.4	3808362	1.18E-07	0.9YrCance	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2467	ALL	465483.4	3808362	1.15E-07	0.9YrCance	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2468	ALL	465503.4	3808362	1.13E-07	0.9YrCance	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2469	ALL	465523.4	3808362	1.11E-07	0.9YrCance	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2470	ALL	465543.4	3808362	1.08E-07	0.9YrCance	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2471	ALL	465563.4	3808362	1.06E-07	0.9YrCance	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2472	ALL	465583.4	3808362	1.04E-07	0.9YrCance	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2473	ALL	465603.4	3808362	1.02E-07	0.9YrCance	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2474	ALL	465623.4	3808362	9.96E-08	0.9YrCance	9.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2475	ALL	465643.4	3808362	9.75E-08	0.9YrCance	9.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2476	ALL	465663.4	3808362	9.56E-08	0.9YrCance	9.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2477	ALL	465683.4	3808362	9.37E-08	0.9YrCance	9.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2478	ALL	465703.4	3808362	9.19E-08	0.9YrCance	9.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2479	ALL	465183.4	3808382	1.69E-07	0.9YrCance	1.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2480	ALL	465203.4	3808382	1.65E-07	0.9YrCance	1.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2481	ALL	465223.4	3808382														

[illegible]

[illegible]

2595		465523.4	3808482	1.19E-07	0.9YrCance	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2596	ALL	465543.4	3808482	1.17E-07	0.9YrCance	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2597	ALL	465563.4	3808482	1.14E-07	0.9YrCance	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2598	ALL	465583.4	3808482	1.12E-07	0.9YrCance	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2599	ALL	465603.4	3808482	1.10E-07	0.9YrCance	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2600	ALL	465623.4	3808482	1.07E-07	0.9YrCance	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2601	ALL	465643.4	3808482	1.05E-07	0.9YrCance	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2602	ALL	465663.4	3808482	1.03E-07	0.9YrCance	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2603	ALL	465683.4	3808482	1.01E-07	0.9YrCance	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2604	ALL	465703.4	3808482	9.87E-08	0.9YrCance	9.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2605	ALL	465463.4	3808502	1.29E-07	0.9YrCance	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2606	ALL	465483.4	3808502	1.26E-07	0.9YrCance	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2607	ALL	465503.4	3808502	1.23E-07	0.9YrCance	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2608	ALL	465523.4	3808502	1.21E-07	0.9YrCance	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2609	ALL	465543.4	3808502	1.18E-07	0.9YrCance	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2610	ALL	465563.4	3808502	1.16E-07	0.9YrCance	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2611	ALL	465583.4	3808502	1.13E-07	0.9YrCance	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2612	ALL	465603.4	3808502	1.11E-07	0.9YrCance	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2613	ALL	465623.4	3808502	1.													

2639	ALL	464163.3	3809562	3.05E-07	0.9YrCance	3.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2640	ALL	464201.3	3809562	2.93E-07	0.9YrCance	2.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2641	ALL	464239.3	3809562	2.80E-07	0.9YrCance	2.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2642	ALL	464277.3	3809562	2.68E-07	0.9YrCance	2.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2643	ALL	464315.3	3809562	2.56E-07	0.9YrCance	2.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2644	ALL	464353.3	3809562	2.46E-07	0.9YrCance	2.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2645	ALL	464391.3	3809562	2.35E-07	0.9YrCance	2.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2646	ALL	464429.3	3809562	2.26E-07	0.9YrCance	2.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2647	ALL	464467.3	3809562	2.16E-07	0.9YrCance	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2648	ALL	464505.3	3809562	2.08E-07	0.9YrCance	2.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2649	ALL	463745.3	3809591	3.63E-07	0.9YrCance	3.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2650	ALL	463783.3	3809591	3.63E-07	0.9YrCance	3.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2651	ALL	463821.3	3809591	3.62E-07	0.9YrCance	3.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2652	ALL	463859.3	3809591	3.63E-07	0.9YrCance	3.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2653	ALL	463897.3	3809591	3.63E-07	0.9YrCance	3.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2654	ALL	463935.3	3809591	3.59E-07	0.9YrCance	3.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2655	ALL	463973.3	3809591	3.51E-07	0.9YrCance	3.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2656	ALL	464011.3	3809591	3.40E-07	0.9YrCance	3.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2657	ALL	464049.3	3809591														

2683	ALL	464239.3	3809620	2.61E-07	0.9YrCance	2.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2684	ALL	464277.3	3809620	2.50E-07	0.9YrCance	2.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2685	ALL	464315.3	3809620	2.40E-07	0.9YrCance	2.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2686	ALL	464353.3	3809620	2.30E-07	0.9YrCance	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2687	ALL	464391.3	3809620	2.20E-07	0.9YrCance	2.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2688	ALL	464429.3	3809620	2.12E-07	0.9YrCance	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2689	ALL	464467.3	3809620	2.04E-07	0.9YrCance	2.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2690	ALL	464505.3	3809620	1.96E-07	0.9YrCance	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2691	ALL	463745.3	3809649	3.28E-07	0.9YrCance	3.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2692	ALL	463783.3	3809649	3.30E-07	0.9YrCance	3.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2693	ALL	463821.3	3809649	3.30E-07	0.9YrCance	3.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2694	ALL	463859.3	3809649	3.29E-07	0.9YrCance	3.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2695	ALL	463897.3	3809649	3.28E-07	0.9YrCance	3.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2696	ALL	463935.3	3809649	3.26E-07	0.9YrCance	3.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2697	ALL	463973.3	3809649	3.19E-07	0.9YrCance	3.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2698	ALL	464011.3	3809649	3.12E-07	0.9YrCance	3.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2699	ALL	464049.3	3809649	3.03E-07	0.9YrCance	3.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2700	ALL	464087.3	3809649	2.93E-07	0.9YrCance	2.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2701	ALL	464125.3	3809649														

2727	ALL	464315.3	3809679	2.24E-07	0.9YrCance	2.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2728	ALL	464353.3	3809679	2.16E-07	0.9YrCance	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2729	ALL	464391.3	3809679	2.08E-07	0.9YrCance	2.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2730	ALL	464429.3	3809679	1.99E-07	0.9YrCance	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2731	ALL	464467.3	3809679	1.92E-07	0.9YrCance	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2732	ALL	464505.3	3809679	1.85E-07	0.9YrCance	1.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2733	ALL	463745.3	3809708	2.97E-07	0.9YrCance	2.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2734	ALL	463783.3	3809708	2.99E-07	0.9YrCance	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2735	ALL	463821.3	3809708	3.00E-07	0.9YrCance	3.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2736	ALL	463859.3	3809708	3.00E-07	0.9YrCance	3.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2737	ALL	463897.3	3809708	2.98E-07	0.9YrCance	2.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2738	ALL	463935.3	3809708	2.96E-07	0.9YrCance	2.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2739	ALL	463973.3	3809708	2.92E-07	0.9YrCance	2.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2740	ALL	464011.3	3809708	2.86E-07	0.9YrCance	2.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2741	ALL	464049.3	3809708	2.80E-07	0.9YrCance	2.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2742	ALL	464087.3	3809708	2.72E-07	0.9YrCance	2.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2743	ALL	464125.3	3809708	2.63E-07	0.9YrCance	2.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2744	ALL	464163.3	3809708	2.54E-07	0.9YrCance	2.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2745	ALL	464201.3	3809708														

2771		464391.3	3809737	1.95E-07	0.9YrCance	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2772	ALL	464429.3	3809737	1.88E-07	0.9YrCance	1.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2773	ALL	464467.3	3809737	1.81E-07	0.9YrCance	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2774	ALL	464505.3	3809737	1.75E-07	0.9YrCance	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2775	ALL	463745.3	3809766	2.74E-07	0.9YrCance	2.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2776	ALL	463783.3	3809766	2.74E-07	0.9YrCance	2.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2777	ALL	463821.3	3809766	2.73E-07	0.9YrCance	2.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2778	ALL	463859.3	3809766	2.73E-07	0.9YrCance	2.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2779	ALL	463897.3	3809766	2.72E-07	0.9YrCance	2.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2780	ALL	463935.3	3809766	2.69E-07	0.9YrCance	2.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2781	ALL	463973.3	3809766	2.66E-07	0.9YrCance	2.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2782	ALL	464011.3	3809766	2.64E-07	0.9YrCance	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2783	ALL	464049.3	3809766	2.60E-07	0.9YrCance	2.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2784	ALL	464087.3	3809766	2.53E-07	0.9YrCance	2.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2785	ALL	464125.3	3809766	2.46E-07	0.9YrCance	2.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2786	ALL	464163.3	3809766	2.39E-07	0.9YrCance	2.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2787	ALL	464201.3	3809766	2.30E-07	0.9YrCance	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2788	ALL	464239.3	3809766	2.21E-07	0.9YrCance	2.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2789	ALL	464277.3	3809766	2.													

2815	ALL	464467.3	3809795	1.72E-07	0.9YrCance	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2816	ALL	464505.3	3809795	1.66E-07	0.9YrCance	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2817	ALL	463745.3	3809824	2.54E-07	0.9YrCance	2.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2818	ALL	463783.3	3809824	2.52E-07	0.9YrCance	2.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2819	ALL	463821.3	3809824	2.50E-07	0.9YrCance	2.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2820	ALL	463859.3	3809824	2.49E-07	0.9YrCance	2.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2821	ALL	463897.3	3809824	2.48E-07	0.9YrCance	2.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2822	ALL	463935.3	3809824	2.45E-07	0.9YrCance	2.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2823	ALL	463973.3	3809824	2.43E-07	0.9YrCance	2.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2824	ALL	464011.3	3809824	2.40E-07	0.9YrCance	2.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2825	ALL	464049.3	3809824	2.39E-07	0.9YrCance	2.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2826	ALL	464087.3	3809824	2.36E-07	0.9YrCance	2.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2827	ALL	464125.3	3809824	2.30E-07	0.9YrCance	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2828	ALL	464163.3	3809824	2.23E-07	0.9YrCance	2.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2829	ALL	464201.3	3809824	2.16E-07	0.9YrCance	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2830	ALL	464239.3	3809824	2.08E-07	0.9YrCance	2.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2831	ALL	464277.3	3809824	2.01E-07	0.9YrCance	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2832	ALL	464315.3	3809824	1.93E-07	0.9YrCance	1.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2833	ALL	464353.3	3809824														

2859	ALL	463745.3	3809882	2.37E-07	0.9YrCance	2.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2860	ALL	463783.3	3809882	2.35E-07	0.9YrCance	2.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2861	ALL	463821.3	3809882	2.32E-07	0.9YrCance	2.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2862	ALL	463859.3	3809882	2.30E-07	0.9YrCance	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2863	ALL	463897.3	3809882	2.27E-07	0.9YrCance	2.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2864	ALL	463935.3	3809882	2.24E-07	0.9YrCance	2.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2865	ALL	463973.3	3809882	2.23E-07	0.9YrCance	2.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2866	ALL	464011.3	3809882	2.20E-07	0.9YrCance	2.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2867	ALL	464049.3	3809882	2.18E-07	0.9YrCance	2.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2868	ALL	464087.3	3809882	2.15E-07	0.9YrCance	2.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2869	ALL	464125.3	3809882	2.12E-07	0.9YrCance	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2870	ALL	464163.3	3809882	2.06E-07	0.9YrCance	2.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2871	ALL	464201.3	3809882	2.00E-07	0.9YrCance	2.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2872	ALL	464239.3	3809882	1.94E-07	0.9YrCance	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2873	ALL	464277.3	3809882	1.88E-07	0.9YrCance	1.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2874	ALL	464315.3	3809882	1.82E-07	0.9YrCance	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2875	ALL	464353.3	3809882	1.76E-07	0.9YrCance	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2876	ALL	464391.3	3809882	1.70E-07	0.9YrCance	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2877	ALL	464429.3	3809882														

2903		463821.3	3809940	2.17E-07	0.9YrCance	2.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2904	ALL	463859.3	3809940	2.14E-07	0.9YrCance	2.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2905	ALL	463897.3	3809940	2.11E-07	0.9YrCance	2.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2906	ALL	463935.3	3809940	2.08E-07	0.9YrCance	2.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2907	ALL	463973.3	3809940	2.06E-07	0.9YrCance	2.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2908	ALL	464011.3	3809940	2.03E-07	0.9YrCance	2.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2909	ALL	464049.3	3809940	2.01E-07	0.9YrCance	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2910	ALL	464087.3	3809940	1.98E-07	0.9YrCance	1.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2911	ALL	464125.3	3809940	1.95E-07	0.9YrCance	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2912	ALL	464163.3	3809940	1.91E-07	0.9YrCance	1.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2913	ALL	464201.3	3809940	1.87E-07	0.9YrCance	1.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2914	ALL	464239.3	3809940	1.82E-07	0.9YrCance	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2915	ALL	464277.3	3809940	1.77E-07	0.9YrCance	1.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2916	ALL	464315.3	3809940	1.71E-07	0.9YrCance	1.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2917	ALL	464353.3	3809940	1.66E-07	0.9YrCance	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2918	ALL	464391.3	3809940	1.61E-07	0.9YrCance	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2919	ALL	464429.3	3809940	1.56E-07	0.9YrCance	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2920	ALL	464467.3	3809940	1.51E-07	0.9YrCance	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2921	ALL	464505.3	3809940	1.46E-07	0.9YrCance	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2922	ALL	463745.3	3809969	2.16E-07	0.9YrCance											

2947	ALL	463897.3	3809998	1.98E-07	0.9YrCance	1.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2948	ALL	463935.3	3809998	1.95E-07	0.9YrCance	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2949	ALL	463973.3	3809998	1.92E-07	0.9YrCance	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2950	ALL	464011.3	3809998	1.89E-07	0.9YrCance	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2951	ALL	464049.3	3809998	1.86E-07	0.9YrCance	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2952	ALL	464087.3	3809998	1.84E-07	0.9YrCance	1.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2953	ALL	464125.3	3809998	1.81E-07	0.9YrCance	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2954	ALL	464163.3	3809998	1.79E-07	0.9YrCance	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2955	ALL	464201.3	3809998	1.75E-07	0.9YrCance	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2956	ALL	464239.3	3809998	1.72E-07	0.9YrCance	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2957	ALL	464277.3	3809998	1.67E-07	0.9YrCance	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2958	ALL	464315.3	3809998	1.62E-07	0.9YrCance	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2959	ALL	464353.3	3809998	1.58E-07	0.9YrCance	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2960	ALL	464391.3	3809998	1.53E-07	0.9YrCance	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2961	ALL	464429.3	3809998	1.48E-07	0.9YrCance	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2962	ALL	464467.3	3809998	1.44E-07	0.9YrCance	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2963	ALL	464505.3	3809998	1.39E-07	0.9YrCance	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2964	ALL	463745.3	3810027	2.09E-07	0.9YrCance	2.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2965	ALL	463783.3	3810027														

2991	ALL	463973.3	3810056	1.81E-07	0.9YrCance	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2992	ALL	464011.3	3810056	1.78E-07	0.9YrCance	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2993	ALL	464049.3	3810056	1.75E-07	0.9YrCance	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2994	ALL	464087.3	3810056	1.72E-07	0.9YrCance	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2995	ALL	464125.3	3810056	1.69E-07	0.9YrCance	1.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2996	ALL	464163.3	3810056	1.67E-07	0.9YrCance	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2997	ALL	464201.3	3810056	1.64E-07	0.9YrCance	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2998	ALL	464239.3	3810056	1.61E-07	0.9YrCance	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2999	ALL	464277.3	3810056	1.57E-07	0.9YrCance	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3000	ALL	464315.3	3810056	1.54E-07	0.9YrCance	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3001	ALL	464353.3	3810056	1.50E-07	0.9YrCance	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3002	ALL	464391.3	3810056	1.46E-07	0.9YrCance	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3003	ALL	464429.3	3810056	1.41E-07	0.9YrCance	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3004	ALL	464467.3	3810056	1.37E-07	0.9YrCance	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3005	ALL	464505.3	3810056	1.32E-07	0.9YrCance	1.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3006	ALL	463745.3	3810085	2.03E-07	0.9YrCance	2.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3007	ALL	463783.3	3810085	1.96E-07	0.9YrCance	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3008	ALL	463821.3	3810085	1.90E-07	0.9YrCance	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3009	ALL	463859.3	3810085														

3035		464049.3	3810114	1.64E-07	0.9YrCance	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3036	ALL	464087.3	3810114	1.61E-07	0.9YrCance	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3037	ALL	464125.3	3810114	1.58E-07	0.9YrCance	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3038	ALL	464163.3	3810114	1.56E-07	0.9YrCance	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3039	ALL	464201.3	3810114	1.53E-07	0.9YrCance	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3040	ALL	464239.3	3810114	1.51E-07	0.9YrCance	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3041	ALL	464277.3	3810114	1.48E-07	0.9YrCance	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3042	ALL	464315.3	3810114	1.45E-07	0.9YrCance	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3043	ALL	464353.3	3810114	1.41E-07	0.9YrCance	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3044	ALL	464391.3	3810114	1.37E-07	0.9YrCance	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3045	ALL	464429.3	3810114	1.34E-07	0.9YrCance	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3046	ALL	464467.3	3810114	1.30E-07	0.9YrCance	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3047	ALL	464505.3	3810114	1.26E-07	0.9YrCance	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3048	ALL	463745.3	3810144	1.94E-07	0.9YrCance	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3049	ALL	463783.3	3810144	1.89E-07	0.9YrCance	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3050	ALL	463821.3	3810144	1.84E-07	0.9YrCance	1.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3051	ALL	463859.3	3810144	1.79E-07	0.9YrCance	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3052	ALL	463897.3	3810144	1.74E-07	0.9YrCance	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3053	ALL	463935.3	3810144	1.70E-07	0.9YrCance	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3054	ALL	463973.3	3810144	1.66E-07	0.9YrCance											

3079 ALL	465420.1	3808486	1.34E-07 0.9YrCance	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3080 ALL	465348.8	3808492	1.46E-07 0.9YrCance	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3081 ALL	465317.1	3808444	1.48E-07 0.9YrCance	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3082 ALL	465327.6	3808407	1.42E-07 0.9YrCance	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3083 ALL	465108.2	3808370	1.86E-07 0.9YrCance	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3084 ALL	464999.9	3808301	2.02E-07 0.9YrCance	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3085 ALL	464722.3	3807973	2.07E-07 0.9YrCance	2.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3086 ALL	464717	3807836	1.78E-07 0.9YrCance	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3087 ALL	464344.3	3807936	2.77E-07 0.9YrCance	2.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3088 ALL	464349.6	3807781	2.78E-07 0.9YrCance	2.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3089 ALL	464386.6	3807786	2.66E-07 0.9YrCance	2.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3090 ALL	464521.4	3807860	2.41E-07 0.9YrCance	2.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3091 ALL	464537.3	3807720	1.55E-07 0.9YrCance	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3092 ALL	464426.3	3807614	1.21E-07 0.9YrCance	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3093 ALL	464368.4	3807533	1.12E-07 0.9YrCance	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3094 ALL	464324.6	3807122	6.02E-08 0.9YrCance	6.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3095 ALL	464123.3	3807124	7.17E-08 0.9YrCance	7.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3096 ALL	463930.1	3806909	5.21E-08 0.9YrCance	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3097 ALL	463831.1	3806906	5.32E-08 0.9YrCance	5.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3098 ALL	463821.4	3806721	3.94E-08 0.9YrCance	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3099 ALL	463727.2	3806727	3.90E-08 0.9YrCance	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3100 ALL	463599	3806335	2.41E-08 0.9YrCance	2.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3101 ALL	463001.1	3806362	1.28E-08 0.9YrCance	1.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

3.82E-07
3.82E-01

HARP2 - HRACalc (dated 21081) 4/25/2022 12:01:40 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: NCChronic
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Exposure duration are only adjusted for cancer assessments

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home

NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\Users\dlarocca\Desktop\Air Quality

Work\HARP2\Poplar18Const\POPLAR18CONST\hra\Const10monthNonCNCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\dlarocca\Desktop\Air Quality

Work\HARP2\Poplar18Const\POPLAR18CONST\hra\Const10monthNonCNCChronicRiskSumByRec.csv

HRA ran successfully

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

449 ALL	466435.6	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05
450 ALL	466491.6	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-05
451 ALL	466547.6	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05
452 ALL	466603.6	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
453 ALL	466659.5	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.21E-05
454 ALL	466715.5	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-05
455 ALL	466771.5	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-05
456 ALL	466827.5	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-05
457 ALL	466883.5	3809193 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-05
458 ALL	465763.9	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
459 ALL	465819.8	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
460 ALL	465875.8	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
461 ALL	465931.8	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
462 ALL	465987.8	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-05
463 ALL	466043.8	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.29E-05
464 ALL	466099.7	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.90E-05
465 ALL	466155.7	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-05
466 ALL	466211.7	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-05
467 ALL	466267.7	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-05
468 ALL	466323.7	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
469 ALL	466379.6	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05
470 ALL	466435.6	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05
471 ALL	466491.6	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-05
472 ALL	466547.6	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05
473 ALL	466603.6	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-05
474 ALL	466659.5	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05
475 ALL	466715.5	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-05
476 ALL	466771.5	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-05
477 ALL	466827.5	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-05
478 ALL	466883.5	3809260 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-05
479 ALL	464503.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05
480 ALL	464523.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05
481 ALL	464543.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05
482 ALL	464563.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-05
483 ALL	464583.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05
484 ALL	464603.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05
485 ALL	464623.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05
486 ALL	464643.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05
487 ALL	464663.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05
488 ALL	464683.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
489 ALL	464703.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05
490 ALL	464723.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05
491 ALL	464743.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05
492 ALL	464763.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-05
493 ALL	464783.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-05
494 ALL	464803.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05
495 ALL	464823.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-05
496 ALL	464843.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-05
497 ALL	464863.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05
498 ALL	464883.4	3807142 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-05

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

2699		ALL	464049.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-04
2700	ALL		464087.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-04
2701	ALL		464125.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-04
2702	ALL		464163.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-04
2703	ALL		464201.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04
2704	ALL		464239.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-04
2705	ALL		464277.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-04
2706	ALL		464315.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-04
2707	ALL		464353.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-04
2708	ALL		464391.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04
2709	ALL		464429.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04
2710	ALL		464467.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-04
2711	ALL		464505.3	3809649	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04
2712	ALL		463745.3	3809679	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-04
2713	ALL		463783.3	3809679	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04
2714	ALL		463821.3	3809679	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-04
2715	ALL		463859.3	3809679	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04
2716	ALL		463897.3	3809679															

[illegible]

[illegible]

[illegible]

[illegible]

2949			463973.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-04
2950	ALL		464011.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-04
2951	ALL		464049.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04
2952	ALL		464087.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04
2953	ALL		464125.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04
2954	ALL		464163.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-04
2955	ALL		464201.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-04
2956	ALL		464239.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04
2957	ALL		464277.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04
2958	ALL		464315.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-04
2959	ALL		464353.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04
2960	ALL		464391.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04
2961	ALL		464429.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04
2962	ALL		464467.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04
2963	ALL		464505.3	3809998	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04
2964	ALL		463745.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04
2965	ALL		463783.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-04
2966	ALL		463821.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-04
2967	ALL		463859.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-04
2968	ALL		463897.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-04
2969	ALL		463935.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-04
2970	ALL		463973.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04
2971	ALL		464011.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04
2972	ALL		464049.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-04
2973	ALL		464087.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04
2974	ALL		464125.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-04
2975	ALL		464163.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04
2976	ALL		464201.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04
2977	ALL		464239.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04
2978	ALL		464277.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-04
2979	ALL		464315.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04
2980	ALL		464353.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04
2981	ALL		464391.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04
2982	ALL		464429.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-04
2983	ALL		464467.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-04
2984	ALL		464505.3	3810027	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-04
2985	ALL		463745.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04
2986	ALL		463783.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-04
2987	ALL		463821.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04
2988	ALL		463859.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04
2989	ALL		463897.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04
2990	ALL		463935.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04
2991	ALL		463973.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-04
2992	ALL		464011.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-04
2993	ALL		464049.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-04
2994	ALL		464087.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04
2995	ALL		464125.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-04
2996	ALL		464163.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04
2997	ALL		464201.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-04
2998	ALL		464239.3	3810056	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-04

[illegible]

[illegible]

3099 ALL	463727.2	3806727 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-05
3100 ALL	463599	3806335 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05
3101 ALL	463001.1	3806362 NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-05

4.74E-04

Operational HRA Files

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.9.0
** Lakes Environmental Software Inc.
** Date: 5/9/2022
** File: C:\Users\dlarocca\Desktop\Air Quality
Work\Lakes\Poplar180operation\Poplar180operation.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Users\apoll\Desktop\HARP2\HARP\I15 Industrial Park\I15 Industrial
  MODELOPT DFAULT CONC
  AVERTIME 1 PERIOD
  URBANOPT 2180000
  POLLUTID PM_10
  RUNORNOT RUN
  ERRORFIL Poplar180operation.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = TRUCK10
** DESCRSRC Truck road segment 10
** PREFIX
** Length of Side = 8.60
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 6.80
** SZINIT = 3.16
** Nodes = 4
** 463915.509, 3808498.245, 1098.00, 3.40, 4.00
** 464118.997, 3808498.245, 1096.07, 3.40, 4.00
** 464123.373, 3808335.235, 1098.67, 3.40, 4.00

```

** 463713.115, 3808333.047, 1102.19, 3.40, 4.00

** -----

LOCATION L0006011	VOLUME	463919.809	3808498.245	1097.59
LOCATION L0006012	VOLUME	463928.409	3808498.245	1097.59
LOCATION L0006013	VOLUME	463937.009	3808498.245	1097.45
LOCATION L0006014	VOLUME	463945.609	3808498.245	1097.28
LOCATION L0006015	VOLUME	463954.209	3808498.245	1097.11
LOCATION L0006016	VOLUME	463962.809	3808498.245	1097.00
LOCATION L0006017	VOLUME	463971.409	3808498.245	1097.00
LOCATION L0006018	VOLUME	463980.009	3808498.245	1097.00
LOCATION L0006019	VOLUME	463988.609	3808498.245	1097.00
LOCATION L0006020	VOLUME	463997.209	3808498.245	1096.90
LOCATION L0006021	VOLUME	464005.809	3808498.245	1096.78
LOCATION L0006022	VOLUME	464014.409	3808498.245	1096.67
LOCATION L0006023	VOLUME	464023.009	3808498.245	1096.59
LOCATION L0006024	VOLUME	464031.609	3808498.245	1096.59
LOCATION L0006025	VOLUME	464040.209	3808498.245	1096.59
LOCATION L0006026	VOLUME	464048.809	3808498.245	1096.59
LOCATION L0006027	VOLUME	464057.409	3808498.245	1096.44
LOCATION L0006028	VOLUME	464066.009	3808498.245	1096.28
LOCATION L0006029	VOLUME	464074.609	3808498.245	1096.11
LOCATION L0006030	VOLUME	464083.209	3808498.245	1095.96
LOCATION L0006031	VOLUME	464091.809	3808498.245	1095.84
LOCATION L0006032	VOLUME	464100.409	3808498.245	1095.72
LOCATION L0006033	VOLUME	464109.009	3808498.245	1095.60
LOCATION L0006034	VOLUME	464117.609	3808498.245	1095.59
LOCATION L0006035	VOLUME	464119.191	3808491.036	1095.83
LOCATION L0006036	VOLUME	464119.421	3808482.439	1096.08
LOCATION L0006037	VOLUME	464119.652	3808473.842	1096.27
LOCATION L0006038	VOLUME	464119.883	3808465.245	1096.46
LOCATION L0006039	VOLUME	464120.114	3808456.648	1096.65
LOCATION L0006040	VOLUME	464120.344	3808448.051	1096.75
LOCATION L0006041	VOLUME	464120.575	3808439.454	1096.84
LOCATION L0006042	VOLUME	464120.806	3808430.857	1096.94
LOCATION L0006043	VOLUME	464121.037	3808422.260	1097.08
LOCATION L0006044	VOLUME	464121.268	3808413.663	1097.26
LOCATION L0006045	VOLUME	464121.498	3808405.067	1097.43
LOCATION L0006046	VOLUME	464121.729	3808396.470	1097.60
LOCATION L0006047	VOLUME	464121.960	3808387.873	1097.71
LOCATION L0006048	VOLUME	464122.191	3808379.276	1097.82
LOCATION L0006049	VOLUME	464122.422	3808370.679	1097.93
LOCATION L0006050	VOLUME	464122.652	3808362.082	1098.07
LOCATION L0006051	VOLUME	464122.883	3808353.485	1098.24
LOCATION L0006052	VOLUME	464123.114	3808344.888	1098.39
LOCATION L0006053	VOLUME	464123.345	3808336.291	1098.55
LOCATION L0006054	VOLUME	464115.829	3808335.195	1098.81
LOCATION L0006055	VOLUME	464107.230	3808335.149	1099.00
LOCATION L0006056	VOLUME	464098.630	3808335.104	1099.01
LOCATION L0006057	VOLUME	464090.030	3808335.058	1099.02
LOCATION L0006058	VOLUME	464081.430	3808335.012	1099.03

LOCATION	L0006059	VOLUME	464072.830	3808334.966	1099.03
LOCATION	L0006060	VOLUME	464064.230	3808334.920	1099.03
LOCATION	L0006061	VOLUME	464055.630	3808334.874	1099.04
LOCATION	L0006062	VOLUME	464047.030	3808334.828	1099.13
LOCATION	L0006063	VOLUME	464038.431	3808334.782	1099.41
LOCATION	L0006064	VOLUME	464029.831	3808334.737	1099.69
LOCATION	L0006065	VOLUME	464021.231	3808334.691	1099.96
LOCATION	L0006066	VOLUME	464012.631	3808334.645	1100.00
LOCATION	L0006067	VOLUME	464004.031	3808334.599	1100.00
LOCATION	L0006068	VOLUME	463995.431	3808334.553	1100.00
LOCATION	L0006069	VOLUME	463986.831	3808334.507	1100.01
LOCATION	L0006070	VOLUME	463978.231	3808334.461	1100.02
LOCATION	L0006071	VOLUME	463969.632	3808334.416	1100.03
LOCATION	L0006072	VOLUME	463961.032	3808334.370	1100.05
LOCATION	L0006073	VOLUME	463952.432	3808334.324	1100.05
LOCATION	L0006074	VOLUME	463943.832	3808334.278	1100.06
LOCATION	L0006075	VOLUME	463935.232	3808334.232	1100.06
LOCATION	L0006076	VOLUME	463926.632	3808334.186	1100.16
LOCATION	L0006077	VOLUME	463918.032	3808334.140	1100.43
LOCATION	L0006078	VOLUME	463909.432	3808334.094	1100.70
LOCATION	L0006079	VOLUME	463900.832	3808334.049	1100.97
LOCATION	L0006080	VOLUME	463892.233	3808334.003	1101.02
LOCATION	L0006081	VOLUME	463883.633	3808333.957	1101.04
LOCATION	L0006082	VOLUME	463875.033	3808333.911	1101.06
LOCATION	L0006083	VOLUME	463866.433	3808333.865	1101.07
LOCATION	L0006084	VOLUME	463857.833	3808333.819	1101.07
LOCATION	L0006085	VOLUME	463849.233	3808333.773	1101.07
LOCATION	L0006086	VOLUME	463840.633	3808333.728	1101.07
LOCATION	L0006087	VOLUME	463832.033	3808333.682	1101.32
LOCATION	L0006088	VOLUME	463823.434	3808333.636	1101.59
LOCATION	L0006089	VOLUME	463814.834	3808333.590	1101.85
LOCATION	L0006090	VOLUME	463806.234	3808333.544	1102.00
LOCATION	L0006091	VOLUME	463797.634	3808333.498	1102.00
LOCATION	L0006092	VOLUME	463789.034	3808333.452	1102.00
LOCATION	L0006093	VOLUME	463780.434	3808333.406	1102.00
LOCATION	L0006094	VOLUME	463771.834	3808333.361	1102.02
LOCATION	L0006095	VOLUME	463763.234	3808333.315	1102.05
LOCATION	L0006096	VOLUME	463754.635	3808333.269	1102.08
LOCATION	L0006097	VOLUME	463746.035	3808333.223	1102.09
LOCATION	L0006098	VOLUME	463737.435	3808333.177	1102.09
LOCATION	L0006099	VOLUME	463728.835	3808333.131	1102.09
LOCATION	L0006100	VOLUME	463720.235	3808333.085	1102.10

** End of LINE VOLUME Source ID = TRUCK10

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = TRUCK9

** DESCRSRC Truck road segment 9

** PREFIX

** Length of Side = 8.60

** Configuration = Adjacent

** Emission Rate = 1.0
 ** Vertical Dimension = 6.80
 ** SZINIT = 3.16
 ** Nodes = 3
 ** 463900.192, 3808498.245, 1098.00, 3.40, 4.00
 ** 463714.209, 3808498.245, 1099.21, 3.40, 4.00
 ** 463708.739, 3808358.210, 1102.16, 3.40, 4.00
 **

LOCATION L0006101	VOLUME	463895.892	3808498.245	1097.65
LOCATION L0006102	VOLUME	463887.292	3808498.245	1097.76
LOCATION L0006103	VOLUME	463878.692	3808498.245	1097.88
LOCATION L0006104	VOLUME	463870.092	3808498.245	1098.00
LOCATION L0006105	VOLUME	463861.492	3808498.245	1098.00
LOCATION L0006106	VOLUME	463852.892	3808498.245	1098.00
LOCATION L0006107	VOLUME	463844.292	3808498.245	1098.00
LOCATION L0006108	VOLUME	463835.692	3808498.245	1098.08
LOCATION L0006109	VOLUME	463827.092	3808498.245	1098.25
LOCATION L0006110	VOLUME	463818.492	3808498.245	1098.42
LOCATION L0006111	VOLUME	463809.892	3808498.245	1098.59
LOCATION L0006112	VOLUME	463801.292	3808498.245	1098.59
LOCATION L0006113	VOLUME	463792.692	3808498.245	1098.59
LOCATION L0006114	VOLUME	463784.092	3808498.245	1098.59
LOCATION L0006115	VOLUME	463775.492	3808498.245	1098.59
LOCATION L0006116	VOLUME	463766.892	3808498.245	1098.59
LOCATION L0006117	VOLUME	463758.292	3808498.245	1098.59
LOCATION L0006118	VOLUME	463749.692	3808498.245	1098.59
LOCATION L0006119	VOLUME	463741.092	3808498.245	1098.71
LOCATION L0006120	VOLUME	463732.492	3808498.245	1098.83
LOCATION L0006121	VOLUME	463723.892	3808498.245	1098.95
LOCATION L0006122	VOLUME	463715.292	3808498.245	1099.09
LOCATION L0006123	VOLUME	463713.915	3808490.734	1099.17
LOCATION L0006124	VOLUME	463713.580	3808482.141	1099.31
LOCATION L0006125	VOLUME	463713.244	3808473.547	1099.55
LOCATION L0006126	VOLUME	463712.908	3808464.954	1099.77
LOCATION L0006127	VOLUME	463712.573	3808456.361	1099.99
LOCATION L0006128	VOLUME	463712.237	3808447.767	1100.07
LOCATION L0006129	VOLUME	463711.901	3808439.174	1100.15
LOCATION L0006130	VOLUME	463711.566	3808430.580	1100.24
LOCATION L0006131	VOLUME	463711.230	3808421.987	1100.39
LOCATION L0006132	VOLUME	463710.894	3808413.393	1100.59
LOCATION L0006133	VOLUME	463710.558	3808404.800	1100.80
LOCATION L0006134	VOLUME	463710.223	3808396.206	1100.99
LOCATION L0006135	VOLUME	463709.887	3808387.613	1101.28
LOCATION L0006136	VOLUME	463709.551	3808379.020	1101.56
LOCATION L0006137	VOLUME	463709.216	3808370.426	1101.85
LOCATION L0006138	VOLUME	463708.880	3808361.833	1102.05

** End of LINE VOLUME Source ID = TRUCK9
 **

** Line Source Represented by Adjacent Volume Sources
 **

** LINE VOLUME Source ID = TRUCK43


```

** DESCRSRC Truck road segment 4 to 3
** PREFIX
** Length of Side = 8.60
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 6.80
** SZINIT = 3.16
** Nodes = 2
** 463696.704, 3808334.141, 1102.92, 3.40, 4.00
** 463321.455, 3808336.330, 1104.07, 3.40, 4.00

```

```

** -----

```

LOCATION	L0005092	VOLUME	463692.404	3808334.167	1102.92
LOCATION	L0005093	VOLUME	463683.805	3808334.217	1103.00
LOCATION	L0005094	VOLUME	463675.205	3808334.267	1103.00
LOCATION	L0005095	VOLUME	463666.605	3808334.317	1103.00
LOCATION	L0005096	VOLUME	463658.005	3808334.367	1103.00
LOCATION	L0005097	VOLUME	463649.405	3808334.417	1103.02
LOCATION	L0005098	VOLUME	463640.805	3808334.467	1103.03
LOCATION	L0005099	VOLUME	463632.205	3808334.518	1103.04
LOCATION	L0005100	VOLUME	463623.606	3808334.568	1103.05
LOCATION	L0005101	VOLUME	463615.006	3808334.618	1103.04
LOCATION	L0005102	VOLUME	463606.406	3808334.668	1103.04
LOCATION	L0005103	VOLUME	463597.806	3808334.718	1103.11
LOCATION	L0005104	VOLUME	463589.206	3808334.768	1103.38
LOCATION	L0005105	VOLUME	463580.606	3808334.818	1103.66
LOCATION	L0005106	VOLUME	463572.006	3808334.869	1103.94
LOCATION	L0005107	VOLUME	463563.407	3808334.919	1104.00
LOCATION	L0005108	VOLUME	463554.807	3808334.969	1104.00
LOCATION	L0005109	VOLUME	463546.207	3808335.019	1104.00
LOCATION	L0005110	VOLUME	463537.607	3808335.069	1104.00
LOCATION	L0005111	VOLUME	463529.007	3808335.119	1104.00
LOCATION	L0005112	VOLUME	463520.407	3808335.169	1104.00
LOCATION	L0005113	VOLUME	463511.807	3808335.220	1104.00
LOCATION	L0005114	VOLUME	463503.208	3808335.270	1104.01
LOCATION	L0005115	VOLUME	463494.608	3808335.320	1104.01
LOCATION	L0005116	VOLUME	463486.008	3808335.370	1104.02
LOCATION	L0005117	VOLUME	463477.408	3808335.420	1104.02
LOCATION	L0005118	VOLUME	463468.808	3808335.470	1104.02
LOCATION	L0005119	VOLUME	463460.208	3808335.520	1104.01
LOCATION	L0005120	VOLUME	463451.608	3808335.571	1104.01
LOCATION	L0005121	VOLUME	463443.009	3808335.621	1104.01
LOCATION	L0005122	VOLUME	463434.409	3808335.671	1104.01
LOCATION	L0005123	VOLUME	463425.809	3808335.721	1104.01
LOCATION	L0005124	VOLUME	463417.209	3808335.771	1104.01
LOCATION	L0005125	VOLUME	463408.609	3808335.821	1104.00
LOCATION	L0005126	VOLUME	463400.009	3808335.871	1104.00
LOCATION	L0005127	VOLUME	463391.410	3808335.922	1104.00
LOCATION	L0005128	VOLUME	463382.810	3808335.972	1104.00
LOCATION	L0005129	VOLUME	463374.210	3808336.022	1104.00
LOCATION	L0005130	VOLUME	463365.610	3808336.072	1104.00

LOCATION L0005131	VOLUME	463357.010	3808336.122	1104.00
LOCATION L0005132	VOLUME	463348.410	3808336.172	1104.00
LOCATION L0005133	VOLUME	463339.810	3808336.222	1104.00
LOCATION L0005134	VOLUME	463331.211	3808336.273	1104.00
LOCATION L0005135	VOLUME	463322.611	3808336.323	1104.00

** End of LINE VOLUME Source ID = TRUCK43

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = TRUCK3I15

** DESCRSRC Truck road segment south to I-15

** PREFIX

** Length of Side = 8.60

** Configuration = Adjacent

** Emission Rate = 1.0

** Vertical Dimension = 6.80

** SZINIT = 3.16

** Nodes = 8

** 463322.569, 3808318.466, 1105.00, 3.40, 4.00

** 463313.867, 3807599.059, 1118.93, 3.40, 4.00

** 463284.859, 3807430.811, 1122.00, 3.40, 4.00

** 463174.627, 3807120.422, 1127.53, 3.40, 4.00

** 463099.205, 3806940.571, 1129.94, 3.40, 4.00

** 463090.503, 3806760.719, 1134.48, 3.40, 4.00

** 463064.395, 3806609.876, 1138.57, 3.40, 4.00

** 463023.784, 3806496.743, 1141.24, 3.40, 4.00

**

LOCATION L0006139	VOLUME	463322.517	3808314.166	1104.73
LOCATION L0006140	VOLUME	463322.413	3808305.567	1105.00
LOCATION L0006141	VOLUME	463322.309	3808296.967	1105.00
LOCATION L0006142	VOLUME	463322.205	3808288.368	1105.00
LOCATION L0006143	VOLUME	463322.101	3808279.768	1105.00
LOCATION L0006144	VOLUME	463321.997	3808271.169	1105.12
LOCATION L0006145	VOLUME	463321.893	3808262.570	1105.33
LOCATION L0006146	VOLUME	463321.789	3808253.970	1105.53
LOCATION L0006147	VOLUME	463321.685	3808245.371	1105.73
LOCATION L0006148	VOLUME	463321.581	3808236.772	1105.81
LOCATION L0006149	VOLUME	463321.477	3808228.172	1105.88
LOCATION L0006150	VOLUME	463321.373	3808219.573	1105.97
LOCATION L0006151	VOLUME	463321.269	3808210.973	1106.17
LOCATION L0006152	VOLUME	463321.165	3808202.374	1106.45
LOCATION L0006153	VOLUME	463321.061	3808193.775	1106.74
LOCATION L0006154	VOLUME	463320.957	3808185.175	1107.03
LOCATION L0006155	VOLUME	463320.853	3808176.576	1107.31
LOCATION L0006156	VOLUME	463320.749	3808167.977	1107.60
LOCATION L0006157	VOLUME	463320.645	3808159.377	1107.89
LOCATION L0006158	VOLUME	463320.541	3808150.778	1108.17
LOCATION L0006159	VOLUME	463320.437	3808142.179	1108.46
LOCATION L0006160	VOLUME	463320.333	3808133.579	1108.75
LOCATION L0006161	VOLUME	463320.229	3808124.980	1109.03
LOCATION L0006162	VOLUME	463320.125	3808116.380	1109.32

LOCATION	L0006163	VOLUME	463320.021	3808107.781	1109.61
LOCATION	L0006164	VOLUME	463319.917	3808099.182	1109.89
LOCATION	L0006165	VOLUME	463319.813	3808090.582	1110.00
LOCATION	L0006166	VOLUME	463319.709	3808081.983	1110.00
LOCATION	L0006167	VOLUME	463319.605	3808073.384	1110.00
LOCATION	L0006168	VOLUME	463319.501	3808064.784	1110.00
LOCATION	L0006169	VOLUME	463319.397	3808056.185	1110.00
LOCATION	L0006170	VOLUME	463319.293	3808047.585	1110.00
LOCATION	L0006171	VOLUME	463319.189	3808038.986	1110.00
LOCATION	L0006172	VOLUME	463319.085	3808030.387	1110.12
LOCATION	L0006173	VOLUME	463318.981	3808021.787	1110.30
LOCATION	L0006174	VOLUME	463318.877	3808013.188	1110.48
LOCATION	L0006175	VOLUME	463318.773	3808004.589	1110.64
LOCATION	L0006176	VOLUME	463318.669	3807995.989	1110.75
LOCATION	L0006177	VOLUME	463318.564	3807987.390	1110.85
LOCATION	L0006178	VOLUME	463318.460	3807978.790	1110.96
LOCATION	L0006179	VOLUME	463318.356	3807970.191	1111.00
LOCATION	L0006180	VOLUME	463318.252	3807961.592	1111.00
LOCATION	L0006181	VOLUME	463318.148	3807952.992	1111.00
LOCATION	L0006182	VOLUME	463318.044	3807944.393	1111.03
LOCATION	L0006183	VOLUME	463317.940	3807935.794	1111.20
LOCATION	L0006184	VOLUME	463317.836	3807927.194	1111.37
LOCATION	L0006185	VOLUME	463317.732	3807918.595	1111.54
LOCATION	L0006186	VOLUME	463317.628	3807909.996	1111.67
LOCATION	L0006187	VOLUME	463317.524	3807901.396	1111.79
LOCATION	L0006188	VOLUME	463317.420	3807892.797	1111.90
LOCATION	L0006189	VOLUME	463317.316	3807884.197	1112.06
LOCATION	L0006190	VOLUME	463317.212	3807875.598	1112.34
LOCATION	L0006191	VOLUME	463317.108	3807866.999	1112.63
LOCATION	L0006192	VOLUME	463317.004	3807858.399	1112.92
LOCATION	L0006193	VOLUME	463316.900	3807849.800	1113.20
LOCATION	L0006194	VOLUME	463316.796	3807841.201	1113.49
LOCATION	L0006195	VOLUME	463316.692	3807832.601	1113.78
LOCATION	L0006196	VOLUME	463316.588	3807824.002	1114.06
LOCATION	L0006197	VOLUME	463316.484	3807815.402	1114.35
LOCATION	L0006198	VOLUME	463316.380	3807806.803	1114.64
LOCATION	L0006199	VOLUME	463316.276	3807798.204	1114.92
LOCATION	L0006200	VOLUME	463316.172	3807789.604	1115.21
LOCATION	L0006201	VOLUME	463316.068	3807781.005	1115.50
LOCATION	L0006202	VOLUME	463315.964	3807772.406	1115.78
LOCATION	L0006203	VOLUME	463315.860	3807763.806	1116.00
LOCATION	L0006204	VOLUME	463315.756	3807755.207	1116.00
LOCATION	L0006205	VOLUME	463315.652	3807746.607	1116.00
LOCATION	L0006206	VOLUME	463315.548	3807738.008	1116.00
LOCATION	L0006207	VOLUME	463315.444	3807729.409	1116.11
LOCATION	L0006208	VOLUME	463315.340	3807720.809	1116.25
LOCATION	L0006209	VOLUME	463315.236	3807712.210	1116.39
LOCATION	L0006210	VOLUME	463315.132	3807703.611	1116.53
LOCATION	L0006211	VOLUME	463315.028	3807695.011	1116.68
LOCATION	L0006212	VOLUME	463314.924	3807686.412	1116.83

LOCATION	L0006213	VOLUME	463314.820	3807677.813	1116.97
LOCATION	L0006214	VOLUME	463314.716	3807669.213	1117.22
LOCATION	L0006215	VOLUME	463314.612	3807660.614	1117.51
LOCATION	L0006216	VOLUME	463314.508	3807652.014	1117.80
LOCATION	L0006217	VOLUME	463314.404	3807643.415	1118.00
LOCATION	L0006218	VOLUME	463314.299	3807634.816	1118.00
LOCATION	L0006219	VOLUME	463314.195	3807626.216	1118.00
LOCATION	L0006220	VOLUME	463314.091	3807617.617	1118.00
LOCATION	L0006221	VOLUME	463313.987	3807609.018	1118.23
LOCATION	L0006222	VOLUME	463313.883	3807600.418	1118.52
LOCATION	L0006223	VOLUME	463312.637	3807591.924	1118.80
LOCATION	L0006224	VOLUME	463311.175	3807583.449	1119.00
LOCATION	L0006225	VOLUME	463309.714	3807574.974	1119.00
LOCATION	L0006226	VOLUME	463308.253	3807566.499	1119.00
LOCATION	L0006227	VOLUME	463306.792	3807558.024	1119.00
LOCATION	L0006228	VOLUME	463305.331	3807549.549	1119.21
LOCATION	L0006229	VOLUME	463303.869	3807541.074	1119.50
LOCATION	L0006230	VOLUME	463302.408	3807532.599	1119.78
LOCATION	L0006231	VOLUME	463300.947	3807524.124	1120.06
LOCATION	L0006232	VOLUME	463299.486	3807515.649	1120.34
LOCATION	L0006233	VOLUME	463298.025	3807507.174	1120.63
LOCATION	L0006234	VOLUME	463296.563	3807498.699	1120.91
LOCATION	L0006235	VOLUME	463295.102	3807490.224	1121.00
LOCATION	L0006236	VOLUME	463293.641	3807481.749	1121.00
LOCATION	L0006237	VOLUME	463292.180	3807473.274	1121.00
LOCATION	L0006238	VOLUME	463290.719	3807464.799	1121.04
LOCATION	L0006239	VOLUME	463289.257	3807456.324	1121.32
LOCATION	L0006240	VOLUME	463287.796	3807447.849	1121.60
LOCATION	L0006241	VOLUME	463286.335	3807439.374	1121.89
LOCATION	L0006242	VOLUME	463284.874	3807430.899	1122.00
LOCATION	L0006243	VOLUME	463282.011	3807422.791	1122.00
LOCATION	L0006244	VOLUME	463279.132	3807414.687	1122.00
LOCATION	L0006245	VOLUME	463276.254	3807406.583	1122.00
LOCATION	L0006246	VOLUME	463273.376	3807398.479	1122.25
LOCATION	L0006247	VOLUME	463270.498	3807390.375	1122.52
LOCATION	L0006248	VOLUME	463267.620	3807382.271	1122.79
LOCATION	L0006249	VOLUME	463264.742	3807374.167	1123.00
LOCATION	L0006250	VOLUME	463261.864	3807366.063	1123.00
LOCATION	L0006251	VOLUME	463258.986	3807357.959	1123.00
LOCATION	L0006252	VOLUME	463256.108	3807349.854	1123.00
LOCATION	L0006253	VOLUME	463253.230	3807341.750	1123.14
LOCATION	L0006254	VOLUME	463250.351	3807333.646	1123.41
LOCATION	L0006255	VOLUME	463247.473	3807325.542	1123.68
LOCATION	L0006256	VOLUME	463244.595	3807317.438	1123.95
LOCATION	L0006257	VOLUME	463241.717	3807309.334	1124.00
LOCATION	L0006258	VOLUME	463238.839	3807301.230	1124.00
LOCATION	L0006259	VOLUME	463235.961	3807293.126	1124.00
LOCATION	L0006260	VOLUME	463233.083	3807285.022	1124.01
LOCATION	L0006261	VOLUME	463230.205	3807276.917	1124.10
LOCATION	L0006262	VOLUME	463227.327	3807268.813	1124.24

LOCATION	L0006263	VOLUME	463224.449	3807260.709	1124.44
LOCATION	L0006264	VOLUME	463221.571	3807252.605	1124.66
LOCATION	L0006265	VOLUME	463218.692	3807244.501	1124.82
LOCATION	L0006266	VOLUME	463215.814	3807236.397	1124.93
LOCATION	L0006267	VOLUME	463212.936	3807228.293	1124.99
LOCATION	L0006268	VOLUME	463210.058	3807220.189	1125.19
LOCATION	L0006269	VOLUME	463207.180	3807212.085	1125.46
LOCATION	L0006270	VOLUME	463204.302	3807203.980	1125.73
LOCATION	L0006271	VOLUME	463201.424	3807195.876	1126.00
LOCATION	L0006272	VOLUME	463198.546	3807187.772	1126.10
LOCATION	L0006273	VOLUME	463195.668	3807179.668	1126.26
LOCATION	L0006274	VOLUME	463192.790	3807171.564	1126.47
LOCATION	L0006275	VOLUME	463189.911	3807163.460	1126.70
LOCATION	L0006276	VOLUME	463187.033	3807155.356	1126.85
LOCATION	L0006277	VOLUME	463184.155	3807147.252	1126.95
LOCATION	L0006278	VOLUME	463181.277	3807139.148	1127.00
LOCATION	L0006279	VOLUME	463178.399	3807131.043	1127.16
LOCATION	L0006280	VOLUME	463175.521	3807122.939	1127.43
LOCATION	L0006281	VOLUME	463172.334	3807114.955	1127.70
LOCATION	L0006282	VOLUME	463169.008	3807107.024	1127.96
LOCATION	L0006283	VOLUME	463165.683	3807099.093	1128.00
LOCATION	L0006284	VOLUME	463162.357	3807091.162	1128.00
LOCATION	L0006285	VOLUME	463159.031	3807083.231	1128.00
LOCATION	L0006286	VOLUME	463155.705	3807075.300	1128.02
LOCATION	L0006287	VOLUME	463152.379	3807067.369	1128.29
LOCATION	L0006288	VOLUME	463149.053	3807059.439	1128.55
LOCATION	L0006289	VOLUME	463145.727	3807051.508	1128.81
LOCATION	L0006290	VOLUME	463142.402	3807043.577	1129.00
LOCATION	L0006291	VOLUME	463139.076	3807035.646	1129.00
LOCATION	L0006292	VOLUME	463135.750	3807027.715	1129.00
LOCATION	L0006293	VOLUME	463132.424	3807019.784	1129.00
LOCATION	L0006294	VOLUME	463129.098	3807011.853	1129.14
LOCATION	L0006295	VOLUME	463125.772	3807003.923	1129.40
LOCATION	L0006296	VOLUME	463122.446	3806995.992	1129.67
LOCATION	L0006297	VOLUME	463119.121	3806988.061	1129.90
LOCATION	L0006298	VOLUME	463115.795	3806980.130	1129.89
LOCATION	L0006299	VOLUME	463112.469	3806972.199	1129.86
LOCATION	L0006300	VOLUME	463109.143	3806964.268	1129.90
LOCATION	L0006301	VOLUME	463105.817	3806956.337	1129.99
LOCATION	L0006302	VOLUME	463102.491	3806948.406	1130.10
LOCATION	L0006303	VOLUME	463099.200	3806940.468	1130.16
LOCATION	L0006304	VOLUME	463098.785	3806931.878	1130.24
LOCATION	L0006305	VOLUME	463098.369	3806923.288	1130.34
LOCATION	L0006306	VOLUME	463097.953	3806914.698	1130.54
LOCATION	L0006307	VOLUME	463097.538	3806906.108	1130.75
LOCATION	L0006308	VOLUME	463097.122	3806897.518	1130.96
LOCATION	L0006309	VOLUME	463096.707	3806888.928	1131.23
LOCATION	L0006310	VOLUME	463096.291	3806880.338	1131.52
LOCATION	L0006311	VOLUME	463095.875	3806871.748	1131.81
LOCATION	L0006312	VOLUME	463095.460	3806863.158	1132.02

LOCATION	L0006313	VOLUME	463095.044	3806854.568	1132.06
LOCATION	L0006314	VOLUME	463094.628	3806845.978	1132.10
LOCATION	L0006315	VOLUME	463094.213	3806837.388	1132.13
LOCATION	L0006316	VOLUME	463093.797	3806828.798	1132.37
LOCATION	L0006317	VOLUME	463093.381	3806820.208	1132.64
LOCATION	L0006318	VOLUME	463092.966	3806811.618	1132.91
LOCATION	L0006319	VOLUME	463092.550	3806803.028	1133.17
LOCATION	L0006320	VOLUME	463092.134	3806794.438	1133.43
LOCATION	L0006321	VOLUME	463091.719	3806785.849	1133.69
LOCATION	L0006322	VOLUME	463091.303	3806777.259	1133.96
LOCATION	L0006323	VOLUME	463090.888	3806768.669	1134.24
LOCATION	L0006324	VOLUME	463090.394	3806760.087	1134.53
LOCATION	L0006325	VOLUME	463088.927	3806751.613	1134.78
LOCATION	L0006326	VOLUME	463087.460	3806743.139	1134.92
LOCATION	L0006327	VOLUME	463085.994	3806734.665	1134.87
LOCATION	L0006328	VOLUME	463084.527	3806726.191	1134.82
LOCATION	L0006329	VOLUME	463083.060	3806717.717	1134.77
LOCATION	L0006330	VOLUME	463081.594	3806709.243	1134.94
LOCATION	L0006331	VOLUME	463080.127	3806700.769	1135.18
LOCATION	L0006332	VOLUME	463078.660	3806692.295	1135.41
LOCATION	L0006333	VOLUME	463077.194	3806683.821	1135.67
LOCATION	L0006334	VOLUME	463075.727	3806675.347	1136.05
LOCATION	L0006335	VOLUME	463074.260	3806666.873	1136.45
LOCATION	L0006336	VOLUME	463072.794	3806658.399	1136.87
LOCATION	L0006337	VOLUME	463071.327	3806649.925	1137.20
LOCATION	L0006338	VOLUME	463069.860	3806641.451	1137.48
LOCATION	L0006339	VOLUME	463068.394	3806632.977	1137.77
LOCATION	L0006340	VOLUME	463066.927	3806624.503	1138.05
LOCATION	L0006341	VOLUME	463065.460	3806616.029	1138.33
LOCATION	L0006342	VOLUME	463063.600	3806607.659	1138.61
LOCATION	L0006343	VOLUME	463060.694	3806599.565	1138.88
LOCATION	L0006344	VOLUME	463057.788	3806591.471	1139.15
LOCATION	L0006345	VOLUME	463054.883	3806583.376	1139.42
LOCATION	L0006346	VOLUME	463051.977	3806575.282	1139.69
LOCATION	L0006347	VOLUME	463049.072	3806567.188	1139.96
LOCATION	L0006348	VOLUME	463046.166	3806559.093	1140.12
LOCATION	L0006349	VOLUME	463043.260	3806550.999	1140.22
LOCATION	L0006350	VOLUME	463040.355	3806542.905	1140.27
LOCATION	L0006351	VOLUME	463037.449	3806534.811	1140.28
LOCATION	L0006352	VOLUME	463034.543	3806526.716	1140.41
LOCATION	L0006353	VOLUME	463031.638	3806518.622	1140.60
LOCATION	L0006354	VOLUME	463028.732	3806510.528	1140.85
LOCATION	L0006355	VOLUME	463025.826	3806502.433	1141.12

** End of LINE VOLUME Source ID = TRUCK3I15

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = TRUCK31

** DESCRSRC Truck road segment north from 3 to 1

** PREFIX

** Length of Side = 8.60

```

** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 6.80
** SZINIT = 3.16
** Nodes = 6
** 463319.669, 3808367.780, 1104.00, 3.40, 4.00
** 463313.867, 3808744.888, 1095.36, 3.40, 4.00
** 463264.553, 3808892.830, 1087.25, 3.40, 4.00
** 463215.239, 3809069.781, 1077.22, 3.40, 4.00
** 463212.338, 3809240.930, 1070.02, 3.40, 4.00
** 463244.247, 3809528.112, 1085.72, 3.40, 4.00

```

```

** -----
LOCATION L0006356      VOLUME  463319.602 3808372.079 1104.00
LOCATION L0006357      VOLUME  463319.470 3808380.678 1104.00
LOCATION L0006358      VOLUME  463319.338 3808389.277 1104.00
LOCATION L0006359      VOLUME  463319.206 3808397.876 1103.94
LOCATION L0006360      VOLUME  463319.073 3808406.475 1103.65
LOCATION L0006361      VOLUME  463318.941 3808415.074 1103.36
LOCATION L0006362      VOLUME  463318.809 3808423.673 1103.08
LOCATION L0006363      VOLUME  463318.676 3808432.272 1102.79
LOCATION L0006364      VOLUME  463318.544 3808440.871 1102.50
LOCATION L0006365      VOLUME  463318.412 3808449.470 1102.22
LOCATION L0006366      VOLUME  463318.280 3808458.069 1101.93
LOCATION L0006367      VOLUME  463318.147 3808466.668 1101.64
LOCATION L0006368      VOLUME  463318.015 3808475.267 1101.36
LOCATION L0006369      VOLUME  463317.883 3808483.866 1101.07
LOCATION L0006370      VOLUME  463317.750 3808492.465 1100.78
LOCATION L0006371      VOLUME  463317.618 3808501.064 1100.50
LOCATION L0006372      VOLUME  463317.486 3808509.663 1100.21
LOCATION L0006373      VOLUME  463317.353 3808518.262 1099.97
LOCATION L0006374      VOLUME  463317.221 3808526.861 1099.84
LOCATION L0006375      VOLUME  463317.089 3808535.460 1099.72
LOCATION L0006376      VOLUME  463316.957 3808544.059 1099.59
LOCATION L0006377      VOLUME  463316.824 3808552.658 1099.44
LOCATION L0006378      VOLUME  463316.692 3808561.257 1099.27
LOCATION L0006379      VOLUME  463316.560 3808569.856 1099.11
LOCATION L0006380      VOLUME  463316.427 3808578.455 1098.96
LOCATION L0006381      VOLUME  463316.295 3808587.054 1098.83
LOCATION L0006382      VOLUME  463316.163 3808595.653 1098.70
LOCATION L0006383      VOLUME  463316.031 3808604.252 1098.56
LOCATION L0006384      VOLUME  463315.898 3808612.851 1098.41
LOCATION L0006385      VOLUME  463315.766 3808621.450 1098.25
LOCATION L0006386      VOLUME  463315.634 3808630.049 1098.10
LOCATION L0006387      VOLUME  463315.501 3808638.648 1098.00
LOCATION L0006388      VOLUME  463315.369 3808647.247 1098.00
LOCATION L0006389      VOLUME  463315.237 3808655.846 1098.00
LOCATION L0006390      VOLUME  463315.105 3808664.445 1098.00
LOCATION L0006391      VOLUME  463314.972 3808673.044 1097.88
LOCATION L0006392      VOLUME  463314.840 3808681.643 1097.74
LOCATION L0006393      VOLUME  463314.708 3808690.242 1097.60

```

LOCATION	L0006394	VOLUME	463314.575	3808698.841	1097.46
LOCATION	L0006395	VOLUME	463314.443	3808707.440	1097.32
LOCATION	L0006396	VOLUME	463314.311	3808716.039	1097.17
LOCATION	L0006397	VOLUME	463314.178	3808724.638	1097.02
LOCATION	L0006398	VOLUME	463314.046	3808733.237	1096.50
LOCATION	L0006399	VOLUME	463313.914	3808741.836	1095.90
LOCATION	L0006400	VOLUME	463312.113	3808750.150	1095.23
LOCATION	L0006401	VOLUME	463309.393	3808758.309	1094.50
LOCATION	L0006402	VOLUME	463306.674	3808766.468	1093.94
LOCATION	L0006403	VOLUME	463303.954	3808774.627	1093.48
LOCATION	L0006404	VOLUME	463301.235	3808782.785	1093.11
LOCATION	L0006405	VOLUME	463298.515	3808790.944	1092.62
LOCATION	L0006406	VOLUME	463295.795	3808799.103	1091.98
LOCATION	L0006407	VOLUME	463293.076	3808807.261	1091.35
LOCATION	L0006408	VOLUME	463290.356	3808815.420	1090.71
LOCATION	L0006409	VOLUME	463287.637	3808823.579	1090.23
LOCATION	L0006410	VOLUME	463284.917	3808831.737	1089.71
LOCATION	L0006411	VOLUME	463282.198	3808839.896	1089.13
LOCATION	L0006412	VOLUME	463279.478	3808848.055	1088.63
LOCATION	L0006413	VOLUME	463276.758	3808856.213	1088.45
LOCATION	L0006414	VOLUME	463274.039	3808864.372	1088.27
LOCATION	L0006415	VOLUME	463271.319	3808872.531	1088.09
LOCATION	L0006416	VOLUME	463268.600	3808880.689	1087.70
LOCATION	L0006417	VOLUME	463265.880	3808888.848	1087.16
LOCATION	L0006418	VOLUME	463263.371	3808897.071	1086.63
LOCATION	L0006419	VOLUME	463261.062	3808905.355	1086.13
LOCATION	L0006420	VOLUME	463258.754	3808913.640	1085.55
LOCATION	L0006421	VOLUME	463256.445	3808921.924	1085.06
LOCATION	L0006422	VOLUME	463254.136	3808930.208	1084.65
LOCATION	L0006423	VOLUME	463251.827	3808938.492	1084.26
LOCATION	L0006424	VOLUME	463249.519	3808946.777	1083.71
LOCATION	L0006425	VOLUME	463247.210	3808955.061	1083.12
LOCATION	L0006426	VOLUME	463244.901	3808963.345	1082.49
LOCATION	L0006427	VOLUME	463242.592	3808971.630	1081.98
LOCATION	L0006428	VOLUME	463240.284	3808979.914	1081.55
LOCATION	L0006429	VOLUME	463237.975	3808988.198	1081.19
LOCATION	L0006430	VOLUME	463235.666	3808996.483	1080.82
LOCATION	L0006431	VOLUME	463233.357	3809004.767	1080.19
LOCATION	L0006432	VOLUME	463231.049	3809013.051	1079.56
LOCATION	L0006433	VOLUME	463228.740	3809021.336	1078.93
LOCATION	L0006434	VOLUME	463226.431	3809029.620	1078.42
LOCATION	L0006435	VOLUME	463224.122	3809037.904	1078.07
LOCATION	L0006436	VOLUME	463221.814	3809046.188	1077.72
LOCATION	L0006437	VOLUME	463219.505	3809054.473	1077.37
LOCATION	L0006438	VOLUME	463217.196	3809062.757	1076.78
LOCATION	L0006439	VOLUME	463215.216	3809071.089	1076.16
LOCATION	L0006440	VOLUME	463215.071	3809079.688	1075.59
LOCATION	L0006441	VOLUME	463214.925	3809088.287	1075.07
LOCATION	L0006442	VOLUME	463214.779	3809096.886	1074.74
LOCATION	L0006443	VOLUME	463214.634	3809105.484	1074.40

LOCATION	L0006444	VOLUME	463214.488	3809114.083	1074.07
LOCATION	L0006445	VOLUME	463214.342	3809122.682	1073.77
LOCATION	L0006446	VOLUME	463214.196	3809131.281	1073.49
LOCATION	L0006447	VOLUME	463214.051	3809139.879	1073.20
LOCATION	L0006448	VOLUME	463213.905	3809148.478	1072.92
LOCATION	L0006449	VOLUME	463213.759	3809157.077	1072.63
LOCATION	L0006450	VOLUME	463213.613	3809165.676	1072.34
LOCATION	L0006451	VOLUME	463213.468	3809174.274	1072.06
LOCATION	L0006452	VOLUME	463213.322	3809182.873	1071.77
LOCATION	L0006453	VOLUME	463213.176	3809191.472	1071.48
LOCATION	L0006454	VOLUME	463213.030	3809200.071	1071.20
LOCATION	L0006455	VOLUME	463212.885	3809208.669	1070.91
LOCATION	L0006456	VOLUME	463212.739	3809217.268	1070.62
LOCATION	L0006457	VOLUME	463212.593	3809225.867	1070.34
LOCATION	L0006458	VOLUME	463212.447	3809234.466	1070.05
LOCATION	L0006459	VOLUME	463212.574	3809243.052	1070.00
LOCATION	L0006460	VOLUME	463213.523	3809251.599	1070.00
LOCATION	L0006461	VOLUME	463214.473	3809260.147	1070.00
LOCATION	L0006462	VOLUME	463215.423	3809268.694	1070.08
LOCATION	L0006463	VOLUME	463216.372	3809277.241	1070.30
LOCATION	L0006464	VOLUME	463217.322	3809285.789	1070.50
LOCATION	L0006465	VOLUME	463218.272	3809294.336	1070.69
LOCATION	L0006466	VOLUME	463219.222	3809302.884	1070.92
LOCATION	L0006467	VOLUME	463220.171	3809311.431	1071.18
LOCATION	L0006468	VOLUME	463221.121	3809319.978	1071.43
LOCATION	L0006469	VOLUME	463222.071	3809328.526	1071.63
LOCATION	L0006470	VOLUME	463223.020	3809337.073	1071.73
LOCATION	L0006471	VOLUME	463223.970	3809345.621	1071.84
LOCATION	L0006472	VOLUME	463224.920	3809354.168	1071.97
LOCATION	L0006473	VOLUME	463225.870	3809362.715	1073.00
LOCATION	L0006474	VOLUME	463226.819	3809371.263	1074.21
LOCATION	L0006475	VOLUME	463227.769	3809379.810	1075.36
LOCATION	L0006476	VOLUME	463228.719	3809388.358	1076.53
LOCATION	L0006477	VOLUME	463229.668	3809396.905	1077.86
LOCATION	L0006478	VOLUME	463230.618	3809405.452	1079.19
LOCATION	L0006479	VOLUME	463231.568	3809414.000	1080.52
LOCATION	L0006480	VOLUME	463232.518	3809422.547	1081.74
LOCATION	L0006481	VOLUME	463233.467	3809431.095	1082.96
LOCATION	L0006482	VOLUME	463234.417	3809439.642	1084.22
LOCATION	L0006483	VOLUME	463235.367	3809448.189	1085.15
LOCATION	L0006484	VOLUME	463236.316	3809456.737	1085.12
LOCATION	L0006485	VOLUME	463237.266	3809465.284	1085.09
LOCATION	L0006486	VOLUME	463238.216	3809473.832	1085.06
LOCATION	L0006487	VOLUME	463239.165	3809482.379	1085.03
LOCATION	L0006488	VOLUME	463240.115	3809490.926	1084.99
LOCATION	L0006489	VOLUME	463241.065	3809499.474	1084.96
LOCATION	L0006490	VOLUME	463242.015	3809508.021	1085.00
LOCATION	L0006491	VOLUME	463242.964	3809516.569	1085.26
LOCATION	L0006492	VOLUME	463243.914	3809525.116	1085.51

** End of LINE VOLUME Source ID = TRUCK31

```

** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = TRUCK1I15
** DESCRSRC Truck road segment north from 1 to I-15
** PREFIX
** Length of Side = 8.60
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 6.80
** SZINIT = 3.16
** Nodes = 6
** 463262.943, 3809539.548, 1085.08, 3.40, 4.00
** 464901.913, 3809536.647, 1069.00, 3.40, 4.00
** 464916.417, 3809614.970, 1067.31, 3.40, 4.00
** 464974.434, 3809672.986, 1066.00, 3.40, 4.00
** 465070.161, 3809693.292, 1065.02, 3.40, 4.00
** 465174.591, 3809768.714, 1063.18, 3.40, 4.00
** -----
LOCATION L0006493      VOLUME  463267.243 3809539.540 1085.20
LOCATION L0006494      VOLUME  463275.843 3809539.525 1085.27
LOCATION L0006495      VOLUME  463284.443 3809539.510 1085.49
LOCATION L0006496      VOLUME  463293.043 3809539.495 1085.70
LOCATION L0006497      VOLUME  463301.643 3809539.480 1085.83
LOCATION L0006498      VOLUME  463310.243 3809539.464 1085.58
LOCATION L0006499      VOLUME  463318.843 3809539.449 1085.33
LOCATION L0006500      VOLUME  463327.443 3809539.434 1085.08
LOCATION L0006501      VOLUME  463336.043 3809539.419 1083.91
LOCATION L0006502      VOLUME  463344.643 3809539.404 1082.35
LOCATION L0006503      VOLUME  463353.243 3809539.388 1080.80
LOCATION L0006504      VOLUME  463361.843 3809539.373 1078.90
LOCATION L0006505      VOLUME  463370.443 3809539.358 1075.74
LOCATION L0006506      VOLUME  463379.043 3809539.343 1072.58
LOCATION L0006507      VOLUME  463387.643 3809539.327 1069.43
LOCATION L0006508      VOLUME  463396.243 3809539.312 1067.52
LOCATION L0006509      VOLUME  463404.843 3809539.297 1066.09
LOCATION L0006510      VOLUME  463413.443 3809539.282 1064.65
LOCATION L0006511      VOLUME  463422.043 3809539.267 1063.66
LOCATION L0006512      VOLUME  463430.643 3809539.251 1064.11
LOCATION L0006513      VOLUME  463439.243 3809539.236 1064.55
LOCATION L0006514      VOLUME  463447.843 3809539.221 1065.00
LOCATION L0006515      VOLUME  463456.443 3809539.206 1064.89
LOCATION L0006516      VOLUME  463465.043 3809539.190 1064.61
LOCATION L0006517      VOLUME  463473.643 3809539.175 1064.32
LOCATION L0006518      VOLUME  463482.243 3809539.160 1064.02
LOCATION L0006519      VOLUME  463490.843 3809539.145 1063.71
LOCATION L0006520      VOLUME  463499.443 3809539.130 1063.39
LOCATION L0006521      VOLUME  463508.043 3809539.114 1063.07
LOCATION L0006522      VOLUME  463516.643 3809539.099 1062.98
LOCATION L0006523      VOLUME  463525.243 3809539.084 1062.95
LOCATION L0006524      VOLUME  463533.843 3809539.069 1062.92

```

LOCATION	L0006525	VOLUME	463542.443	3809539.053	1062.82
LOCATION	L0006526	VOLUME	463551.043	3809539.038	1062.57
LOCATION	L0006527	VOLUME	463559.643	3809539.023	1062.31
LOCATION	L0006528	VOLUME	463568.243	3809539.008	1062.05
LOCATION	L0006529	VOLUME	463576.843	3809538.993	1061.98
LOCATION	L0006530	VOLUME	463585.443	3809538.977	1061.95
LOCATION	L0006531	VOLUME	463594.043	3809538.962	1061.92
LOCATION	L0006532	VOLUME	463602.643	3809538.947	1062.13
LOCATION	L0006533	VOLUME	463611.243	3809538.932	1062.87
LOCATION	L0006534	VOLUME	463619.843	3809538.916	1063.62
LOCATION	L0006535	VOLUME	463628.443	3809538.901	1064.37
LOCATION	L0006536	VOLUME	463637.043	3809538.886	1065.05
LOCATION	L0006537	VOLUME	463645.642	3809538.871	1065.71
LOCATION	L0006538	VOLUME	463654.242	3809538.856	1066.37
LOCATION	L0006539	VOLUME	463662.842	3809538.840	1067.01
LOCATION	L0006540	VOLUME	463671.442	3809538.825	1067.61
LOCATION	L0006541	VOLUME	463680.042	3809538.810	1068.21
LOCATION	L0006542	VOLUME	463688.642	3809538.795	1068.81
LOCATION	L0006543	VOLUME	463697.242	3809538.779	1069.15
LOCATION	L0006544	VOLUME	463705.842	3809538.764	1069.43
LOCATION	L0006545	VOLUME	463714.442	3809538.749	1069.72
LOCATION	L0006546	VOLUME	463723.042	3809538.734	1070.01
LOCATION	L0006547	VOLUME	463731.642	3809538.719	1070.30
LOCATION	L0006548	VOLUME	463740.242	3809538.703	1070.58
LOCATION	L0006549	VOLUME	463748.842	3809538.688	1070.87
LOCATION	L0006550	VOLUME	463757.442	3809538.673	1071.16
LOCATION	L0006551	VOLUME	463766.042	3809538.658	1071.44
LOCATION	L0006552	VOLUME	463774.642	3809538.642	1071.73
LOCATION	L0006553	VOLUME	463783.242	3809538.627	1072.02
LOCATION	L0006554	VOLUME	463791.842	3809538.612	1072.31
LOCATION	L0006555	VOLUME	463800.442	3809538.597	1072.59
LOCATION	L0006556	VOLUME	463809.042	3809538.582	1072.88
LOCATION	L0006557	VOLUME	463817.642	3809538.566	1073.65
LOCATION	L0006558	VOLUME	463826.242	3809538.551	1074.49
LOCATION	L0006559	VOLUME	463834.842	3809538.536	1075.33
LOCATION	L0006560	VOLUME	463843.442	3809538.521	1076.17
LOCATION	L0006561	VOLUME	463852.042	3809538.505	1077.03
LOCATION	L0006562	VOLUME	463860.642	3809538.490	1077.89
LOCATION	L0006563	VOLUME	463869.242	3809538.475	1078.76
LOCATION	L0006564	VOLUME	463877.842	3809538.460	1078.88
LOCATION	L0006565	VOLUME	463886.442	3809538.445	1078.92
LOCATION	L0006566	VOLUME	463895.042	3809538.429	1078.97
LOCATION	L0006567	VOLUME	463903.642	3809538.414	1079.11
LOCATION	L0006568	VOLUME	463912.242	3809538.399	1079.37
LOCATION	L0006569	VOLUME	463920.842	3809538.384	1079.64
LOCATION	L0006570	VOLUME	463929.442	3809538.368	1079.90
LOCATION	L0006571	VOLUME	463938.042	3809538.353	1079.94
LOCATION	L0006572	VOLUME	463946.642	3809538.338	1079.96
LOCATION	L0006573	VOLUME	463955.242	3809538.323	1079.99
LOCATION	L0006574	VOLUME	463963.842	3809538.308	1079.87

LOCATION	L0006575	VOLUME	463972.442	3809538.292	1079.58
LOCATION	L0006576	VOLUME	463981.042	3809538.277	1079.30
LOCATION	L0006577	VOLUME	463989.642	3809538.262	1079.01
LOCATION	L0006578	VOLUME	463998.242	3809538.247	1078.72
LOCATION	L0006579	VOLUME	464006.842	3809538.231	1078.44
LOCATION	L0006580	VOLUME	464015.442	3809538.216	1078.15
LOCATION	L0006581	VOLUME	464024.042	3809538.201	1078.00
LOCATION	L0006582	VOLUME	464032.642	3809538.186	1078.00
LOCATION	L0006583	VOLUME	464041.242	3809538.171	1078.00
LOCATION	L0006584	VOLUME	464049.842	3809538.155	1078.00
LOCATION	L0006585	VOLUME	464058.442	3809538.140	1077.98
LOCATION	L0006586	VOLUME	464067.042	3809538.125	1077.96
LOCATION	L0006587	VOLUME	464075.642	3809538.110	1077.94
LOCATION	L0006588	VOLUME	464084.242	3809538.094	1077.80
LOCATION	L0006589	VOLUME	464092.842	3809538.079	1077.53
LOCATION	L0006590	VOLUME	464101.442	3809538.064	1077.26
LOCATION	L0006591	VOLUME	464110.042	3809538.049	1077.00
LOCATION	L0006592	VOLUME	464118.642	3809538.034	1076.98
LOCATION	L0006593	VOLUME	464127.242	3809538.018	1076.96
LOCATION	L0006594	VOLUME	464135.842	3809538.003	1076.94
LOCATION	L0006595	VOLUME	464144.442	3809537.988	1076.79
LOCATION	L0006596	VOLUME	464153.042	3809537.973	1076.53
LOCATION	L0006597	VOLUME	464161.642	3809537.957	1076.26
LOCATION	L0006598	VOLUME	464170.242	3809537.942	1076.00
LOCATION	L0006599	VOLUME	464178.842	3809537.927	1076.00
LOCATION	L0006600	VOLUME	464187.442	3809537.912	1076.00
LOCATION	L0006601	VOLUME	464196.042	3809537.897	1076.00
LOCATION	L0006602	VOLUME	464204.642	3809537.881	1075.99
LOCATION	L0006603	VOLUME	464213.242	3809537.866	1075.97
LOCATION	L0006604	VOLUME	464221.842	3809537.851	1075.95
LOCATION	L0006605	VOLUME	464230.442	3809537.836	1075.92
LOCATION	L0006606	VOLUME	464239.042	3809537.821	1075.65
LOCATION	L0006607	VOLUME	464247.642	3809537.805	1075.39
LOCATION	L0006608	VOLUME	464256.242	3809537.790	1075.12
LOCATION	L0006609	VOLUME	464264.842	3809537.775	1074.99
LOCATION	L0006610	VOLUME	464273.442	3809537.760	1074.97
LOCATION	L0006611	VOLUME	464282.042	3809537.744	1074.96
LOCATION	L0006612	VOLUME	464290.641	3809537.729	1074.92
LOCATION	L0006613	VOLUME	464299.241	3809537.714	1074.65
LOCATION	L0006614	VOLUME	464307.841	3809537.699	1074.38
LOCATION	L0006615	VOLUME	464316.441	3809537.684	1074.11
LOCATION	L0006616	VOLUME	464325.041	3809537.668	1074.00
LOCATION	L0006617	VOLUME	464333.641	3809537.653	1074.00
LOCATION	L0006618	VOLUME	464342.241	3809537.638	1074.00
LOCATION	L0006619	VOLUME	464350.841	3809537.623	1074.00
LOCATION	L0006620	VOLUME	464359.441	3809537.607	1073.98
LOCATION	L0006621	VOLUME	464368.041	3809537.592	1073.97
LOCATION	L0006622	VOLUME	464376.641	3809537.577	1073.95
LOCATION	L0006623	VOLUME	464385.241	3809537.562	1073.95
LOCATION	L0006624	VOLUME	464393.841	3809537.547	1073.95

LOCATION	L0006625	VOLUME	464402.441	3809537.531	1073.95
LOCATION	L0006626	VOLUME	464411.041	3809537.516	1073.91
LOCATION	L0006627	VOLUME	464419.641	3809537.501	1073.64
LOCATION	L0006628	VOLUME	464428.241	3809537.486	1073.37
LOCATION	L0006629	VOLUME	464436.841	3809537.470	1073.10
LOCATION	L0006630	VOLUME	464445.441	3809537.455	1072.99
LOCATION	L0006631	VOLUME	464454.041	3809537.440	1072.98
LOCATION	L0006632	VOLUME	464462.641	3809537.425	1072.96
LOCATION	L0006633	VOLUME	464471.241	3809537.410	1072.91
LOCATION	L0006634	VOLUME	464479.841	3809537.394	1072.64
LOCATION	L0006635	VOLUME	464488.441	3809537.379	1072.37
LOCATION	L0006636	VOLUME	464497.041	3809537.364	1072.09
LOCATION	L0006637	VOLUME	464505.641	3809537.349	1072.00
LOCATION	L0006638	VOLUME	464514.241	3809537.333	1072.00
LOCATION	L0006639	VOLUME	464522.841	3809537.318	1072.00
LOCATION	L0006640	VOLUME	464531.441	3809537.303	1072.00
LOCATION	L0006641	VOLUME	464540.041	3809537.288	1071.98
LOCATION	L0006642	VOLUME	464548.641	3809537.273	1071.97
LOCATION	L0006643	VOLUME	464557.241	3809537.257	1071.96
LOCATION	L0006644	VOLUME	464565.841	3809537.242	1071.77
LOCATION	L0006645	VOLUME	464574.441	3809537.227	1071.50
LOCATION	L0006646	VOLUME	464583.041	3809537.212	1071.22
LOCATION	L0006647	VOLUME	464591.641	3809537.196	1071.00
LOCATION	L0006648	VOLUME	464600.241	3809537.181	1071.00
LOCATION	L0006649	VOLUME	464608.841	3809537.166	1071.00
LOCATION	L0006650	VOLUME	464617.441	3809537.151	1071.00
LOCATION	L0006651	VOLUME	464626.041	3809537.136	1070.99
LOCATION	L0006652	VOLUME	464634.641	3809537.120	1070.98
LOCATION	L0006653	VOLUME	464643.241	3809537.105	1070.97
LOCATION	L0006654	VOLUME	464651.841	3809537.090	1070.96
LOCATION	L0006655	VOLUME	464660.441	3809537.075	1070.96
LOCATION	L0006656	VOLUME	464669.041	3809537.059	1070.96
LOCATION	L0006657	VOLUME	464677.641	3809537.044	1070.96
LOCATION	L0006658	VOLUME	464686.241	3809537.029	1070.76
LOCATION	L0006659	VOLUME	464694.841	3809537.014	1070.49
LOCATION	L0006660	VOLUME	464703.441	3809536.999	1070.21
LOCATION	L0006661	VOLUME	464712.041	3809536.983	1070.00
LOCATION	L0006662	VOLUME	464720.641	3809536.968	1070.00
LOCATION	L0006663	VOLUME	464729.241	3809536.953	1070.00
LOCATION	L0006664	VOLUME	464737.841	3809536.938	1070.00
LOCATION	L0006665	VOLUME	464746.441	3809536.922	1069.99
LOCATION	L0006666	VOLUME	464755.041	3809536.907	1069.98
LOCATION	L0006667	VOLUME	464763.641	3809536.892	1069.98
LOCATION	L0006668	VOLUME	464772.241	3809536.877	1069.97
LOCATION	L0006669	VOLUME	464780.841	3809536.862	1069.97
LOCATION	L0006670	VOLUME	464789.441	3809536.846	1069.97
LOCATION	L0006671	VOLUME	464798.041	3809536.831	1069.97
LOCATION	L0006672	VOLUME	464806.641	3809536.816	1069.76
LOCATION	L0006673	VOLUME	464815.241	3809536.801	1069.48
LOCATION	L0006674	VOLUME	464823.841	3809536.785	1069.20

LOCATION	L0006675	VOLUME	464832.441	3809536.770	1069.00
LOCATION	L0006676	VOLUME	464841.041	3809536.755	1068.99
LOCATION	L0006677	VOLUME	464849.641	3809536.740	1068.98
LOCATION	L0006678	VOLUME	464858.241	3809536.725	1068.98
LOCATION	L0006679	VOLUME	464866.841	3809536.709	1068.97
LOCATION	L0006680	VOLUME	464875.441	3809536.694	1068.98
LOCATION	L0006681	VOLUME	464884.041	3809536.679	1068.98
LOCATION	L0006682	VOLUME	464892.641	3809536.664	1068.98
LOCATION	L0006683	VOLUME	464901.241	3809536.648	1068.98
LOCATION	L0006684	VOLUME	464903.357	3809544.442	1068.72
LOCATION	L0006685	VOLUME	464904.923	3809552.898	1068.44
LOCATION	L0006686	VOLUME	464906.488	3809561.355	1068.15
LOCATION	L0006687	VOLUME	464908.054	3809569.811	1068.00
LOCATION	L0006688	VOLUME	464909.620	3809578.267	1068.00
LOCATION	L0006689	VOLUME	464911.186	3809586.723	1068.00
LOCATION	L0006690	VOLUME	464912.752	3809595.180	1068.00
LOCATION	L0006691	VOLUME	464914.318	3809603.636	1067.74
LOCATION	L0006692	VOLUME	464915.884	3809612.092	1067.46
LOCATION	L0006693	VOLUME	464920.429	3809618.981	1067.23
LOCATION	L0006694	VOLUME	464926.510	3809625.063	1067.02
LOCATION	L0006695	VOLUME	464932.591	3809631.144	1066.83
LOCATION	L0006696	VOLUME	464938.672	3809637.225	1066.62
LOCATION	L0006697	VOLUME	464944.753	3809643.306	1066.42
LOCATION	L0006698	VOLUME	464950.834	3809649.387	1066.22
LOCATION	L0006699	VOLUME	464956.916	3809655.468	1066.02
LOCATION	L0006700	VOLUME	464962.997	3809661.549	1066.00
LOCATION	L0006701	VOLUME	464969.078	3809667.630	1066.00
LOCATION	L0006702	VOLUME	464975.437	3809673.199	1066.00
LOCATION	L0006703	VOLUME	464983.850	3809674.984	1066.00
LOCATION	L0006704	VOLUME	464992.263	3809676.768	1066.00
LOCATION	L0006705	VOLUME	465000.675	3809678.553	1066.00
LOCATION	L0006706	VOLUME	465009.088	3809680.337	1066.00
LOCATION	L0006707	VOLUME	465017.501	3809682.122	1065.78
LOCATION	L0006708	VOLUME	465025.914	3809683.906	1065.51
LOCATION	L0006709	VOLUME	465034.327	3809685.691	1065.20
LOCATION	L0006710	VOLUME	465042.739	3809687.475	1065.00
LOCATION	L0006711	VOLUME	465051.152	3809689.260	1065.00
LOCATION	L0006712	VOLUME	465059.565	3809691.045	1065.00
LOCATION	L0006713	VOLUME	465067.978	3809692.829	1065.00
LOCATION	L0006714	VOLUME	465075.324	3809697.021	1064.93
LOCATION	L0006715	VOLUME	465082.296	3809702.056	1064.78
LOCATION	L0006716	VOLUME	465089.267	3809707.091	1064.55
LOCATION	L0006717	VOLUME	465096.239	3809712.126	1064.24
LOCATION	L0006718	VOLUME	465103.211	3809717.162	1064.00
LOCATION	L0006719	VOLUME	465110.183	3809722.197	1064.00
LOCATION	L0006720	VOLUME	465117.155	3809727.232	1064.00
LOCATION	L0006721	VOLUME	465124.127	3809732.267	1064.00
LOCATION	L0006722	VOLUME	465131.098	3809737.302	1064.00
LOCATION	L0006723	VOLUME	465138.070	3809742.338	1064.00
LOCATION	L0006724	VOLUME	465145.042	3809747.373	1063.95

LOCATION L0006725	VOLUME	465152.014	3809752.408	1063.78
LOCATION L0006726	VOLUME	465158.986	3809757.443	1063.62
LOCATION L0006727	VOLUME	465165.958	3809762.478	1063.36
LOCATION L0006728	VOLUME	465172.930	3809767.514	1063.16

** End of LINE VOLUME Source ID = TRUCK1I15

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = TRUCK395

** DESCRSRC Truck road segment north from 1 to 395

** PREFIX

** Length of Side = 8.60

** Configuration = Adjacent

** Emission Rate = 1.0

** Vertical Dimension = 6.80

** SZINIT = 3.16

** Nodes = 3

** 463244.603, 3809556.884, 1086.00, 3.40, 4.00

** 463288.774, 3809974.497, 1079.23, 3.40, 4.00

** 463296.805, 3811359.847, 1059.20, 3.40, 4.00

**

LOCATION L0006729	VOLUME	463245.055	3809561.160	1085.97
LOCATION L0006730	VOLUME	463245.960	3809569.712	1086.00
LOCATION L0006731	VOLUME	463246.865	3809578.264	1086.00
LOCATION L0006732	VOLUME	463247.769	3809586.817	1086.00
LOCATION L0006733	VOLUME	463248.674	3809595.369	1086.00
LOCATION L0006734	VOLUME	463249.578	3809603.921	1085.73
LOCATION L0006735	VOLUME	463250.483	3809612.474	1085.45
LOCATION L0006736	VOLUME	463251.387	3809621.026	1085.16
LOCATION L0006737	VOLUME	463252.292	3809629.578	1084.95
LOCATION L0006738	VOLUME	463253.197	3809638.130	1084.82
LOCATION L0006739	VOLUME	463254.101	3809646.683	1084.67
LOCATION L0006740	VOLUME	463255.006	3809655.235	1084.51
LOCATION L0006741	VOLUME	463255.910	3809663.787	1084.35
LOCATION L0006742	VOLUME	463256.815	3809672.340	1084.20
LOCATION L0006743	VOLUME	463257.719	3809680.892	1084.07
LOCATION L0006744	VOLUME	463258.624	3809689.444	1084.00
LOCATION L0006745	VOLUME	463259.529	3809697.996	1084.00
LOCATION L0006746	VOLUME	463260.433	3809706.549	1084.00
LOCATION L0006747	VOLUME	463261.338	3809715.101	1084.00
LOCATION L0006748	VOLUME	463262.242	3809723.653	1083.74
LOCATION L0006749	VOLUME	463263.147	3809732.206	1083.46
LOCATION L0006750	VOLUME	463264.051	3809740.758	1083.17
LOCATION L0006751	VOLUME	463264.956	3809749.310	1082.91
LOCATION L0006752	VOLUME	463265.861	3809757.863	1082.66
LOCATION L0006753	VOLUME	463266.765	3809766.415	1082.39
LOCATION L0006754	VOLUME	463267.670	3809774.967	1082.11
LOCATION L0006755	VOLUME	463268.574	3809783.519	1082.04
LOCATION L0006756	VOLUME	463269.479	3809792.072	1082.01
LOCATION L0006757	VOLUME	463270.383	3809800.624	1082.00
LOCATION L0006758	VOLUME	463271.288	3809809.176	1082.00

LOCATION	L0006759	VOLUME	463272.193	3809817.729	1081.97
LOCATION	L0006760	VOLUME	463273.097	3809826.281	1081.93
LOCATION	L0006761	VOLUME	463274.002	3809834.833	1081.87
LOCATION	L0006762	VOLUME	463274.906	3809843.386	1081.63
LOCATION	L0006763	VOLUME	463275.811	3809851.938	1081.38
LOCATION	L0006764	VOLUME	463276.715	3809860.490	1081.14
LOCATION	L0006765	VOLUME	463277.620	3809869.042	1080.97
LOCATION	L0006766	VOLUME	463278.525	3809877.595	1080.89
LOCATION	L0006767	VOLUME	463279.429	3809886.147	1080.79
LOCATION	L0006768	VOLUME	463280.334	3809894.699	1080.67
LOCATION	L0006769	VOLUME	463281.238	3809903.252	1080.47
LOCATION	L0006770	VOLUME	463282.143	3809911.804	1080.28
LOCATION	L0006771	VOLUME	463283.047	3809920.356	1080.10
LOCATION	L0006772	VOLUME	463283.952	3809928.908	1080.00
LOCATION	L0006773	VOLUME	463284.857	3809937.461	1080.00
LOCATION	L0006774	VOLUME	463285.761	3809946.013	1080.00
LOCATION	L0006775	VOLUME	463286.666	3809954.565	1080.00
LOCATION	L0006776	VOLUME	463287.570	3809963.118	1079.76
LOCATION	L0006777	VOLUME	463288.475	3809971.670	1079.48
LOCATION	L0006778	VOLUME	463288.807	3809980.254	1079.19
LOCATION	L0006779	VOLUME	463288.857	3809988.854	1078.94
LOCATION	L0006780	VOLUME	463288.907	3809997.454	1078.76
LOCATION	L0006781	VOLUME	463288.957	3810006.054	1078.58
LOCATION	L0006782	VOLUME	463289.007	3810014.653	1078.39
LOCATION	L0006783	VOLUME	463289.056	3810023.253	1078.28
LOCATION	L0006784	VOLUME	463289.106	3810031.853	1078.17
LOCATION	L0006785	VOLUME	463289.156	3810040.453	1078.07
LOCATION	L0006786	VOLUME	463289.206	3810049.053	1077.93
LOCATION	L0006787	VOLUME	463289.256	3810057.653	1077.75
LOCATION	L0006788	VOLUME	463289.306	3810066.253	1077.56
LOCATION	L0006789	VOLUME	463289.356	3810074.852	1077.38
LOCATION	L0006790	VOLUME	463289.405	3810083.452	1077.26
LOCATION	L0006791	VOLUME	463289.455	3810092.052	1077.16
LOCATION	L0006792	VOLUME	463289.505	3810100.652	1077.06
LOCATION	L0006793	VOLUME	463289.555	3810109.252	1076.89
LOCATION	L0006794	VOLUME	463289.605	3810117.852	1076.60
LOCATION	L0006795	VOLUME	463289.655	3810126.452	1076.32
LOCATION	L0006796	VOLUME	463289.705	3810135.051	1076.03
LOCATION	L0006797	VOLUME	463289.754	3810143.651	1076.00
LOCATION	L0006798	VOLUME	463289.804	3810152.251	1076.00
LOCATION	L0006799	VOLUME	463289.854	3810160.851	1076.00
LOCATION	L0006800	VOLUME	463289.904	3810169.451	1075.88
LOCATION	L0006801	VOLUME	463289.954	3810178.051	1075.60
LOCATION	L0006802	VOLUME	463290.004	3810186.651	1075.31
LOCATION	L0006803	VOLUME	463290.053	3810195.250	1075.02
LOCATION	L0006804	VOLUME	463290.103	3810203.850	1074.82
LOCATION	L0006805	VOLUME	463290.153	3810212.450	1074.63
LOCATION	L0006806	VOLUME	463290.203	3810221.050	1074.44
LOCATION	L0006807	VOLUME	463290.253	3810229.650	1074.28
LOCATION	L0006808	VOLUME	463290.303	3810238.250	1074.19

LOCATION	L0006809	VOLUME	463290.353	3810246.850	1074.10
LOCATION	L0006810	VOLUME	463290.402	3810255.449	1074.01
LOCATION	L0006811	VOLUME	463290.452	3810264.049	1073.82
LOCATION	L0006812	VOLUME	463290.502	3810272.649	1073.62
LOCATION	L0006813	VOLUME	463290.552	3810281.249	1073.42
LOCATION	L0006814	VOLUME	463290.602	3810289.849	1073.27
LOCATION	L0006815	VOLUME	463290.652	3810298.449	1073.18
LOCATION	L0006816	VOLUME	463290.702	3810307.049	1073.09
LOCATION	L0006817	VOLUME	463290.751	3810315.648	1073.00
LOCATION	L0006818	VOLUME	463290.801	3810324.248	1072.72
LOCATION	L0006819	VOLUME	463290.851	3810332.848	1072.44
LOCATION	L0006820	VOLUME	463290.901	3810341.448	1072.15
LOCATION	L0006821	VOLUME	463290.951	3810350.048	1072.00
LOCATION	L0006822	VOLUME	463291.001	3810358.648	1072.00
LOCATION	L0006823	VOLUME	463291.051	3810367.248	1072.00
LOCATION	L0006824	VOLUME	463291.100	3810375.847	1072.00
LOCATION	L0006825	VOLUME	463291.150	3810384.447	1072.00
LOCATION	L0006826	VOLUME	463291.200	3810393.047	1072.00
LOCATION	L0006827	VOLUME	463291.250	3810401.647	1072.00
LOCATION	L0006828	VOLUME	463291.300	3810410.247	1071.86
LOCATION	L0006829	VOLUME	463291.350	3810418.847	1071.57
LOCATION	L0006830	VOLUME	463291.400	3810427.447	1071.28
LOCATION	L0006831	VOLUME	463291.449	3810436.046	1071.00
LOCATION	L0006832	VOLUME	463291.499	3810444.646	1071.00
LOCATION	L0006833	VOLUME	463291.549	3810453.246	1071.00
LOCATION	L0006834	VOLUME	463291.599	3810461.846	1071.00
LOCATION	L0006835	VOLUME	463291.649	3810470.446	1070.89
LOCATION	L0006836	VOLUME	463291.699	3810479.046	1070.68
LOCATION	L0006837	VOLUME	463291.749	3810487.646	1070.47
LOCATION	L0006838	VOLUME	463291.798	3810496.245	1070.27
LOCATION	L0006839	VOLUME	463291.848	3810504.845	1070.19
LOCATION	L0006840	VOLUME	463291.898	3810513.445	1070.11
LOCATION	L0006841	VOLUME	463291.948	3810522.045	1070.03
LOCATION	L0006842	VOLUME	463291.998	3810530.645	1070.00
LOCATION	L0006843	VOLUME	463292.048	3810539.245	1070.00
LOCATION	L0006844	VOLUME	463292.098	3810547.845	1070.00
LOCATION	L0006845	VOLUME	463292.147	3810556.444	1069.98
LOCATION	L0006846	VOLUME	463292.197	3810565.044	1069.70
LOCATION	L0006847	VOLUME	463292.247	3810573.644	1069.41
LOCATION	L0006848	VOLUME	463292.297	3810582.244	1069.12
LOCATION	L0006849	VOLUME	463292.347	3810590.844	1069.00
LOCATION	L0006850	VOLUME	463292.397	3810599.444	1069.00
LOCATION	L0006851	VOLUME	463292.446	3810608.044	1069.00
LOCATION	L0006852	VOLUME	463292.496	3810616.643	1068.98
LOCATION	L0006853	VOLUME	463292.546	3810625.243	1068.69
LOCATION	L0006854	VOLUME	463292.596	3810633.843	1068.40
LOCATION	L0006855	VOLUME	463292.646	3810642.443	1068.12
LOCATION	L0006856	VOLUME	463292.696	3810651.043	1068.00
LOCATION	L0006857	VOLUME	463292.746	3810659.643	1068.00
LOCATION	L0006858	VOLUME	463292.795	3810668.243	1068.00

LOCATION	L0006859	VOLUME	463292.845	3810676.842	1067.98
LOCATION	L0006860	VOLUME	463292.895	3810685.442	1067.76
LOCATION	L0006861	VOLUME	463292.945	3810694.042	1067.54
LOCATION	L0006862	VOLUME	463292.995	3810702.642	1067.32
LOCATION	L0006863	VOLUME	463293.045	3810711.242	1067.19
LOCATION	L0006864	VOLUME	463293.095	3810719.842	1067.12
LOCATION	L0006865	VOLUME	463293.144	3810728.441	1067.06
LOCATION	L0006866	VOLUME	463293.194	3810737.041	1066.97
LOCATION	L0006867	VOLUME	463293.244	3810745.641	1066.75
LOCATION	L0006868	VOLUME	463293.294	3810754.241	1066.53
LOCATION	L0006869	VOLUME	463293.344	3810762.841	1066.30
LOCATION	L0006870	VOLUME	463293.394	3810771.441	1066.18
LOCATION	L0006871	VOLUME	463293.444	3810780.041	1066.12
LOCATION	L0006872	VOLUME	463293.493	3810788.640	1066.05
LOCATION	L0006873	VOLUME	463293.543	3810797.240	1066.00
LOCATION	L0006874	VOLUME	463293.593	3810805.840	1066.00
LOCATION	L0006875	VOLUME	463293.643	3810814.440	1066.00
LOCATION	L0006876	VOLUME	463293.693	3810823.040	1066.00
LOCATION	L0006877	VOLUME	463293.743	3810831.640	1065.85
LOCATION	L0006878	VOLUME	463293.793	3810840.240	1065.62
LOCATION	L0006879	VOLUME	463293.842	3810848.839	1065.39
LOCATION	L0006880	VOLUME	463293.892	3810857.439	1065.19
LOCATION	L0006881	VOLUME	463293.942	3810866.039	1065.13
LOCATION	L0006882	VOLUME	463293.992	3810874.639	1065.08
LOCATION	L0006883	VOLUME	463294.042	3810883.239	1065.02
LOCATION	L0006884	VOLUME	463294.092	3810891.839	1065.00
LOCATION	L0006885	VOLUME	463294.142	3810900.439	1065.00
LOCATION	L0006886	VOLUME	463294.191	3810909.038	1065.00
LOCATION	L0006887	VOLUME	463294.241	3810917.638	1065.00
LOCATION	L0006888	VOLUME	463294.291	3810926.238	1065.00
LOCATION	L0006889	VOLUME	463294.341	3810934.838	1065.00
LOCATION	L0006890	VOLUME	463294.391	3810943.438	1065.00
LOCATION	L0006891	VOLUME	463294.441	3810952.038	1064.83
LOCATION	L0006892	VOLUME	463294.491	3810960.638	1064.60
LOCATION	L0006893	VOLUME	463294.540	3810969.237	1064.36
LOCATION	L0006894	VOLUME	463294.590	3810977.837	1064.17
LOCATION	L0006895	VOLUME	463294.640	3810986.437	1064.12
LOCATION	L0006896	VOLUME	463294.690	3810995.037	1064.06
LOCATION	L0006897	VOLUME	463294.740	3811003.637	1064.01
LOCATION	L0006898	VOLUME	463294.790	3811012.237	1064.00
LOCATION	L0006899	VOLUME	463294.840	3811020.837	1064.00
LOCATION	L0006900	VOLUME	463294.889	3811029.436	1064.00
LOCATION	L0006901	VOLUME	463294.939	3811038.036	1063.94
LOCATION	L0006902	VOLUME	463294.989	3811046.636	1063.70
LOCATION	L0006903	VOLUME	463295.039	3811055.236	1063.46
LOCATION	L0006904	VOLUME	463295.089	3811063.836	1063.22
LOCATION	L0006905	VOLUME	463295.139	3811072.436	1063.13
LOCATION	L0006906	VOLUME	463295.188	3811081.036	1063.08
LOCATION	L0006907	VOLUME	463295.238	3811089.635	1063.03
LOCATION	L0006908	VOLUME	463295.288	3811098.235	1062.93

LOCATION L0006909	VOLUME	463295.338	3811106.835	1062.69
LOCATION L0006910	VOLUME	463295.388	3811115.435	1062.45
LOCATION L0006911	VOLUME	463295.438	3811124.035	1062.20
LOCATION L0006912	VOLUME	463295.488	3811132.635	1062.12
LOCATION L0006913	VOLUME	463295.537	3811141.235	1062.07
LOCATION L0006914	VOLUME	463295.587	3811149.834	1062.03
LOCATION L0006915	VOLUME	463295.637	3811158.434	1062.00
LOCATION L0006916	VOLUME	463295.687	3811167.034	1062.00
LOCATION L0006917	VOLUME	463295.737	3811175.634	1062.00
LOCATION L0006918	VOLUME	463295.787	3811184.234	1062.00
LOCATION L0006919	VOLUME	463295.837	3811192.834	1061.80
LOCATION L0006920	VOLUME	463295.886	3811201.434	1061.55
LOCATION L0006921	VOLUME	463295.936	3811210.033	1061.30
LOCATION L0006922	VOLUME	463295.986	3811218.633	1061.12
LOCATION L0006923	VOLUME	463296.036	3811227.233	1061.08
LOCATION L0006924	VOLUME	463296.086	3811235.833	1061.04
LOCATION L0006925	VOLUME	463296.136	3811244.433	1061.01
LOCATION L0006926	VOLUME	463296.186	3811253.033	1060.79
LOCATION L0006927	VOLUME	463296.235	3811261.633	1060.54
LOCATION L0006928	VOLUME	463296.285	3811270.232	1060.29
LOCATION L0006929	VOLUME	463296.335	3811278.832	1060.11
LOCATION L0006930	VOLUME	463296.385	3811287.432	1060.07
LOCATION L0006931	VOLUME	463296.435	3811296.032	1060.04
LOCATION L0006932	VOLUME	463296.485	3811304.632	1060.00
LOCATION L0006933	VOLUME	463296.535	3811313.232	1060.00
LOCATION L0006934	VOLUME	463296.584	3811321.832	1060.00
LOCATION L0006935	VOLUME	463296.634	3811330.431	1060.00
LOCATION L0006936	VOLUME	463296.684	3811339.031	1059.91
LOCATION L0006937	VOLUME	463296.734	3811347.631	1059.65
LOCATION L0006938	VOLUME	463296.784	3811356.231	1059.40

** End of LINE VOLUME Source ID = TRUCK395

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = IDLE

** DESCRSRC Truck idling emissions at bays

** PREFIX

** Length of Side = 3.12

** Configuration = Adjacent

** Emission Rate = 1.0

** Vertical Dimension = 3.16

** SZINIT = 1.47

** Nodes = 2

** 463798.449, 3808477.615, 1099.00, 4.00, 1.45

** 464031.164, 3808477.389, 1097.22, 4.00, 1.45

** -----

LOCATION L0005936	VOLUME	463800.009	3808477.613	1099.00
LOCATION L0005937	VOLUME	463803.129	3808477.610	1099.00
LOCATION L0005938	VOLUME	463806.249	3808477.607	1099.00
LOCATION L0005939	VOLUME	463809.369	3808477.604	1099.00
LOCATION L0005940	VOLUME	463812.489	3808477.601	1098.94

LOCATION	L0005941	VOLUME	463815.609	3808477.598	1098.86
LOCATION	L0005942	VOLUME	463818.729	3808477.595	1098.79
LOCATION	L0005943	VOLUME	463821.849	3808477.592	1098.71
LOCATION	L0005944	VOLUME	463824.969	3808477.589	1098.64
LOCATION	L0005945	VOLUME	463828.089	3808477.586	1098.56
LOCATION	L0005946	VOLUME	463831.209	3808477.583	1098.49
LOCATION	L0005947	VOLUME	463834.329	3808477.580	1098.41
LOCATION	L0005948	VOLUME	463837.449	3808477.577	1098.34
LOCATION	L0005949	VOLUME	463840.569	3808477.574	1098.28
LOCATION	L0005950	VOLUME	463843.689	3808477.571	1098.28
LOCATION	L0005951	VOLUME	463846.809	3808477.568	1098.28
LOCATION	L0005952	VOLUME	463849.929	3808477.565	1098.28
LOCATION	L0005953	VOLUME	463853.049	3808477.562	1098.28
LOCATION	L0005954	VOLUME	463856.169	3808477.559	1098.28
LOCATION	L0005955	VOLUME	463859.289	3808477.556	1098.28
LOCATION	L0005956	VOLUME	463862.409	3808477.553	1098.28
LOCATION	L0005957	VOLUME	463865.529	3808477.550	1098.28
LOCATION	L0005958	VOLUME	463868.649	3808477.547	1098.28
LOCATION	L0005959	VOLUME	463871.769	3808477.544	1098.26
LOCATION	L0005960	VOLUME	463874.889	3808477.541	1098.23
LOCATION	L0005961	VOLUME	463878.009	3808477.538	1098.21
LOCATION	L0005962	VOLUME	463881.129	3808477.535	1098.18
LOCATION	L0005963	VOLUME	463884.249	3808477.532	1098.15
LOCATION	L0005964	VOLUME	463887.369	3808477.529	1098.12
LOCATION	L0005965	VOLUME	463890.489	3808477.526	1098.09
LOCATION	L0005966	VOLUME	463893.609	3808477.522	1098.06
LOCATION	L0005967	VOLUME	463896.729	3808477.519	1098.03
LOCATION	L0005968	VOLUME	463899.849	3808477.516	1098.00
LOCATION	L0005969	VOLUME	463902.969	3808477.513	1098.00
LOCATION	L0005970	VOLUME	463906.089	3808477.510	1098.00
LOCATION	L0005971	VOLUME	463909.209	3808477.507	1098.00
LOCATION	L0005972	VOLUME	463912.329	3808477.504	1098.00
LOCATION	L0005973	VOLUME	463915.449	3808477.501	1098.00
LOCATION	L0005974	VOLUME	463918.569	3808477.498	1098.00
LOCATION	L0005975	VOLUME	463921.689	3808477.495	1098.00
LOCATION	L0005976	VOLUME	463924.809	3808477.492	1098.00
LOCATION	L0005977	VOLUME	463927.929	3808477.489	1098.00
LOCATION	L0005978	VOLUME	463931.049	3808477.486	1097.97
LOCATION	L0005979	VOLUME	463934.169	3808477.483	1097.90
LOCATION	L0005980	VOLUME	463937.289	3808477.480	1097.83
LOCATION	L0005981	VOLUME	463940.409	3808477.477	1097.75
LOCATION	L0005982	VOLUME	463943.529	3808477.474	1097.68
LOCATION	L0005983	VOLUME	463946.649	3808477.471	1097.60
LOCATION	L0005984	VOLUME	463949.769	3808477.468	1097.53
LOCATION	L0005985	VOLUME	463952.889	3808477.465	1097.45
LOCATION	L0005986	VOLUME	463956.009	3808477.462	1097.38
LOCATION	L0005987	VOLUME	463959.129	3808477.459	1097.30
LOCATION	L0005988	VOLUME	463962.249	3808477.456	1097.28
LOCATION	L0005989	VOLUME	463965.369	3808477.453	1097.28
LOCATION	L0005990	VOLUME	463968.489	3808477.450	1097.28

LOCATION	L0005991	VOLUME	463971.609	3808477.447	1097.28
LOCATION	L0005992	VOLUME	463974.729	3808477.444	1097.28
LOCATION	L0005993	VOLUME	463977.849	3808477.441	1097.28
LOCATION	L0005994	VOLUME	463980.969	3808477.438	1097.28
LOCATION	L0005995	VOLUME	463984.089	3808477.435	1097.28
LOCATION	L0005996	VOLUME	463987.209	3808477.432	1097.28
LOCATION	L0005997	VOLUME	463990.329	3808477.429	1097.28
LOCATION	L0005998	VOLUME	463993.449	3808477.426	1097.28
LOCATION	L0005999	VOLUME	463996.569	3808477.423	1097.28
LOCATION	L0006000	VOLUME	463999.689	3808477.420	1097.28
LOCATION	L0006001	VOLUME	464002.809	3808477.417	1097.28
LOCATION	L0006002	VOLUME	464005.929	3808477.414	1097.28
LOCATION	L0006003	VOLUME	464009.049	3808477.411	1097.28
LOCATION	L0006004	VOLUME	464012.169	3808477.408	1097.28
LOCATION	L0006005	VOLUME	464015.289	3808477.405	1097.28
LOCATION	L0006006	VOLUME	464018.409	3808477.402	1097.28
LOCATION	L0006007	VOLUME	464021.529	3808477.399	1097.27
LOCATION	L0006008	VOLUME	464024.649	3808477.396	1097.24
LOCATION	L0006009	VOLUME	464027.769	3808477.393	1097.21
LOCATION	L0006010	VOLUME	464030.889	3808477.390	1097.18

** End of LINE VOLUME Source ID = IDLE

** Source Parameters **

** LINE VOLUME Source ID = TRUCK10

SRCPARAM	L0006011	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006012	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006013	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006014	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006015	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006016	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006017	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006018	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006019	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006020	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006021	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006022	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006023	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006024	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006025	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006026	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006027	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006028	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006029	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006030	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006031	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006032	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006033	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006034	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006035	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006036	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006037	0.0111111111	3.40	4.00	3.16

[illegible]

SRCPARAM	L0006088	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006089	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006090	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006091	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006092	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006093	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006094	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006095	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006096	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006097	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006098	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006099	0.0111111111	3.40	4.00	3.16
SRCPARAM	L0006100	0.0111111111	3.40	4.00	3.16

**

** LINE VOLUME Source ID = TRUCK9

SRCPARAM	L0006101	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006102	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006103	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006104	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006105	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006106	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006107	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006108	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006109	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006110	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006111	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006112	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006113	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006114	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006115	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006116	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006117	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006118	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006119	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006120	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006121	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006122	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006123	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006124	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006125	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006126	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006127	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006128	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006129	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006130	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006131	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006132	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006133	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006134	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006135	0.0263157895	3.40	4.00	3.16

SRCPARAM	L0006136	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006137	0.0263157895	3.40	4.00	3.16
SRCPARAM	L0006138	0.0263157895	3.40	4.00	3.16

**

** LINE VOLUME Source ID = TRUCK43

SRCPARAM	L0005092	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005093	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005094	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005095	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005096	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005097	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005098	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005099	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005100	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005101	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005102	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005103	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005104	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005105	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005106	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005107	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005108	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005109	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005110	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005111	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005112	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005113	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005114	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005115	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005116	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005117	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005118	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005119	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005120	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005121	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005122	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005123	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005124	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005125	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005126	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005127	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005128	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005129	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005130	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005131	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005132	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005133	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005134	0.0227272727	3.40	4.00	3.16
SRCPARAM	L0005135	0.0227272727	3.40	4.00	3.16

**


```
** LINE VOLUME Source ID = TRUCK3I15
```

[illegible]

[illegible]

[illegible]

[illegible]

SRCPARAM	L0006338	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006339	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006340	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006341	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006342	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006343	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006344	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006345	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006346	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006347	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006348	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006349	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006350	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006351	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006352	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006353	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006354	0.0046082949	3.40	4.00	3.16
SRCPARAM	L0006355	0.0046082949	3.40	4.00	3.16

**

** LINE VOLUME Source ID = TRUCK31

SRCPARAM	L0006356	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006357	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006358	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006359	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006360	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006361	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006362	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006363	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006364	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006365	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006366	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006367	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006368	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006369	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006370	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006371	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006372	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006373	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006374	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006375	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006376	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006377	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006378	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006379	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006380	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006381	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006382	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006383	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006384	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006385	0.0072992701	3.40	4.00	3.16

[illegible]

[illegible]

SRCPARAM	L0006486	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006487	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006488	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006489	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006490	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006491	0.0072992701	3.40	4.00	3.16
SRCPARAM	L0006492	0.0072992701	3.40	4.00	3.16

**

** LINE VOLUME Source ID = TRUCK1I15

SRCPARAM	L0006493	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006494	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006495	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006496	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006497	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006498	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006499	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006500	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006501	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006502	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006503	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006504	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006505	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006506	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006507	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006508	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006509	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006510	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006511	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006512	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006513	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006514	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006515	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006516	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006517	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006518	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006519	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006520	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006521	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006522	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006523	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006524	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006525	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006526	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006527	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006528	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006529	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006530	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006531	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006532	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006533	0.0042372881	3.40	4.00	3.16

[illegible]

[illegible]

[illegible]

SRCPARAM	L0006684	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006685	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006686	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006687	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006688	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006689	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006690	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006691	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006692	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006693	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006694	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006695	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006696	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006697	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006698	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006699	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006700	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006701	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006702	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006703	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006704	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006705	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006706	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006707	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006708	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006709	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006710	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006711	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006712	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006713	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006714	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006715	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006716	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006717	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006718	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006719	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006720	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006721	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006722	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006723	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006724	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006725	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006726	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006727	0.0042372881	3.40	4.00	3.16
SRCPARAM	L0006728	0.0042372881	3.40	4.00	3.16

**

** LINE VOLUME Source ID = TRUCK395

SRCPARAM	L0006729	0.0047619048	3.40	4.00	3.16
SRCPARAM	L0006730	0.0047619048	3.40	4.00	3.16
SRCPARAM	L0006731	0.0047619048	3.40	4.00	3.16

[illegible]

[illegible]

[illegible]

[illegible]

SRCPARAM	L0006932	0.0047619048	3.40	4.00	3.16
SRCPARAM	L0006933	0.0047619048	3.40	4.00	3.16
SRCPARAM	L0006934	0.0047619048	3.40	4.00	3.16
SRCPARAM	L0006935	0.0047619048	3.40	4.00	3.16
SRCPARAM	L0006936	0.0047619048	3.40	4.00	3.16
SRCPARAM	L0006937	0.0047619048	3.40	4.00	3.16
SRCPARAM	L0006938	0.0047619048	3.40	4.00	3.16

**

** LINE VOLUME Source ID = IDLE

SRCPARAM	L0005936	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005937	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005938	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005939	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005940	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005941	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005942	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005943	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005944	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005945	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005946	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005947	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005948	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005949	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005950	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005951	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005952	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005953	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005954	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005955	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005956	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005957	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005958	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005959	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005960	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005961	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005962	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005963	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005964	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005965	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005966	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005967	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005968	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005969	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005970	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005971	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005972	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005973	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005974	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005975	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005976	0.0133333333	4.00	1.45	1.47

SRCPARAM	L0005977	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005978	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005979	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005980	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005981	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005982	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005983	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005984	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005985	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005986	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005987	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005988	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005989	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005990	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005991	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005992	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005993	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005994	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005995	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005996	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005997	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005998	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0005999	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006000	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006001	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006002	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006003	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006004	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006005	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006006	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006007	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006008	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006009	0.0133333333	4.00	1.45	1.47
SRCPARAM	L0006010	0.0133333333	4.00	1.45	1.47

**

URBANSRC	ALL					
SRCGROUP	IDLE	L0005936	L0005937	L0005938	L0005939	L0005940
SRCGROUP	IDLE	L0005942	L0005943	L0005944	L0005945	L0005946
SRCGROUP	IDLE	L0005948	L0005949	L0005950	L0005951	L0005952
SRCGROUP	IDLE	L0005954	L0005955	L0005956	L0005957	L0005958
SRCGROUP	IDLE	L0005960	L0005961	L0005962	L0005963	L0005964
SRCGROUP	IDLE	L0005966	L0005967	L0005968	L0005969	L0005970
SRCGROUP	IDLE	L0005972	L0005973	L0005974	L0005975	L0005976
SRCGROUP	IDLE	L0005978	L0005979	L0005980	L0005981	L0005982
SRCGROUP	IDLE	L0005984	L0005985	L0005986	L0005987	L0005988
SRCGROUP	IDLE	L0005990	L0005991	L0005992	L0005993	L0005994
SRCGROUP	IDLE	L0005996	L0005997	L0005998	L0005999	L0006000
SRCGROUP	IDLE	L0006002	L0006003	L0006004	L0006005	L0006006
SRCGROUP	IDLE	L0006008	L0006009	L0006010		
SRCGROUP	TRUCK1I1	L0006493	L0006494	L0006495	L0006496	L0006497

SRCGROUP	TRUCK1I1	L0006499	L0006500	L0006501	L0006502	L0006503	L0006504
SRCGROUP	TRUCK1I1	L0006505	L0006506	L0006507	L0006508	L0006509	L0006510
SRCGROUP	TRUCK1I1	L0006511	L0006512	L0006513	L0006514	L0006515	L0006516
SRCGROUP	TRUCK1I1	L0006517	L0006518	L0006519	L0006520	L0006521	L0006522
SRCGROUP	TRUCK1I1	L0006523	L0006524	L0006525	L0006526	L0006527	L0006528
SRCGROUP	TRUCK1I1	L0006529	L0006530	L0006531	L0006532	L0006533	L0006534
SRCGROUP	TRUCK1I1	L0006535	L0006536	L0006537	L0006538	L0006539	L0006540
SRCGROUP	TRUCK1I1	L0006541	L0006542	L0006543	L0006544	L0006545	L0006546
SRCGROUP	TRUCK1I1	L0006547	L0006548	L0006549	L0006550	L0006551	L0006552
SRCGROUP	TRUCK1I1	L0006553	L0006554	L0006555	L0006556	L0006557	L0006558
SRCGROUP	TRUCK1I1	L0006559	L0006560	L0006561	L0006562	L0006563	L0006564
SRCGROUP	TRUCK1I1	L0006565	L0006566	L0006567	L0006568	L0006569	L0006570
SRCGROUP	TRUCK1I1	L0006571	L0006572	L0006573	L0006574	L0006575	L0006576
SRCGROUP	TRUCK1I1	L0006577	L0006578	L0006579	L0006580	L0006581	L0006582
SRCGROUP	TRUCK1I1	L0006583	L0006584	L0006585	L0006586	L0006587	L0006588
SRCGROUP	TRUCK1I1	L0006589	L0006590	L0006591	L0006592	L0006593	L0006594
SRCGROUP	TRUCK1I1	L0006595	L0006596	L0006597	L0006598	L0006599	L0006600
SRCGROUP	TRUCK1I1	L0006601	L0006602	L0006603	L0006604	L0006605	L0006606
SRCGROUP	TRUCK1I1	L0006607	L0006608	L0006609	L0006610	L0006611	L0006612
SRCGROUP	TRUCK1I1	L0006613	L0006614	L0006615	L0006616	L0006617	L0006618
SRCGROUP	TRUCK1I1	L0006619	L0006620	L0006621	L0006622	L0006623	L0006624
SRCGROUP	TRUCK1I1	L0006625	L0006626	L0006627	L0006628	L0006629	L0006630
SRCGROUP	TRUCK1I1	L0006631	L0006632	L0006633	L0006634	L0006635	L0006636
SRCGROUP	TRUCK1I1	L0006637	L0006638	L0006639	L0006640	L0006641	L0006642
SRCGROUP	TRUCK1I1	L0006643	L0006644	L0006645	L0006646	L0006647	L0006648
SRCGROUP	TRUCK1I1	L0006649	L0006650	L0006651	L0006652	L0006653	L0006654
SRCGROUP	TRUCK1I1	L0006655	L0006656	L0006657	L0006658	L0006659	L0006660
SRCGROUP	TRUCK1I1	L0006661	L0006662	L0006663	L0006664	L0006665	L0006666
SRCGROUP	TRUCK1I1	L0006667	L0006668	L0006669	L0006670	L0006671	L0006672
SRCGROUP	TRUCK1I1	L0006673	L0006674	L0006675	L0006676	L0006677	L0006678
SRCGROUP	TRUCK1I1	L0006679	L0006680	L0006681	L0006682	L0006683	L0006684
SRCGROUP	TRUCK1I1	L0006685	L0006686	L0006687	L0006688	L0006689	L0006690
SRCGROUP	TRUCK1I1	L0006691	L0006692	L0006693	L0006694	L0006695	L0006696
SRCGROUP	TRUCK1I1	L0006697	L0006698	L0006699	L0006700	L0006701	L0006702
SRCGROUP	TRUCK1I1	L0006703	L0006704	L0006705	L0006706	L0006707	L0006708
SRCGROUP	TRUCK1I1	L0006709	L0006710	L0006711	L0006712	L0006713	L0006714
SRCGROUP	TRUCK1I1	L0006715	L0006716	L0006717	L0006718	L0006719	L0006720
SRCGROUP	TRUCK1I1	L0006721	L0006722	L0006723	L0006724	L0006725	L0006726
SRCGROUP	TRUCK1I1	L0006727	L0006728				
SRCGROUP	TRUCK10	L0006011	L0006012	L0006013	L0006014	L0006015	L0006016
SRCGROUP	TRUCK10	L0006017	L0006018	L0006019	L0006020	L0006021	L0006022
SRCGROUP	TRUCK10	L0006023	L0006024	L0006025	L0006026	L0006027	L0006028
SRCGROUP	TRUCK10	L0006029	L0006030	L0006031	L0006032	L0006033	L0006034
SRCGROUP	TRUCK10	L0006035	L0006036	L0006037	L0006038	L0006039	L0006040
SRCGROUP	TRUCK10	L0006041	L0006042	L0006043	L0006044	L0006045	L0006046
SRCGROUP	TRUCK10	L0006047	L0006048	L0006049	L0006050	L0006051	L0006052
SRCGROUP	TRUCK10	L0006053	L0006054	L0006055	L0006056	L0006057	L0006058
SRCGROUP	TRUCK10	L0006059	L0006060	L0006061	L0006062	L0006063	L0006064
SRCGROUP	TRUCK10	L0006065	L0006066	L0006067	L0006068	L0006069	L0006070
SRCGROUP	TRUCK10	L0006071	L0006072	L0006073	L0006074	L0006075	L0006076

SRCGROUP	TRUCK10	L0006077	L0006078	L0006079	L0006080	L0006081	L0006082
SRCGROUP	TRUCK10	L0006083	L0006084	L0006085	L0006086	L0006087	L0006088
SRCGROUP	TRUCK10	L0006089	L0006090	L0006091	L0006092	L0006093	L0006094
SRCGROUP	TRUCK10	L0006095	L0006096	L0006097	L0006098	L0006099	L0006100
SRCGROUP	TRUCK31	L0006356	L0006357	L0006358	L0006359	L0006360	L0006361
SRCGROUP	TRUCK31	L0006362	L0006363	L0006364	L0006365	L0006366	L0006367
SRCGROUP	TRUCK31	L0006368	L0006369	L0006370	L0006371	L0006372	L0006373
SRCGROUP	TRUCK31	L0006374	L0006375	L0006376	L0006377	L0006378	L0006379
SRCGROUP	TRUCK31	L0006380	L0006381	L0006382	L0006383	L0006384	L0006385
SRCGROUP	TRUCK31	L0006386	L0006387	L0006388	L0006389	L0006390	L0006391
SRCGROUP	TRUCK31	L0006392	L0006393	L0006394	L0006395	L0006396	L0006397
SRCGROUP	TRUCK31	L0006398	L0006399	L0006400	L0006401	L0006402	L0006403
SRCGROUP	TRUCK31	L0006404	L0006405	L0006406	L0006407	L0006408	L0006409
SRCGROUP	TRUCK31	L0006410	L0006411	L0006412	L0006413	L0006414	L0006415
SRCGROUP	TRUCK31	L0006416	L0006417	L0006418	L0006419	L0006420	L0006421
SRCGROUP	TRUCK31	L0006422	L0006423	L0006424	L0006425	L0006426	L0006427
SRCGROUP	TRUCK31	L0006428	L0006429	L0006430	L0006431	L0006432	L0006433
SRCGROUP	TRUCK31	L0006434	L0006435	L0006436	L0006437	L0006438	L0006439
SRCGROUP	TRUCK31	L0006440	L0006441	L0006442	L0006443	L0006444	L0006445
SRCGROUP	TRUCK31	L0006446	L0006447	L0006448	L0006449	L0006450	L0006451
SRCGROUP	TRUCK31	L0006452	L0006453	L0006454	L0006455	L0006456	L0006457
SRCGROUP	TRUCK31	L0006458	L0006459	L0006460	L0006461	L0006462	L0006463
SRCGROUP	TRUCK31	L0006464	L0006465	L0006466	L0006467	L0006468	L0006469
SRCGROUP	TRUCK31	L0006470	L0006471	L0006472	L0006473	L0006474	L0006475
SRCGROUP	TRUCK31	L0006476	L0006477	L0006478	L0006479	L0006480	L0006481
SRCGROUP	TRUCK31	L0006482	L0006483	L0006484	L0006485	L0006486	L0006487
SRCGROUP	TRUCK31	L0006488	L0006489	L0006490	L0006491	L0006492	
SRCGROUP	TRUCK395	L0006729	L0006730	L0006731	L0006732	L0006733	L0006734
SRCGROUP	TRUCK395	L0006735	L0006736	L0006737	L0006738	L0006739	L0006740
SRCGROUP	TRUCK395	L0006741	L0006742	L0006743	L0006744	L0006745	L0006746
SRCGROUP	TRUCK395	L0006747	L0006748	L0006749	L0006750	L0006751	L0006752
SRCGROUP	TRUCK395	L0006753	L0006754	L0006755	L0006756	L0006757	L0006758
SRCGROUP	TRUCK395	L0006759	L0006760	L0006761	L0006762	L0006763	L0006764
SRCGROUP	TRUCK395	L0006765	L0006766	L0006767	L0006768	L0006769	L0006770
SRCGROUP	TRUCK395	L0006771	L0006772	L0006773	L0006774	L0006775	L0006776
SRCGROUP	TRUCK395	L0006777	L0006778	L0006779	L0006780	L0006781	L0006782
SRCGROUP	TRUCK395	L0006783	L0006784	L0006785	L0006786	L0006787	L0006788
SRCGROUP	TRUCK395	L0006789	L0006790	L0006791	L0006792	L0006793	L0006794
SRCGROUP	TRUCK395	L0006795	L0006796	L0006797	L0006798	L0006799	L0006800
SRCGROUP	TRUCK395	L0006801	L0006802	L0006803	L0006804	L0006805	L0006806
SRCGROUP	TRUCK395	L0006807	L0006808	L0006809	L0006810	L0006811	L0006812
SRCGROUP	TRUCK395	L0006813	L0006814	L0006815	L0006816	L0006817	L0006818
SRCGROUP	TRUCK395	L0006819	L0006820	L0006821	L0006822	L0006823	L0006824
SRCGROUP	TRUCK395	L0006825	L0006826	L0006827	L0006828	L0006829	L0006830
SRCGROUP	TRUCK395	L0006831	L0006832	L0006833	L0006834	L0006835	L0006836
SRCGROUP	TRUCK395	L0006837	L0006838	L0006839	L0006840	L0006841	L0006842
SRCGROUP	TRUCK395	L0006843	L0006844	L0006845	L0006846	L0006847	L0006848
SRCGROUP	TRUCK395	L0006849	L0006850	L0006851	L0006852	L0006853	L0006854
SRCGROUP	TRUCK395	L0006855	L0006856	L0006857	L0006858	L0006859	L0006860
SRCGROUP	TRUCK395	L0006861	L0006862	L0006863	L0006864	L0006865	L0006866

SRCGROUP	TRUCK395	L0006867	L0006868	L0006869	L0006870	L0006871	L0006872
SRCGROUP	TRUCK395	L0006873	L0006874	L0006875	L0006876	L0006877	L0006878
SRCGROUP	TRUCK395	L0006879	L0006880	L0006881	L0006882	L0006883	L0006884
SRCGROUP	TRUCK395	L0006885	L0006886	L0006887	L0006888	L0006889	L0006890
SRCGROUP	TRUCK395	L0006891	L0006892	L0006893	L0006894	L0006895	L0006896
SRCGROUP	TRUCK395	L0006897	L0006898	L0006899	L0006900	L0006901	L0006902
SRCGROUP	TRUCK395	L0006903	L0006904	L0006905	L0006906	L0006907	L0006908
SRCGROUP	TRUCK395	L0006909	L0006910	L0006911	L0006912	L0006913	L0006914
SRCGROUP	TRUCK395	L0006915	L0006916	L0006917	L0006918	L0006919	L0006920
SRCGROUP	TRUCK395	L0006921	L0006922	L0006923	L0006924	L0006925	L0006926
SRCGROUP	TRUCK395	L0006927	L0006928	L0006929	L0006930	L0006931	L0006932
SRCGROUP	TRUCK395	L0006933	L0006934	L0006935	L0006936	L0006937	L0006938
SRCGROUP	TRUCK3I1	L0006139	L0006140	L0006141	L0006142	L0006143	L0006144
SRCGROUP	TRUCK3I1	L0006145	L0006146	L0006147	L0006148	L0006149	L0006150
SRCGROUP	TRUCK3I1	L0006151	L0006152	L0006153	L0006154	L0006155	L0006156
SRCGROUP	TRUCK3I1	L0006157	L0006158	L0006159	L0006160	L0006161	L0006162
SRCGROUP	TRUCK3I1	L0006163	L0006164	L0006165	L0006166	L0006167	L0006168
SRCGROUP	TRUCK3I1	L0006169	L0006170	L0006171	L0006172	L0006173	L0006174
SRCGROUP	TRUCK3I1	L0006175	L0006176	L0006177	L0006178	L0006179	L0006180
SRCGROUP	TRUCK3I1	L0006181	L0006182	L0006183	L0006184	L0006185	L0006186
SRCGROUP	TRUCK3I1	L0006187	L0006188	L0006189	L0006190	L0006191	L0006192
SRCGROUP	TRUCK3I1	L0006193	L0006194	L0006195	L0006196	L0006197	L0006198
SRCGROUP	TRUCK3I1	L0006199	L0006200	L0006201	L0006202	L0006203	L0006204
SRCGROUP	TRUCK3I1	L0006205	L0006206	L0006207	L0006208	L0006209	L0006210
SRCGROUP	TRUCK3I1	L0006211	L0006212	L0006213	L0006214	L0006215	L0006216
SRCGROUP	TRUCK3I1	L0006217	L0006218	L0006219	L0006220	L0006221	L0006222
SRCGROUP	TRUCK3I1	L0006223	L0006224	L0006225	L0006226	L0006227	L0006228
SRCGROUP	TRUCK3I1	L0006229	L0006230	L0006231	L0006232	L0006233	L0006234
SRCGROUP	TRUCK3I1	L0006235	L0006236	L0006237	L0006238	L0006239	L0006240
SRCGROUP	TRUCK3I1	L0006241	L0006242	L0006243	L0006244	L0006245	L0006246
SRCGROUP	TRUCK3I1	L0006247	L0006248	L0006249	L0006250	L0006251	L0006252
SRCGROUP	TRUCK3I1	L0006253	L0006254	L0006255	L0006256	L0006257	L0006258
SRCGROUP	TRUCK3I1	L0006259	L0006260	L0006261	L0006262	L0006263	L0006264
SRCGROUP	TRUCK3I1	L0006265	L0006266	L0006267	L0006268	L0006269	L0006270
SRCGROUP	TRUCK3I1	L0006271	L0006272	L0006273	L0006274	L0006275	L0006276
SRCGROUP	TRUCK3I1	L0006277	L0006278	L0006279	L0006280	L0006281	L0006282
SRCGROUP	TRUCK3I1	L0006283	L0006284	L0006285	L0006286	L0006287	L0006288
SRCGROUP	TRUCK3I1	L0006289	L0006290	L0006291	L0006292	L0006293	L0006294
SRCGROUP	TRUCK3I1	L0006295	L0006296	L0006297	L0006298	L0006299	L0006300
SRCGROUP	TRUCK3I1	L0006301	L0006302	L0006303	L0006304	L0006305	L0006306
SRCGROUP	TRUCK3I1	L0006307	L0006308	L0006309	L0006310	L0006311	L0006312
SRCGROUP	TRUCK3I1	L0006313	L0006314	L0006315	L0006316	L0006317	L0006318
SRCGROUP	TRUCK3I1	L0006319	L0006320	L0006321	L0006322	L0006323	L0006324
SRCGROUP	TRUCK3I1	L0006325	L0006326	L0006327	L0006328	L0006329	L0006330
SRCGROUP	TRUCK3I1	L0006331	L0006332	L0006333	L0006334	L0006335	L0006336
SRCGROUP	TRUCK3I1	L0006337	L0006338	L0006339	L0006340	L0006341	L0006342
SRCGROUP	TRUCK3I1	L0006343	L0006344	L0006345	L0006346	L0006347	L0006348
SRCGROUP	TRUCK3I1	L0006349	L0006350	L0006351	L0006352	L0006353	L0006354
SRCGROUP	TRUCK3I1	L0006355					
SRCGROUP	TRUCK43	L0005092	L0005093	L0005094	L0005095	L0005096	L0005097

SRCGROUP TRUCK43 L0005098 L0005099 L0005100 L0005101 L0005102 L0005103
SRCGROUP TRUCK43 L0005104 L0005105 L0005106 L0005107 L0005108 L0005109
SRCGROUP TRUCK43 L0005110 L0005111 L0005112 L0005113 L0005114 L0005115
SRCGROUP TRUCK43 L0005116 L0005117 L0005118 L0005119 L0005120 L0005121
SRCGROUP TRUCK43 L0005122 L0005123 L0005124 L0005125 L0005126 L0005127
SRCGROUP TRUCK43 L0005128 L0005129 L0005130 L0005131 L0005132 L0005133
SRCGROUP TRUCK43 L0005134 L0005135
SRCGROUP TRUCK9 L0006101 L0006102 L0006103 L0006104 L0006105 L0006106
SRCGROUP TRUCK9 L0006107 L0006108 L0006109 L0006110 L0006111 L0006112
SRCGROUP TRUCK9 L0006113 L0006114 L0006115 L0006116 L0006117 L0006118
SRCGROUP TRUCK9 L0006119 L0006120 L0006121 L0006122 L0006123 L0006124
SRCGROUP TRUCK9 L0006125 L0006126 L0006127 L0006128 L0006129 L0006130
SRCGROUP TRUCK9 L0006131 L0006132 L0006133 L0006134 L0006135 L0006136
SRCGROUP TRUCK9 L0006137 L0006138
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED Poplar180peration.rou

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE "..\I15 Industrial Park8.16.21\723825\723825R.SFC"

PROFFILE "..\I15 Industrial Park8.16.21\723825\723825R.PFL"

SURFDATA 23131 2009

UAIRDATA 3160 2009 DESERT_ROCK

PROFBASE 879.4 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST POPLAR180PERATION.AD\01H1GALL.PLT 31

PLOTFILE 1 IDLE 1ST POPLAR180PERATION.AD\01H1G001.PLT 32

PLOTFILE 1 TRUCK1I1 1ST POPLAR18OPERATION.AD\01H1G002.PLT 33
PLOTFILE 1 TRUCK10 1ST POPLAR18OPERATION.AD\01H1G003.PLT 34
PLOTFILE 1 TRUCK31 1ST POPLAR18OPERATION.AD\01H1G004.PLT 35
PLOTFILE 1 TRUCK395 1ST POPLAR18OPERATION.AD\01H1G005.PLT 36
PLOTFILE 1 TRUCK3I1 1ST POPLAR18OPERATION.AD\01H1G006.PLT 37
PLOTFILE 1 TRUCK43 1ST POPLAR18OPERATION.AD\01H1G007.PLT 38
PLOTFILE 1 TRUCK9 1ST POPLAR18OPERATION.AD\01H1G008.PLT 39
PLOTFILE PERIOD ALL POPLAR18OPERATION.AD\PE00GALL.PLT 40
PLOTFILE PERIOD IDLE POPLAR18OPERATION.AD\PE00G001.PLT 41
PLOTFILE PERIOD TRUCK1I1 POPLAR18OPERATION.AD\PE00G002.PLT 42
PLOTFILE PERIOD TRUCK10 POPLAR18OPERATION.AD\PE00G003.PLT 43
PLOTFILE PERIOD TRUCK31 POPLAR18OPERATION.AD\PE00G004.PLT 44
PLOTFILE PERIOD TRUCK395 POPLAR18OPERATION.AD\PE00G005.PLT 45
PLOTFILE PERIOD TRUCK3I1 POPLAR18OPERATION.AD\PE00G006.PLT 46
PLOTFILE PERIOD TRUCK43 POPLAR18OPERATION.AD\PE00G007.PLT 47
PLOTFILE PERIOD TRUCK9 POPLAR18OPERATION.AD\PE00G008.PLT 48
SUMMFILE Poplar180operation.sum

OU FINISHED

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 1

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** MODEL SETUP OPTIONS SUMMARY

-- --
- - - - -
- - - - -
**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

**NO GAS DEPOSITION Data Provided.

**NO PARTICLE DEPOSITION Data Provided.

**Model Uses NO DRY DEPLETION. DRYDPLT = F

**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 1047 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 2180000.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.

2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

****Other Options Specified:**

CCVR_Sub - Meteorological data includes CCVR substitutions

TEMP_Sub - Meteorological data includes TEMP substitutions

****Model Assumes No FLAGPOLE Receptor Heights.**

****The User Specified a Pollutant Type of: PM₁₀**

****Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages**

****This Run Includes: 1047 Source(s); 9 Source Group(s); and 3065
Receptor(s)**

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 1047 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

****Model Set To Continue RUNning After the Setup Testing.**

****The AERMET Input Meteorological Data Version Date: 14134**

****Output Options Selected:**

Model Outputs Tables of PERIOD Averages by Receptor

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)

Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)

Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

****NOTE: The Following Flags May Appear Following CONC Values:** c for Calm Hours
m for Missing Hours
b for Both Calm and

Missing Hours

****Misc. Inputs:** Base Elev. for Pot. Temp. Profile (m MSL) = 879.40 ; Decay
Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC ;
Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 5.4 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: Poplar180operation.err

**File for Summary of Results: Poplar180operation.sum

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	SCALAR	VARY	X	Y	(METERS)	(METERS)	(METERS)
ID		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		BY						
L0006011		0	0.11111E-01	463919.8	3808498.2	1097.6	3.40	4.00
3.16	YES							
L0006012		0	0.11111E-01	463928.4	3808498.2	1097.6	3.40	4.00
3.16	YES							
L0006013		0	0.11111E-01	463937.0	3808498.2	1097.5	3.40	4.00
3.16	YES							
L0006014		0	0.11111E-01	463945.6	3808498.2	1097.3	3.40	4.00
3.16	YES							
L0006015		0	0.11111E-01	463954.2	3808498.2	1097.1	3.40	4.00
3.16	YES							
L0006016		0	0.11111E-01	463962.8	3808498.2	1097.0	3.40	4.00
3.16	YES							
L0006017		0	0.11111E-01	463971.4	3808498.2	1097.0	3.40	4.00
3.16	YES							
L0006018		0	0.11111E-01	463980.0	3808498.2	1097.0	3.40	4.00

3.16	YES							
L0006019		0	0.11111E-01	463988.6	3808498.2	1097.0	3.40	4.00
3.16	YES							
L0006020		0	0.11111E-01	463997.2	3808498.2	1096.9	3.40	4.00
3.16	YES							
L0006021		0	0.11111E-01	464005.8	3808498.2	1096.8	3.40	4.00
3.16	YES							
L0006022		0	0.11111E-01	464014.4	3808498.2	1096.7	3.40	4.00
3.16	YES							
L0006023		0	0.11111E-01	464023.0	3808498.2	1096.6	3.40	4.00
3.16	YES							
L0006024		0	0.11111E-01	464031.6	3808498.2	1096.6	3.40	4.00
3.16	YES							
L0006025		0	0.11111E-01	464040.2	3808498.2	1096.6	3.40	4.00
3.16	YES							
L0006026		0	0.11111E-01	464048.8	3808498.2	1096.6	3.40	4.00
3.16	YES							
L0006027		0	0.11111E-01	464057.4	3808498.2	1096.4	3.40	4.00
3.16	YES							
L0006028		0	0.11111E-01	464066.0	3808498.2	1096.3	3.40	4.00
3.16	YES							
L0006029		0	0.11111E-01	464074.6	3808498.2	1096.1	3.40	4.00
3.16	YES							
L0006030		0	0.11111E-01	464083.2	3808498.2	1096.0	3.40	4.00
3.16	YES							
L0006031		0	0.11111E-01	464091.8	3808498.2	1095.8	3.40	4.00
3.16	YES							
L0006032		0	0.11111E-01	464100.4	3808498.2	1095.7	3.40	4.00
3.16	YES							
L0006033		0	0.11111E-01	464109.0	3808498.2	1095.6	3.40	4.00
3.16	YES							
L0006034		0	0.11111E-01	464117.6	3808498.2	1095.6	3.40	4.00
3.16	YES							
L0006035		0	0.11111E-01	464119.2	3808491.0	1095.8	3.40	4.00
3.16	YES							
L0006036		0	0.11111E-01	464119.4	3808482.4	1096.1	3.40	4.00
3.16	YES							
L0006037		0	0.11111E-01	464119.7	3808473.8	1096.3	3.40	4.00
3.16	YES							
L0006038		0	0.11111E-01	464119.9	3808465.2	1096.5	3.40	4.00
3.16	YES							
L0006039		0	0.11111E-01	464120.1	3808456.6	1096.6	3.40	4.00
3.16	YES							
L0006040		0	0.11111E-01	464120.3	3808448.1	1096.8	3.40	4.00
3.16	YES							
L0006041		0	0.11111E-01	464120.6	3808439.5	1096.8	3.40	4.00
3.16	YES							
L0006042		0	0.11111E-01	464120.8	3808430.9	1096.9	3.40	4.00
3.16	YES							
L0006043		0	0.11111E-01	464121.0	3808422.3	1097.1	3.40	4.00

3.16	YES							
L0006044		0	0.11111E-01	464121.3	3808413.7	1097.3	3.40	4.00
3.16	YES							
L0006045		0	0.11111E-01	464121.5	3808405.1	1097.4	3.40	4.00
3.16	YES							
L0006046		0	0.11111E-01	464121.7	3808396.5	1097.6	3.40	4.00
3.16	YES							
L0006047		0	0.11111E-01	464122.0	3808387.9	1097.7	3.40	4.00
3.16	YES							
L0006048		0	0.11111E-01	464122.2	3808379.3	1097.8	3.40	4.00
3.16	YES							
L0006049		0	0.11111E-01	464122.4	3808370.7	1097.9	3.40	4.00
3.16	YES							
L0006050		0	0.11111E-01	464122.7	3808362.1	1098.1	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 3

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006051		0	0.11111E-01	464122.9	3808353.5	1098.2	3.40	4.00
3.16	YES							
L0006052		0	0.11111E-01	464123.1	3808344.9	1098.4	3.40	4.00
3.16	YES							
L0006053		0	0.11111E-01	464123.3	3808336.3	1098.5	3.40	4.00
3.16	YES							
L0006054		0	0.11111E-01	464115.8	3808335.2	1098.8	3.40	4.00
3.16	YES							
L0006055		0	0.11111E-01	464107.2	3808335.1	1099.0	3.40	4.00
3.16	YES							
L0006056		0	0.11111E-01	464098.6	3808335.1	1099.0	3.40	4.00
3.16	YES							
L0006057		0	0.11111E-01	464090.0	3808335.1	1099.0	3.40	4.00
3.16	YES							
L0006058		0	0.11111E-01	464081.4	3808335.0	1099.0	3.40	4.00

3.16	YES							
L0006059		0	0.11111E-01	464072.8	3808335.0	1099.0	3.40	4.00
3.16	YES							
L0006060		0	0.11111E-01	464064.2	3808334.9	1099.0	3.40	4.00
3.16	YES							
L0006061		0	0.11111E-01	464055.6	3808334.9	1099.0	3.40	4.00
3.16	YES							
L0006062		0	0.11111E-01	464047.0	3808334.8	1099.1	3.40	4.00
3.16	YES							
L0006063		0	0.11111E-01	464038.4	3808334.8	1099.4	3.40	4.00
3.16	YES							
L0006064		0	0.11111E-01	464029.8	3808334.7	1099.7	3.40	4.00
3.16	YES							
L0006065		0	0.11111E-01	464021.2	3808334.7	1100.0	3.40	4.00
3.16	YES							
L0006066		0	0.11111E-01	464012.6	3808334.6	1100.0	3.40	4.00
3.16	YES							
L0006067		0	0.11111E-01	464004.0	3808334.6	1100.0	3.40	4.00
3.16	YES							
L0006068		0	0.11111E-01	463995.4	3808334.6	1100.0	3.40	4.00
3.16	YES							
L0006069		0	0.11111E-01	463986.8	3808334.5	1100.0	3.40	4.00
3.16	YES							
L0006070		0	0.11111E-01	463978.2	3808334.5	1100.0	3.40	4.00
3.16	YES							
L0006071		0	0.11111E-01	463969.6	3808334.4	1100.0	3.40	4.00
3.16	YES							
L0006072		0	0.11111E-01	463961.0	3808334.4	1100.0	3.40	4.00
3.16	YES							
L0006073		0	0.11111E-01	463952.4	3808334.3	1100.0	3.40	4.00
3.16	YES							
L0006074		0	0.11111E-01	463943.8	3808334.3	1100.1	3.40	4.00
3.16	YES							
L0006075		0	0.11111E-01	463935.2	3808334.2	1100.1	3.40	4.00
3.16	YES							
L0006076		0	0.11111E-01	463926.6	3808334.2	1100.2	3.40	4.00
3.16	YES							
L0006077		0	0.11111E-01	463918.0	3808334.1	1100.4	3.40	4.00
3.16	YES							
L0006078		0	0.11111E-01	463909.4	3808334.1	1100.7	3.40	4.00
3.16	YES							
L0006079		0	0.11111E-01	463900.8	3808334.0	1101.0	3.40	4.00
3.16	YES							
L0006080		0	0.11111E-01	463892.2	3808334.0	1101.0	3.40	4.00
3.16	YES							
L0006081		0	0.11111E-01	463883.6	3808334.0	1101.0	3.40	4.00
3.16	YES							
L0006082		0	0.11111E-01	463875.0	3808333.9	1101.1	3.40	4.00
3.16	YES							
L0006083		0	0.11111E-01	463866.4	3808333.9	1101.1	3.40	4.00

3.16	YES							
L0006084		0	0.11111E-01	463857.8	3808333.8	1101.1	3.40	4.00
3.16	YES							
L0006085		0	0.11111E-01	463849.2	3808333.8	1101.1	3.40	4.00
3.16	YES							
L0006086		0	0.11111E-01	463840.6	3808333.7	1101.1	3.40	4.00
3.16	YES							
L0006087		0	0.11111E-01	463832.0	3808333.7	1101.3	3.40	4.00
3.16	YES							
L0006088		0	0.11111E-01	463823.4	3808333.6	1101.6	3.40	4.00
3.16	YES							
L0006089		0	0.11111E-01	463814.8	3808333.6	1101.8	3.40	4.00
3.16	YES							
L0006090		0	0.11111E-01	463806.2	3808333.5	1102.0	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 4

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006091		0	0.11111E-01	463797.6	3808333.5	1102.0	3.40	4.00
3.16	YES							
L0006092		0	0.11111E-01	463789.0	3808333.5	1102.0	3.40	4.00
3.16	YES							
L0006093		0	0.11111E-01	463780.4	3808333.4	1102.0	3.40	4.00
3.16	YES							
L0006094		0	0.11111E-01	463771.8	3808333.4	1102.0	3.40	4.00
3.16	YES							
L0006095		0	0.11111E-01	463763.2	3808333.3	1102.0	3.40	4.00
3.16	YES							
L0006096		0	0.11111E-01	463754.6	3808333.3	1102.1	3.40	4.00
3.16	YES							
L0006097		0	0.11111E-01	463746.0	3808333.2	1102.1	3.40	4.00
3.16	YES							
L0006098		0	0.11111E-01	463737.4	3808333.2	1102.1	3.40	4.00

3.16	YES							
L0006099		0	0.11111E-01	463728.8	3808333.1	1102.1	3.40	4.00
3.16	YES							
L0006100		0	0.11111E-01	463720.2	3808333.1	1102.1	3.40	4.00
3.16	YES							
L0006101		0	0.26316E-01	463895.9	3808498.2	1097.6	3.40	4.00
3.16	YES							
L0006102		0	0.26316E-01	463887.3	3808498.2	1097.8	3.40	4.00
3.16	YES							
L0006103		0	0.26316E-01	463878.7	3808498.2	1097.9	3.40	4.00
3.16	YES							
L0006104		0	0.26316E-01	463870.1	3808498.2	1098.0	3.40	4.00
3.16	YES							
L0006105		0	0.26316E-01	463861.5	3808498.2	1098.0	3.40	4.00
3.16	YES							
L0006106		0	0.26316E-01	463852.9	3808498.2	1098.0	3.40	4.00
3.16	YES							
L0006107		0	0.26316E-01	463844.3	3808498.2	1098.0	3.40	4.00
3.16	YES							
L0006108		0	0.26316E-01	463835.7	3808498.2	1098.1	3.40	4.00
3.16	YES							
L0006109		0	0.26316E-01	463827.1	3808498.2	1098.2	3.40	4.00
3.16	YES							
L0006110		0	0.26316E-01	463818.5	3808498.2	1098.4	3.40	4.00
3.16	YES							
L0006111		0	0.26316E-01	463809.9	3808498.2	1098.6	3.40	4.00
3.16	YES							
L0006112		0	0.26316E-01	463801.3	3808498.2	1098.6	3.40	4.00
3.16	YES							
L0006113		0	0.26316E-01	463792.7	3808498.2	1098.6	3.40	4.00
3.16	YES							
L0006114		0	0.26316E-01	463784.1	3808498.2	1098.6	3.40	4.00
3.16	YES							
L0006115		0	0.26316E-01	463775.5	3808498.2	1098.6	3.40	4.00
3.16	YES							
L0006116		0	0.26316E-01	463766.9	3808498.2	1098.6	3.40	4.00
3.16	YES							
L0006117		0	0.26316E-01	463758.3	3808498.2	1098.6	3.40	4.00
3.16	YES							
L0006118		0	0.26316E-01	463749.7	3808498.2	1098.6	3.40	4.00
3.16	YES							
L0006119		0	0.26316E-01	463741.1	3808498.2	1098.7	3.40	4.00
3.16	YES							
L0006120		0	0.26316E-01	463732.5	3808498.2	1098.8	3.40	4.00
3.16	YES							
L0006121		0	0.26316E-01	463723.9	3808498.2	1099.0	3.40	4.00
3.16	YES							
L0006122		0	0.26316E-01	463715.3	3808498.2	1099.1	3.40	4.00
3.16	YES							
L0006123		0	0.26316E-01	463713.9	3808490.7	1099.2	3.40	4.00

3.16	YES							
L0006124		0	0.26316E-01	463713.6	3808482.1	1099.3	3.40	4.00
3.16	YES							
L0006125		0	0.26316E-01	463713.2	3808473.5	1099.5	3.40	4.00
3.16	YES							
L0006126		0	0.26316E-01	463712.9	3808465.0	1099.8	3.40	4.00
3.16	YES							
L0006127		0	0.26316E-01	463712.6	3808456.4	1100.0	3.40	4.00
3.16	YES							
L0006128		0	0.26316E-01	463712.2	3808447.8	1100.1	3.40	4.00
3.16	YES							
L0006129		0	0.26316E-01	463711.9	3808439.2	1100.1	3.40	4.00
3.16	YES							
L0006130		0	0.26316E-01	463711.6	3808430.6	1100.2	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 5

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY			(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)

L0006131		0	0.26316E-01	463711.2	3808422.0	1100.4	3.40	4.00
3.16	YES							
L0006132		0	0.26316E-01	463710.9	3808413.4	1100.6	3.40	4.00
3.16	YES							
L0006133		0	0.26316E-01	463710.6	3808404.8	1100.8	3.40	4.00
3.16	YES							
L0006134		0	0.26316E-01	463710.2	3808396.2	1101.0	3.40	4.00
3.16	YES							
L0006135		0	0.26316E-01	463709.9	3808387.6	1101.3	3.40	4.00
3.16	YES							
L0006136		0	0.26316E-01	463709.6	3808379.0	1101.6	3.40	4.00
3.16	YES							
L0006137		0	0.26316E-01	463709.2	3808370.4	1101.8	3.40	4.00
3.16	YES							
L0006138		0	0.26316E-01	463708.9	3808361.8	1102.0	3.40	4.00

3.16	YES							
L0005092		0	0.22727E-01	463692.4	3808334.2	1102.9	3.40	4.00
3.16	YES							
L0005093		0	0.22727E-01	463683.8	3808334.2	1103.0	3.40	4.00
3.16	YES							
L0005094		0	0.22727E-01	463675.2	3808334.3	1103.0	3.40	4.00
3.16	YES							
L0005095		0	0.22727E-01	463666.6	3808334.3	1103.0	3.40	4.00
3.16	YES							
L0005096		0	0.22727E-01	463658.0	3808334.4	1103.0	3.40	4.00
3.16	YES							
L0005097		0	0.22727E-01	463649.4	3808334.4	1103.0	3.40	4.00
3.16	YES							
L0005098		0	0.22727E-01	463640.8	3808334.5	1103.0	3.40	4.00
3.16	YES							
L0005099		0	0.22727E-01	463632.2	3808334.5	1103.0	3.40	4.00
3.16	YES							
L0005100		0	0.22727E-01	463623.6	3808334.6	1103.0	3.40	4.00
3.16	YES							
L0005101		0	0.22727E-01	463615.0	3808334.6	1103.0	3.40	4.00
3.16	YES							
L0005102		0	0.22727E-01	463606.4	3808334.7	1103.0	3.40	4.00
3.16	YES							
L0005103		0	0.22727E-01	463597.8	3808334.7	1103.1	3.40	4.00
3.16	YES							
L0005104		0	0.22727E-01	463589.2	3808334.8	1103.4	3.40	4.00
3.16	YES							
L0005105		0	0.22727E-01	463580.6	3808334.8	1103.7	3.40	4.00
3.16	YES							
L0005106		0	0.22727E-01	463572.0	3808334.9	1103.9	3.40	4.00
3.16	YES							
L0005107		0	0.22727E-01	463563.4	3808334.9	1104.0	3.40	4.00
3.16	YES							
L0005108		0	0.22727E-01	463554.8	3808335.0	1104.0	3.40	4.00
3.16	YES							
L0005109		0	0.22727E-01	463546.2	3808335.0	1104.0	3.40	4.00
3.16	YES							
L0005110		0	0.22727E-01	463537.6	3808335.1	1104.0	3.40	4.00
3.16	YES							
L0005111		0	0.22727E-01	463529.0	3808335.1	1104.0	3.40	4.00
3.16	YES							
L0005112		0	0.22727E-01	463520.4	3808335.2	1104.0	3.40	4.00
3.16	YES							
L0005113		0	0.22727E-01	463511.8	3808335.2	1104.0	3.40	4.00
3.16	YES							
L0005114		0	0.22727E-01	463503.2	3808335.3	1104.0	3.40	4.00
3.16	YES							
L0005115		0	0.22727E-01	463494.6	3808335.3	1104.0	3.40	4.00
3.16	YES							
L0005116		0	0.22727E-01	463486.0	3808335.4	1104.0	3.40	4.00

3.16	YES							
L0005117		0	0.22727E-01	463477.4	3808335.4	1104.0	3.40	4.00
3.16	YES							
L0005118		0	0.22727E-01	463468.8	3808335.5	1104.0	3.40	4.00
3.16	YES							
L0005119		0	0.22727E-01	463460.2	3808335.5	1104.0	3.40	4.00
3.16	YES							
L0005120		0	0.22727E-01	463451.6	3808335.6	1104.0	3.40	4.00
3.16	YES							
L0005121		0	0.22727E-01	463443.0	3808335.6	1104.0	3.40	4.00
3.16	YES							
L0005122		0	0.22727E-01	463434.4	3808335.7	1104.0	3.40	4.00
3.16	YES							
L0005123		0	0.22727E-01	463425.8	3808335.7	1104.0	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 6

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0005124		0	0.22727E-01	463417.2	3808335.8	1104.0	3.40	4.00
3.16	YES							
L0005125		0	0.22727E-01	463408.6	3808335.8	1104.0	3.40	4.00
3.16	YES							
L0005126		0	0.22727E-01	463400.0	3808335.9	1104.0	3.40	4.00
3.16	YES							
L0005127		0	0.22727E-01	463391.4	3808335.9	1104.0	3.40	4.00
3.16	YES							
L0005128		0	0.22727E-01	463382.8	3808336.0	1104.0	3.40	4.00
3.16	YES							
L0005129		0	0.22727E-01	463374.2	3808336.0	1104.0	3.40	4.00
3.16	YES							
L0005130		0	0.22727E-01	463365.6	3808336.1	1104.0	3.40	4.00
3.16	YES							
L0005131		0	0.22727E-01	463357.0	3808336.1	1104.0	3.40	4.00

3.16	YES							
L0005132		0	0.22727E-01	463348.4	3808336.2	1104.0	3.40	4.00
3.16	YES							
L0005133		0	0.22727E-01	463339.8	3808336.2	1104.0	3.40	4.00
3.16	YES							
L0005134		0	0.22727E-01	463331.2	3808336.3	1104.0	3.40	4.00
3.16	YES							
L0005135		0	0.22727E-01	463322.6	3808336.3	1104.0	3.40	4.00
3.16	YES							
L0006139		0	0.46083E-02	463322.5	3808314.2	1104.7	3.40	4.00
3.16	YES							
L0006140		0	0.46083E-02	463322.4	3808305.6	1105.0	3.40	4.00
3.16	YES							
L0006141		0	0.46083E-02	463322.3	3808297.0	1105.0	3.40	4.00
3.16	YES							
L0006142		0	0.46083E-02	463322.2	3808288.4	1105.0	3.40	4.00
3.16	YES							
L0006143		0	0.46083E-02	463322.1	3808279.8	1105.0	3.40	4.00
3.16	YES							
L0006144		0	0.46083E-02	463322.0	3808271.2	1105.1	3.40	4.00
3.16	YES							
L0006145		0	0.46083E-02	463321.9	3808262.6	1105.3	3.40	4.00
3.16	YES							
L0006146		0	0.46083E-02	463321.8	3808254.0	1105.5	3.40	4.00
3.16	YES							
L0006147		0	0.46083E-02	463321.7	3808245.4	1105.7	3.40	4.00
3.16	YES							
L0006148		0	0.46083E-02	463321.6	3808236.8	1105.8	3.40	4.00
3.16	YES							
L0006149		0	0.46083E-02	463321.5	3808228.2	1105.9	3.40	4.00
3.16	YES							
L0006150		0	0.46083E-02	463321.4	3808219.6	1106.0	3.40	4.00
3.16	YES							
L0006151		0	0.46083E-02	463321.3	3808211.0	1106.2	3.40	4.00
3.16	YES							
L0006152		0	0.46083E-02	463321.2	3808202.4	1106.5	3.40	4.00
3.16	YES							
L0006153		0	0.46083E-02	463321.1	3808193.8	1106.7	3.40	4.00
3.16	YES							
L0006154		0	0.46083E-02	463321.0	3808185.2	1107.0	3.40	4.00
3.16	YES							
L0006155		0	0.46083E-02	463320.9	3808176.6	1107.3	3.40	4.00
3.16	YES							
L0006156		0	0.46083E-02	463320.7	3808168.0	1107.6	3.40	4.00
3.16	YES							
L0006157		0	0.46083E-02	463320.6	3808159.4	1107.9	3.40	4.00
3.16	YES							
L0006158		0	0.46083E-02	463320.5	3808150.8	1108.2	3.40	4.00
3.16	YES							
L0006159		0	0.46083E-02	463320.4	3808142.2	1108.5	3.40	4.00

3.16	YES							
L0006160		0	0.46083E-02	463320.3	3808133.6	1108.8	3.40	4.00
3.16	YES							
L0006161		0	0.46083E-02	463320.2	3808125.0	1109.0	3.40	4.00
3.16	YES							
L0006162		0	0.46083E-02	463320.1	3808116.4	1109.3	3.40	4.00
3.16	YES							
L0006163		0	0.46083E-02	463320.0	3808107.8	1109.6	3.40	4.00
3.16	YES							
L0006164		0	0.46083E-02	463319.9	3808099.2	1109.9	3.40	4.00
3.16	YES							
L0006165		0	0.46083E-02	463319.8	3808090.6	1110.0	3.40	4.00
3.16	YES							
L0006166		0	0.46083E-02	463319.7	3808082.0	1110.0	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 7

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	SCALAR	VARY	X	Y	(METERS)	(METERS)	(METERS)
ID		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		BY						
L0006167		0	0.46083E-02	463319.6	3808073.4	1110.0	3.40	4.00
3.16	YES							
L0006168		0	0.46083E-02	463319.5	3808064.8	1110.0	3.40	4.00
3.16	YES							
L0006169		0	0.46083E-02	463319.4	3808056.2	1110.0	3.40	4.00
3.16	YES							
L0006170		0	0.46083E-02	463319.3	3808047.6	1110.0	3.40	4.00
3.16	YES							
L0006171		0	0.46083E-02	463319.2	3808039.0	1110.0	3.40	4.00
3.16	YES							
L0006172		0	0.46083E-02	463319.1	3808030.4	1110.1	3.40	4.00
3.16	YES							
L0006173		0	0.46083E-02	463319.0	3808021.8	1110.3	3.40	4.00
3.16	YES							
L0006174		0	0.46083E-02	463318.9	3808013.2	1110.5	3.40	4.00

3.16	YES							
L0006175		0	0.46083E-02	463318.8	3808004.6	1110.6	3.40	4.00
3.16	YES							
L0006176		0	0.46083E-02	463318.7	3807996.0	1110.8	3.40	4.00
3.16	YES							
L0006177		0	0.46083E-02	463318.6	3807987.4	1110.8	3.40	4.00
3.16	YES							
L0006178		0	0.46083E-02	463318.5	3807978.8	1111.0	3.40	4.00
3.16	YES							
L0006179		0	0.46083E-02	463318.4	3807970.2	1111.0	3.40	4.00
3.16	YES							
L0006180		0	0.46083E-02	463318.3	3807961.6	1111.0	3.40	4.00
3.16	YES							
L0006181		0	0.46083E-02	463318.1	3807953.0	1111.0	3.40	4.00
3.16	YES							
L0006182		0	0.46083E-02	463318.0	3807944.4	1111.0	3.40	4.00
3.16	YES							
L0006183		0	0.46083E-02	463317.9	3807935.8	1111.2	3.40	4.00
3.16	YES							
L0006184		0	0.46083E-02	463317.8	3807927.2	1111.4	3.40	4.00
3.16	YES							
L0006185		0	0.46083E-02	463317.7	3807918.6	1111.5	3.40	4.00
3.16	YES							
L0006186		0	0.46083E-02	463317.6	3807910.0	1111.7	3.40	4.00
3.16	YES							
L0006187		0	0.46083E-02	463317.5	3807901.4	1111.8	3.40	4.00
3.16	YES							
L0006188		0	0.46083E-02	463317.4	3807892.8	1111.9	3.40	4.00
3.16	YES							
L0006189		0	0.46083E-02	463317.3	3807884.2	1112.1	3.40	4.00
3.16	YES							
L0006190		0	0.46083E-02	463317.2	3807875.6	1112.3	3.40	4.00
3.16	YES							
L0006191		0	0.46083E-02	463317.1	3807867.0	1112.6	3.40	4.00
3.16	YES							
L0006192		0	0.46083E-02	463317.0	3807858.4	1112.9	3.40	4.00
3.16	YES							
L0006193		0	0.46083E-02	463316.9	3807849.8	1113.2	3.40	4.00
3.16	YES							
L0006194		0	0.46083E-02	463316.8	3807841.2	1113.5	3.40	4.00
3.16	YES							
L0006195		0	0.46083E-02	463316.7	3807832.6	1113.8	3.40	4.00
3.16	YES							
L0006196		0	0.46083E-02	463316.6	3807824.0	1114.1	3.40	4.00
3.16	YES							
L0006197		0	0.46083E-02	463316.5	3807815.4	1114.3	3.40	4.00
3.16	YES							
L0006198		0	0.46083E-02	463316.4	3807806.8	1114.6	3.40	4.00
3.16	YES							
L0006199		0	0.46083E-02	463316.3	3807798.2	1114.9	3.40	4.00

3.16	YES							
L0006200		0	0.46083E-02	463316.2	3807789.6	1115.2	3.40	4.00
3.16	YES							
L0006201		0	0.46083E-02	463316.1	3807781.0	1115.5	3.40	4.00
3.16	YES							
L0006202		0	0.46083E-02	463316.0	3807772.4	1115.8	3.40	4.00
3.16	YES							
L0006203		0	0.46083E-02	463315.9	3807763.8	1116.0	3.40	4.00
3.16	YES							
L0006204		0	0.46083E-02	463315.8	3807755.2	1116.0	3.40	4.00
3.16	YES							
L0006205		0	0.46083E-02	463315.7	3807746.6	1116.0	3.40	4.00
3.16	YES							
L0006206		0	0.46083E-02	463315.5	3807738.0	1116.0	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 8

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006207		0	0.46083E-02	463315.4	3807729.4	1116.1	3.40	4.00
3.16	YES							
L0006208		0	0.46083E-02	463315.3	3807720.8	1116.2	3.40	4.00
3.16	YES							
L0006209		0	0.46083E-02	463315.2	3807712.2	1116.4	3.40	4.00
3.16	YES							
L0006210		0	0.46083E-02	463315.1	3807703.6	1116.5	3.40	4.00
3.16	YES							
L0006211		0	0.46083E-02	463315.0	3807695.0	1116.7	3.40	4.00
3.16	YES							
L0006212		0	0.46083E-02	463314.9	3807686.4	1116.8	3.40	4.00
3.16	YES							
L0006213		0	0.46083E-02	463314.8	3807677.8	1117.0	3.40	4.00
3.16	YES							
L0006214		0	0.46083E-02	463314.7	3807669.2	1117.2	3.40	4.00

3.16	YES							
L0006215		0	0.46083E-02	463314.6	3807660.6	1117.5	3.40	4.00
3.16	YES							
L0006216		0	0.46083E-02	463314.5	3807652.0	1117.8	3.40	4.00
3.16	YES							
L0006217		0	0.46083E-02	463314.4	3807643.4	1118.0	3.40	4.00
3.16	YES							
L0006218		0	0.46083E-02	463314.3	3807634.8	1118.0	3.40	4.00
3.16	YES							
L0006219		0	0.46083E-02	463314.2	3807626.2	1118.0	3.40	4.00
3.16	YES							
L0006220		0	0.46083E-02	463314.1	3807617.6	1118.0	3.40	4.00
3.16	YES							
L0006221		0	0.46083E-02	463314.0	3807609.0	1118.2	3.40	4.00
3.16	YES							
L0006222		0	0.46083E-02	463313.9	3807600.4	1118.5	3.40	4.00
3.16	YES							
L0006223		0	0.46083E-02	463312.6	3807591.9	1118.8	3.40	4.00
3.16	YES							
L0006224		0	0.46083E-02	463311.2	3807583.4	1119.0	3.40	4.00
3.16	YES							
L0006225		0	0.46083E-02	463309.7	3807575.0	1119.0	3.40	4.00
3.16	YES							
L0006226		0	0.46083E-02	463308.3	3807566.5	1119.0	3.40	4.00
3.16	YES							
L0006227		0	0.46083E-02	463306.8	3807558.0	1119.0	3.40	4.00
3.16	YES							
L0006228		0	0.46083E-02	463305.3	3807549.5	1119.2	3.40	4.00
3.16	YES							
L0006229		0	0.46083E-02	463303.9	3807541.1	1119.5	3.40	4.00
3.16	YES							
L0006230		0	0.46083E-02	463302.4	3807532.6	1119.8	3.40	4.00
3.16	YES							
L0006231		0	0.46083E-02	463300.9	3807524.1	1120.1	3.40	4.00
3.16	YES							
L0006232		0	0.46083E-02	463299.5	3807515.6	1120.3	3.40	4.00
3.16	YES							
L0006233		0	0.46083E-02	463298.0	3807507.2	1120.6	3.40	4.00
3.16	YES							
L0006234		0	0.46083E-02	463296.6	3807498.7	1120.9	3.40	4.00
3.16	YES							
L0006235		0	0.46083E-02	463295.1	3807490.2	1121.0	3.40	4.00
3.16	YES							
L0006236		0	0.46083E-02	463293.6	3807481.7	1121.0	3.40	4.00
3.16	YES							
L0006237		0	0.46083E-02	463292.2	3807473.3	1121.0	3.40	4.00
3.16	YES							
L0006238		0	0.46083E-02	463290.7	3807464.8	1121.0	3.40	4.00
3.16	YES							
L0006239		0	0.46083E-02	463289.3	3807456.3	1121.3	3.40	4.00

3.16	YES							
L0006240		0	0.46083E-02	463287.8	3807447.8	1121.6	3.40	4.00
3.16	YES							
L0006241		0	0.46083E-02	463286.3	3807439.4	1121.9	3.40	4.00
3.16	YES							
L0006242		0	0.46083E-02	463284.9	3807430.9	1122.0	3.40	4.00
3.16	YES							
L0006243		0	0.46083E-02	463282.0	3807422.8	1122.0	3.40	4.00
3.16	YES							
L0006244		0	0.46083E-02	463279.1	3807414.7	1122.0	3.40	4.00
3.16	YES							
L0006245		0	0.46083E-02	463276.3	3807406.6	1122.0	3.40	4.00
3.16	YES							
L0006246		0	0.46083E-02	463273.4	3807398.5	1122.2	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 9

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006247		0	0.46083E-02	463270.5	3807390.4	1122.5	3.40	4.00
3.16	YES							
L0006248		0	0.46083E-02	463267.6	3807382.3	1122.8	3.40	4.00
3.16	YES							
L0006249		0	0.46083E-02	463264.7	3807374.2	1123.0	3.40	4.00
3.16	YES							
L0006250		0	0.46083E-02	463261.9	3807366.1	1123.0	3.40	4.00
3.16	YES							
L0006251		0	0.46083E-02	463259.0	3807358.0	1123.0	3.40	4.00
3.16	YES							
L0006252		0	0.46083E-02	463256.1	3807349.9	1123.0	3.40	4.00
3.16	YES							
L0006253		0	0.46083E-02	463253.2	3807341.8	1123.1	3.40	4.00
3.16	YES							
L0006254		0	0.46083E-02	463250.4	3807333.6	1123.4	3.40	4.00

3.16	YES							
L0006255		0	0.46083E-02	463247.5	3807325.5	1123.7	3.40	4.00
3.16	YES							
L0006256		0	0.46083E-02	463244.6	3807317.4	1124.0	3.40	4.00
3.16	YES							
L0006257		0	0.46083E-02	463241.7	3807309.3	1124.0	3.40	4.00
3.16	YES							
L0006258		0	0.46083E-02	463238.8	3807301.2	1124.0	3.40	4.00
3.16	YES							
L0006259		0	0.46083E-02	463236.0	3807293.1	1124.0	3.40	4.00
3.16	YES							
L0006260		0	0.46083E-02	463233.1	3807285.0	1124.0	3.40	4.00
3.16	YES							
L0006261		0	0.46083E-02	463230.2	3807276.9	1124.1	3.40	4.00
3.16	YES							
L0006262		0	0.46083E-02	463227.3	3807268.8	1124.2	3.40	4.00
3.16	YES							
L0006263		0	0.46083E-02	463224.4	3807260.7	1124.4	3.40	4.00
3.16	YES							
L0006264		0	0.46083E-02	463221.6	3807252.6	1124.7	3.40	4.00
3.16	YES							
L0006265		0	0.46083E-02	463218.7	3807244.5	1124.8	3.40	4.00
3.16	YES							
L0006266		0	0.46083E-02	463215.8	3807236.4	1124.9	3.40	4.00
3.16	YES							
L0006267		0	0.46083E-02	463212.9	3807228.3	1125.0	3.40	4.00
3.16	YES							
L0006268		0	0.46083E-02	463210.1	3807220.2	1125.2	3.40	4.00
3.16	YES							
L0006269		0	0.46083E-02	463207.2	3807212.1	1125.5	3.40	4.00
3.16	YES							
L0006270		0	0.46083E-02	463204.3	3807204.0	1125.7	3.40	4.00
3.16	YES							
L0006271		0	0.46083E-02	463201.4	3807195.9	1126.0	3.40	4.00
3.16	YES							
L0006272		0	0.46083E-02	463198.5	3807187.8	1126.1	3.40	4.00
3.16	YES							
L0006273		0	0.46083E-02	463195.7	3807179.7	1126.3	3.40	4.00
3.16	YES							
L0006274		0	0.46083E-02	463192.8	3807171.6	1126.5	3.40	4.00
3.16	YES							
L0006275		0	0.46083E-02	463189.9	3807163.5	1126.7	3.40	4.00
3.16	YES							
L0006276		0	0.46083E-02	463187.0	3807155.4	1126.8	3.40	4.00
3.16	YES							
L0006277		0	0.46083E-02	463184.2	3807147.3	1127.0	3.40	4.00
3.16	YES							
L0006278		0	0.46083E-02	463181.3	3807139.1	1127.0	3.40	4.00
3.16	YES							
L0006279		0	0.46083E-02	463178.4	3807131.0	1127.2	3.40	4.00

3.16	YES							
L0006280		0	0.46083E-02	463175.5	3807122.9	1127.4	3.40	4.00
3.16	YES							
L0006281		0	0.46083E-02	463172.3	3807115.0	1127.7	3.40	4.00
3.16	YES							
L0006282		0	0.46083E-02	463169.0	3807107.0	1128.0	3.40	4.00
3.16	YES							
L0006283		0	0.46083E-02	463165.7	3807099.1	1128.0	3.40	4.00
3.16	YES							
L0006284		0	0.46083E-02	463162.4	3807091.2	1128.0	3.40	4.00
3.16	YES							
L0006285		0	0.46083E-02	463159.0	3807083.2	1128.0	3.40	4.00
3.16	YES							
L0006286		0	0.46083E-02	463155.7	3807075.3	1128.0	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 10

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y	(METERS)	(METERS)	(METERS)
ID		SCALAR	VARY					
(METERS)		CATS.	BY					

L0006287		0	0.46083E-02	463152.4	3807067.4	1128.3	3.40	4.00
3.16	YES							
L0006288		0	0.46083E-02	463149.1	3807059.4	1128.5	3.40	4.00
3.16	YES							
L0006289		0	0.46083E-02	463145.7	3807051.5	1128.8	3.40	4.00
3.16	YES							
L0006290		0	0.46083E-02	463142.4	3807043.6	1129.0	3.40	4.00
3.16	YES							
L0006291		0	0.46083E-02	463139.1	3807035.6	1129.0	3.40	4.00
3.16	YES							
L0006292		0	0.46083E-02	463135.8	3807027.7	1129.0	3.40	4.00
3.16	YES							
L0006293		0	0.46083E-02	463132.4	3807019.8	1129.0	3.40	4.00
3.16	YES							
L0006294		0	0.46083E-02	463129.1	3807011.9	1129.1	3.40	4.00

3.16	YES							
L0006295		0	0.46083E-02	463125.8	3807003.9	1129.4	3.40	4.00
3.16	YES							
L0006296		0	0.46083E-02	463122.4	3806996.0	1129.7	3.40	4.00
3.16	YES							
L0006297		0	0.46083E-02	463119.1	3806988.1	1129.9	3.40	4.00
3.16	YES							
L0006298		0	0.46083E-02	463115.8	3806980.1	1129.9	3.40	4.00
3.16	YES							
L0006299		0	0.46083E-02	463112.5	3806972.2	1129.9	3.40	4.00
3.16	YES							
L0006300		0	0.46083E-02	463109.1	3806964.3	1129.9	3.40	4.00
3.16	YES							
L0006301		0	0.46083E-02	463105.8	3806956.3	1130.0	3.40	4.00
3.16	YES							
L0006302		0	0.46083E-02	463102.5	3806948.4	1130.1	3.40	4.00
3.16	YES							
L0006303		0	0.46083E-02	463099.2	3806940.5	1130.2	3.40	4.00
3.16	YES							
L0006304		0	0.46083E-02	463098.8	3806931.9	1130.2	3.40	4.00
3.16	YES							
L0006305		0	0.46083E-02	463098.4	3806923.3	1130.3	3.40	4.00
3.16	YES							
L0006306		0	0.46083E-02	463098.0	3806914.7	1130.5	3.40	4.00
3.16	YES							
L0006307		0	0.46083E-02	463097.5	3806906.1	1130.8	3.40	4.00
3.16	YES							
L0006308		0	0.46083E-02	463097.1	3806897.5	1131.0	3.40	4.00
3.16	YES							
L0006309		0	0.46083E-02	463096.7	3806888.9	1131.2	3.40	4.00
3.16	YES							
L0006310		0	0.46083E-02	463096.3	3806880.3	1131.5	3.40	4.00
3.16	YES							
L0006311		0	0.46083E-02	463095.9	3806871.7	1131.8	3.40	4.00
3.16	YES							
L0006312		0	0.46083E-02	463095.5	3806863.2	1132.0	3.40	4.00
3.16	YES							
L0006313		0	0.46083E-02	463095.0	3806854.6	1132.1	3.40	4.00
3.16	YES							
L0006314		0	0.46083E-02	463094.6	3806846.0	1132.1	3.40	4.00
3.16	YES							
L0006315		0	0.46083E-02	463094.2	3806837.4	1132.1	3.40	4.00
3.16	YES							
L0006316		0	0.46083E-02	463093.8	3806828.8	1132.4	3.40	4.00
3.16	YES							
L0006317		0	0.46083E-02	463093.4	3806820.2	1132.6	3.40	4.00
3.16	YES							
L0006318		0	0.46083E-02	463093.0	3806811.6	1132.9	3.40	4.00
3.16	YES							
L0006319		0	0.46083E-02	463092.5	3806803.0	1133.2	3.40	4.00

3.16	YES							
L0006320		0	0.46083E-02	463092.1	3806794.4	1133.4	3.40	4.00
3.16	YES							
L0006321		0	0.46083E-02	463091.7	3806785.8	1133.7	3.40	4.00
3.16	YES							
L0006322		0	0.46083E-02	463091.3	3806777.3	1134.0	3.40	4.00
3.16	YES							
L0006323		0	0.46083E-02	463090.9	3806768.7	1134.2	3.40	4.00
3.16	YES							
L0006324		0	0.46083E-02	463090.4	3806760.1	1134.5	3.40	4.00
3.16	YES							
L0006325		0	0.46083E-02	463088.9	3806751.6	1134.8	3.40	4.00
3.16	YES							
L0006326		0	0.46083E-02	463087.5	3806743.1	1134.9	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 11

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006327		0	0.46083E-02	463086.0	3806734.7	1134.9	3.40	4.00
3.16	YES							
L0006328		0	0.46083E-02	463084.5	3806726.2	1134.8	3.40	4.00
3.16	YES							
L0006329		0	0.46083E-02	463083.1	3806717.7	1134.8	3.40	4.00
3.16	YES							
L0006330		0	0.46083E-02	463081.6	3806709.2	1134.9	3.40	4.00
3.16	YES							
L0006331		0	0.46083E-02	463080.1	3806700.8	1135.2	3.40	4.00
3.16	YES							
L0006332		0	0.46083E-02	463078.7	3806692.3	1135.4	3.40	4.00
3.16	YES							
L0006333		0	0.46083E-02	463077.2	3806683.8	1135.7	3.40	4.00
3.16	YES							
L0006334		0	0.46083E-02	463075.7	3806675.3	1136.0	3.40	4.00

3.16	YES							
L0006335		0	0.46083E-02	463074.3	3806666.9	1136.5	3.40	4.00
3.16	YES							
L0006336		0	0.46083E-02	463072.8	3806658.4	1136.9	3.40	4.00
3.16	YES							
L0006337		0	0.46083E-02	463071.3	3806649.9	1137.2	3.40	4.00
3.16	YES							
L0006338		0	0.46083E-02	463069.9	3806641.5	1137.5	3.40	4.00
3.16	YES							
L0006339		0	0.46083E-02	463068.4	3806633.0	1137.8	3.40	4.00
3.16	YES							
L0006340		0	0.46083E-02	463066.9	3806624.5	1138.0	3.40	4.00
3.16	YES							
L0006341		0	0.46083E-02	463065.5	3806616.0	1138.3	3.40	4.00
3.16	YES							
L0006342		0	0.46083E-02	463063.6	3806607.7	1138.6	3.40	4.00
3.16	YES							
L0006343		0	0.46083E-02	463060.7	3806599.6	1138.9	3.40	4.00
3.16	YES							
L0006344		0	0.46083E-02	463057.8	3806591.5	1139.1	3.40	4.00
3.16	YES							
L0006345		0	0.46083E-02	463054.9	3806583.4	1139.4	3.40	4.00
3.16	YES							
L0006346		0	0.46083E-02	463052.0	3806575.3	1139.7	3.40	4.00
3.16	YES							
L0006347		0	0.46083E-02	463049.1	3806567.2	1140.0	3.40	4.00
3.16	YES							
L0006348		0	0.46083E-02	463046.2	3806559.1	1140.1	3.40	4.00
3.16	YES							
L0006349		0	0.46083E-02	463043.3	3806551.0	1140.2	3.40	4.00
3.16	YES							
L0006350		0	0.46083E-02	463040.4	3806542.9	1140.3	3.40	4.00
3.16	YES							
L0006351		0	0.46083E-02	463037.4	3806534.8	1140.3	3.40	4.00
3.16	YES							
L0006352		0	0.46083E-02	463034.5	3806526.7	1140.4	3.40	4.00
3.16	YES							
L0006353		0	0.46083E-02	463031.6	3806518.6	1140.6	3.40	4.00
3.16	YES							
L0006354		0	0.46083E-02	463028.7	3806510.5	1140.8	3.40	4.00
3.16	YES							
L0006355		0	0.46083E-02	463025.8	3806502.4	1141.1	3.40	4.00
3.16	YES							
L0006356		0	0.72993E-02	463319.6	3808372.1	1104.0	3.40	4.00
3.16	YES							
L0006357		0	0.72993E-02	463319.5	3808380.7	1104.0	3.40	4.00
3.16	YES							
L0006358		0	0.72993E-02	463319.3	3808389.3	1104.0	3.40	4.00
3.16	YES							
L0006359		0	0.72993E-02	463319.2	3808397.9	1103.9	3.40	4.00

3.16	YES							
L0006360		0	0.72993E-02	463319.1	3808406.5	1103.6	3.40	4.00
3.16	YES							
L0006361		0	0.72993E-02	463318.9	3808415.1	1103.4	3.40	4.00
3.16	YES							
L0006362		0	0.72993E-02	463318.8	3808423.7	1103.1	3.40	4.00
3.16	YES							
L0006363		0	0.72993E-02	463318.7	3808432.3	1102.8	3.40	4.00
3.16	YES							
L0006364		0	0.72993E-02	463318.5	3808440.9	1102.5	3.40	4.00
3.16	YES							
L0006365		0	0.72993E-02	463318.4	3808449.5	1102.2	3.40	4.00
3.16	YES							
L0006366		0	0.72993E-02	463318.3	3808458.1	1101.9	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 12

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0006367		0	0.72993E-02	463318.1	3808466.7	1101.6	3.40	4.00
3.16	YES							
L0006368		0	0.72993E-02	463318.0	3808475.3	1101.4	3.40	4.00
3.16	YES							
L0006369		0	0.72993E-02	463317.9	3808483.9	1101.1	3.40	4.00
3.16	YES							
L0006370		0	0.72993E-02	463317.8	3808492.5	1100.8	3.40	4.00
3.16	YES							
L0006371		0	0.72993E-02	463317.6	3808501.1	1100.5	3.40	4.00
3.16	YES							
L0006372		0	0.72993E-02	463317.5	3808509.7	1100.2	3.40	4.00
3.16	YES							
L0006373		0	0.72993E-02	463317.4	3808518.3	1100.0	3.40	4.00
3.16	YES							
L0006374		0	0.72993E-02	463317.2	3808526.9	1099.8	3.40	4.00

3.16	YES							
L0006375		0	0.72993E-02	463317.1	3808535.5	1099.7	3.40	4.00
3.16	YES							
L0006376		0	0.72993E-02	463317.0	3808544.1	1099.6	3.40	4.00
3.16	YES							
L0006377		0	0.72993E-02	463316.8	3808552.7	1099.4	3.40	4.00
3.16	YES							
L0006378		0	0.72993E-02	463316.7	3808561.3	1099.3	3.40	4.00
3.16	YES							
L0006379		0	0.72993E-02	463316.6	3808569.9	1099.1	3.40	4.00
3.16	YES							
L0006380		0	0.72993E-02	463316.4	3808578.5	1099.0	3.40	4.00
3.16	YES							
L0006381		0	0.72993E-02	463316.3	3808587.1	1098.8	3.40	4.00
3.16	YES							
L0006382		0	0.72993E-02	463316.2	3808595.7	1098.7	3.40	4.00
3.16	YES							
L0006383		0	0.72993E-02	463316.0	3808604.3	1098.6	3.40	4.00
3.16	YES							
L0006384		0	0.72993E-02	463315.9	3808612.9	1098.4	3.40	4.00
3.16	YES							
L0006385		0	0.72993E-02	463315.8	3808621.4	1098.2	3.40	4.00
3.16	YES							
L0006386		0	0.72993E-02	463315.6	3808630.0	1098.1	3.40	4.00
3.16	YES							
L0006387		0	0.72993E-02	463315.5	3808638.6	1098.0	3.40	4.00
3.16	YES							
L0006388		0	0.72993E-02	463315.4	3808647.2	1098.0	3.40	4.00
3.16	YES							
L0006389		0	0.72993E-02	463315.2	3808655.8	1098.0	3.40	4.00
3.16	YES							
L0006390		0	0.72993E-02	463315.1	3808664.4	1098.0	3.40	4.00
3.16	YES							
L0006391		0	0.72993E-02	463315.0	3808673.0	1097.9	3.40	4.00
3.16	YES							
L0006392		0	0.72993E-02	463314.8	3808681.6	1097.7	3.40	4.00
3.16	YES							
L0006393		0	0.72993E-02	463314.7	3808690.2	1097.6	3.40	4.00
3.16	YES							
L0006394		0	0.72993E-02	463314.6	3808698.8	1097.5	3.40	4.00
3.16	YES							
L0006395		0	0.72993E-02	463314.4	3808707.4	1097.3	3.40	4.00
3.16	YES							
L0006396		0	0.72993E-02	463314.3	3808716.0	1097.2	3.40	4.00
3.16	YES							
L0006397		0	0.72993E-02	463314.2	3808724.6	1097.0	3.40	4.00
3.16	YES							
L0006398		0	0.72993E-02	463314.0	3808733.2	1096.5	3.40	4.00
3.16	YES							
L0006399		0	0.72993E-02	463313.9	3808741.8	1095.9	3.40	4.00

3.16	YES							
L0006400		0	0.72993E-02	463312.1	3808750.1	1095.2	3.40	4.00
3.16	YES							
L0006401		0	0.72993E-02	463309.4	3808758.3	1094.5	3.40	4.00
3.16	YES							
L0006402		0	0.72993E-02	463306.7	3808766.5	1093.9	3.40	4.00
3.16	YES							
L0006403		0	0.72993E-02	463304.0	3808774.6	1093.5	3.40	4.00
3.16	YES							
L0006404		0	0.72993E-02	463301.2	3808782.8	1093.1	3.40	4.00
3.16	YES							
L0006405		0	0.72993E-02	463298.5	3808790.9	1092.6	3.40	4.00
3.16	YES							
L0006406		0	0.72993E-02	463295.8	3808799.1	1092.0	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 13

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006407		0	0.72993E-02	463293.1	3808807.3	1091.3	3.40	4.00
3.16	YES							
L0006408		0	0.72993E-02	463290.4	3808815.4	1090.7	3.40	4.00
3.16	YES							
L0006409		0	0.72993E-02	463287.6	3808823.6	1090.2	3.40	4.00
3.16	YES							
L0006410		0	0.72993E-02	463284.9	3808831.7	1089.7	3.40	4.00
3.16	YES							
L0006411		0	0.72993E-02	463282.2	3808839.9	1089.1	3.40	4.00
3.16	YES							
L0006412		0	0.72993E-02	463279.5	3808848.1	1088.6	3.40	4.00
3.16	YES							
L0006413		0	0.72993E-02	463276.8	3808856.2	1088.5	3.40	4.00
3.16	YES							
L0006414		0	0.72993E-02	463274.0	3808864.4	1088.3	3.40	4.00

3.16	YES							
L0006415		0	0.72993E-02	463271.3	3808872.5	1088.1	3.40	4.00
3.16	YES							
L0006416		0	0.72993E-02	463268.6	3808880.7	1087.7	3.40	4.00
3.16	YES							
L0006417		0	0.72993E-02	463265.9	3808888.8	1087.2	3.40	4.00
3.16	YES							
L0006418		0	0.72993E-02	463263.4	3808897.1	1086.6	3.40	4.00
3.16	YES							
L0006419		0	0.72993E-02	463261.1	3808905.4	1086.1	3.40	4.00
3.16	YES							
L0006420		0	0.72993E-02	463258.8	3808913.6	1085.5	3.40	4.00
3.16	YES							
L0006421		0	0.72993E-02	463256.4	3808921.9	1085.1	3.40	4.00
3.16	YES							
L0006422		0	0.72993E-02	463254.1	3808930.2	1084.6	3.40	4.00
3.16	YES							
L0006423		0	0.72993E-02	463251.8	3808938.5	1084.3	3.40	4.00
3.16	YES							
L0006424		0	0.72993E-02	463249.5	3808946.8	1083.7	3.40	4.00
3.16	YES							
L0006425		0	0.72993E-02	463247.2	3808955.1	1083.1	3.40	4.00
3.16	YES							
L0006426		0	0.72993E-02	463244.9	3808963.3	1082.5	3.40	4.00
3.16	YES							
L0006427		0	0.72993E-02	463242.6	3808971.6	1082.0	3.40	4.00
3.16	YES							
L0006428		0	0.72993E-02	463240.3	3808979.9	1081.5	3.40	4.00
3.16	YES							
L0006429		0	0.72993E-02	463238.0	3808988.2	1081.2	3.40	4.00
3.16	YES							
L0006430		0	0.72993E-02	463235.7	3808996.5	1080.8	3.40	4.00
3.16	YES							
L0006431		0	0.72993E-02	463233.4	3809004.8	1080.2	3.40	4.00
3.16	YES							
L0006432		0	0.72993E-02	463231.0	3809013.1	1079.6	3.40	4.00
3.16	YES							
L0006433		0	0.72993E-02	463228.7	3809021.3	1078.9	3.40	4.00
3.16	YES							
L0006434		0	0.72993E-02	463226.4	3809029.6	1078.4	3.40	4.00
3.16	YES							
L0006435		0	0.72993E-02	463224.1	3809037.9	1078.1	3.40	4.00
3.16	YES							
L0006436		0	0.72993E-02	463221.8	3809046.2	1077.7	3.40	4.00
3.16	YES							
L0006437		0	0.72993E-02	463219.5	3809054.5	1077.4	3.40	4.00
3.16	YES							
L0006438		0	0.72993E-02	463217.2	3809062.8	1076.8	3.40	4.00
3.16	YES							
L0006439		0	0.72993E-02	463215.2	3809071.1	1076.2	3.40	4.00

3.16	YES							
L0006440		0	0.72993E-02	463215.1	3809079.7	1075.6	3.40	4.00
3.16	YES							
L0006441		0	0.72993E-02	463214.9	3809088.3	1075.1	3.40	4.00
3.16	YES							
L0006442		0	0.72993E-02	463214.8	3809096.9	1074.7	3.40	4.00
3.16	YES							
L0006443		0	0.72993E-02	463214.6	3809105.5	1074.4	3.40	4.00
3.16	YES							
L0006444		0	0.72993E-02	463214.5	3809114.1	1074.1	3.40	4.00
3.16	YES							
L0006445		0	0.72993E-02	463214.3	3809122.7	1073.8	3.40	4.00
3.16	YES							
L0006446		0	0.72993E-02	463214.2	3809131.3	1073.5	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 14

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0006447		0	0.72993E-02	463214.1	3809139.9	1073.2	3.40	4.00
3.16	YES							
L0006448		0	0.72993E-02	463213.9	3809148.5	1072.9	3.40	4.00
3.16	YES							
L0006449		0	0.72993E-02	463213.8	3809157.1	1072.6	3.40	4.00
3.16	YES							
L0006450		0	0.72993E-02	463213.6	3809165.7	1072.3	3.40	4.00
3.16	YES							
L0006451		0	0.72993E-02	463213.5	3809174.3	1072.1	3.40	4.00
3.16	YES							
L0006452		0	0.72993E-02	463213.3	3809182.9	1071.8	3.40	4.00
3.16	YES							
L0006453		0	0.72993E-02	463213.2	3809191.5	1071.5	3.40	4.00
3.16	YES							
L0006454		0	0.72993E-02	463213.0	3809200.1	1071.2	3.40	4.00

3.16	YES							
L0006455		0	0.72993E-02	463212.9	3809208.7	1070.9	3.40	4.00
3.16	YES							
L0006456		0	0.72993E-02	463212.7	3809217.3	1070.6	3.40	4.00
3.16	YES							
L0006457		0	0.72993E-02	463212.6	3809225.9	1070.3	3.40	4.00
3.16	YES							
L0006458		0	0.72993E-02	463212.4	3809234.5	1070.0	3.40	4.00
3.16	YES							
L0006459		0	0.72993E-02	463212.6	3809243.1	1070.0	3.40	4.00
3.16	YES							
L0006460		0	0.72993E-02	463213.5	3809251.6	1070.0	3.40	4.00
3.16	YES							
L0006461		0	0.72993E-02	463214.5	3809260.1	1070.0	3.40	4.00
3.16	YES							
L0006462		0	0.72993E-02	463215.4	3809268.7	1070.1	3.40	4.00
3.16	YES							
L0006463		0	0.72993E-02	463216.4	3809277.2	1070.3	3.40	4.00
3.16	YES							
L0006464		0	0.72993E-02	463217.3	3809285.8	1070.5	3.40	4.00
3.16	YES							
L0006465		0	0.72993E-02	463218.3	3809294.3	1070.7	3.40	4.00
3.16	YES							
L0006466		0	0.72993E-02	463219.2	3809302.9	1070.9	3.40	4.00
3.16	YES							
L0006467		0	0.72993E-02	463220.2	3809311.4	1071.2	3.40	4.00
3.16	YES							
L0006468		0	0.72993E-02	463221.1	3809320.0	1071.4	3.40	4.00
3.16	YES							
L0006469		0	0.72993E-02	463222.1	3809328.5	1071.6	3.40	4.00
3.16	YES							
L0006470		0	0.72993E-02	463223.0	3809337.1	1071.7	3.40	4.00
3.16	YES							
L0006471		0	0.72993E-02	463224.0	3809345.6	1071.8	3.40	4.00
3.16	YES							
L0006472		0	0.72993E-02	463224.9	3809354.2	1072.0	3.40	4.00
3.16	YES							
L0006473		0	0.72993E-02	463225.9	3809362.7	1073.0	3.40	4.00
3.16	YES							
L0006474		0	0.72993E-02	463226.8	3809371.3	1074.2	3.40	4.00
3.16	YES							
L0006475		0	0.72993E-02	463227.8	3809379.8	1075.4	3.40	4.00
3.16	YES							
L0006476		0	0.72993E-02	463228.7	3809388.4	1076.5	3.40	4.00
3.16	YES							
L0006477		0	0.72993E-02	463229.7	3809396.9	1077.9	3.40	4.00
3.16	YES							
L0006478		0	0.72993E-02	463230.6	3809405.5	1079.2	3.40	4.00
3.16	YES							
L0006479		0	0.72993E-02	463231.6	3809414.0	1080.5	3.40	4.00

3.16	YES							
L0006480		0	0.72993E-02	463232.5	3809422.5	1081.7	3.40	4.00
3.16	YES							
L0006481		0	0.72993E-02	463233.5	3809431.1	1083.0	3.40	4.00
3.16	YES							
L0006482		0	0.72993E-02	463234.4	3809439.6	1084.2	3.40	4.00
3.16	YES							
L0006483		0	0.72993E-02	463235.4	3809448.2	1085.1	3.40	4.00
3.16	YES							
L0006484		0	0.72993E-02	463236.3	3809456.7	1085.1	3.40	4.00
3.16	YES							
L0006485		0	0.72993E-02	463237.3	3809465.3	1085.1	3.40	4.00
3.16	YES							
L0006486		0	0.72993E-02	463238.2	3809473.8	1085.1	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 15

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE					
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006487		0	0.72993E-02	463239.2	3809482.4	1085.0	3.40	4.00
3.16	YES							
L0006488		0	0.72993E-02	463240.1	3809490.9	1085.0	3.40	4.00
3.16	YES							
L0006489		0	0.72993E-02	463241.1	3809499.5	1085.0	3.40	4.00
3.16	YES							
L0006490		0	0.72993E-02	463242.0	3809508.0	1085.0	3.40	4.00
3.16	YES							
L0006491		0	0.72993E-02	463243.0	3809516.6	1085.3	3.40	4.00
3.16	YES							
L0006492		0	0.72993E-02	463243.9	3809525.1	1085.5	3.40	4.00
3.16	YES							
L0006493		0	0.42373E-02	463267.2	3809539.5	1085.2	3.40	4.00
3.16	YES							
L0006494		0	0.42373E-02	463275.8	3809539.5	1085.3	3.40	4.00

3.16	YES							
L0006495		0	0.42373E-02	463284.4	3809539.5	1085.5	3.40	4.00
3.16	YES							
L0006496		0	0.42373E-02	463293.0	3809539.5	1085.7	3.40	4.00
3.16	YES							
L0006497		0	0.42373E-02	463301.6	3809539.5	1085.8	3.40	4.00
3.16	YES							
L0006498		0	0.42373E-02	463310.2	3809539.5	1085.6	3.40	4.00
3.16	YES							
L0006499		0	0.42373E-02	463318.8	3809539.4	1085.3	3.40	4.00
3.16	YES							
L0006500		0	0.42373E-02	463327.4	3809539.4	1085.1	3.40	4.00
3.16	YES							
L0006501		0	0.42373E-02	463336.0	3809539.4	1083.9	3.40	4.00
3.16	YES							
L0006502		0	0.42373E-02	463344.6	3809539.4	1082.3	3.40	4.00
3.16	YES							
L0006503		0	0.42373E-02	463353.2	3809539.4	1080.8	3.40	4.00
3.16	YES							
L0006504		0	0.42373E-02	463361.8	3809539.4	1078.9	3.40	4.00
3.16	YES							
L0006505		0	0.42373E-02	463370.4	3809539.4	1075.7	3.40	4.00
3.16	YES							
L0006506		0	0.42373E-02	463379.0	3809539.3	1072.6	3.40	4.00
3.16	YES							
L0006507		0	0.42373E-02	463387.6	3809539.3	1069.4	3.40	4.00
3.16	YES							
L0006508		0	0.42373E-02	463396.2	3809539.3	1067.5	3.40	4.00
3.16	YES							
L0006509		0	0.42373E-02	463404.8	3809539.3	1066.1	3.40	4.00
3.16	YES							
L0006510		0	0.42373E-02	463413.4	3809539.3	1064.6	3.40	4.00
3.16	YES							
L0006511		0	0.42373E-02	463422.0	3809539.3	1063.7	3.40	4.00
3.16	YES							
L0006512		0	0.42373E-02	463430.6	3809539.3	1064.1	3.40	4.00
3.16	YES							
L0006513		0	0.42373E-02	463439.2	3809539.2	1064.5	3.40	4.00
3.16	YES							
L0006514		0	0.42373E-02	463447.8	3809539.2	1065.0	3.40	4.00
3.16	YES							
L0006515		0	0.42373E-02	463456.4	3809539.2	1064.9	3.40	4.00
3.16	YES							
L0006516		0	0.42373E-02	463465.0	3809539.2	1064.6	3.40	4.00
3.16	YES							
L0006517		0	0.42373E-02	463473.6	3809539.2	1064.3	3.40	4.00
3.16	YES							
L0006518		0	0.42373E-02	463482.2	3809539.2	1064.0	3.40	4.00
3.16	YES							
L0006519		0	0.42373E-02	463490.8	3809539.1	1063.7	3.40	4.00

3.16	YES							
L0006520		0	0.42373E-02	463499.4	3809539.1	1063.4	3.40	4.00
3.16	YES							
L0006521		0	0.42373E-02	463508.0	3809539.1	1063.1	3.40	4.00
3.16	YES							
L0006522		0	0.42373E-02	463516.6	3809539.1	1063.0	3.40	4.00
3.16	YES							
L0006523		0	0.42373E-02	463525.2	3809539.1	1063.0	3.40	4.00
3.16	YES							
L0006524		0	0.42373E-02	463533.8	3809539.1	1062.9	3.40	4.00
3.16	YES							
L0006525		0	0.42373E-02	463542.4	3809539.1	1062.8	3.40	4.00
3.16	YES							
L0006526		0	0.42373E-02	463551.0	3809539.0	1062.6	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apol1\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 16

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006527		0	0.42373E-02	463559.6	3809539.0	1062.3	3.40	4.00
3.16	YES							
L0006528		0	0.42373E-02	463568.2	3809539.0	1062.0	3.40	4.00
3.16	YES							
L0006529		0	0.42373E-02	463576.8	3809539.0	1062.0	3.40	4.00
3.16	YES							
L0006530		0	0.42373E-02	463585.4	3809539.0	1062.0	3.40	4.00
3.16	YES							
L0006531		0	0.42373E-02	463594.0	3809539.0	1061.9	3.40	4.00
3.16	YES							
L0006532		0	0.42373E-02	463602.6	3809538.9	1062.1	3.40	4.00
3.16	YES							
L0006533		0	0.42373E-02	463611.2	3809538.9	1062.9	3.40	4.00
3.16	YES							
L0006534		0	0.42373E-02	463619.8	3809538.9	1063.6	3.40	4.00

3.16	YES							
L0006535		0	0.42373E-02	463628.4	3809538.9	1064.4	3.40	4.00
3.16	YES							
L0006536		0	0.42373E-02	463637.0	3809538.9	1065.0	3.40	4.00
3.16	YES							
L0006537		0	0.42373E-02	463645.6	3809538.9	1065.7	3.40	4.00
3.16	YES							
L0006538		0	0.42373E-02	463654.2	3809538.9	1066.4	3.40	4.00
3.16	YES							
L0006539		0	0.42373E-02	463662.8	3809538.8	1067.0	3.40	4.00
3.16	YES							
L0006540		0	0.42373E-02	463671.4	3809538.8	1067.6	3.40	4.00
3.16	YES							
L0006541		0	0.42373E-02	463680.0	3809538.8	1068.2	3.40	4.00
3.16	YES							
L0006542		0	0.42373E-02	463688.6	3809538.8	1068.8	3.40	4.00
3.16	YES							
L0006543		0	0.42373E-02	463697.2	3809538.8	1069.1	3.40	4.00
3.16	YES							
L0006544		0	0.42373E-02	463705.8	3809538.8	1069.4	3.40	4.00
3.16	YES							
L0006545		0	0.42373E-02	463714.4	3809538.7	1069.7	3.40	4.00
3.16	YES							
L0006546		0	0.42373E-02	463723.0	3809538.7	1070.0	3.40	4.00
3.16	YES							
L0006547		0	0.42373E-02	463731.6	3809538.7	1070.3	3.40	4.00
3.16	YES							
L0006548		0	0.42373E-02	463740.2	3809538.7	1070.6	3.40	4.00
3.16	YES							
L0006549		0	0.42373E-02	463748.8	3809538.7	1070.9	3.40	4.00
3.16	YES							
L0006550		0	0.42373E-02	463757.4	3809538.7	1071.2	3.40	4.00
3.16	YES							
L0006551		0	0.42373E-02	463766.0	3809538.7	1071.4	3.40	4.00
3.16	YES							
L0006552		0	0.42373E-02	463774.6	3809538.6	1071.7	3.40	4.00
3.16	YES							
L0006553		0	0.42373E-02	463783.2	3809538.6	1072.0	3.40	4.00
3.16	YES							
L0006554		0	0.42373E-02	463791.8	3809538.6	1072.3	3.40	4.00
3.16	YES							
L0006555		0	0.42373E-02	463800.4	3809538.6	1072.6	3.40	4.00
3.16	YES							
L0006556		0	0.42373E-02	463809.0	3809538.6	1072.9	3.40	4.00
3.16	YES							
L0006557		0	0.42373E-02	463817.6	3809538.6	1073.6	3.40	4.00
3.16	YES							
L0006558		0	0.42373E-02	463826.2	3809538.6	1074.5	3.40	4.00
3.16	YES							
L0006559		0	0.42373E-02	463834.8	3809538.5	1075.3	3.40	4.00

3.16	YES							
L0006560		0	0.42373E-02	463843.4	3809538.5	1076.2	3.40	4.00
3.16	YES							
L0006561		0	0.42373E-02	463852.0	3809538.5	1077.0	3.40	4.00
3.16	YES							
L0006562		0	0.42373E-02	463860.6	3809538.5	1077.9	3.40	4.00
3.16	YES							
L0006563		0	0.42373E-02	463869.2	3809538.5	1078.8	3.40	4.00
3.16	YES							
L0006564		0	0.42373E-02	463877.8	3809538.5	1078.9	3.40	4.00
3.16	YES							
L0006565		0	0.42373E-02	463886.4	3809538.4	1078.9	3.40	4.00
3.16	YES							
L0006566		0	0.42373E-02	463895.0	3809538.4	1079.0	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 17

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006567		0	0.42373E-02	463903.6	3809538.4	1079.1	3.40	4.00
3.16	YES							
L0006568		0	0.42373E-02	463912.2	3809538.4	1079.4	3.40	4.00
3.16	YES							
L0006569		0	0.42373E-02	463920.8	3809538.4	1079.6	3.40	4.00
3.16	YES							
L0006570		0	0.42373E-02	463929.4	3809538.4	1079.9	3.40	4.00
3.16	YES							
L0006571		0	0.42373E-02	463938.0	3809538.4	1079.9	3.40	4.00
3.16	YES							
L0006572		0	0.42373E-02	463946.6	3809538.3	1080.0	3.40	4.00
3.16	YES							
L0006573		0	0.42373E-02	463955.2	3809538.3	1080.0	3.40	4.00
3.16	YES							
L0006574		0	0.42373E-02	463963.8	3809538.3	1079.9	3.40	4.00

3.16	YES							
L0006575		0	0.42373E-02	463972.4	3809538.3	1079.6	3.40	4.00
3.16	YES							
L0006576		0	0.42373E-02	463981.0	3809538.3	1079.3	3.40	4.00
3.16	YES							
L0006577		0	0.42373E-02	463989.6	3809538.3	1079.0	3.40	4.00
3.16	YES							
L0006578		0	0.42373E-02	463998.2	3809538.2	1078.7	3.40	4.00
3.16	YES							
L0006579		0	0.42373E-02	464006.8	3809538.2	1078.4	3.40	4.00
3.16	YES							
L0006580		0	0.42373E-02	464015.4	3809538.2	1078.1	3.40	4.00
3.16	YES							
L0006581		0	0.42373E-02	464024.0	3809538.2	1078.0	3.40	4.00
3.16	YES							
L0006582		0	0.42373E-02	464032.6	3809538.2	1078.0	3.40	4.00
3.16	YES							
L0006583		0	0.42373E-02	464041.2	3809538.2	1078.0	3.40	4.00
3.16	YES							
L0006584		0	0.42373E-02	464049.8	3809538.2	1078.0	3.40	4.00
3.16	YES							
L0006585		0	0.42373E-02	464058.4	3809538.1	1078.0	3.40	4.00
3.16	YES							
L0006586		0	0.42373E-02	464067.0	3809538.1	1078.0	3.40	4.00
3.16	YES							
L0006587		0	0.42373E-02	464075.6	3809538.1	1077.9	3.40	4.00
3.16	YES							
L0006588		0	0.42373E-02	464084.2	3809538.1	1077.8	3.40	4.00
3.16	YES							
L0006589		0	0.42373E-02	464092.8	3809538.1	1077.5	3.40	4.00
3.16	YES							
L0006590		0	0.42373E-02	464101.4	3809538.1	1077.3	3.40	4.00
3.16	YES							
L0006591		0	0.42373E-02	464110.0	3809538.0	1077.0	3.40	4.00
3.16	YES							
L0006592		0	0.42373E-02	464118.6	3809538.0	1077.0	3.40	4.00
3.16	YES							
L0006593		0	0.42373E-02	464127.2	3809538.0	1077.0	3.40	4.00
3.16	YES							
L0006594		0	0.42373E-02	464135.8	3809538.0	1076.9	3.40	4.00
3.16	YES							
L0006595		0	0.42373E-02	464144.4	3809538.0	1076.8	3.40	4.00
3.16	YES							
L0006596		0	0.42373E-02	464153.0	3809538.0	1076.5	3.40	4.00
3.16	YES							
L0006597		0	0.42373E-02	464161.6	3809538.0	1076.3	3.40	4.00
3.16	YES							
L0006598		0	0.42373E-02	464170.2	3809537.9	1076.0	3.40	4.00
3.16	YES							
L0006599		0	0.42373E-02	464178.8	3809537.9	1076.0	3.40	4.00

3.16	YES							
L0006600		0	0.42373E-02	464187.4	3809537.9	1076.0	3.40	4.00
3.16	YES							
L0006601		0	0.42373E-02	464196.0	3809537.9	1076.0	3.40	4.00
3.16	YES							
L0006602		0	0.42373E-02	464204.6	3809537.9	1076.0	3.40	4.00
3.16	YES							
L0006603		0	0.42373E-02	464213.2	3809537.9	1076.0	3.40	4.00
3.16	YES							
L0006604		0	0.42373E-02	464221.8	3809537.9	1076.0	3.40	4.00
3.16	YES							
L0006605		0	0.42373E-02	464230.4	3809537.8	1075.9	3.40	4.00
3.16	YES							
L0006606		0	0.42373E-02	464239.0	3809537.8	1075.6	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 18

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006607		0	0.42373E-02	464247.6	3809537.8	1075.4	3.40	4.00
3.16	YES							
L0006608		0	0.42373E-02	464256.2	3809537.8	1075.1	3.40	4.00
3.16	YES							
L0006609		0	0.42373E-02	464264.8	3809537.8	1075.0	3.40	4.00
3.16	YES							
L0006610		0	0.42373E-02	464273.4	3809537.8	1075.0	3.40	4.00
3.16	YES							
L0006611		0	0.42373E-02	464282.0	3809537.7	1075.0	3.40	4.00
3.16	YES							
L0006612		0	0.42373E-02	464290.6	3809537.7	1074.9	3.40	4.00
3.16	YES							
L0006613		0	0.42373E-02	464299.2	3809537.7	1074.6	3.40	4.00
3.16	YES							
L0006614		0	0.42373E-02	464307.8	3809537.7	1074.4	3.40	4.00

3.16	YES							
L0006615		0	0.42373E-02	464316.4	3809537.7	1074.1	3.40	4.00
3.16	YES							
L0006616		0	0.42373E-02	464325.0	3809537.7	1074.0	3.40	4.00
3.16	YES							
L0006617		0	0.42373E-02	464333.6	3809537.7	1074.0	3.40	4.00
3.16	YES							
L0006618		0	0.42373E-02	464342.2	3809537.6	1074.0	3.40	4.00
3.16	YES							
L0006619		0	0.42373E-02	464350.8	3809537.6	1074.0	3.40	4.00
3.16	YES							
L0006620		0	0.42373E-02	464359.4	3809537.6	1074.0	3.40	4.00
3.16	YES							
L0006621		0	0.42373E-02	464368.0	3809537.6	1074.0	3.40	4.00
3.16	YES							
L0006622		0	0.42373E-02	464376.6	3809537.6	1074.0	3.40	4.00
3.16	YES							
L0006623		0	0.42373E-02	464385.2	3809537.6	1074.0	3.40	4.00
3.16	YES							
L0006624		0	0.42373E-02	464393.8	3809537.5	1074.0	3.40	4.00
3.16	YES							
L0006625		0	0.42373E-02	464402.4	3809537.5	1074.0	3.40	4.00
3.16	YES							
L0006626		0	0.42373E-02	464411.0	3809537.5	1073.9	3.40	4.00
3.16	YES							
L0006627		0	0.42373E-02	464419.6	3809537.5	1073.6	3.40	4.00
3.16	YES							
L0006628		0	0.42373E-02	464428.2	3809537.5	1073.4	3.40	4.00
3.16	YES							
L0006629		0	0.42373E-02	464436.8	3809537.5	1073.1	3.40	4.00
3.16	YES							
L0006630		0	0.42373E-02	464445.4	3809537.5	1073.0	3.40	4.00
3.16	YES							
L0006631		0	0.42373E-02	464454.0	3809537.4	1073.0	3.40	4.00
3.16	YES							
L0006632		0	0.42373E-02	464462.6	3809537.4	1073.0	3.40	4.00
3.16	YES							
L0006633		0	0.42373E-02	464471.2	3809537.4	1072.9	3.40	4.00
3.16	YES							
L0006634		0	0.42373E-02	464479.8	3809537.4	1072.6	3.40	4.00
3.16	YES							
L0006635		0	0.42373E-02	464488.4	3809537.4	1072.4	3.40	4.00
3.16	YES							
L0006636		0	0.42373E-02	464497.0	3809537.4	1072.1	3.40	4.00
3.16	YES							
L0006637		0	0.42373E-02	464505.6	3809537.3	1072.0	3.40	4.00
3.16	YES							
L0006638		0	0.42373E-02	464514.2	3809537.3	1072.0	3.40	4.00
3.16	YES							
L0006639		0	0.42373E-02	464522.8	3809537.3	1072.0	3.40	4.00

3.16	YES							
L0006640		0	0.42373E-02	464531.4	3809537.3	1072.0	3.40	4.00
3.16	YES							
L0006641		0	0.42373E-02	464540.0	3809537.3	1072.0	3.40	4.00
3.16	YES							
L0006642		0	0.42373E-02	464548.6	3809537.3	1072.0	3.40	4.00
3.16	YES							
L0006643		0	0.42373E-02	464557.2	3809537.3	1072.0	3.40	4.00
3.16	YES							
L0006644		0	0.42373E-02	464565.8	3809537.2	1071.8	3.40	4.00
3.16	YES							
L0006645		0	0.42373E-02	464574.4	3809537.2	1071.5	3.40	4.00
3.16	YES							
L0006646		0	0.42373E-02	464583.0	3809537.2	1071.2	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006647		0	0.42373E-02	464591.6	3809537.2	1071.0	3.40	4.00
3.16	YES							
L0006648		0	0.42373E-02	464600.2	3809537.2	1071.0	3.40	4.00
3.16	YES							
L0006649		0	0.42373E-02	464608.8	3809537.2	1071.0	3.40	4.00
3.16	YES							
L0006650		0	0.42373E-02	464617.4	3809537.2	1071.0	3.40	4.00
3.16	YES							
L0006651		0	0.42373E-02	464626.0	3809537.1	1071.0	3.40	4.00
3.16	YES							
L0006652		0	0.42373E-02	464634.6	3809537.1	1071.0	3.40	4.00
3.16	YES							
L0006653		0	0.42373E-02	464643.2	3809537.1	1071.0	3.40	4.00
3.16	YES							
L0006654		0	0.42373E-02	464651.8	3809537.1	1071.0	3.40	4.00

3.16	YES							
L0006655		0	0.42373E-02	464660.4	3809537.1	1071.0	3.40	4.00
3.16	YES							
L0006656		0	0.42373E-02	464669.0	3809537.1	1071.0	3.40	4.00
3.16	YES							
L0006657		0	0.42373E-02	464677.6	3809537.0	1071.0	3.40	4.00
3.16	YES							
L0006658		0	0.42373E-02	464686.2	3809537.0	1070.8	3.40	4.00
3.16	YES							
L0006659		0	0.42373E-02	464694.8	3809537.0	1070.5	3.40	4.00
3.16	YES							
L0006660		0	0.42373E-02	464703.4	3809537.0	1070.2	3.40	4.00
3.16	YES							
L0006661		0	0.42373E-02	464712.0	3809537.0	1070.0	3.40	4.00
3.16	YES							
L0006662		0	0.42373E-02	464720.6	3809537.0	1070.0	3.40	4.00
3.16	YES							
L0006663		0	0.42373E-02	464729.2	3809537.0	1070.0	3.40	4.00
3.16	YES							
L0006664		0	0.42373E-02	464737.8	3809536.9	1070.0	3.40	4.00
3.16	YES							
L0006665		0	0.42373E-02	464746.4	3809536.9	1070.0	3.40	4.00
3.16	YES							
L0006666		0	0.42373E-02	464755.0	3809536.9	1070.0	3.40	4.00
3.16	YES							
L0006667		0	0.42373E-02	464763.6	3809536.9	1070.0	3.40	4.00
3.16	YES							
L0006668		0	0.42373E-02	464772.2	3809536.9	1070.0	3.40	4.00
3.16	YES							
L0006669		0	0.42373E-02	464780.8	3809536.9	1070.0	3.40	4.00
3.16	YES							
L0006670		0	0.42373E-02	464789.4	3809536.8	1070.0	3.40	4.00
3.16	YES							
L0006671		0	0.42373E-02	464798.0	3809536.8	1070.0	3.40	4.00
3.16	YES							
L0006672		0	0.42373E-02	464806.6	3809536.8	1069.8	3.40	4.00
3.16	YES							
L0006673		0	0.42373E-02	464815.2	3809536.8	1069.5	3.40	4.00
3.16	YES							
L0006674		0	0.42373E-02	464823.8	3809536.8	1069.2	3.40	4.00
3.16	YES							
L0006675		0	0.42373E-02	464832.4	3809536.8	1069.0	3.40	4.00
3.16	YES							
L0006676		0	0.42373E-02	464841.0	3809536.8	1069.0	3.40	4.00
3.16	YES							
L0006677		0	0.42373E-02	464849.6	3809536.7	1069.0	3.40	4.00
3.16	YES							
L0006678		0	0.42373E-02	464858.2	3809536.7	1069.0	3.40	4.00
3.16	YES							
L0006679		0	0.42373E-02	464866.8	3809536.7	1069.0	3.40	4.00

3.16	YES							
L0006680		0	0.42373E-02	464875.4	3809536.7	1069.0	3.40	4.00
3.16	YES							
L0006681		0	0.42373E-02	464884.0	3809536.7	1069.0	3.40	4.00
3.16	YES							
L0006682		0	0.42373E-02	464892.6	3809536.7	1069.0	3.40	4.00
3.16	YES							
L0006683		0	0.42373E-02	464901.2	3809536.6	1069.0	3.40	4.00
3.16	YES							
L0006684		0	0.42373E-02	464903.4	3809544.4	1068.7	3.40	4.00
3.16	YES							
L0006685		0	0.42373E-02	464904.9	3809552.9	1068.4	3.40	4.00
3.16	YES							
L0006686		0	0.42373E-02	464906.5	3809561.4	1068.1	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 20

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006687		0	0.42373E-02	464908.1	3809569.8	1068.0	3.40	4.00
3.16	YES							
L0006688		0	0.42373E-02	464909.6	3809578.3	1068.0	3.40	4.00
3.16	YES							
L0006689		0	0.42373E-02	464911.2	3809586.7	1068.0	3.40	4.00
3.16	YES							
L0006690		0	0.42373E-02	464912.8	3809595.2	1068.0	3.40	4.00
3.16	YES							
L0006691		0	0.42373E-02	464914.3	3809603.6	1067.7	3.40	4.00
3.16	YES							
L0006692		0	0.42373E-02	464915.9	3809612.1	1067.5	3.40	4.00
3.16	YES							
L0006693		0	0.42373E-02	464920.4	3809619.0	1067.2	3.40	4.00
3.16	YES							
L0006694		0	0.42373E-02	464926.5	3809625.1	1067.0	3.40	4.00

3.16	YES							
L0006695		0	0.42373E-02	464932.6	3809631.1	1066.8	3.40	4.00
3.16	YES							
L0006696		0	0.42373E-02	464938.7	3809637.2	1066.6	3.40	4.00
3.16	YES							
L0006697		0	0.42373E-02	464944.8	3809643.3	1066.4	3.40	4.00
3.16	YES							
L0006698		0	0.42373E-02	464950.8	3809649.4	1066.2	3.40	4.00
3.16	YES							
L0006699		0	0.42373E-02	464956.9	3809655.5	1066.0	3.40	4.00
3.16	YES							
L0006700		0	0.42373E-02	464963.0	3809661.5	1066.0	3.40	4.00
3.16	YES							
L0006701		0	0.42373E-02	464969.1	3809667.6	1066.0	3.40	4.00
3.16	YES							
L0006702		0	0.42373E-02	464975.4	3809673.2	1066.0	3.40	4.00
3.16	YES							
L0006703		0	0.42373E-02	464983.8	3809675.0	1066.0	3.40	4.00
3.16	YES							
L0006704		0	0.42373E-02	464992.3	3809676.8	1066.0	3.40	4.00
3.16	YES							
L0006705		0	0.42373E-02	465000.7	3809678.6	1066.0	3.40	4.00
3.16	YES							
L0006706		0	0.42373E-02	465009.1	3809680.3	1066.0	3.40	4.00
3.16	YES							
L0006707		0	0.42373E-02	465017.5	3809682.1	1065.8	3.40	4.00
3.16	YES							
L0006708		0	0.42373E-02	465025.9	3809683.9	1065.5	3.40	4.00
3.16	YES							
L0006709		0	0.42373E-02	465034.3	3809685.7	1065.2	3.40	4.00
3.16	YES							
L0006710		0	0.42373E-02	465042.7	3809687.5	1065.0	3.40	4.00
3.16	YES							
L0006711		0	0.42373E-02	465051.2	3809689.3	1065.0	3.40	4.00
3.16	YES							
L0006712		0	0.42373E-02	465059.6	3809691.0	1065.0	3.40	4.00
3.16	YES							
L0006713		0	0.42373E-02	465068.0	3809692.8	1065.0	3.40	4.00
3.16	YES							
L0006714		0	0.42373E-02	465075.3	3809697.0	1064.9	3.40	4.00
3.16	YES							
L0006715		0	0.42373E-02	465082.3	3809702.1	1064.8	3.40	4.00
3.16	YES							
L0006716		0	0.42373E-02	465089.3	3809707.1	1064.5	3.40	4.00
3.16	YES							
L0006717		0	0.42373E-02	465096.2	3809712.1	1064.2	3.40	4.00
3.16	YES							
L0006718		0	0.42373E-02	465103.2	3809717.2	1064.0	3.40	4.00
3.16	YES							
L0006719		0	0.42373E-02	465110.2	3809722.2	1064.0	3.40	4.00

3.16	YES							
L0006720		0	0.42373E-02	465117.2	3809727.2	1064.0	3.40	4.00
3.16	YES							
L0006721		0	0.42373E-02	465124.1	3809732.3	1064.0	3.40	4.00
3.16	YES							
L0006722		0	0.42373E-02	465131.1	3809737.3	1064.0	3.40	4.00
3.16	YES							
L0006723		0	0.42373E-02	465138.1	3809742.3	1064.0	3.40	4.00
3.16	YES							
L0006724		0	0.42373E-02	465145.0	3809747.4	1064.0	3.40	4.00
3.16	YES							
L0006725		0	0.42373E-02	465152.0	3809752.4	1063.8	3.40	4.00
3.16	YES							
L0006726		0	0.42373E-02	465159.0	3809757.4	1063.6	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 21

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006727		0	0.42373E-02	465166.0	3809762.5	1063.4	3.40	4.00
3.16	YES							
L0006728		0	0.42373E-02	465172.9	3809767.5	1063.2	3.40	4.00
3.16	YES							
L0006729		0	0.47619E-02	463245.1	3809561.2	1086.0	3.40	4.00
3.16	YES							
L0006730		0	0.47619E-02	463246.0	3809569.7	1086.0	3.40	4.00
3.16	YES							
L0006731		0	0.47619E-02	463246.9	3809578.3	1086.0	3.40	4.00
3.16	YES							
L0006732		0	0.47619E-02	463247.8	3809586.8	1086.0	3.40	4.00
3.16	YES							
L0006733		0	0.47619E-02	463248.7	3809595.4	1086.0	3.40	4.00
3.16	YES							
L0006734		0	0.47619E-02	463249.6	3809603.9	1085.7	3.40	4.00

3.16	YES							
L0006735		0	0.47619E-02	463250.5	3809612.5	1085.5	3.40	4.00
3.16	YES							
L0006736		0	0.47619E-02	463251.4	3809621.0	1085.2	3.40	4.00
3.16	YES							
L0006737		0	0.47619E-02	463252.3	3809629.6	1085.0	3.40	4.00
3.16	YES							
L0006738		0	0.47619E-02	463253.2	3809638.1	1084.8	3.40	4.00
3.16	YES							
L0006739		0	0.47619E-02	463254.1	3809646.7	1084.7	3.40	4.00
3.16	YES							
L0006740		0	0.47619E-02	463255.0	3809655.2	1084.5	3.40	4.00
3.16	YES							
L0006741		0	0.47619E-02	463255.9	3809663.8	1084.3	3.40	4.00
3.16	YES							
L0006742		0	0.47619E-02	463256.8	3809672.3	1084.2	3.40	4.00
3.16	YES							
L0006743		0	0.47619E-02	463257.7	3809680.9	1084.1	3.40	4.00
3.16	YES							
L0006744		0	0.47619E-02	463258.6	3809689.4	1084.0	3.40	4.00
3.16	YES							
L0006745		0	0.47619E-02	463259.5	3809698.0	1084.0	3.40	4.00
3.16	YES							
L0006746		0	0.47619E-02	463260.4	3809706.5	1084.0	3.40	4.00
3.16	YES							
L0006747		0	0.47619E-02	463261.3	3809715.1	1084.0	3.40	4.00
3.16	YES							
L0006748		0	0.47619E-02	463262.2	3809723.7	1083.7	3.40	4.00
3.16	YES							
L0006749		0	0.47619E-02	463263.1	3809732.2	1083.5	3.40	4.00
3.16	YES							
L0006750		0	0.47619E-02	463264.1	3809740.8	1083.2	3.40	4.00
3.16	YES							
L0006751		0	0.47619E-02	463265.0	3809749.3	1082.9	3.40	4.00
3.16	YES							
L0006752		0	0.47619E-02	463265.9	3809757.9	1082.7	3.40	4.00
3.16	YES							
L0006753		0	0.47619E-02	463266.8	3809766.4	1082.4	3.40	4.00
3.16	YES							
L0006754		0	0.47619E-02	463267.7	3809775.0	1082.1	3.40	4.00
3.16	YES							
L0006755		0	0.47619E-02	463268.6	3809783.5	1082.0	3.40	4.00
3.16	YES							
L0006756		0	0.47619E-02	463269.5	3809792.1	1082.0	3.40	4.00
3.16	YES							
L0006757		0	0.47619E-02	463270.4	3809800.6	1082.0	3.40	4.00
3.16	YES							
L0006758		0	0.47619E-02	463271.3	3809809.2	1082.0	3.40	4.00
3.16	YES							
L0006759		0	0.47619E-02	463272.2	3809817.7	1082.0	3.40	4.00

3.16	YES							
L0006760		0	0.47619E-02	463273.1	3809826.3	1081.9	3.40	4.00
3.16	YES							
L0006761		0	0.47619E-02	463274.0	3809834.8	1081.9	3.40	4.00
3.16	YES							
L0006762		0	0.47619E-02	463274.9	3809843.4	1081.6	3.40	4.00
3.16	YES							
L0006763		0	0.47619E-02	463275.8	3809851.9	1081.4	3.40	4.00
3.16	YES							
L0006764		0	0.47619E-02	463276.7	3809860.5	1081.1	3.40	4.00
3.16	YES							
L0006765		0	0.47619E-02	463277.6	3809869.0	1081.0	3.40	4.00
3.16	YES							
L0006766		0	0.47619E-02	463278.5	3809877.6	1080.9	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 22

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006767		0	0.47619E-02	463279.4	3809886.1	1080.8	3.40	4.00
3.16	YES							
L0006768		0	0.47619E-02	463280.3	3809894.7	1080.7	3.40	4.00
3.16	YES							
L0006769		0	0.47619E-02	463281.2	3809903.3	1080.5	3.40	4.00
3.16	YES							
L0006770		0	0.47619E-02	463282.1	3809911.8	1080.3	3.40	4.00
3.16	YES							
L0006771		0	0.47619E-02	463283.0	3809920.4	1080.1	3.40	4.00
3.16	YES							
L0006772		0	0.47619E-02	463284.0	3809928.9	1080.0	3.40	4.00
3.16	YES							
L0006773		0	0.47619E-02	463284.9	3809937.5	1080.0	3.40	4.00
3.16	YES							
L0006774		0	0.47619E-02	463285.8	3809946.0	1080.0	3.40	4.00

3.16	YES							
L0006775		0	0.47619E-02	463286.7	3809954.6	1080.0	3.40	4.00
3.16	YES							
L0006776		0	0.47619E-02	463287.6	3809963.1	1079.8	3.40	4.00
3.16	YES							
L0006777		0	0.47619E-02	463288.5	3809971.7	1079.5	3.40	4.00
3.16	YES							
L0006778		0	0.47619E-02	463288.8	3809980.3	1079.2	3.40	4.00
3.16	YES							
L0006779		0	0.47619E-02	463288.9	3809988.9	1078.9	3.40	4.00
3.16	YES							
L0006780		0	0.47619E-02	463288.9	3809997.5	1078.8	3.40	4.00
3.16	YES							
L0006781		0	0.47619E-02	463289.0	3810006.1	1078.6	3.40	4.00
3.16	YES							
L0006782		0	0.47619E-02	463289.0	3810014.7	1078.4	3.40	4.00
3.16	YES							
L0006783		0	0.47619E-02	463289.1	3810023.3	1078.3	3.40	4.00
3.16	YES							
L0006784		0	0.47619E-02	463289.1	3810031.9	1078.2	3.40	4.00
3.16	YES							
L0006785		0	0.47619E-02	463289.2	3810040.5	1078.1	3.40	4.00
3.16	YES							
L0006786		0	0.47619E-02	463289.2	3810049.1	1077.9	3.40	4.00
3.16	YES							
L0006787		0	0.47619E-02	463289.3	3810057.7	1077.8	3.40	4.00
3.16	YES							
L0006788		0	0.47619E-02	463289.3	3810066.3	1077.6	3.40	4.00
3.16	YES							
L0006789		0	0.47619E-02	463289.4	3810074.9	1077.4	3.40	4.00
3.16	YES							
L0006790		0	0.47619E-02	463289.4	3810083.5	1077.3	3.40	4.00
3.16	YES							
L0006791		0	0.47619E-02	463289.5	3810092.1	1077.2	3.40	4.00
3.16	YES							
L0006792		0	0.47619E-02	463289.5	3810100.7	1077.1	3.40	4.00
3.16	YES							
L0006793		0	0.47619E-02	463289.6	3810109.3	1076.9	3.40	4.00
3.16	YES							
L0006794		0	0.47619E-02	463289.6	3810117.9	1076.6	3.40	4.00
3.16	YES							
L0006795		0	0.47619E-02	463289.7	3810126.5	1076.3	3.40	4.00
3.16	YES							
L0006796		0	0.47619E-02	463289.7	3810135.1	1076.0	3.40	4.00
3.16	YES							
L0006797		0	0.47619E-02	463289.8	3810143.7	1076.0	3.40	4.00
3.16	YES							
L0006798		0	0.47619E-02	463289.8	3810152.3	1076.0	3.40	4.00
3.16	YES							
L0006799		0	0.47619E-02	463289.9	3810160.9	1076.0	3.40	4.00

3.16	YES							
L0006800		0	0.47619E-02	463289.9	3810169.5	1075.9	3.40	4.00
3.16	YES							
L0006801		0	0.47619E-02	463290.0	3810178.1	1075.6	3.40	4.00
3.16	YES							
L0006802		0	0.47619E-02	463290.0	3810186.7	1075.3	3.40	4.00
3.16	YES							
L0006803		0	0.47619E-02	463290.1	3810195.2	1075.0	3.40	4.00
3.16	YES							
L0006804		0	0.47619E-02	463290.1	3810203.8	1074.8	3.40	4.00
3.16	YES							
L0006805		0	0.47619E-02	463290.2	3810212.4	1074.6	3.40	4.00
3.16	YES							
L0006806		0	0.47619E-02	463290.2	3810221.0	1074.4	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 23

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006807		0	0.47619E-02	463290.3	3810229.6	1074.3	3.40	4.00
3.16	YES							
L0006808		0	0.47619E-02	463290.3	3810238.2	1074.2	3.40	4.00
3.16	YES							
L0006809		0	0.47619E-02	463290.4	3810246.8	1074.1	3.40	4.00
3.16	YES							
L0006810		0	0.47619E-02	463290.4	3810255.4	1074.0	3.40	4.00
3.16	YES							
L0006811		0	0.47619E-02	463290.5	3810264.0	1073.8	3.40	4.00
3.16	YES							
L0006812		0	0.47619E-02	463290.5	3810272.6	1073.6	3.40	4.00
3.16	YES							
L0006813		0	0.47619E-02	463290.6	3810281.2	1073.4	3.40	4.00
3.16	YES							
L0006814		0	0.47619E-02	463290.6	3810289.8	1073.3	3.40	4.00

3.16	YES							
L0006815		0	0.47619E-02	463290.7	3810298.4	1073.2	3.40	4.00
3.16	YES							
L0006816		0	0.47619E-02	463290.7	3810307.0	1073.1	3.40	4.00
3.16	YES							
L0006817		0	0.47619E-02	463290.8	3810315.6	1073.0	3.40	4.00
3.16	YES							
L0006818		0	0.47619E-02	463290.8	3810324.2	1072.7	3.40	4.00
3.16	YES							
L0006819		0	0.47619E-02	463290.9	3810332.8	1072.4	3.40	4.00
3.16	YES							
L0006820		0	0.47619E-02	463290.9	3810341.4	1072.1	3.40	4.00
3.16	YES							
L0006821		0	0.47619E-02	463291.0	3810350.0	1072.0	3.40	4.00
3.16	YES							
L0006822		0	0.47619E-02	463291.0	3810358.6	1072.0	3.40	4.00
3.16	YES							
L0006823		0	0.47619E-02	463291.1	3810367.2	1072.0	3.40	4.00
3.16	YES							
L0006824		0	0.47619E-02	463291.1	3810375.8	1072.0	3.40	4.00
3.16	YES							
L0006825		0	0.47619E-02	463291.1	3810384.4	1072.0	3.40	4.00
3.16	YES							
L0006826		0	0.47619E-02	463291.2	3810393.0	1072.0	3.40	4.00
3.16	YES							
L0006827		0	0.47619E-02	463291.2	3810401.6	1072.0	3.40	4.00
3.16	YES							
L0006828		0	0.47619E-02	463291.3	3810410.2	1071.9	3.40	4.00
3.16	YES							
L0006829		0	0.47619E-02	463291.3	3810418.8	1071.6	3.40	4.00
3.16	YES							
L0006830		0	0.47619E-02	463291.4	3810427.4	1071.3	3.40	4.00
3.16	YES							
L0006831		0	0.47619E-02	463291.4	3810436.0	1071.0	3.40	4.00
3.16	YES							
L0006832		0	0.47619E-02	463291.5	3810444.6	1071.0	3.40	4.00
3.16	YES							
L0006833		0	0.47619E-02	463291.5	3810453.2	1071.0	3.40	4.00
3.16	YES							
L0006834		0	0.47619E-02	463291.6	3810461.8	1071.0	3.40	4.00
3.16	YES							
L0006835		0	0.47619E-02	463291.6	3810470.4	1070.9	3.40	4.00
3.16	YES							
L0006836		0	0.47619E-02	463291.7	3810479.0	1070.7	3.40	4.00
3.16	YES							
L0006837		0	0.47619E-02	463291.7	3810487.6	1070.5	3.40	4.00
3.16	YES							
L0006838		0	0.47619E-02	463291.8	3810496.2	1070.3	3.40	4.00
3.16	YES							
L0006839		0	0.47619E-02	463291.8	3810504.8	1070.2	3.40	4.00

3.16	YES							
L0006840		0	0.47619E-02	463291.9	3810513.4	1070.1	3.40	4.00
3.16	YES							
L0006841		0	0.47619E-02	463291.9	3810522.0	1070.0	3.40	4.00
3.16	YES							
L0006842		0	0.47619E-02	463292.0	3810530.6	1070.0	3.40	4.00
3.16	YES							
L0006843		0	0.47619E-02	463292.0	3810539.2	1070.0	3.40	4.00
3.16	YES							
L0006844		0	0.47619E-02	463292.1	3810547.8	1070.0	3.40	4.00
3.16	YES							
L0006845		0	0.47619E-02	463292.1	3810556.4	1070.0	3.40	4.00
3.16	YES							
L0006846		0	0.47619E-02	463292.2	3810565.0	1069.7	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 24

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006847		0	0.47619E-02	463292.2	3810573.6	1069.4	3.40	4.00
3.16	YES							
L0006848		0	0.47619E-02	463292.3	3810582.2	1069.1	3.40	4.00
3.16	YES							
L0006849		0	0.47619E-02	463292.3	3810590.8	1069.0	3.40	4.00
3.16	YES							
L0006850		0	0.47619E-02	463292.4	3810599.4	1069.0	3.40	4.00
3.16	YES							
L0006851		0	0.47619E-02	463292.4	3810608.0	1069.0	3.40	4.00
3.16	YES							
L0006852		0	0.47619E-02	463292.5	3810616.6	1069.0	3.40	4.00
3.16	YES							
L0006853		0	0.47619E-02	463292.5	3810625.2	1068.7	3.40	4.00
3.16	YES							
L0006854		0	0.47619E-02	463292.6	3810633.8	1068.4	3.40	4.00

3.16	YES							
L0006855		0	0.47619E-02	463292.6	3810642.4	1068.1	3.40	4.00
3.16	YES							
L0006856		0	0.47619E-02	463292.7	3810651.0	1068.0	3.40	4.00
3.16	YES							
L0006857		0	0.47619E-02	463292.7	3810659.6	1068.0	3.40	4.00
3.16	YES							
L0006858		0	0.47619E-02	463292.8	3810668.2	1068.0	3.40	4.00
3.16	YES							
L0006859		0	0.47619E-02	463292.8	3810676.8	1068.0	3.40	4.00
3.16	YES							
L0006860		0	0.47619E-02	463292.9	3810685.4	1067.8	3.40	4.00
3.16	YES							
L0006861		0	0.47619E-02	463292.9	3810694.0	1067.5	3.40	4.00
3.16	YES							
L0006862		0	0.47619E-02	463293.0	3810702.6	1067.3	3.40	4.00
3.16	YES							
L0006863		0	0.47619E-02	463293.0	3810711.2	1067.2	3.40	4.00
3.16	YES							
L0006864		0	0.47619E-02	463293.1	3810719.8	1067.1	3.40	4.00
3.16	YES							
L0006865		0	0.47619E-02	463293.1	3810728.4	1067.1	3.40	4.00
3.16	YES							
L0006866		0	0.47619E-02	463293.2	3810737.0	1067.0	3.40	4.00
3.16	YES							
L0006867		0	0.47619E-02	463293.2	3810745.6	1066.8	3.40	4.00
3.16	YES							
L0006868		0	0.47619E-02	463293.3	3810754.2	1066.5	3.40	4.00
3.16	YES							
L0006869		0	0.47619E-02	463293.3	3810762.8	1066.3	3.40	4.00
3.16	YES							
L0006870		0	0.47619E-02	463293.4	3810771.4	1066.2	3.40	4.00
3.16	YES							
L0006871		0	0.47619E-02	463293.4	3810780.0	1066.1	3.40	4.00
3.16	YES							
L0006872		0	0.47619E-02	463293.5	3810788.6	1066.0	3.40	4.00
3.16	YES							
L0006873		0	0.47619E-02	463293.5	3810797.2	1066.0	3.40	4.00
3.16	YES							
L0006874		0	0.47619E-02	463293.6	3810805.8	1066.0	3.40	4.00
3.16	YES							
L0006875		0	0.47619E-02	463293.6	3810814.4	1066.0	3.40	4.00
3.16	YES							
L0006876		0	0.47619E-02	463293.7	3810823.0	1066.0	3.40	4.00
3.16	YES							
L0006877		0	0.47619E-02	463293.7	3810831.6	1065.8	3.40	4.00
3.16	YES							
L0006878		0	0.47619E-02	463293.8	3810840.2	1065.6	3.40	4.00
3.16	YES							
L0006879		0	0.47619E-02	463293.8	3810848.8	1065.4	3.40	4.00

3.16	YES							
L0006880		0	0.47619E-02	463293.9	3810857.4	1065.2	3.40	4.00
3.16	YES							
L0006881		0	0.47619E-02	463293.9	3810866.0	1065.1	3.40	4.00
3.16	YES							
L0006882		0	0.47619E-02	463294.0	3810874.6	1065.1	3.40	4.00
3.16	YES							
L0006883		0	0.47619E-02	463294.0	3810883.2	1065.0	3.40	4.00
3.16	YES							
L0006884		0	0.47619E-02	463294.1	3810891.8	1065.0	3.40	4.00
3.16	YES							
L0006885		0	0.47619E-02	463294.1	3810900.4	1065.0	3.40	4.00
3.16	YES							
L0006886		0	0.47619E-02	463294.2	3810909.0	1065.0	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 25

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0006887		0	0.47619E-02	463294.2	3810917.6	1065.0	3.40	4.00
3.16	YES							
L0006888		0	0.47619E-02	463294.3	3810926.2	1065.0	3.40	4.00
3.16	YES							
L0006889		0	0.47619E-02	463294.3	3810934.8	1065.0	3.40	4.00
3.16	YES							
L0006890		0	0.47619E-02	463294.4	3810943.4	1065.0	3.40	4.00
3.16	YES							
L0006891		0	0.47619E-02	463294.4	3810952.0	1064.8	3.40	4.00
3.16	YES							
L0006892		0	0.47619E-02	463294.5	3810960.6	1064.6	3.40	4.00
3.16	YES							
L0006893		0	0.47619E-02	463294.5	3810969.2	1064.4	3.40	4.00
3.16	YES							
L0006894		0	0.47619E-02	463294.6	3810977.8	1064.2	3.40	4.00

3.16	YES							
L0006895		0	0.47619E-02	463294.6	3810986.4	1064.1	3.40	4.00
3.16	YES							
L0006896		0	0.47619E-02	463294.7	3810995.0	1064.1	3.40	4.00
3.16	YES							
L0006897		0	0.47619E-02	463294.7	3811003.6	1064.0	3.40	4.00
3.16	YES							
L0006898		0	0.47619E-02	463294.8	3811012.2	1064.0	3.40	4.00
3.16	YES							
L0006899		0	0.47619E-02	463294.8	3811020.8	1064.0	3.40	4.00
3.16	YES							
L0006900		0	0.47619E-02	463294.9	3811029.4	1064.0	3.40	4.00
3.16	YES							
L0006901		0	0.47619E-02	463294.9	3811038.0	1063.9	3.40	4.00
3.16	YES							
L0006902		0	0.47619E-02	463295.0	3811046.6	1063.7	3.40	4.00
3.16	YES							
L0006903		0	0.47619E-02	463295.0	3811055.2	1063.5	3.40	4.00
3.16	YES							
L0006904		0	0.47619E-02	463295.1	3811063.8	1063.2	3.40	4.00
3.16	YES							
L0006905		0	0.47619E-02	463295.1	3811072.4	1063.1	3.40	4.00
3.16	YES							
L0006906		0	0.47619E-02	463295.2	3811081.0	1063.1	3.40	4.00
3.16	YES							
L0006907		0	0.47619E-02	463295.2	3811089.6	1063.0	3.40	4.00
3.16	YES							
L0006908		0	0.47619E-02	463295.3	3811098.2	1062.9	3.40	4.00
3.16	YES							
L0006909		0	0.47619E-02	463295.3	3811106.8	1062.7	3.40	4.00
3.16	YES							
L0006910		0	0.47619E-02	463295.4	3811115.4	1062.5	3.40	4.00
3.16	YES							
L0006911		0	0.47619E-02	463295.4	3811124.0	1062.2	3.40	4.00
3.16	YES							
L0006912		0	0.47619E-02	463295.5	3811132.6	1062.1	3.40	4.00
3.16	YES							
L0006913		0	0.47619E-02	463295.5	3811141.2	1062.1	3.40	4.00
3.16	YES							
L0006914		0	0.47619E-02	463295.6	3811149.8	1062.0	3.40	4.00
3.16	YES							
L0006915		0	0.47619E-02	463295.6	3811158.4	1062.0	3.40	4.00
3.16	YES							
L0006916		0	0.47619E-02	463295.7	3811167.0	1062.0	3.40	4.00
3.16	YES							
L0006917		0	0.47619E-02	463295.7	3811175.6	1062.0	3.40	4.00
3.16	YES							
L0006918		0	0.47619E-02	463295.8	3811184.2	1062.0	3.40	4.00
3.16	YES							
L0006919		0	0.47619E-02	463295.8	3811192.8	1061.8	3.40	4.00

3.16	YES							
L0006920		0	0.47619E-02	463295.9	3811201.4	1061.5	3.40	4.00
3.16	YES							
L0006921		0	0.47619E-02	463295.9	3811210.0	1061.3	3.40	4.00
3.16	YES							
L0006922		0	0.47619E-02	463296.0	3811218.6	1061.1	3.40	4.00
3.16	YES							
L0006923		0	0.47619E-02	463296.0	3811227.2	1061.1	3.40	4.00
3.16	YES							
L0006924		0	0.47619E-02	463296.1	3811235.8	1061.0	3.40	4.00
3.16	YES							
L0006925		0	0.47619E-02	463296.1	3811244.4	1061.0	3.40	4.00
3.16	YES							
L0006926		0	0.47619E-02	463296.2	3811253.0	1060.8	3.40	4.00

3.16 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 26

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						

L0006927		0	0.47619E-02	463296.2	3811261.6	1060.5	3.40	4.00
3.16	YES							
L0006928		0	0.47619E-02	463296.3	3811270.2	1060.3	3.40	4.00
3.16	YES							
L0006929		0	0.47619E-02	463296.3	3811278.8	1060.1	3.40	4.00
3.16	YES							
L0006930		0	0.47619E-02	463296.4	3811287.4	1060.1	3.40	4.00
3.16	YES							
L0006931		0	0.47619E-02	463296.4	3811296.0	1060.0	3.40	4.00
3.16	YES							
L0006932		0	0.47619E-02	463296.5	3811304.6	1060.0	3.40	4.00
3.16	YES							
L0006933		0	0.47619E-02	463296.5	3811313.2	1060.0	3.40	4.00
3.16	YES							
L0006934		0	0.47619E-02	463296.6	3811321.8	1060.0	3.40	4.00

3.16	YES							
L0006935		0	0.47619E-02	463296.6	3811330.4	1060.0	3.40	4.00
3.16	YES							
L0006936		0	0.47619E-02	463296.7	3811339.0	1059.9	3.40	4.00
3.16	YES							
L0006937		0	0.47619E-02	463296.7	3811347.6	1059.6	3.40	4.00
3.16	YES							
L0006938		0	0.47619E-02	463296.8	3811356.2	1059.4	3.40	4.00
3.16	YES							
L0005936		0	0.13333E-01	463800.0	3808477.6	1099.0	4.00	1.45
1.47	YES							
L0005937		0	0.13333E-01	463803.1	3808477.6	1099.0	4.00	1.45
1.47	YES							
L0005938		0	0.13333E-01	463806.2	3808477.6	1099.0	4.00	1.45
1.47	YES							
L0005939		0	0.13333E-01	463809.4	3808477.6	1099.0	4.00	1.45
1.47	YES							
L0005940		0	0.13333E-01	463812.5	3808477.6	1098.9	4.00	1.45
1.47	YES							
L0005941		0	0.13333E-01	463815.6	3808477.6	1098.9	4.00	1.45
1.47	YES							
L0005942		0	0.13333E-01	463818.7	3808477.6	1098.8	4.00	1.45
1.47	YES							
L0005943		0	0.13333E-01	463821.8	3808477.6	1098.7	4.00	1.45
1.47	YES							
L0005944		0	0.13333E-01	463825.0	3808477.6	1098.6	4.00	1.45
1.47	YES							
L0005945		0	0.13333E-01	463828.1	3808477.6	1098.6	4.00	1.45
1.47	YES							
L0005946		0	0.13333E-01	463831.2	3808477.6	1098.5	4.00	1.45
1.47	YES							
L0005947		0	0.13333E-01	463834.3	3808477.6	1098.4	4.00	1.45
1.47	YES							
L0005948		0	0.13333E-01	463837.4	3808477.6	1098.3	4.00	1.45
1.47	YES							
L0005949		0	0.13333E-01	463840.6	3808477.6	1098.3	4.00	1.45
1.47	YES							
L0005950		0	0.13333E-01	463843.7	3808477.6	1098.3	4.00	1.45
1.47	YES							
L0005951		0	0.13333E-01	463846.8	3808477.6	1098.3	4.00	1.45
1.47	YES							
L0005952		0	0.13333E-01	463849.9	3808477.6	1098.3	4.00	1.45
1.47	YES							
L0005953		0	0.13333E-01	463853.0	3808477.6	1098.3	4.00	1.45
1.47	YES							
L0005954		0	0.13333E-01	463856.2	3808477.6	1098.3	4.00	1.45
1.47	YES							
L0005955		0	0.13333E-01	463859.3	3808477.6	1098.3	4.00	1.45
1.47	YES							
L0005956		0	0.13333E-01	463862.4	3808477.6	1098.3	4.00	1.45

```

1.47      YES
L0005957      0      0.13333E-01  463865.5  3808477.5  1098.3      4.00      1.45
1.47      YES
L0005958      0      0.13333E-01  463868.6  3808477.5  1098.3      4.00      1.45
1.47      YES
L0005959      0      0.13333E-01  463871.8  3808477.5  1098.3      4.00      1.45
1.47      YES
L0005960      0      0.13333E-01  463874.9  3808477.5  1098.2      4.00      1.45
1.47      YES
L0005961      0      0.13333E-01  463878.0  3808477.5  1098.2      4.00      1.45
1.47      YES
L0005962      0      0.13333E-01  463881.1  3808477.5  1098.2      4.00      1.45
1.47      YES
L0005963      0      0.13333E-01  463884.2  3808477.5  1098.1      4.00      1.45
1.47      YES
^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***      16:42:19

```

PAGE 27

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0005964		0	0.13333E-01	463887.4	3808477.5	1098.1	4.00	1.45
1.47	YES							
L0005965		0	0.13333E-01	463890.5	3808477.5	1098.1	4.00	1.45
1.47	YES							
L0005966		0	0.13333E-01	463893.6	3808477.5	1098.1	4.00	1.45
1.47	YES							
L0005967		0	0.13333E-01	463896.7	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005968		0	0.13333E-01	463899.8	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005969		0	0.13333E-01	463903.0	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005970		0	0.13333E-01	463906.1	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005971		0	0.13333E-01	463909.2	3808477.5	1098.0	4.00	1.45

1.47	YES							
L0005972		0	0.13333E-01	463912.3	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005973		0	0.13333E-01	463915.4	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005974		0	0.13333E-01	463918.6	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005975		0	0.13333E-01	463921.7	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005976		0	0.13333E-01	463924.8	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005977		0	0.13333E-01	463927.9	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005978		0	0.13333E-01	463931.0	3808477.5	1098.0	4.00	1.45
1.47	YES							
L0005979		0	0.13333E-01	463934.2	3808477.5	1097.9	4.00	1.45
1.47	YES							
L0005980		0	0.13333E-01	463937.3	3808477.5	1097.8	4.00	1.45
1.47	YES							
L0005981		0	0.13333E-01	463940.4	3808477.5	1097.8	4.00	1.45
1.47	YES							
L0005982		0	0.13333E-01	463943.5	3808477.5	1097.7	4.00	1.45
1.47	YES							
L0005983		0	0.13333E-01	463946.6	3808477.5	1097.6	4.00	1.45
1.47	YES							
L0005984		0	0.13333E-01	463949.8	3808477.5	1097.5	4.00	1.45
1.47	YES							
L0005985		0	0.13333E-01	463952.9	3808477.5	1097.5	4.00	1.45
1.47	YES							
L0005986		0	0.13333E-01	463956.0	3808477.5	1097.4	4.00	1.45
1.47	YES							
L0005987		0	0.13333E-01	463959.1	3808477.5	1097.3	4.00	1.45
1.47	YES							
L0005988		0	0.13333E-01	463962.2	3808477.5	1097.3	4.00	1.45
1.47	YES							
L0005989		0	0.13333E-01	463965.4	3808477.5	1097.3	4.00	1.45
1.47	YES							
L0005990		0	0.13333E-01	463968.5	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0005991		0	0.13333E-01	463971.6	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0005992		0	0.13333E-01	463974.7	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0005993		0	0.13333E-01	463977.8	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0005994		0	0.13333E-01	463981.0	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0005995		0	0.13333E-01	463984.1	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0005996		0	0.13333E-01	463987.2	3808477.4	1097.3	4.00	1.45

1.47	YES							
L0005997		0	0.13333E-01	463990.3	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0005998		0	0.13333E-01	463993.4	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0005999		0	0.13333E-01	463996.6	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0006000		0	0.13333E-01	463999.7	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0006001		0	0.13333E-01	464002.8	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0006002		0	0.13333E-01	464005.9	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0006003		0	0.13333E-01	464009.0	3808477.4	1097.3	4.00	1.45

1.47 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 28

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE			ELEV.	HEIGHT	SY
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y			
ID		SCALAR	VARY			(METERS)	(METERS)	(METERS)
(METERS)		CATS.	BY					

L0006004		0	0.13333E-01	464012.2	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0006005		0	0.13333E-01	464015.3	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0006006		0	0.13333E-01	464018.4	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0006007		0	0.13333E-01	464021.5	3808477.4	1097.3	4.00	1.45
1.47	YES							
L0006008		0	0.13333E-01	464024.6	3808477.4	1097.2	4.00	1.45
1.47	YES							
L0006009		0	0.13333E-01	464027.8	3808477.4	1097.2	4.00	1.45
1.47	YES							
L0006010		0	0.13333E-01	464030.9	3808477.4	1097.2	4.00	1.45

1.47 YES
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 29
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
IDLE	L0005936 , L0005937 , L0005938 , L0005939 , L0005940 ,
L0005941	, L0005942 , L0005943 ,
	L0005944 , L0005945 , L0005946 , L0005947 , L0005948 ,
L0005949	, L0005950 , L0005951 ,
	L0005952 , L0005953 , L0005954 , L0005955 , L0005956 ,
L0005957	, L0005958 , L0005959 ,
	L0005960 , L0005961 , L0005962 , L0005963 , L0005964 ,
L0005965	, L0005966 , L0005967 ,
	L0005968 , L0005969 , L0005970 , L0005971 , L0005972 ,
L0005973	, L0005974 , L0005975 ,
	L0005976 , L0005977 , L0005978 , L0005979 , L0005980 ,
L0005981	, L0005982 , L0005983 ,
	L0005984 , L0005985 , L0005986 , L0005987 , L0005988 ,
L0005989	, L0005990 , L0005991 ,
	L0005992 , L0005993 , L0005994 , L0005995 , L0005996 ,
L0005997	, L0005998 , L0005999 ,
	L0006000 , L0006001 , L0006002 , L0006003 , L0006004 ,
L0006005	, L0006006 , L0006007 ,
	L0006008 , L0006009 , L0006010 ,
TRUCK1I1	L0006493 , L0006494 , L0006495 , L0006496 , L0006497 ,
L0006498	, L0006499 , L0006500 ,
	L0006501 , L0006502 , L0006503 , L0006504 , L0006505 ,
L0006506	, L0006507 , L0006508 ,
	L0006509 , L0006510 , L0006511 , L0006512 , L0006513 ,

L0006514 , L0006515 , L0006516 ,
 L0006522 L0006517 , L0006518 , L0006519 , L0006520 , L0006521 ,
 , L0006523 , L0006524 ,
 L0006530 L0006525 , L0006526 , L0006527 , L0006528 , L0006529 ,
 , L0006531 , L0006532 ,
 L0006538 L0006533 , L0006534 , L0006535 , L0006536 , L0006537 ,
 , L0006539 , L0006540 ,
 L0006546 L0006541 , L0006542 , L0006543 , L0006544 , L0006545 ,
 , L0006547 , L0006548 ,
 L0006554 L0006549 , L0006550 , L0006551 , L0006552 , L0006553 ,
 , L0006555 , L0006556 ,
 L0006562 L0006557 , L0006558 , L0006559 , L0006560 , L0006561 ,
 , L0006563 , L0006564 ,
 L0006570 L0006565 , L0006566 , L0006567 , L0006568 , L0006569 ,
 , L0006571 , L0006572 ,

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 30

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

L0006578 L0006573 , L0006574 , L0006575 , L0006576 , L0006577 ,
 , L0006579 , L0006580 ,
 L0006586 L0006581 , L0006582 , L0006583 , L0006584 , L0006585 ,
 , L0006587 , L0006588 ,
 L0006594 L0006589 , L0006590 , L0006591 , L0006592 , L0006593 ,
 , L0006595 , L0006596 ,
 L0006602 L0006597 , L0006598 , L0006599 , L0006600 , L0006601 ,
 , L0006603 , L0006604 ,
 L0006605 , L0006606 , L0006607 , L0006608 , L0006609 ,

L0006610	, L0006611	, L0006612	,			
	L0006613	, L0006614	, L0006615	, L0006616	, L0006617	,
L0006618	, L0006619	, L0006620	,			
	L0006621	, L0006622	, L0006623	, L0006624	, L0006625	,
L0006626	, L0006627	, L0006628	,			
	L0006629	, L0006630	, L0006631	, L0006632	, L0006633	,
L0006634	, L0006635	, L0006636	,			
	L0006637	, L0006638	, L0006639	, L0006640	, L0006641	,
L0006642	, L0006643	, L0006644	,			
	L0006645	, L0006646	, L0006647	, L0006648	, L0006649	,
L0006650	, L0006651	, L0006652	,			
	L0006653	, L0006654	, L0006655	, L0006656	, L0006657	,
L0006658	, L0006659	, L0006660	,			
	L0006661	, L0006662	, L0006663	, L0006664	, L0006665	,
L0006666	, L0006667	, L0006668	,			
	L0006669	, L0006670	, L0006671	, L0006672	, L0006673	,
L0006674	, L0006675	, L0006676	,			
	L0006677	, L0006678	, L0006679	, L0006680	, L0006681	,
L0006682	, L0006683	, L0006684	,			
	L0006685	, L0006686	, L0006687	, L0006688	, L0006689	,
L0006690	, L0006691	, L0006692	,			
	L0006693	, L0006694	, L0006695	, L0006696	, L0006697	,
L0006698	, L0006699	, L0006700	,			
	L0006701	, L0006702	, L0006703	, L0006704	, L0006705	,
L0006706	, L0006707	, L0006708	,			
	L0006709	, L0006710	, L0006711	, L0006712	, L0006713	,
L0006714	, L0006715	, L0006716	,			
	L0006717	, L0006718	, L0006719	, L0006720	, L0006721	,
L0006722	, L0006723	, L0006724	,			
	L0006725	, L0006726	, L0006727	, L0006728	,	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs					
-----	-----					
TRUCK10	L0006011	, L0006012	, L0006013	, L0006014	, L0006015	,
L0006016	, L0006017	, L0006018	,			
	L0006019	, L0006020	, L0006021	, L0006022	, L0006023	,
L0006024	, L0006025	, L0006026	,			
	L0006027	, L0006028	, L0006029	, L0006030	, L0006031	,
L0006032	, L0006033	, L0006034	,			
	L0006035	, L0006036	, L0006037	, L0006038	, L0006039	,
L0006040	, L0006041	, L0006042	,			
	L0006043	, L0006044	, L0006045	, L0006046	, L0006047	,
L0006048	, L0006049	, L0006050	,			
	L0006051	, L0006052	, L0006053	, L0006054	, L0006055	,
L0006056	, L0006057	, L0006058	,			
	L0006059	, L0006060	, L0006061	, L0006062	, L0006063	,
L0006064	, L0006065	, L0006066	,			
	L0006067	, L0006068	, L0006069	, L0006070	, L0006071	,
L0006072	, L0006073	, L0006074	,			
	L0006075	, L0006076	, L0006077	, L0006078	, L0006079	,
L0006080	, L0006081	, L0006082	,			
	L0006083	, L0006084	, L0006085	, L0006086	, L0006087	,
L0006088	, L0006089	, L0006090	,			
	L0006091	, L0006092	, L0006093	, L0006094	, L0006095	,
L0006096	, L0006097	, L0006098	,			
	L0006099	, L0006100	,			
TRUCK31	L0006356	, L0006357	, L0006358	, L0006359	, L0006360	,
L0006361	, L0006362	, L0006363	,			
	L0006364	, L0006365	, L0006366	, L0006367	, L0006368	,
L0006369	, L0006370	, L0006371	,			

L0006377	L0006372 , L0006378	, L0006373 , L0006379	, L0006374 ,	, L0006375	, L0006376	,
L0006385	L0006380 , L0006386	, L0006381 , L0006387	, L0006382 ,	, L0006383	, L0006384	,
L0006393	L0006388 , L0006394	, L0006389 , L0006395	, L0006390 ,	, L0006391	, L0006392	,
L0006401	L0006396 , L0006402	, L0006397 , L0006403	, L0006398 ,	, L0006399	, L0006400	,
L0006409	L0006404 , L0006410	, L0006405 , L0006411	, L0006406 ,	, L0006407	, L0006408	,

L0006417	L0006412 , L0006418	, L0006413 , L0006419	, L0006414 ,	, L0006415	, L0006416	,
----------	------------------------	--------------------------	-----------------	------------	------------	---

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 32

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs					
-----	-----					
L0006425	L0006420 , L0006426	, L0006421 , L0006427	, L0006422 ,	, L0006423	, L0006424	,
L0006433	L0006428 , L0006434	, L0006429 , L0006435	, L0006430 ,	, L0006431	, L0006432	,
L0006441	L0006436 , L0006442	, L0006437 , L0006443	, L0006438 ,	, L0006439	, L0006440	,
L0006449	L0006444 , L0006450	, L0006445 , L0006451	, L0006446 ,	, L0006447	, L0006448	,
L0006457	L0006452 , L0006458	, L0006453 , L0006459	, L0006454 ,	, L0006455	, L0006456	,
L0006465	L0006460 , L0006466	, L0006461 , L0006467	, L0006462 ,	, L0006463	, L0006464	,

L0006473	L0006468 , L0006474	, L0006469 , L0006475	, L0006470 ,	, L0006471	, L0006472	,
L0006481	L0006476 , L0006482	, L0006477 , L0006483	, L0006478 ,	, L0006479	, L0006480	,
L0006489	L0006484 , L0006490	, L0006485 , L0006491	, L0006486 ,	, L0006487	, L0006488	,
	L0006492	,				
TRUCK395 L0006734	L0006729 , L0006735	, L0006730 , L0006736	, L0006731 ,	, L0006732	, L0006733	,
L0006742	L0006737 , L0006743	, L0006738 , L0006744	, L0006739 ,	, L0006740	, L0006741	,
L0006750	L0006745 , L0006751	, L0006746 , L0006752	, L0006747 ,	, L0006748	, L0006749	,
L0006758	L0006753 , L0006759	, L0006754 , L0006760	, L0006755 ,	, L0006756	, L0006757	,
L0006766	L0006761 , L0006767	, L0006762 , L0006768	, L0006763 ,	, L0006764	, L0006765	,
L0006774	L0006769 , L0006775	, L0006770 , L0006776	, L0006771 ,	, L0006772	, L0006773	,
L0006782	L0006777 , L0006783	, L0006778 , L0006784	, L0006779 ,	, L0006780	, L0006781	,
L0006790	L0006785 , L0006791	, L0006786 , L0006792	, L0006787 ,	, L0006788	, L0006789	,
L0006798	L0006793 , L0006799	, L0006794 , L0006800	, L0006795 ,	, L0006796	, L0006797	,
L0006806	L0006801 , L0006807	, L0006802 , L0006808	, L0006803 ,	, L0006804	, L0006805	,

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 33

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID		SOURCE IDs					
-----		-----					
L0006814	L0006809 , L0006815	, L0006810 , L0006816	, L0006811 ,	, L0006812	, L0006813	,	
L0006822	L0006817 , L0006823	, L0006818 , L0006824	, L0006819 ,	, L0006820	, L0006821	,	
L0006830	L0006825 , L0006831	, L0006826 , L0006832	, L0006827 ,	, L0006828	, L0006829	,	
L0006838	L0006833 , L0006839	, L0006834 , L0006840	, L0006835 ,	, L0006836	, L0006837	,	
L0006846	L0006841 , L0006847	, L0006842 , L0006848	, L0006843 ,	, L0006844	, L0006845	,	
L0006854	L0006849 , L0006855	, L0006850 , L0006856	, L0006851 ,	, L0006852	, L0006853	,	
L0006862	L0006857 , L0006863	, L0006858 , L0006864	, L0006859 ,	, L0006860	, L0006861	,	
L0006870	L0006865 , L0006871	, L0006866 , L0006872	, L0006867 ,	, L0006868	, L0006869	,	
L0006878	L0006873 , L0006879	, L0006874 , L0006880	, L0006875 ,	, L0006876	, L0006877	,	
L0006886	L0006881 , L0006887	, L0006882 , L0006888	, L0006883 ,	, L0006884	, L0006885	,	
L0006894	L0006889 , L0006895	, L0006890 , L0006896	, L0006891 ,	, L0006892	, L0006893	,	
L0006902	L0006897 , L0006903	, L0006898 , L0006904	, L0006899 ,	, L0006900	, L0006901	,	
L0006910	L0006905 , L0006911	, L0006906 , L0006912	, L0006907 ,	, L0006908	, L0006909	,	
L0006918	L0006913 , L0006919	, L0006914 , L0006920	, L0006915 ,	, L0006916	, L0006917	,	
L0006926	L0006921 , L0006927	, L0006922 , L0006928	, L0006923 ,	, L0006924	, L0006925	,	

```

L0006934      L0006929      , L0006930      , L0006931      , L0006932      , L0006933      ,
, L0006935      , L0006936      ,

L0006937      , L0006938      ,

TRUCK3I1      L0006139      , L0006140      , L0006141      , L0006142      , L0006143      ,
L0006144      , L0006145      , L0006146      ,

L0006152      L0006147      , L0006148      , L0006149      , L0006150      , L0006151      ,
, L0006153      , L0006154      ,

L0006160      L0006155      , L0006156      , L0006157      , L0006158      , L0006159      ,
, L0006161      , L0006162      ,
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 34

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
L0006168	L0006163 , L0006164 , L0006165 , L0006166 , L0006167 , , L0006169 , L0006170 ,
L0006176	L0006171 , L0006172 , L0006173 , L0006174 , L0006175 , , L0006177 , L0006178 ,
L0006184	L0006179 , L0006180 , L0006181 , L0006182 , L0006183 , , L0006185 , L0006186 ,
L0006192	L0006187 , L0006188 , L0006189 , L0006190 , L0006191 , , L0006193 , L0006194 ,
L0006200	L0006195 , L0006196 , L0006197 , L0006198 , L0006199 , , L0006201 , L0006202 ,
L0006208	L0006203 , L0006204 , L0006205 , L0006206 , L0006207 , , L0006209 , L0006210 ,
L0006216	L0006211 , L0006212 , L0006213 , L0006214 , L0006215 , , L0006217 , L0006218 ,

L0006224	L0006219 , L0006225	, L0006220 , L0006226	, L0006221 ,	, L0006222	, L0006223	,
L0006232	L0006227 , L0006233	, L0006228 , L0006234	, L0006229 ,	, L0006230	, L0006231	,
L0006240	L0006235 , L0006241	, L0006236 , L0006242	, L0006237 ,	, L0006238	, L0006239	,
L0006248	L0006243 , L0006249	, L0006244 , L0006250	, L0006245 ,	, L0006246	, L0006247	,
L0006256	L0006251 , L0006257	, L0006252 , L0006258	, L0006253 ,	, L0006254	, L0006255	,
L0006264	L0006259 , L0006265	, L0006260 , L0006266	, L0006261 ,	, L0006262	, L0006263	,
L0006272	L0006267 , L0006273	, L0006268 , L0006274	, L0006269 ,	, L0006270	, L0006271	,
L0006280	L0006275 , L0006281	, L0006276 , L0006282	, L0006277 ,	, L0006278	, L0006279	,
L0006288	L0006283 , L0006289	, L0006284 , L0006290	, L0006285 ,	, L0006286	, L0006287	,
L0006296	L0006291 , L0006297	, L0006292 , L0006298	, L0006293 ,	, L0006294	, L0006295	,
L0006304	L0006299 , L0006305	, L0006300 , L0006306	, L0006301 ,	, L0006302	, L0006303	,
L0006312	L0006307 , L0006313	, L0006308 , L0006314	, L0006309 ,	, L0006310	, L0006311	,
L0006320	L0006315 , L0006321	, L0006316 , L0006322	, L0006317 ,	, L0006318	, L0006319	,

*** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial
 *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 35

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

L0006328	L0006323 , L0006329	, L0006324 , L0006330	, L0006325 ,	, L0006326	, L0006327	,
L0006336	L0006331 , L0006337	, L0006332 , L0006338	, L0006333 ,	, L0006334	, L0006335	,
L0006344	L0006339 , L0006345	, L0006340 , L0006346	, L0006341 ,	, L0006342	, L0006343	,
L0006352	L0006347 , L0006353	, L0006348 , L0006354	, L0006349 ,	, L0006350	, L0006351	,
	L0006355	,				
TRUCK43 L0005097	L0005092 , L0005098	, L0005093 , L0005099	, L0005094 ,	, L0005095	, L0005096	,
L0005105	L0005100 , L0005106	, L0005101 , L0005107	, L0005102 ,	, L0005103	, L0005104	,
L0005113	L0005108 , L0005114	, L0005109 , L0005115	, L0005110 ,	, L0005111	, L0005112	,
L0005121	L0005116 , L0005122	, L0005117 , L0005123	, L0005118 ,	, L0005119	, L0005120	,
L0005129	L0005124 , L0005130	, L0005125 , L0005131	, L0005126 ,	, L0005127	, L0005128	,
	L0005132	, L0005133	, L0005134	, L0005135	,	
TRUCK9 L0006106	L0006101 , L0006107	, L0006102 , L0006108	, L0006103 ,	, L0006104	, L0006105	,
L0006114	L0006109 , L0006115	, L0006110 , L0006116	, L0006111 ,	, L0006112	, L0006113	,
L0006122	L0006117 , L0006123	, L0006118 , L0006124	, L0006119 ,	, L0006120	, L0006121	,
L0006130	L0006125 , L0006131	, L0006126 , L0006132	, L0006127 ,	, L0006128	, L0006129	,
L0006138	L0006133 ,	, L0006134	, L0006135	, L0006136	, L0006137	,
ALL	L0006011	, L0006012	, L0006013	, L0006014	, L0006015	,

L0006016 , L0006017 , L0006018 ,
 L0006019 , L0006020 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 ,
 L0006027 , L0006028 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 ,
 L0006035 , L0006036 , L0006037 , L0006038 , L0006039 ,
 L0006040 , L0006041 , L0006042 ,
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 36

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
L0006048	L0006043 , L0006044 , L0006045 , L0006046 , L0006047 , L0006048 , L0006049 , L0006050 ,
L0006056	L0006051 , L0006052 , L0006053 , L0006054 , L0006055 , L0006056 , L0006057 , L0006058 ,
L0006064	L0006059 , L0006060 , L0006061 , L0006062 , L0006063 , L0006064 , L0006065 , L0006066 ,
L0006072	L0006067 , L0006068 , L0006069 , L0006070 , L0006071 , L0006072 , L0006073 , L0006074 ,
L0006080	L0006075 , L0006076 , L0006077 , L0006078 , L0006079 , L0006080 , L0006081 , L0006082 ,
L0006088	L0006083 , L0006084 , L0006085 , L0006086 , L0006087 , L0006088 , L0006089 , L0006090 ,
L0006096	L0006091 , L0006092 , L0006093 , L0006094 , L0006095 , L0006096 , L0006097 , L0006098 ,
L0006104	L0006099 , L0006100 , L0006101 , L0006102 , L0006103 , L0006104 , L0006105 , L0006106 ,
	L0006107 , L0006108 , L0006109 , L0006110 , L0006111 ,

L0006112 , L0006113 , L0006114 ,
 L0006120 , L0006115 , L0006116 , L0006117 , L0006118 , L0006119 ,
 , L0006121 , L0006122 ,
 L0006128 , L0006123 , L0006124 , L0006125 , L0006126 , L0006127 ,
 , L0006129 , L0006130 ,
 L0006136 , L0006131 , L0006132 , L0006133 , L0006134 , L0006135 ,
 , L0006137 , L0006138 ,
 L0005097 , L0005092 , L0005093 , L0005094 , L0005095 , L0005096 ,
 , L0005098 , L0005099 ,
 L0005105 , L0005100 , L0005101 , L0005102 , L0005103 , L0005104 ,
 , L0005106 , L0005107 ,
 L0005113 , L0005108 , L0005109 , L0005110 , L0005111 , L0005112 ,
 , L0005114 , L0005115 ,
 L0005121 , L0005116 , L0005117 , L0005118 , L0005119 , L0005120 ,
 , L0005122 , L0005123 ,
 L0005129 , L0005124 , L0005125 , L0005126 , L0005127 , L0005128 ,
 , L0005130 , L0005131 ,
 L0006140 , L0005132 , L0005133 , L0005134 , L0005135 , L0006139 ,
 , L0006141 , L0006142 ,
 L0006148 , L0006143 , L0006144 , L0006145 , L0006146 , L0006147 ,
 , L0006149 , L0006150 ,
 L0006156 , L0006151 , L0006152 , L0006153 , L0006154 , L0006155 ,
 , L0006157 , L0006158 ,

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 37

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

L0006159 , L0006160 , L0006161 , L0006162 , L0006163 ,

L0006164	, L0006165	, L0006166	,			
	L0006167	, L0006168	, L0006169	, L0006170	, L0006171	,
L0006172	, L0006173	, L0006174	,			
	L0006175	, L0006176	, L0006177	, L0006178	, L0006179	,
L0006180	, L0006181	, L0006182	,			
	L0006183	, L0006184	, L0006185	, L0006186	, L0006187	,
L0006188	, L0006189	, L0006190	,			
	L0006191	, L0006192	, L0006193	, L0006194	, L0006195	,
L0006196	, L0006197	, L0006198	,			
	L0006199	, L0006200	, L0006201	, L0006202	, L0006203	,
L0006204	, L0006205	, L0006206	,			
	L0006207	, L0006208	, L0006209	, L0006210	, L0006211	,
L0006212	, L0006213	, L0006214	,			
	L0006215	, L0006216	, L0006217	, L0006218	, L0006219	,
L0006220	, L0006221	, L0006222	,			
	L0006223	, L0006224	, L0006225	, L0006226	, L0006227	,
L0006228	, L0006229	, L0006230	,			
	L0006231	, L0006232	, L0006233	, L0006234	, L0006235	,
L0006236	, L0006237	, L0006238	,			
	L0006239	, L0006240	, L0006241	, L0006242	, L0006243	,
L0006244	, L0006245	, L0006246	,			
	L0006247	, L0006248	, L0006249	, L0006250	, L0006251	,
L0006252	, L0006253	, L0006254	,			
	L0006255	, L0006256	, L0006257	, L0006258	, L0006259	,
L0006260	, L0006261	, L0006262	,			
	L0006263	, L0006264	, L0006265	, L0006266	, L0006267	,
L0006268	, L0006269	, L0006270	,			
	L0006271	, L0006272	, L0006273	, L0006274	, L0006275	,
L0006276	, L0006277	, L0006278	,			
	L0006279	, L0006280	, L0006281	, L0006282	, L0006283	,
L0006284	, L0006285	, L0006286	,			
	L0006287	, L0006288	, L0006289	, L0006290	, L0006291	,
L0006292	, L0006293	, L0006294	,			

L0006300 L0006295 , L0006296 , L0006297 , L0006298 , L0006299 ,
 , L0006301 , L0006302 ,

L0006308 L0006303 , L0006304 , L0006305 , L0006306 , L0006307 ,
 , L0006309 , L0006310 ,

L0006316 L0006311 , L0006312 , L0006313 , L0006314 , L0006315 ,
 , L0006317 , L0006318 ,

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 38

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs					
-----	-----					
L0006324	L0006319	, L0006320	, L0006321	, L0006322	, L0006323	,
	, L0006325	, L0006326	,			
L0006332	L0006327	, L0006328	, L0006329	, L0006330	, L0006331	,
	, L0006333	, L0006334	,			
L0006340	L0006335	, L0006336	, L0006337	, L0006338	, L0006339	,
	, L0006341	, L0006342	,			
L0006348	L0006343	, L0006344	, L0006345	, L0006346	, L0006347	,
	, L0006349	, L0006350	,			
L0006356	L0006351	, L0006352	, L0006353	, L0006354	, L0006355	,
	, L0006357	, L0006358	,			
L0006364	L0006359	, L0006360	, L0006361	, L0006362	, L0006363	,
	, L0006365	, L0006366	,			
L0006372	L0006367	, L0006368	, L0006369	, L0006370	, L0006371	,
	, L0006373	, L0006374	,			
L0006380	L0006375	, L0006376	, L0006377	, L0006378	, L0006379	,
	, L0006381	, L0006382	,			
L0006388	L0006383	, L0006384	, L0006385	, L0006386	, L0006387	,
	, L0006389	, L0006390	,			

L0006396	L0006391 , L0006397	, L0006392 , L0006398	, L0006393 ,	, L0006394	, L0006395	,
L0006404	L0006399 , L0006405	, L0006400 , L0006406	, L0006401 ,	, L0006402	, L0006403	,
L0006412	L0006407 , L0006413	, L0006408 , L0006414	, L0006409 ,	, L0006410	, L0006411	,
L0006420	L0006415 , L0006421	, L0006416 , L0006422	, L0006417 ,	, L0006418	, L0006419	,
L0006428	L0006423 , L0006429	, L0006424 , L0006430	, L0006425 ,	, L0006426	, L0006427	,
L0006436	L0006431 , L0006437	, L0006432 , L0006438	, L0006433 ,	, L0006434	, L0006435	,
L0006444	L0006439 , L0006445	, L0006440 , L0006446	, L0006441 ,	, L0006442	, L0006443	,
L0006452	L0006447 , L0006453	, L0006448 , L0006454	, L0006449 ,	, L0006450	, L0006451	,
L0006460	L0006455 , L0006461	, L0006456 , L0006462	, L0006457 ,	, L0006458	, L0006459	,
L0006468	L0006463 , L0006469	, L0006464 , L0006470	, L0006465 ,	, L0006466	, L0006467	,
L0006476	L0006471 , L0006477	, L0006472 , L0006478	, L0006473 ,	, L0006474	, L0006475	,

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 39

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

L0006484	L0006479 , L0006485	, L0006480 , L0006486	, L0006481 ,	, L0006482	, L0006483	,
----------	------------------------	--------------------------	-----------------	------------	------------	---

L0006492	L0006487 , L0006493	, L0006488 , L0006494	, L0006489 ,	, L0006490	, L0006491	,
L0006500	L0006495 , L0006501	, L0006496 , L0006502	, L0006497 ,	, L0006498	, L0006499	,
L0006508	L0006503 , L0006509	, L0006504 , L0006510	, L0006505 ,	, L0006506	, L0006507	,
L0006516	L0006511 , L0006517	, L0006512 , L0006518	, L0006513 ,	, L0006514	, L0006515	,
L0006524	L0006519 , L0006525	, L0006520 , L0006526	, L0006521 ,	, L0006522	, L0006523	,
L0006532	L0006527 , L0006533	, L0006528 , L0006534	, L0006529 ,	, L0006530	, L0006531	,
L0006540	L0006535 , L0006541	, L0006536 , L0006542	, L0006537 ,	, L0006538	, L0006539	,
L0006548	L0006543 , L0006549	, L0006544 , L0006550	, L0006545 ,	, L0006546	, L0006547	,
L0006556	L0006551 , L0006557	, L0006552 , L0006558	, L0006553 ,	, L0006554	, L0006555	,
L0006564	L0006559 , L0006565	, L0006560 , L0006566	, L0006561 ,	, L0006562	, L0006563	,
L0006572	L0006567 , L0006573	, L0006568 , L0006574	, L0006569 ,	, L0006570	, L0006571	,
L0006580	L0006575 , L0006581	, L0006576 , L0006582	, L0006577 ,	, L0006578	, L0006579	,
L0006588	L0006583 , L0006589	, L0006584 , L0006590	, L0006585 ,	, L0006586	, L0006587	,
L0006596	L0006591 , L0006597	, L0006592 , L0006598	, L0006593 ,	, L0006594	, L0006595	,
L0006604	L0006599 , L0006605	, L0006600 , L0006606	, L0006601 ,	, L0006602	, L0006603	,
L0006612	L0006607 , L0006613	, L0006608 , L0006614	, L0006609 ,	, L0006610	, L0006611	,
L0006620	L0006615 , L0006621	, L0006616 , L0006622	, L0006617 ,	, L0006618	, L0006619	,

L0006623 , L0006624 , L0006625 , L0006626 , L0006627 ,
L0006628 , L0006629 , L0006630 ,

L0006631 , L0006632 , L0006633 , L0006634 , L0006635 ,
L0006636 , L0006637 , L0006638 ,

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 40

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

L0006639 , L0006640 , L0006641 , L0006642 , L0006643 ,
L0006644 , L0006645 , L0006646 ,

L0006647 , L0006648 , L0006649 , L0006650 , L0006651 ,
L0006652 , L0006653 , L0006654 ,

L0006655 , L0006656 , L0006657 , L0006658 , L0006659 ,
L0006660 , L0006661 , L0006662 ,

L0006663 , L0006664 , L0006665 , L0006666 , L0006667 ,
L0006668 , L0006669 , L0006670 ,

L0006671 , L0006672 , L0006673 , L0006674 , L0006675 ,
L0006676 , L0006677 , L0006678 ,

L0006679 , L0006680 , L0006681 , L0006682 , L0006683 ,
L0006684 , L0006685 , L0006686 ,

L0006687 , L0006688 , L0006689 , L0006690 , L0006691 ,
L0006692 , L0006693 , L0006694 ,

L0006695 , L0006696 , L0006697 , L0006698 , L0006699 ,
L0006700 , L0006701 , L0006702 ,

L0006703 , L0006704 , L0006705 , L0006706 , L0006707 ,
L0006708 , L0006709 , L0006710 ,

L0006711 , L0006712 , L0006713 , L0006714 , L0006715 ,
L0006716 , L0006717 , L0006718 ,

L0006724	L0006719 , L0006725	, L0006720 , L0006726	, L0006721 ,	, L0006722	, L0006723	,
L0006732	L0006727 , L0006733	, L0006728 , L0006734	, L0006729 ,	, L0006730	, L0006731	,
L0006740	L0006735 , L0006741	, L0006736 , L0006742	, L0006737 ,	, L0006738	, L0006739	,
L0006748	L0006743 , L0006749	, L0006744 , L0006750	, L0006745 ,	, L0006746	, L0006747	,
L0006756	L0006751 , L0006757	, L0006752 , L0006758	, L0006753 ,	, L0006754	, L0006755	,
L0006764	L0006759 , L0006765	, L0006760 , L0006766	, L0006761 ,	, L0006762	, L0006763	,
L0006772	L0006767 , L0006773	, L0006768 , L0006774	, L0006769 ,	, L0006770	, L0006771	,
L0006780	L0006775 , L0006781	, L0006776 , L0006782	, L0006777 ,	, L0006778	, L0006779	,
L0006788	L0006783 , L0006789	, L0006784 , L0006790	, L0006785 ,	, L0006786	, L0006787	,
L0006796	L0006791 , L0006797	, L0006792 , L0006798	, L0006793 ,	, L0006794	, L0006795	,

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 41

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

L0006804	L0006799 , L0006805	, L0006800 , L0006806	, L0006801 ,	, L0006802	, L0006803	,
L0006812	L0006807 , L0006813	, L0006808 , L0006814	, L0006809 ,	, L0006810	, L0006811	,

L0006820	L0006815 , L0006821	, L0006816 , L0006822	, L0006817 ,	, L0006818	, L0006819	,
L0006828	L0006823 , L0006829	, L0006824 , L0006830	, L0006825 ,	, L0006826	, L0006827	,
L0006836	L0006831 , L0006837	, L0006832 , L0006838	, L0006833 ,	, L0006834	, L0006835	,
L0006844	L0006839 , L0006845	, L0006840 , L0006846	, L0006841 ,	, L0006842	, L0006843	,
L0006852	L0006847 , L0006853	, L0006848 , L0006854	, L0006849 ,	, L0006850	, L0006851	,
L0006860	L0006855 , L0006861	, L0006856 , L0006862	, L0006857 ,	, L0006858	, L0006859	,
L0006868	L0006863 , L0006869	, L0006864 , L0006870	, L0006865 ,	, L0006866	, L0006867	,
L0006876	L0006871 , L0006877	, L0006872 , L0006878	, L0006873 ,	, L0006874	, L0006875	,
L0006884	L0006879 , L0006885	, L0006880 , L0006886	, L0006881 ,	, L0006882	, L0006883	,
L0006892	L0006887 , L0006893	, L0006888 , L0006894	, L0006889 ,	, L0006890	, L0006891	,
L0006900	L0006895 , L0006901	, L0006896 , L0006902	, L0006897 ,	, L0006898	, L0006899	,
L0006908	L0006903 , L0006909	, L0006904 , L0006910	, L0006905 ,	, L0006906	, L0006907	,
L0006916	L0006911 , L0006917	, L0006912 , L0006918	, L0006913 ,	, L0006914	, L0006915	,
L0006924	L0006919 , L0006925	, L0006920 , L0006926	, L0006921 ,	, L0006922	, L0006923	,
L0006932	L0006927 , L0006933	, L0006928 , L0006934	, L0006929 ,	, L0006930	, L0006931	,
L0005937	L0006935 , L0005938	, L0006936 , L0005939	, L0006937 ,	, L0006938	, L0005936	,
	L0005940	, L0005941	, L0005942	, L0005943	, L0005944	,

L0005945 , L0005946 , L0005947 ,
 L0005948 , L0005949 , L0005950 , L0005951 , L0005952 ,
 L0005953 , L0005954 , L0005955 ,
 ^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 42

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
L0005961	L0005956 , L0005957 , L0005958 , L0005959 , L0005960 , , L0005962 , L0005963 ,
L0005969	L0005964 , L0005965 , L0005966 , L0005967 , L0005968 , , L0005970 , L0005971 ,
L0005977	L0005972 , L0005973 , L0005974 , L0005975 , L0005976 , , L0005978 , L0005979 ,
L0005985	L0005980 , L0005981 , L0005982 , L0005983 , L0005984 , , L0005986 , L0005987 ,
L0005993	L0005988 , L0005989 , L0005990 , L0005991 , L0005992 , , L0005994 , L0005995 ,
L0006001	L0005996 , L0005997 , L0005998 , L0005999 , L0006000 , , L0006002 , L0006003 ,
L0006009	L0006004 , L0006005 , L0006006 , L0006007 , L0006008 , , L0006010 ,
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15 Industrial Park\I15 Industrial *** 05/09/22 *** AERMET - VERSION 14134 *** *** *** 16:42:19	

PAGE 43

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID -----	URBAN POP -----	SOURCE IDs -----			
L0006015 L0006018	2180000. , L0006016 ,	L0006011 , L0006017	, L0006012 ,	, L0006013	, L0006014 ,
L0006024	L0006019 , L0006025	, L0006020 , L0006026	, L0006021 ,	, L0006022	, L0006023 ,
L0006032	L0006027 , L0006033	, L0006028 , L0006034	, L0006029 ,	, L0006030	, L0006031 ,
L0006040	L0006035 , L0006041	, L0006036 , L0006042	, L0006037 ,	, L0006038	, L0006039 ,
L0006048	L0006043 , L0006049	, L0006044 , L0006050	, L0006045 ,	, L0006046	, L0006047 ,
L0006056	L0006051 , L0006057	, L0006052 , L0006058	, L0006053 ,	, L0006054	, L0006055 ,
L0006064	L0006059 , L0006065	, L0006060 , L0006066	, L0006061 ,	, L0006062	, L0006063 ,
L0006072	L0006067 , L0006073	, L0006068 , L0006074	, L0006069 ,	, L0006070	, L0006071 ,
L0006080	L0006075 , L0006081	, L0006076 , L0006082	, L0006077 ,	, L0006078	, L0006079 ,
L0006088	L0006083 , L0006089	, L0006084 , L0006090	, L0006085 ,	, L0006086	, L0006087 ,
L0006096	L0006091 , L0006097	, L0006092 , L0006098	, L0006093 ,	, L0006094	, L0006095 ,
L0006104	L0006099 , L0006105	, L0006100 , L0006106	, L0006101 ,	, L0006102	, L0006103 ,
L0006112	L0006107 , L0006113	, L0006108 , L0006114	, L0006109 ,	, L0006110	, L0006111 ,
L0006120	L0006115 , L0006121	, L0006116 , L0006122	, L0006117 ,	, L0006118	, L0006119 ,
L0006128	L0006123 , L0006129	, L0006124 , L0006130	, L0006125 ,	, L0006126	, L0006127 ,

```

L0006136      L0006131      , L0006132      , L0006133      , L0006134      , L0006135      ,
, L0006137      , L0006138      ,

L0005097      L0005092      , L0005093      , L0005094      , L0005095      , L0005096      ,
, L0005098      , L0005099      ,

L0005105      L0005100      , L0005101      , L0005102      , L0005103      , L0005104      ,
, L0005106      , L0005107      ,

L0005113      L0005108      , L0005109      , L0005110      , L0005111      , L0005112      ,
, L0005114      , L0005115      ,

L0005121      L0005116      , L0005117      , L0005118      , L0005119      , L0005120      ,
, L0005122      , L0005123      ,
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 44

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0005129	L0005124 , L0005125 , L0005126 , L0005127 , L0005128 , , L0005130 , L0005131 ,	
L0006140	L0005132 , L0005133 , L0005134 , L0005135 , L0006139 , , L0006141 , L0006142 ,	
L0006148	L0006143 , L0006144 , L0006145 , L0006146 , L0006147 , , L0006149 , L0006150 ,	
L0006156	L0006151 , L0006152 , L0006153 , L0006154 , L0006155 , , L0006157 , L0006158 ,	
L0006164	L0006159 , L0006160 , L0006161 , L0006162 , L0006163 , , L0006165 , L0006166 ,	
L0006172	L0006167 , L0006168 , L0006169 , L0006170 , L0006171 , , L0006173 , L0006174 ,	
	L0006175 , L0006176 , L0006177 , L0006178 , L0006179 ,	

L0006180	,	L0006181	,	L0006182	,	
		L0006183	,	L0006184	,	L0006185
L0006188	,	L0006189	,	L0006190	,	
		L0006191	,	L0006192	,	L0006193
L0006196	,	L0006197	,	L0006198	,	
		L0006199	,	L0006200	,	L0006201
L0006204	,	L0006205	,	L0006206	,	
		L0006207	,	L0006208	,	L0006209
L0006212	,	L0006213	,	L0006214	,	
		L0006215	,	L0006216	,	L0006217
L0006220	,	L0006221	,	L0006222	,	
		L0006223	,	L0006224	,	L0006225
L0006228	,	L0006229	,	L0006230	,	
		L0006231	,	L0006232	,	L0006233
L0006236	,	L0006237	,	L0006238	,	
		L0006239	,	L0006240	,	L0006241
L0006244	,	L0006245	,	L0006246	,	
		L0006247	,	L0006248	,	L0006249
L0006252	,	L0006253	,	L0006254	,	
		L0006255	,	L0006256	,	L0006257
L0006260	,	L0006261	,	L0006262	,	
		L0006263	,	L0006264	,	L0006265
L0006268	,	L0006269	,	L0006270	,	
		L0006271	,	L0006272	,	L0006273
L0006276	,	L0006277	,	L0006278	,	
		L0006279	,	L0006280	,	L0006281
L0006284	,	L0006285	,	L0006286	,	

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 45

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID -----	URBAN POP -----	SOURCE IDs -----				
L0006292	L0006287 , L0006293	, L0006288 , L0006294	, L0006289 ,	, L0006290 ,	L0006291 ,	
L0006300	L0006295 , L0006301	, L0006296 , L0006302	, L0006297 ,	, L0006298 ,	L0006299 ,	
L0006308	L0006303 , L0006309	, L0006304 , L0006310	, L0006305 ,	, L0006306 ,	L0006307 ,	
L0006316	L0006311 , L0006317	, L0006312 , L0006318	, L0006313 ,	, L0006314 ,	L0006315 ,	
L0006324	L0006319 , L0006325	, L0006320 , L0006326	, L0006321 ,	, L0006322 ,	L0006323 ,	
L0006332	L0006327 , L0006333	, L0006328 , L0006334	, L0006329 ,	, L0006330 ,	L0006331 ,	
L0006340	L0006335 , L0006341	, L0006336 , L0006342	, L0006337 ,	, L0006338 ,	L0006339 ,	
L0006348	L0006343 , L0006349	, L0006344 , L0006350	, L0006345 ,	, L0006346 ,	L0006347 ,	
L0006356	L0006351 , L0006357	, L0006352 , L0006358	, L0006353 ,	, L0006354 ,	L0006355 ,	
L0006364	L0006359 , L0006365	, L0006360 , L0006366	, L0006361 ,	, L0006362 ,	L0006363 ,	
L0006372	L0006367 , L0006373	, L0006368 , L0006374	, L0006369 ,	, L0006370 ,	L0006371 ,	
L0006380	L0006375 , L0006381	, L0006376 , L0006382	, L0006377 ,	, L0006378 ,	L0006379 ,	
L0006388	L0006383 , L0006389	, L0006384 , L0006390	, L0006385 ,	, L0006386 ,	L0006387 ,	
L0006396	L0006391 , L0006397	, L0006392 , L0006398	, L0006393 ,	, L0006394 ,	L0006395 ,	
L0006404	L0006399 , L0006405	, L0006400 , L0006406	, L0006401 ,	, L0006402 ,	L0006403 ,	

```

L0006412      L0006407      , L0006408      , L0006409      , L0006410      , L0006411      ,
, L0006413      , L0006414      ,

L0006420      L0006415      , L0006416      , L0006417      , L0006418      , L0006419      ,
, L0006421      , L0006422      ,

L0006428      L0006423      , L0006424      , L0006425      , L0006426      , L0006427      ,
, L0006429      , L0006430      ,

L0006436      L0006431      , L0006432      , L0006433      , L0006434      , L0006435      ,
, L0006437      , L0006438      ,

L0006444      L0006439      , L0006440      , L0006441      , L0006442      , L0006443      ,
, L0006445      , L0006446      ,
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 46

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0006452	L0006447 , L0006448 , L0006449 , L0006450 , L0006451 , , L0006453 , L0006454 ,	
L0006460	L0006455 , L0006456 , L0006457 , L0006458 , L0006459 , , L0006461 , L0006462 ,	
L0006468	L0006463 , L0006464 , L0006465 , L0006466 , L0006467 , , L0006469 , L0006470 ,	
L0006476	L0006471 , L0006472 , L0006473 , L0006474 , L0006475 , , L0006477 , L0006478 ,	
L0006484	L0006479 , L0006480 , L0006481 , L0006482 , L0006483 , , L0006485 , L0006486 ,	
L0006492	L0006487 , L0006488 , L0006489 , L0006490 , L0006491 , , L0006493 , L0006494 ,	
	L0006495 , L0006496 , L0006497 , L0006498 , L0006499 ,	

L0006500	,	L0006501	,	L0006502	,		
		L0006503	,	L0006504	,	L0006505	,
L0006508	,	L0006509	,	L0006510	,		
		L0006511	,	L0006512	,	L0006513	,
L0006516	,	L0006517	,	L0006518	,		
		L0006519	,	L0006520	,	L0006521	,
L0006524	,	L0006525	,	L0006526	,		
		L0006527	,	L0006528	,	L0006529	,
L0006532	,	L0006533	,	L0006534	,		
		L0006535	,	L0006536	,	L0006537	,
L0006540	,	L0006541	,	L0006542	,		
		L0006543	,	L0006544	,	L0006545	,
L0006548	,	L0006549	,	L0006550	,		
		L0006551	,	L0006552	,	L0006553	,
L0006556	,	L0006557	,	L0006558	,		
		L0006559	,	L0006560	,	L0006561	,
L0006564	,	L0006565	,	L0006566	,		
		L0006567	,	L0006568	,	L0006569	,
L0006572	,	L0006573	,	L0006574	,		
		L0006575	,	L0006576	,	L0006577	,
L0006580	,	L0006581	,	L0006582	,		
		L0006583	,	L0006584	,	L0006585	,
L0006588	,	L0006589	,	L0006590	,		
		L0006591	,	L0006592	,	L0006593	,
L0006596	,	L0006597	,	L0006598	,		
		L0006599	,	L0006600	,	L0006601	,
L0006604	,	L0006605	,	L0006606	,		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 47

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs					
-----	-----	-----					
L0006612	L0006607 , L0006613	, L0006608 , L0006614	, L0006609 ,	, L0006610 ,	, L0006611 ,	,	
L0006620	L0006615 , L0006621	, L0006616 , L0006622	, L0006617 ,	, L0006618 ,	, L0006619 ,	,	
L0006628	L0006623 , L0006629	, L0006624 , L0006630	, L0006625 ,	, L0006626 ,	, L0006627 ,	,	
L0006636	L0006631 , L0006637	, L0006632 , L0006638	, L0006633 ,	, L0006634 ,	, L0006635 ,	,	
L0006644	L0006639 , L0006645	, L0006640 , L0006646	, L0006641 ,	, L0006642 ,	, L0006643 ,	,	
L0006652	L0006647 , L0006653	, L0006648 , L0006654	, L0006649 ,	, L0006650 ,	, L0006651 ,	,	
L0006660	L0006655 , L0006661	, L0006656 , L0006662	, L0006657 ,	, L0006658 ,	, L0006659 ,	,	
L0006668	L0006663 , L0006669	, L0006664 , L0006670	, L0006665 ,	, L0006666 ,	, L0006667 ,	,	
L0006676	L0006671 , L0006677	, L0006672 , L0006678	, L0006673 ,	, L0006674 ,	, L0006675 ,	,	
L0006684	L0006679 , L0006685	, L0006680 , L0006686	, L0006681 ,	, L0006682 ,	, L0006683 ,	,	
L0006692	L0006687 , L0006693	, L0006688 , L0006694	, L0006689 ,	, L0006690 ,	, L0006691 ,	,	
L0006700	L0006695 , L0006701	, L0006696 , L0006702	, L0006697 ,	, L0006698 ,	, L0006699 ,	,	
L0006708	L0006703 , L0006709	, L0006704 , L0006710	, L0006705 ,	, L0006706 ,	, L0006707 ,	,	
L0006716	L0006711 , L0006717	, L0006712 , L0006718	, L0006713 ,	, L0006714 ,	, L0006715 ,	,	
L0006724	L0006719 , L0006725	, L0006720 , L0006726	, L0006721 ,	, L0006722 ,	, L0006723 ,	,	


```

L0006732      L0006727      , L0006728      , L0006729      , L0006730      , L0006731      ,
, L0006733      , L0006734      ,

L0006740      L0006735      , L0006736      , L0006737      , L0006738      , L0006739      ,
, L0006741      , L0006742      ,

L0006748      L0006743      , L0006744      , L0006745      , L0006746      , L0006747      ,
, L0006749      , L0006750      ,

L0006756      L0006751      , L0006752      , L0006753      , L0006754      , L0006755      ,
, L0006757      , L0006758      ,

L0006764      L0006759      , L0006760      , L0006761      , L0006762      , L0006763      ,
, L0006765      , L0006766      ,
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apol1\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 48

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0006772	L0006767 , L0006773	L0006768 , L0006774
		L0006769 , L0006770 , L0006771 ,
L0006780	L0006775 , L0006781	L0006776 , L0006782
		L0006777 , L0006778 , L0006779 ,
L0006788	L0006783 , L0006789	L0006784 , L0006790
		L0006785 , L0006786 , L0006787 ,
L0006796	L0006791 , L0006797	L0006792 , L0006798
		L0006793 , L0006794 , L0006795 ,
L0006804	L0006799 , L0006805	L0006800 , L0006806
		L0006801 , L0006802 , L0006803 ,
L0006812	L0006807 , L0006813	L0006808 , L0006814
		L0006809 , L0006810 , L0006811 ,
	L0006815	L0006816 , L0006817 , L0006818 , L0006819 ,

L0006820	,	L0006821	,	L0006822	,	
		L0006823	,	L0006824	,	L0006825
L0006828	,	L0006829	,	L0006830	,	
		L0006831	,	L0006832	,	L0006833
L0006836	,	L0006837	,	L0006838	,	
		L0006839	,	L0006840	,	L0006841
L0006844	,	L0006845	,	L0006846	,	
		L0006847	,	L0006848	,	L0006849
L0006852	,	L0006853	,	L0006854	,	
		L0006855	,	L0006856	,	L0006857
L0006860	,	L0006861	,	L0006862	,	
		L0006863	,	L0006864	,	L0006865
L0006868	,	L0006869	,	L0006870	,	
		L0006871	,	L0006872	,	L0006873
L0006876	,	L0006877	,	L0006878	,	
		L0006879	,	L0006880	,	L0006881
L0006884	,	L0006885	,	L0006886	,	
		L0006887	,	L0006888	,	L0006889
L0006892	,	L0006893	,	L0006894	,	
		L0006895	,	L0006896	,	L0006897
L0006900	,	L0006901	,	L0006902	,	
		L0006903	,	L0006904	,	L0006905
L0006908	,	L0006909	,	L0006910	,	
		L0006911	,	L0006912	,	L0006913
L0006916	,	L0006917	,	L0006918	,	
		L0006919	,	L0006920	,	L0006921
L0006924	,	L0006925	,	L0006926	,	

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 49

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID -----	URBAN POP -----	SOURCE IDs -----					
L0006932	L0006927 , L0006933	, L0006928 , L0006934	, L0006929 ,	, L0006930	, L0006931	,	
L0005937	L0006935 , L0005938	, L0006936 , L0005939	, L0006937 ,	, L0006938	, L0005936	,	
L0005945	L0005940 , L0005946	, L0005941 , L0005947	, L0005942 ,	, L0005943	, L0005944	,	
L0005953	L0005948 , L0005954	, L0005949 , L0005955	, L0005950 ,	, L0005951	, L0005952	,	
L0005961	L0005956 , L0005962	, L0005957 , L0005963	, L0005958 ,	, L0005959	, L0005960	,	
L0005969	L0005964 , L0005970	, L0005965 , L0005971	, L0005966 ,	, L0005967	, L0005968	,	
L0005977	L0005972 , L0005978	, L0005973 , L0005979	, L0005974 ,	, L0005975	, L0005976	,	
L0005985	L0005980 , L0005986	, L0005981 , L0005987	, L0005982 ,	, L0005983	, L0005984	,	
L0005993	L0005988 , L0005994	, L0005989 , L0005995	, L0005990 ,	, L0005991	, L0005992	,	
L0006001	L0005996 , L0006002	, L0005997 , L0006003	, L0005998 ,	, L0005999	, L0006000	,	
L0006009	L0006004 , L0006010	, L0006005 ,	, L0006006	, L0006007	, L0006008	,	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 50

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(462160.5, 3809377.8, 1098.0, 1098.0,	0.0);	(462051.5,
3809270.6, 1100.0, 1100.0, 0.0);		
(462014.5, 3809029.1, 1104.0, 1104.0,	0.0);	(462010.6,
3808855.8, 1107.0, 1107.0, 0.0);		
(461936.6, 3808886.9, 1107.0, 1107.0,	0.0);	(461936.6,
3808997.9, 1105.4, 1105.4, 0.0);		
(461909.3, 3808768.1, 1109.2, 1109.2,	0.0);	(461835.3,
3808894.7, 1107.4, 1107.4, 0.0);		
(461845.0, 3808996.0, 1106.0, 1106.0,	0.0);	(461833.3,
3809114.8, 1104.0, 1104.0, 0.0);		
(461843.1, 3809210.2, 1103.0, 1103.0,	0.0);	(461810.0,
3809297.9, 1101.9, 1101.9, 0.0);		
(461856.7, 3809385.5, 1100.0, 1100.0,	0.0);	(461841.1,
3809482.9, 1098.0, 1098.0, 0.0);		
(462004.7, 3809379.7, 1099.0, 1099.0,	0.0);	(461763.2,
3808793.4, 1110.0, 1110.0, 0.0);		
(461753.5, 3808699.9, 1110.0, 1110.0,	0.0);	(461835.3,
3808686.3, 1111.0, 1111.0, 0.0);		
(461823.6, 3808579.2, 1113.9, 1113.9,	0.0);	(461761.3,
3808585.0, 1114.1, 1114.1, 0.0);		
(462301.2, 3807807.1, 1122.2, 1122.2,	0.0);	(462304.8,
3807868.2, 1121.3, 1121.3, 0.0);		
(462216.8, 3807882.5, 1122.1, 1122.1,	0.0);	(462116.3,
3807886.1, 1123.0, 1123.0, 0.0);		
(462114.5, 3807789.2, 1125.2, 1125.2,	0.0);	(462012.2,
3807887.9, 1123.9, 1123.9, 0.0);		
(462008.7, 3807975.8, 1122.0, 1122.0,	0.0);	(461917.1,
3807972.2, 1123.1, 1123.1, 0.0);		
(461922.5, 3808187.6, 1119.0, 1119.0,	0.0);	(461908.2,
3808288.1, 1117.6, 1117.6, 0.0);		
(461848.9, 3808377.8, 1116.2, 1116.2,	0.0);	(461831.0,
3808494.5, 1114.7, 1114.7, 0.0);		
(462421.4, 3808394.0, 1110.0, 1110.0,	0.0);	(462459.1,
3808501.7, 1108.5, 1108.5, 0.0);		
(462437.6, 3808580.6, 1107.6, 1107.6,	0.0);	(462654.7,
3809189.0, 1096.6, 1096.6, 0.0);		
(462559.5, 3809194.3, 1097.0, 1097.0,	0.0);	(465763.9,
3807935.2, 1085.9, 1085.9, 0.0);		
(465819.8, 3807935.2, 1085.0, 1085.0,	0.0);	(465875.8,
3807935.2, 1084.0, 1084.0, 0.0);		
(465931.8, 3807935.2, 1083.1, 1083.1,	0.0);	(465987.8,
3807935.2, 1082.1, 1082.1, 0.0);		
(466043.8, 3807935.2, 1081.2, 1081.2,	0.0);	(466099.7,
3807935.2, 1080.2, 1080.2, 0.0);		
(466155.7, 3807935.2, 1079.3, 1079.3,	0.0);	(466211.7,
3807935.2, 1078.3, 1078.3, 0.0);		
(466267.7, 3807935.2, 1077.4, 1077.4,	0.0);	(466323.7,
3807935.2, 1076.2, 1076.2, 0.0);		
(466379.6, 3807935.2, 1075.3, 1075.3,	0.0);	(466435.6,
3807935.2, 1074.5, 1074.5, 0.0);		

```

( 466491.6, 3807935.2, 1073.6, 1073.6, 0.0); ( 466547.6,
3807935.2, 1072.0, 1072.0, 0.0);
( 466603.6, 3807935.2, 1071.0, 1071.0, 0.0); ( 466659.5,
3807935.2, 1070.0, 1070.0, 0.0);
( 466715.5, 3807935.2, 1069.0, 1069.0, 0.0); ( 466771.5,
3807935.2, 1068.0, 1068.0, 0.0);
( 466827.5, 3807935.2, 1066.6, 1066.6, 0.0); ( 466883.5,
3807935.2, 1065.5, 1065.5, 0.0);
( 465763.9, 3808001.4, 1084.9, 1084.9, 0.0); ( 465819.8,
3808001.4, 1084.0, 1084.0, 0.0);
( 465875.8, 3808001.4, 1083.0, 1083.0, 0.0); ( 465931.8,
3808001.4, 1082.0, 1082.0, 0.0);
( 465987.8, 3808001.4, 1081.4, 1081.4, 0.0); ( 466043.8,
3808001.4, 1080.1, 1080.1, 0.0);
( 466099.7, 3808001.4, 1079.7, 1079.7, 0.0); ( 466155.7,
3808001.4, 1078.8, 1078.8, 0.0);
( 466211.7, 3808001.4, 1078.0, 1078.0, 0.0); ( 466267.7,
3808001.4, 1077.0, 1077.0, 0.0);
( 466323.7, 3808001.4, 1076.0, 1076.0, 0.0); ( 466379.6,
3808001.4, 1075.0, 1075.0, 0.0);
( 466435.6, 3808001.4, 1074.0, 1074.0, 0.0); ( 466491.6,
3808001.4, 1073.0, 1073.0, 0.0);
( 466547.6, 3808001.4, 1071.8, 1071.8, 0.0); ( 466603.6,
3808001.4, 1070.9, 1070.9, 0.0);
( 466659.5, 3808001.4, 1070.0, 1070.0, 0.0); ( 466715.5,
3808001.4, 1068.3, 1068.3, 0.0);
( 466771.5, 3808001.4, 1067.4, 1067.4, 0.0); ( 466827.5,
3808001.4, 1066.4, 1066.4, 0.0);
( 466883.5, 3808001.4, 1065.1, 1065.1, 0.0); ( 465763.9,
3808067.6, 1084.0, 1084.0, 0.0);
( 465819.8, 3808067.6, 1083.0, 1083.0, 0.0); ( 465875.8,
3808067.6, 1082.1, 1082.1, 0.0);
( 465931.8, 3808067.6, 1081.2, 1081.2, 0.0); ( 465987.8,
3808067.6, 1080.4, 1080.4, 0.0);
( 466043.8, 3808067.6, 1079.5, 1079.5, 0.0); ( 466099.7,
3808067.6, 1078.6, 1078.6, 0.0);
( 466155.7, 3808067.6, 1077.8, 1077.8, 0.0); ( 466211.7,
3808067.6, 1076.9, 1076.9, 0.0);
( 466267.7, 3808067.6, 1076.0, 1076.0, 0.0); ( 466323.7,
3808067.6, 1075.0, 1075.0, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 16:42:19

```

PAGE 51

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

```

(METERS)

(466379.6, 3808067.6, 1074.0, 1074.0,	0.0);	(466435.6,
3808067.6, 1073.5, 1073.5, 0.0);		
(466491.6, 3808067.6, 1072.0, 1072.0,	0.0);	(466547.6,
3808067.6, 1071.0, 1071.0, 0.0);		
(466603.6, 3808067.6, 1070.0, 1070.0,	0.0);	(466659.5,
3808067.6, 1069.0, 1069.0, 0.0);		
(466715.5, 3808067.6, 1068.1, 1068.1,	0.0);	(466771.5,
3808067.6, 1067.3, 1067.3, 0.0);		
(466827.5, 3808067.6, 1066.0, 1066.0,	0.0);	(466883.5,
3808067.6, 1064.5, 1064.5, 0.0);		
(465763.9, 3808133.8, 1083.0, 1083.0,	0.0);	(465819.8,
3808133.8, 1082.0, 1082.0, 0.0);		
(465875.8, 3808133.8, 1081.1, 1081.1,	0.0);	(465931.8,
3808133.8, 1080.2, 1080.2, 0.0);		
(465987.8, 3808133.8, 1079.8, 1079.8,	0.0);	(466043.8,
3808133.8, 1078.9, 1078.9, 0.0);		
(466099.7, 3808133.8, 1077.9, 1077.9,	0.0);	(466155.7,
3808133.8, 1077.0, 1077.0, 0.0);		
(466211.7, 3808133.8, 1076.0, 1076.0,	0.0);	(466267.7,
3808133.8, 1075.0, 1075.0, 0.0);		
(466323.7, 3808133.8, 1074.1, 1074.1,	0.0);	(466379.6,
3808133.8, 1073.3, 1073.3, 0.0);		
(466435.6, 3808133.8, 1072.5, 1072.5,	0.0);	(466491.6,
3808133.8, 1071.6, 1071.6, 0.0);		
(466547.6, 3808133.8, 1070.5, 1070.5,	0.0);	(466603.6,
3808133.8, 1069.6, 1069.6, 0.0);		
(466659.5, 3808133.8, 1068.8, 1068.8,	0.0);	(466715.5,
3808133.8, 1067.8, 1067.8, 0.0);		
(466771.5, 3808133.8, 1066.3, 1066.3,	0.0);	(466827.5,
3808133.8, 1065.4, 1065.4, 0.0);		
(466883.5, 3808133.8, 1064.4, 1064.4,	0.0);	(465763.9,
3808200.1, 1081.9, 1081.9, 0.0);		
(465819.8, 3808200.1, 1081.0, 1081.0,	0.0);	(465875.8,
3808200.1, 1080.1, 1080.1, 0.0);		
(465931.8, 3808200.1, 1079.7, 1079.7,	0.0);	(465987.8,
3808200.1, 1078.7, 1078.7, 0.0);		
(466043.8, 3808200.1, 1077.8, 1077.8,	0.0);	(466099.7,
3808200.1, 1076.8, 1076.8, 0.0);		
(466155.7, 3808200.1, 1075.9, 1075.9,	0.0);	(466211.7,
3808200.1, 1075.0, 1075.0, 0.0);		
(466267.7, 3808200.1, 1074.0, 1074.0,	0.0);	(466323.7,
3808200.1, 1073.6, 1073.6, 0.0);		
(466379.6, 3808200.1, 1072.7, 1072.7,	0.0);	(466435.6,
3808200.1, 1071.8, 1071.8, 0.0);		
(466491.6, 3808200.1, 1070.8, 1070.8,	0.0);	(466547.6,
3808200.1, 1069.9, 1069.9, 0.0);		
(466603.6, 3808200.1, 1068.9, 1068.9,	0.0);	(466659.5,
3808200.1, 1068.0, 1068.0, 0.0);		

(466715.5, 3808200.1, 1067.1, 1067.1,	0.0);	(466771.5,
3808200.1, 1066.0, 1066.0, 0.0);		
(466827.5, 3808200.1, 1064.7, 1064.7,	0.0);	(466883.5,
3808200.1, 1063.8, 1063.8, 0.0);		
(465763.9, 3808266.3, 1080.3, 1080.3,	0.0);	(465819.8,
3808266.3, 1080.0, 1080.0, 0.0);		
(465875.8, 3808266.3, 1079.4, 1079.4,	0.0);	(465931.8,
3808266.3, 1078.5, 1078.5, 0.0);		
(465987.8, 3808266.3, 1077.6, 1077.6,	0.0);	(466043.8,
3808266.3, 1076.7, 1076.7, 0.0);		
(466099.7, 3808266.3, 1075.8, 1075.8,	0.0);	(466155.7,
3808266.3, 1074.9, 1074.9, 0.0);		
(466211.7, 3808266.3, 1074.0, 1074.0,	0.0);	(466267.7,
3808266.3, 1073.4, 1073.4, 0.0);		
(466323.7, 3808266.3, 1072.5, 1072.5,	0.0);	(466379.6,
3808266.3, 1072.0, 1072.0, 0.0);		
(466435.6, 3808266.3, 1071.2, 1071.2,	0.0);	(466491.6,
3808266.3, 1070.0, 1070.0, 0.0);		
(466547.6, 3808266.3, 1069.0, 1069.0,	0.0);	(466603.6,
3808266.3, 1068.0, 1068.0, 0.0);		
(466659.5, 3808266.3, 1067.3, 1067.3,	0.0);	(466715.5,
3808266.3, 1066.1, 1066.1, 0.0);		
(466771.5, 3808266.3, 1065.3, 1065.3,	0.0);	(466827.5,
3808266.3, 1064.1, 1064.1, 0.0);		
(466883.5, 3808266.3, 1063.2, 1063.2,	0.0);	(465763.9,
3808332.5, 1079.1, 1079.1, 0.0);		
(465819.8, 3808332.5, 1079.1, 1079.1,	0.0);	(465875.8,
3808332.5, 1078.2, 1078.2, 0.0);		
(465931.8, 3808332.5, 1077.4, 1077.4,	0.0);	(465987.8,
3808332.5, 1076.5, 1076.5, 0.0);		
(466043.8, 3808332.5, 1075.6, 1075.6,	0.0);	(466099.7,
3808332.5, 1074.7, 1074.7, 0.0);		
(466155.7, 3808332.5, 1074.0, 1074.0,	0.0);	(466211.7,
3808332.5, 1073.1, 1073.1, 0.0);		
(466267.7, 3808332.5, 1072.2, 1072.2,	0.0);	(466323.7,
3808332.5, 1072.0, 1072.0, 0.0);		
(466379.6, 3808332.5, 1071.0, 1071.0,	0.0);	(466435.6,
3808332.5, 1070.1, 1070.1, 0.0);		
(466491.6, 3808332.5, 1069.1, 1069.1,	0.0);	(466547.6,
3808332.5, 1068.1, 1068.1, 0.0);		
(466603.6, 3808332.5, 1067.9, 1067.9,	0.0);	(466659.5,
3808332.5, 1067.0, 1067.0, 0.0);		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(466715.5, 3808332.5, 1066.0, 1066.0, 0.0);	(466771.5,
3808332.5, 1064.4, 1064.4, 0.0);	
(466827.5, 3808332.5, 1063.5, 1063.5, 0.0);	(466883.5,
3808332.5, 1062.5, 1062.5, 0.0);	
(465763.9, 3808398.7, 1078.0, 1078.0, 0.0);	(465819.8,
3808398.7, 1077.9, 1077.9, 0.0);	
(465875.8, 3808398.7, 1077.0, 1077.0, 0.0);	(465931.8,
3808398.7, 1076.2, 1076.2, 0.0);	
(465987.8, 3808398.7, 1075.4, 1075.4, 0.0);	(466043.8,
3808398.7, 1074.5, 1074.5, 0.0);	
(466099.7, 3808398.7, 1074.0, 1074.0, 0.0);	(466155.7,
3808398.7, 1073.0, 1073.0, 0.0);	
(466211.7, 3808398.7, 1072.0, 1072.0, 0.0);	(466267.7,
3808398.7, 1071.9, 1071.9, 0.0);	
(466323.7, 3808398.7, 1070.9, 1070.9, 0.0);	(466379.6,
3808398.7, 1070.0, 1070.0, 0.0);	
(466435.6, 3808398.7, 1069.4, 1069.4, 0.0);	(466491.6,
3808398.7, 1068.6, 1068.6, 0.0);	
(466547.6, 3808398.7, 1067.7, 1067.7, 0.0);	(466603.6,
3808398.7, 1066.9, 1066.9, 0.0);	
(466659.5, 3808398.7, 1066.0, 1066.0, 0.0);	(466715.5,
3808398.7, 1064.9, 1064.9, 0.0);	
(466771.5, 3808398.7, 1064.0, 1064.0, 0.0);	(466827.5,
3808398.7, 1063.0, 1063.0, 0.0);	
(466883.5, 3808398.7, 1062.0, 1062.0, 0.0);	(465763.9,
3808464.9, 1077.0, 1077.0, 0.0);	
(465819.8, 3808464.9, 1076.7, 1076.7, 0.0);	(465875.8,
3808464.9, 1075.8, 1075.8, 0.0);	
(465931.8, 3808464.9, 1075.0, 1075.0, 0.0);	(465987.8,
3808464.9, 1074.3, 1074.3, 0.0);	
(466043.8, 3808464.9, 1073.9, 1073.9, 0.0);	(466099.7,
3808464.9, 1072.9, 1072.9, 0.0);	
(466155.7, 3808464.9, 1071.9, 1071.9, 0.0);	(466211.7,
3808464.9, 1071.0, 1071.0, 0.0);	
(466267.7, 3808464.9, 1070.7, 1070.7, 0.0);	(466323.7,
3808464.9, 1069.8, 1069.8, 0.0);	
(466379.6, 3808464.9, 1069.2, 1069.2, 0.0);	(466435.6,
3808464.9, 1068.3, 1068.3, 0.0);	
(466491.6, 3808464.9, 1067.9, 1067.9, 0.0);	(466547.6,
3808464.9, 1066.9, 1066.9, 0.0);	
(466603.6, 3808464.9, 1066.0, 1066.0, 0.0);	(466659.5,
3808464.9, 1065.0, 1065.0, 0.0);	
(466715.5, 3808464.9, 1064.1, 1064.1, 0.0);	(466771.5,
3808464.9, 1063.2, 1063.2, 0.0);	
(466827.5, 3808464.9, 1062.3, 1062.3, 0.0);	(466883.5,
3808464.9, 1061.4, 1061.4, 0.0);	


```

( 465763.9, 3808531.2, 1076.4, 1076.4, 0.0); ( 465819.8,
3808531.2, 1075.5, 1075.5, 0.0);
( 465875.8, 3808531.2, 1074.6, 1074.6, 0.0); ( 465931.8,
3808531.2, 1073.6, 1073.6, 0.0);
( 465987.8, 3808531.2, 1073.2, 1073.2, 0.0); ( 466043.8,
3808531.2, 1072.5, 1072.5, 0.0);
( 466099.7, 3808531.2, 1071.8, 1071.8, 0.0); ( 466155.7,
3808531.2, 1070.9, 1070.9, 0.0);
( 466211.7, 3808531.2, 1070.0, 1070.0, 0.0); ( 466267.7,
3808531.2, 1069.5, 1069.5, 0.0);
( 466323.7, 3808531.2, 1069.0, 1069.0, 0.0); ( 466379.6,
3808531.2, 1068.2, 1068.2, 0.0);
( 466435.6, 3808531.2, 1067.7, 1067.7, 0.0); ( 466491.6,
3808531.2, 1066.8, 1066.8, 0.0);
( 466547.6, 3808531.2, 1065.9, 1065.9, 0.0); ( 466603.6,
3808531.2, 1064.9, 1064.9, 0.0);
( 466659.5, 3808531.2, 1064.0, 1064.0, 0.0); ( 466715.5,
3808531.2, 1063.1, 1063.1, 0.0);
( 466771.5, 3808531.2, 1062.1, 1062.1, 0.0); ( 466827.5,
3808531.2, 1061.4, 1061.4, 0.0);
( 466883.5, 3808531.2, 1060.5, 1060.5, 0.0); ( 465763.9,
3808597.4, 1075.2, 1075.2, 0.0);
( 465819.8, 3808597.4, 1075.0, 1075.0, 0.0); ( 465875.8,
3808597.4, 1074.0, 1074.0, 0.0);
( 465931.8, 3808597.4, 1072.5, 1072.5, 0.0); ( 465987.8,
3808597.4, 1072.0, 1072.0, 0.0);
( 466043.8, 3808597.4, 1071.7, 1071.7, 0.0); ( 466099.7,
3808597.4, 1070.8, 1070.8, 0.0);
( 466155.7, 3808597.4, 1070.0, 1070.0, 0.0); ( 466211.7,
3808597.4, 1069.3, 1069.3, 0.0);
( 466267.7, 3808597.4, 1068.3, 1068.3, 0.0); ( 466323.7,
3808597.4, 1068.0, 1068.0, 0.0);
( 466379.6, 3808597.4, 1067.5, 1067.5, 0.0); ( 466435.6,
3808597.4, 1066.6, 1066.6, 0.0);
( 466491.6, 3808597.4, 1066.0, 1066.0, 0.0); ( 466547.6,
3808597.4, 1065.2, 1065.2, 0.0);
( 466603.6, 3808597.4, 1064.3, 1064.3, 0.0); ( 466659.5,
3808597.4, 1063.3, 1063.3, 0.0);
( 466715.5, 3808597.4, 1062.4, 1062.4, 0.0); ( 466771.5,
3808597.4, 1061.5, 1061.5, 0.0);
( 466827.5, 3808597.4, 1060.6, 1060.6, 0.0); ( 466883.5,
3808597.4, 1060.0, 1060.0, 0.0);
( 465763.9, 3808663.6, 1074.1, 1074.1, 0.0); ( 465819.8,
3808663.6, 1074.0, 1074.0, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 16:42:19

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(465875.8, 3808663.6, 1073.1, 1073.1, 0.0);	(465931.8, 3808663.6, 1072.3, 1072.3, 0.0);
(465987.8, 3808663.6, 1071.5, 1071.5, 0.0);	(466043.8, 3808663.6, 1070.6, 1070.6, 0.0);
(466099.7, 3808663.6, 1070.0, 1070.0, 0.0);	(466155.7, 3808663.6, 1069.1, 1069.1, 0.0);
(466211.7, 3808663.6, 1068.1, 1068.1, 0.0);	(466267.7, 3808663.6, 1067.1, 1067.1, 0.0);
(466323.7, 3808663.6, 1067.0, 1067.0, 0.0);	(466379.6, 3808663.6, 1066.1, 1066.1, 0.0);
(466435.6, 3808663.6, 1066.0, 1066.0, 0.0);	(466491.6, 3808663.6, 1065.0, 1065.0, 0.0);
(466547.6, 3808663.6, 1064.1, 1064.1, 0.0);	(466603.6, 3808663.6, 1063.1, 1063.1, 0.0);
(466659.5, 3808663.6, 1062.1, 1062.1, 0.0);	(466715.5, 3808663.6, 1061.2, 1061.2, 0.0);
(466771.5, 3808663.6, 1060.3, 1060.3, 0.0);	(466827.5, 3808663.6, 1060.0, 1060.0, 0.0);
(466883.5, 3808663.6, 1059.0, 1059.0, 0.0);	(465763.9, 3808729.8, 1073.9, 1073.9, 0.0);
(465819.8, 3808729.8, 1074.0, 1074.0, 0.0);	(465875.8, 3808729.8, 1073.1, 1073.1, 0.0);
(465931.8, 3808729.8, 1072.0, 1072.0, 0.0);	(465987.8, 3808729.8, 1070.9, 1070.9, 0.0);
(466043.8, 3808729.8, 1069.9, 1069.9, 0.0);	(466099.7, 3808729.8, 1069.0, 1069.0, 0.0);
(466155.7, 3808729.8, 1068.0, 1068.0, 0.0);	(466211.7, 3808729.8, 1067.0, 1067.0, 0.0);
(466267.7, 3808729.8, 1066.1, 1066.1, 0.0);	(466323.7, 3808729.8, 1065.9, 1065.9, 0.0);
(466379.6, 3808729.8, 1065.3, 1065.3, 0.0);	(466435.6, 3808729.8, 1064.4, 1064.4, 0.0);
(466491.6, 3808729.8, 1064.0, 1064.0, 0.0);	(466547.6, 3808729.8, 1063.0, 1063.0, 0.0);
(466603.6, 3808729.8, 1062.0, 1062.0, 0.0);	(466659.5, 3808729.8, 1061.9, 1061.9, 0.0);
(466715.5, 3808729.8, 1060.9, 1060.9, 0.0);	(466771.5, 3808729.8, 1060.0, 1060.0, 0.0);
(466827.5, 3808729.8, 1059.4, 1059.4, 0.0);	(466883.5, 3808729.8, 1058.5, 1058.5, 0.0);
(465763.9, 3808796.0, 1072.7, 1072.7, 0.0);	(465819.8, 3808796.0, 1073.7, 1073.7, 0.0);
(465875.8, 3808796.0, 1072.1, 1072.1, 0.0);	(465931.8, 3808796.0, 1071.3, 1071.3, 0.0);

```

( 465987.8, 3808796.0, 1070.3, 1070.3, 0.0); ( 466043.8,
3808796.0, 1069.4, 1069.4, 0.0);
( 466099.7, 3808796.0, 1068.5, 1068.5, 0.0); ( 466155.7,
3808796.0, 1067.5, 1067.5, 0.0);
( 466211.7, 3808796.0, 1066.6, 1066.6, 0.0); ( 466267.7,
3808796.0, 1065.7, 1065.7, 0.0);
( 466323.7, 3808796.0, 1065.0, 1065.0, 0.0); ( 466379.6,
3808796.0, 1064.2, 1064.2, 0.0);
( 466435.6, 3808796.0, 1063.8, 1063.8, 0.0); ( 466491.6,
3808796.0, 1062.9, 1062.9, 0.0);
( 466547.6, 3808796.0, 1062.0, 1062.0, 0.0); ( 466603.6,
3808796.0, 1061.6, 1061.6, 0.0);
( 466659.5, 3808796.0, 1060.7, 1060.7, 0.0); ( 466715.5,
3808796.0, 1060.0, 1060.0, 0.0);
( 466771.5, 3808796.0, 1059.2, 1059.2, 0.0); ( 466827.5,
3808796.0, 1058.3, 1058.3, 0.0);
( 466883.5, 3808796.0, 1057.8, 1057.8, 0.0); ( 465763.9,
3808862.3, 1070.5, 1070.5, 0.0);
( 465819.8, 3808862.3, 1070.9, 1070.9, 0.0); ( 465875.8,
3808862.3, 1071.0, 1071.0, 0.0);
( 465931.8, 3808862.3, 1070.1, 1070.1, 0.0); ( 465987.8,
3808862.3, 1069.2, 1069.2, 0.0);
( 466043.8, 3808862.3, 1068.2, 1068.2, 0.0); ( 466099.7,
3808862.3, 1067.7, 1067.7, 0.0);
( 466155.7, 3808862.3, 1066.4, 1066.4, 0.0); ( 466211.7,
3808862.3, 1065.4, 1065.4, 0.0);
( 466267.7, 3808862.3, 1065.0, 1065.0, 0.0); ( 466323.7,
3808862.3, 1064.1, 1064.1, 0.0);
( 466379.6, 3808862.3, 1063.5, 1063.5, 0.0); ( 466435.6,
3808862.3, 1062.7, 1062.7, 0.0);
( 466491.6, 3808862.3, 1062.0, 1062.0, 0.0); ( 466547.6,
3808862.3, 1061.3, 1061.3, 0.0);
( 466603.6, 3808862.3, 1060.4, 1060.4, 0.0); ( 466659.5,
3808862.3, 1060.0, 1060.0, 0.0);
( 466715.5, 3808862.3, 1059.1, 1059.1, 0.0); ( 466771.5,
3808862.3, 1058.3, 1058.3, 0.0);
( 466827.5, 3808862.3, 1057.7, 1057.7, 0.0); ( 466883.5,
3808862.3, 1057.0, 1057.0, 0.0);
( 465763.9, 3808928.5, 1067.3, 1067.3, 0.0); ( 465819.8,
3808928.5, 1067.5, 1067.5, 0.0);
( 465875.8, 3808928.5, 1068.2, 1068.2, 0.0); ( 465931.8,
3808928.5, 1068.3, 1068.3, 0.0);
( 465987.8, 3808928.5, 1068.1, 1068.1, 0.0); ( 466043.8,
3808928.5, 1068.0, 1068.0, 0.0);
( 466099.7, 3808928.5, 1066.7, 1066.7, 0.0); ( 466155.7,
3808928.5, 1065.8, 1065.8, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 16:42:19

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(466211.7, 3808928.5, 1065.0, 1065.0, 0.0);	(466267.7,
3808928.5, 1064.0, 1064.0, 0.0);	
(466323.7, 3808928.5, 1063.0, 1063.0, 0.0);	(466379.6,
3808928.5, 1062.1, 1062.1, 0.0);	
(466435.6, 3808928.5, 1061.6, 1061.6, 0.0);	(466491.6,
3808928.5, 1061.0, 1061.0, 0.0);	
(466547.6, 3808928.5, 1060.2, 1060.2, 0.0);	(466603.6,
3808928.5, 1059.9, 1059.9, 0.0);	
(466659.5, 3808928.5, 1059.0, 1059.0, 0.0);	(466715.5,
3808928.5, 1058.4, 1058.4, 0.0);	
(466771.5, 3808928.5, 1057.5, 1057.5, 0.0);	(466827.5,
3808928.5, 1057.0, 1057.0, 0.0);	
(466883.5, 3808928.5, 1056.1, 1056.1, 0.0);	(465763.9,
3808994.7, 1066.8, 1066.8, 0.0);	
(465819.8, 3808994.7, 1066.0, 1066.0, 0.0);	(465875.8,
3808994.7, 1066.0, 1066.0, 0.0);	
(465931.8, 3808994.7, 1066.8, 1066.8, 0.0);	(465987.8,
3808994.7, 1067.6, 1067.6, 0.0);	
(466043.8, 3808994.7, 1067.0, 1067.0, 0.0);	(466099.7,
3808994.7, 1066.0, 1066.0, 0.0);	
(466155.7, 3808994.7, 1064.8, 1064.8, 0.0);	(466211.7,
3808994.7, 1064.0, 1064.0, 0.0);	
(466267.7, 3808994.7, 1063.1, 1063.1, 0.0);	(466323.7,
3808994.7, 1062.2, 1062.2, 0.0);	
(466379.6, 3808994.7, 1061.4, 1061.4, 0.0);	(466435.6,
3808994.7, 1060.5, 1060.5, 0.0);	
(466491.6, 3808994.7, 1060.0, 1060.0, 0.0);	(466547.6,
3808994.7, 1059.8, 1059.8, 0.0);	
(466603.6, 3808994.7, 1059.0, 1059.0, 0.0);	(466659.5,
3808994.7, 1058.1, 1058.1, 0.0);	
(466715.5, 3808994.7, 1058.0, 1058.0, 0.0);	(466771.5,
3808994.7, 1057.0, 1057.0, 0.0);	
(466827.5, 3808994.7, 1056.0, 1056.0, 0.0);	(466883.5,
3808994.7, 1055.6, 1055.6, 0.0);	
(465763.9, 3809060.9, 1067.0, 1067.0, 0.0);	(465819.8,
3809060.9, 1066.2, 1066.2, 0.0);	
(465875.8, 3809060.9, 1066.0, 1066.0, 0.0);	(465931.8,
3809060.9, 1066.0, 1066.0, 0.0);	
(465987.8, 3809060.9, 1066.0, 1066.0, 0.0);	(466043.8,
3809060.9, 1065.9, 1065.9, 0.0);	
(466099.7, 3809060.9, 1064.6, 1064.6, 0.0);	(466155.7,
3809060.9, 1063.8, 1063.8, 0.0);	

```

( 466211.7, 3809060.9, 1062.8, 1062.8, 0.0); ( 466267.7,
3809060.9, 1062.1, 1062.1, 0.0);
( 466323.7, 3809060.9, 1061.2, 1061.2, 0.0); ( 466379.6,
3809060.9, 1060.3, 1060.3, 0.0);
( 466435.6, 3809060.9, 1060.0, 1060.0, 0.0); ( 466491.6,
3809060.9, 1059.5, 1059.5, 0.0);
( 466547.6, 3809060.9, 1058.6, 1058.6, 0.0); ( 466603.6,
3809060.9, 1058.0, 1058.0, 0.0);
( 466659.5, 3809060.9, 1057.8, 1057.8, 0.0); ( 466715.5,
3809060.9, 1056.9, 1056.9, 0.0);
( 466771.5, 3809060.9, 1056.0, 1056.0, 0.0); ( 466827.5,
3809060.9, 1055.3, 1055.3, 0.0);
( 466883.5, 3809060.9, 1054.8, 1054.8, 0.0); ( 465763.9,
3809127.1, 1068.0, 1068.0, 0.0);
( 465819.8, 3809127.1, 1067.4, 1067.4, 0.0); ( 465875.8,
3809127.1, 1067.0, 1067.0, 0.0);
( 465931.8, 3809127.1, 1066.4, 1066.4, 0.0); ( 465987.8,
3809127.1, 1065.8, 1065.8, 0.0);
( 466043.8, 3809127.1, 1064.2, 1064.2, 0.0); ( 466099.7,
3809127.1, 1062.6, 1062.6, 0.0);
( 466155.7, 3809127.1, 1061.6, 1061.6, 0.0); ( 466211.7,
3809127.1, 1062.0, 1062.0, 0.0);
( 466267.7, 3809127.1, 1061.7, 1061.7, 0.0); ( 466323.7,
3809127.1, 1061.0, 1061.0, 0.0);
( 466379.6, 3809127.1, 1060.0, 1060.0, 0.0); ( 466435.6,
3809127.1, 1059.3, 1059.3, 0.0);
( 466491.6, 3809127.1, 1058.6, 1058.6, 0.0); ( 466547.6,
3809127.1, 1058.0, 1058.0, 0.0);
( 466603.6, 3809127.1, 1057.6, 1057.6, 0.0); ( 466659.5,
3809127.1, 1056.6, 1056.6, 0.0);
( 466715.5, 3809127.1, 1056.0, 1056.0, 0.0); ( 466771.5,
3809127.1, 1055.3, 1055.3, 0.0);
( 466827.5, 3809127.1, 1054.4, 1054.4, 0.0); ( 466883.5,
3809127.1, 1054.0, 1054.0, 0.0);
( 465763.9, 3809193.4, 1068.0, 1068.0, 0.0); ( 465819.8,
3809193.4, 1068.0, 1068.0, 0.0);
( 465875.8, 3809193.4, 1067.4, 1067.4, 0.0); ( 465931.8,
3809193.4, 1066.6, 1066.6, 0.0);
( 465987.8, 3809193.4, 1064.8, 1064.8, 0.0); ( 466043.8,
3809193.4, 1061.7, 1061.7, 0.0);
( 466099.7, 3809193.4, 1061.3, 1061.3, 0.0); ( 466155.7,
3809193.4, 1060.4, 1060.4, 0.0);
( 466211.7, 3809193.4, 1060.4, 1060.4, 0.0); ( 466267.7,
3809193.4, 1060.4, 1060.4, 0.0);
( 466323.7, 3809193.4, 1060.1, 1060.1, 0.0); ( 466379.6,
3809193.4, 1059.6, 1059.6, 0.0);
( 466435.6, 3809193.4, 1058.7, 1058.7, 0.0); ( 466491.6,
3809193.4, 1058.0, 1058.0, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 55

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(466547.6, 3809193.4, 1057.3, 1057.3, 0.0);	(466603.6, 3809193.4, 1056.9, 1056.9, 0.0);
(466659.5, 3809193.4, 1056.0, 1056.0, 0.0);	(466715.5, 3809193.4, 1055.5, 1055.5, 0.0);
(466771.5, 3809193.4, 1054.6, 1054.6, 0.0);	(466827.5, 3809193.4, 1054.0, 1054.0, 0.0);
(466883.5, 3809193.4, 1053.2, 1053.2, 0.0);	(465763.9, 3809259.6, 1067.2, 1067.2, 0.0);
(465819.8, 3809259.6, 1067.0, 1067.0, 0.0);	(465875.8, 3809259.6, 1066.2, 1066.2, 0.0);
(465931.8, 3809259.6, 1065.4, 1065.4, 0.0);	(465987.8, 3809259.6, 1063.5, 1063.5, 0.0);
(466043.8, 3809259.6, 1061.5, 1061.5, 0.0);	(466099.7, 3809259.6, 1060.0, 1060.0, 0.0);
(466155.7, 3809259.6, 1060.0, 1060.0, 0.0);	(466211.7, 3809259.6, 1060.0, 1060.0, 0.0);
(466267.7, 3809259.6, 1060.0, 1060.0, 0.0);	(466323.7, 3809259.6, 1059.0, 1059.0, 0.0);
(466379.6, 3809259.6, 1058.5, 1058.5, 0.0);	(466435.6, 3809259.6, 1058.0, 1058.0, 0.0);
(466491.6, 3809259.6, 1057.1, 1057.1, 0.0);	(466547.6, 3809259.6, 1056.8, 1056.8, 0.0);
(466603.6, 3809259.6, 1056.0, 1056.0, 0.0);	(466659.5, 3809259.6, 1055.2, 1055.2, 0.0);
(466715.5, 3809259.6, 1055.0, 1055.0, 0.0);	(466771.5, 3809259.6, 1054.1, 1054.1, 0.0);
(466827.5, 3809259.6, 1053.4, 1053.4, 0.0);	(466883.5, 3809259.6, 1052.6, 1052.6, 0.0);
(464503.4, 3807141.9, 1112.9, 1112.9, 0.0);	(464523.4, 3807141.9, 1112.2, 1112.2, 0.0);
(464543.4, 3807141.9, 1112.0, 1112.0, 0.0);	(464563.4, 3807141.9, 1111.9, 1111.9, 0.0);
(464583.4, 3807141.9, 1111.2, 1111.2, 0.0);	(464603.4, 3807141.9, 1110.9, 1110.9, 0.0);
(464623.4, 3807141.9, 1110.7, 1110.7, 0.0);	(464643.4, 3807141.9, 1110.2, 1110.2, 0.0);
(464663.4, 3807141.9, 1109.9, 1109.9, 0.0);	(464683.4, 3807141.9, 1109.7, 1109.7, 0.0);
(464703.4, 3807141.9, 1109.2, 1109.2, 0.0);	(464723.4, 3807141.9, 1109.0, 1109.0, 0.0);

(464743.4, 3807141.9, 1109.0, 1109.0,	0.0);	(464763.4,
3807141.9, 1108.8, 1108.8, 0.0);		
(464783.4, 3807141.9, 1108.8, 1108.8,	0.0);	(464803.4,
3807141.9, 1108.7, 1108.7, 0.0);		
(464823.4, 3807141.9, 1108.2, 1108.2,	0.0);	(464843.4,
3807141.9, 1108.0, 1108.0, 0.0);		
(464863.4, 3807141.9, 1108.0, 1108.0,	0.0);	(464883.4,
3807141.9, 1107.8, 1107.8, 0.0);		
(464903.4, 3807141.9, 1107.4, 1107.4,	0.0);	(464923.4,
3807141.9, 1107.0, 1107.0, 0.0);		
(464503.4, 3807161.9, 1112.9, 1112.9,	0.0);	(464523.4,
3807161.9, 1112.2, 1112.2, 0.0);		
(464543.4, 3807161.9, 1112.0, 1112.0,	0.0);	(464563.4,
3807161.9, 1111.9, 1111.9, 0.0);		
(464583.4, 3807161.9, 1111.2, 1111.2,	0.0);	(464603.4,
3807161.9, 1110.6, 1110.6, 0.0);		
(464623.4, 3807161.9, 1110.1, 1110.1,	0.0);	(464643.4,
3807161.9, 1110.0, 1110.0, 0.0);		
(464663.4, 3807161.9, 1109.6, 1109.6,	0.0);	(464683.4,
3807161.9, 1109.1, 1109.1, 0.0);		
(464703.4, 3807161.9, 1109.0, 1109.0,	0.0);	(464723.4,
3807161.9, 1109.0, 1109.0, 0.0);		
(464743.4, 3807161.9, 1108.9, 1108.9,	0.0);	(464763.4,
3807161.9, 1108.3, 1108.3, 0.0);		
(464783.4, 3807161.9, 1108.1, 1108.1,	0.0);	(464803.4,
3807161.9, 1108.1, 1108.1, 0.0);		
(464823.4, 3807161.9, 1108.0, 1108.0,	0.0);	(464843.4,
3807161.9, 1108.0, 1108.0, 0.0);		
(464863.4, 3807161.9, 1107.9, 1107.9,	0.0);	(464883.4,
3807161.9, 1107.3, 1107.3, 0.0);		
(464903.4, 3807161.9, 1107.1, 1107.1,	0.0);	(464923.4,
3807161.9, 1106.9, 1106.9, 0.0);		
(464503.4, 3807181.9, 1112.4, 1112.4,	0.0);	(464523.4,
3807181.9, 1112.1, 1112.1, 0.0);		
(464543.4, 3807181.9, 1111.8, 1111.8,	0.0);	(464563.4,
3807181.9, 1111.4, 1111.4, 0.0);		
(464583.4, 3807181.9, 1111.1, 1111.1,	0.0);	(464603.4,
3807181.9, 1110.5, 1110.5, 0.0);		
(464623.4, 3807181.9, 1110.0, 1110.0,	0.0);	(464643.4,
3807181.9, 1110.0, 1110.0, 0.0);		
(464663.4, 3807181.9, 1109.5, 1109.5,	0.0);	(464683.4,
3807181.9, 1109.0, 1109.0, 0.0);		
(464703.4, 3807181.9, 1109.0, 1109.0,	0.0);	(464723.4,
3807181.9, 1108.8, 1108.8, 0.0);		
(464743.4, 3807181.9, 1108.4, 1108.4,	0.0);	(464763.4,
3807181.9, 1108.1, 1108.1, 0.0);		
(464783.4, 3807181.9, 1108.0, 1108.0,	0.0);	(464803.4,
3807181.9, 1107.9, 1107.9, 0.0);		
(464823.4, 3807181.9, 1107.6, 1107.6,	0.0);	(464843.4,
3807181.9, 1107.5, 1107.5, 0.0);		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 56

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(464863.4, 3807181.9, 1107.4, 1107.4, 0.0);	(464883.4,
3807181.9, 1107.1, 1107.1, 0.0);	
(464903.4, 3807181.9, 1106.8, 1106.8, 0.0);	(464923.4,
3807181.9, 1106.4, 1106.4, 0.0);	
(464503.4, 3807201.9, 1112.0, 1112.0, 0.0);	(464523.4,
3807201.9, 1112.0, 1112.0, 0.0);	
(464543.4, 3807201.9, 1111.5, 1111.5, 0.0);	(464563.4,
3807201.9, 1111.0, 1111.0, 0.0);	
(464583.4, 3807201.9, 1110.8, 1110.8, 0.0);	(464603.4,
3807201.9, 1110.4, 1110.4, 0.0);	
(464623.4, 3807201.9, 1110.0, 1110.0, 0.0);	(464643.4,
3807201.9, 1109.8, 1109.8, 0.0);	
(464663.4, 3807201.9, 1109.4, 1109.4, 0.0);	(464683.4,
3807201.9, 1109.0, 1109.0, 0.0);	
(464703.4, 3807201.9, 1108.8, 1108.8, 0.0);	(464723.4,
3807201.9, 1108.4, 1108.4, 0.0);	
(464743.4, 3807201.9, 1108.0, 1108.0, 0.0);	(464763.4,
3807201.9, 1108.0, 1108.0, 0.0);	
(464783.4, 3807201.9, 1107.9, 1107.9, 0.0);	(464803.4,
3807201.9, 1107.7, 1107.7, 0.0);	
(464823.4, 3807201.9, 1107.2, 1107.2, 0.0);	(464843.4,
3807201.9, 1106.9, 1106.9, 0.0);	
(464863.4, 3807201.9, 1106.8, 1106.8, 0.0);	(464883.4,
3807201.9, 1106.8, 1106.8, 0.0);	
(464903.4, 3807201.9, 1106.4, 1106.4, 0.0);	(464923.4,
3807201.9, 1106.0, 1106.0, 0.0);	
(464503.4, 3807221.9, 1112.0, 1112.0, 0.0);	(464523.4,
3807221.9, 1112.0, 1112.0, 0.0);	
(464543.4, 3807221.9, 1111.5, 1111.5, 0.0);	(464563.4,
3807221.9, 1110.9, 1110.9, 0.0);	
(464583.4, 3807221.9, 1110.3, 1110.3, 0.0);	(464603.4,
3807221.9, 1110.1, 1110.1, 0.0);	
(464623.4, 3807221.9, 1109.9, 1109.9, 0.0);	(464643.4,
3807221.9, 1109.3, 1109.3, 0.0);	
(464663.4, 3807221.9, 1109.1, 1109.1, 0.0);	(464683.4,
3807221.9, 1108.9, 1108.9, 0.0);	
(464703.4, 3807221.9, 1108.3, 1108.3, 0.0);	(464723.4,
3807221.9, 1108.1, 1108.1, 0.0);	

(464743.4, 3807221.9, 1108.0, 1108.0,	0.0);	(464763.4,
3807221.9, 1108.0, 1108.0, 0.0);		
(464783.4, 3807221.9, 1107.6, 1107.6,	0.0);	(464803.4,
3807221.9, 1107.1, 1107.1, 0.0);		
(464823.4, 3807221.9, 1107.0, 1107.0,	0.0);	(464843.4,
3807221.9, 1106.6, 1106.6, 0.0);		
(464863.4, 3807221.9, 1106.1, 1106.1,	0.0);	(464883.4,
3807221.9, 1106.1, 1106.1, 0.0);		
(464903.4, 3807221.9, 1106.1, 1106.1,	0.0);	(464923.4,
3807221.9, 1105.9, 1105.9, 0.0);		
(464503.4, 3807241.9, 1111.9, 1111.9,	0.0);	(464523.4,
3807241.9, 1111.6, 1111.6, 0.0);		
(464543.4, 3807241.9, 1111.3, 1111.3,	0.0);	(464563.4,
3807241.9, 1110.9, 1110.9, 0.0);		
(464583.4, 3807241.9, 1110.2, 1110.2,	0.0);	(464603.4,
3807241.9, 1110.0, 1110.0, 0.0);		
(464623.4, 3807241.9, 1109.9, 1109.9,	0.0);	(464643.4,
3807241.9, 1109.2, 1109.2, 0.0);		
(464663.4, 3807241.9, 1108.8, 1108.8,	0.0);	(464683.4,
3807241.9, 1108.4, 1108.4, 0.0);		
(464703.4, 3807241.9, 1108.1, 1108.1,	0.0);	(464723.4,
3807241.9, 1108.0, 1108.0, 0.0);		
(464743.4, 3807241.9, 1107.9, 1107.9,	0.0);	(464763.4,
3807241.9, 1107.6, 1107.6, 0.0);		
(464783.4, 3807241.9, 1107.3, 1107.3,	0.0);	(464803.4,
3807241.9, 1106.9, 1106.9, 0.0);		
(464823.4, 3807241.9, 1106.6, 1106.6,	0.0);	(464843.4,
3807241.9, 1106.3, 1106.3, 0.0);		
(464863.4, 3807241.9, 1106.0, 1106.0,	0.0);	(464883.4,
3807241.9, 1106.0, 1106.0, 0.0);		
(464903.4, 3807241.9, 1105.8, 1105.8,	0.0);	(464923.4,
3807241.9, 1105.4, 1105.4, 0.0);		
(464503.4, 3807261.9, 1111.9, 1111.9,	0.0);	(464523.4,
3807261.9, 1111.2, 1111.2, 0.0);		
(464543.4, 3807261.9, 1111.0, 1111.0,	0.0);	(464563.4,
3807261.9, 1110.9, 1110.9, 0.0);		
(464583.4, 3807261.9, 1110.2, 1110.2,	0.0);	(464603.4,
3807261.9, 1109.9, 1109.9, 0.0);		
(464623.4, 3807261.9, 1109.7, 1109.7,	0.0);	(464643.4,
3807261.9, 1109.2, 1109.2, 0.0);		
(464663.4, 3807261.9, 1108.5, 1108.5,	0.0);	(464683.4,
3807261.9, 1108.0, 1108.0, 0.0);		
(464703.4, 3807261.9, 1108.0, 1108.0,	0.0);	(464723.4,
3807261.9, 1107.9, 1107.9, 0.0);		
(464743.4, 3807261.9, 1107.7, 1107.7,	0.0);	(464763.4,
3807261.9, 1107.2, 1107.2, 0.0);		
(464783.4, 3807261.9, 1106.9, 1106.9,	0.0);	(464803.4,
3807261.9, 1106.7, 1106.7, 0.0);		
(464823.4, 3807261.9, 1106.2, 1106.2,	0.0);	(464843.4,
3807261.9, 1105.9, 1105.9, 0.0);		

```

      ( 464863.4, 3807261.9, 1105.8, 1105.8, 0.0);      ( 464883.4,
3807261.9, 1105.8, 1105.8, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 57

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

      ( 464903.4, 3807261.9, 1105.3, 1105.3, 0.0);      ( 464923.4,
3807261.9, 1104.8, 1104.8, 0.0);
      ( 464503.4, 3807281.9, 1111.9, 1111.9, 0.0);      ( 464523.4,
3807281.9, 1111.2, 1111.2, 0.0);
      ( 464543.4, 3807281.9, 1111.0, 1111.0, 0.0);      ( 464563.4,
3807281.9, 1110.9, 1110.9, 0.0);
      ( 464583.4, 3807281.9, 1110.2, 1110.2, 0.0);      ( 464603.4,
3807281.9, 1109.6, 1109.6, 0.0);
      ( 464623.4, 3807281.9, 1109.1, 1109.1, 0.0);      ( 464643.4,
3807281.9, 1109.0, 1109.0, 0.0);
      ( 464663.4, 3807281.9, 1108.5, 1108.5, 0.0);      ( 464683.4,
3807281.9, 1108.0, 1108.0, 0.0);
      ( 464703.4, 3807281.9, 1108.0, 1108.0, 0.0);      ( 464723.4,
3807281.9, 1107.6, 1107.6, 0.0);
      ( 464743.4, 3807281.9, 1107.1, 1107.1, 0.0);      ( 464763.4,
3807281.9, 1107.0, 1107.0, 0.0);
      ( 464783.4, 3807281.9, 1106.6, 1106.6, 0.0);      ( 464803.4,
3807281.9, 1106.1, 1106.1, 0.0);
      ( 464823.4, 3807281.9, 1106.0, 1106.0, 0.0);      ( 464843.4,
3807281.9, 1105.6, 1105.6, 0.0);
      ( 464863.4, 3807281.9, 1105.1, 1105.1, 0.0);      ( 464883.4,
3807281.9, 1105.1, 1105.1, 0.0);
      ( 464903.4, 3807281.9, 1104.7, 1104.7, 0.0);      ( 464923.4,
3807281.9, 1104.1, 1104.1, 0.0);
      ( 464503.4, 3807301.9, 1111.4, 1111.4, 0.0);      ( 464523.4,
3807301.9, 1111.1, 1111.1, 0.0);
      ( 464543.4, 3807301.9, 1110.8, 1110.8, 0.0);      ( 464563.4,
3807301.9, 1110.4, 1110.4, 0.0);
      ( 464583.4, 3807301.9, 1110.1, 1110.1, 0.0);      ( 464603.4,
3807301.9, 1109.5, 1109.5, 0.0);
      ( 464623.4, 3807301.9, 1109.0, 1109.0, 0.0);      ( 464643.4,
3807301.9, 1109.0, 1109.0, 0.0);
      ( 464663.4, 3807301.9, 1108.5, 1108.5, 0.0);      ( 464683.4,
3807301.9, 1108.0, 1108.0, 0.0);
      ( 464703.4, 3807301.9, 1108.0, 1108.0, 0.0);      ( 464723.4,
3807301.9, 1107.5, 1107.5, 0.0);

```

(464743.4, 3807301.9, 1106.9, 1106.9,	0.0);	(464763.4,
3807301.9, 1106.6, 1106.6, 0.0);		
(464783.4, 3807301.9, 1106.3, 1106.3,	0.0);	(464803.4,
3807301.9, 1106.0, 1106.0, 0.0);		
(464823.4, 3807301.9, 1106.0, 1106.0,	0.0);	(464843.4,
3807301.9, 1105.5, 1105.5, 0.0);		
(464863.4, 3807301.9, 1104.9, 1104.9,	0.0);	(464883.4,
3807301.9, 1104.6, 1104.6, 0.0);		
(464903.4, 3807301.9, 1104.3, 1104.3,	0.0);	(464923.4,
3807301.9, 1104.0, 1104.0, 0.0);		
(464503.4, 3807321.9, 1111.0, 1111.0,	0.0);	(464523.4,
3807321.9, 1111.0, 1111.0, 0.0);		
(464543.4, 3807321.9, 1110.5, 1110.5,	0.0);	(464563.4,
3807321.9, 1110.0, 1110.0, 0.0);		
(464583.4, 3807321.9, 1110.0, 1110.0,	0.0);	(464603.4,
3807321.9, 1109.5, 1109.5, 0.0);		
(464623.4, 3807321.9, 1109.0, 1109.0,	0.0);	(464643.4,
3807321.9, 1109.0, 1109.0, 0.0);		
(464663.4, 3807321.9, 1108.5, 1108.5,	0.0);	(464683.4,
3807321.9, 1108.0, 1108.0, 0.0);		
(464703.4, 3807321.9, 1107.8, 1107.8,	0.0);	(464723.4,
3807321.9, 1107.4, 1107.4, 0.0);		
(464743.4, 3807321.9, 1106.9, 1106.9,	0.0);	(464763.4,
3807321.9, 1106.2, 1106.2, 0.0);		
(464783.4, 3807321.9, 1106.0, 1106.0,	0.0);	(464803.4,
3807321.9, 1106.0, 1106.0, 0.0);		
(464823.4, 3807321.9, 1105.8, 1105.8,	0.0);	(464843.4,
3807321.9, 1105.3, 1105.3, 0.0);		
(464863.4, 3807321.9, 1104.7, 1104.7,	0.0);	(464883.4,
3807321.9, 1104.2, 1104.2, 0.0);		
(464903.4, 3807321.9, 1104.0, 1104.0,	0.0);	(464923.4,
3807321.9, 1104.0, 1104.0, 0.0);		
(464503.4, 3807341.9, 1111.0, 1111.0,	0.0);	(464523.4,
3807341.9, 1111.0, 1111.0, 0.0);		
(464543.4, 3807341.9, 1110.5, 1110.5,	0.0);	(464563.4,
3807341.9, 1110.0, 1110.0, 0.0);		
(464583.4, 3807341.9, 1110.0, 1110.0,	0.0);	(464603.4,
3807341.9, 1109.5, 1109.5, 0.0);		
(464623.4, 3807341.9, 1109.0, 1109.0,	0.0);	(464643.4,
3807341.9, 1109.0, 1109.0, 0.0);		
(464663.4, 3807341.9, 1108.5, 1108.5,	0.0);	(464683.4,
3807341.9, 1107.9, 1107.9, 0.0);		
(464703.4, 3807341.9, 1107.3, 1107.3,	0.0);	(464723.4,
3807341.9, 1107.1, 1107.1, 0.0);		
(464743.4, 3807341.9, 1106.9, 1106.9,	0.0);	(464763.4,
3807341.9, 1106.2, 1106.2, 0.0);		
(464783.4, 3807341.9, 1106.0, 1106.0,	0.0);	(464803.4,
3807341.9, 1105.9, 1105.9, 0.0);		
(464823.4, 3807341.9, 1105.3, 1105.3,	0.0);	(464843.4,
3807341.9, 1104.7, 1104.7, 0.0);		

```

( 464863.4, 3807341.9, 1104.1, 1104.1, 0.0); ( 464883.4,
3807341.9, 1104.0, 1104.0, 0.0);
( 464903.4, 3807341.9, 1104.0, 1104.0, 0.0); ( 464923.4,
3807341.9, 1103.9, 1103.9, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 58

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464503.4, 3807361.9, 1110.9, 1110.9, 0.0); ( 464523.4,
3807361.9, 1110.6, 1110.6, 0.0);
( 464543.4, 3807361.9, 1110.3, 1110.3, 0.0); ( 464563.4,
3807361.9, 1110.0, 1110.0, 0.0);
( 464583.4, 3807361.9, 1110.0, 1110.0, 0.0); ( 464603.4,
3807361.9, 1109.5, 1109.5, 0.0);
( 464623.4, 3807361.9, 1108.9, 1108.9, 0.0); ( 464643.4,
3807361.9, 1108.6, 1108.6, 0.0);
( 464663.4, 3807361.9, 1108.3, 1108.3, 0.0); ( 464683.4,
3807361.9, 1107.9, 1107.9, 0.0);
( 464703.4, 3807361.9, 1107.2, 1107.2, 0.0); ( 464723.4,
3807361.9, 1106.8, 1106.8, 0.0);
( 464743.4, 3807361.9, 1106.4, 1106.4, 0.0); ( 464763.4,
3807361.9, 1106.1, 1106.1, 0.0);
( 464783.4, 3807361.9, 1105.8, 1105.8, 0.0); ( 464803.4,
3807361.9, 1105.3, 1105.3, 0.0);
( 464823.4, 3807361.9, 1104.7, 1104.7, 0.0); ( 464843.4,
3807361.9, 1104.3, 1104.3, 0.0);
( 464863.4, 3807361.9, 1104.0, 1104.0, 0.0); ( 464883.4,
3807361.9, 1104.0, 1104.0, 0.0);
( 464903.4, 3807361.9, 1103.8, 1103.8, 0.0); ( 464923.4,
3807361.9, 1103.4, 1103.4, 0.0);
( 464503.4, 3807381.9, 1110.7, 1110.7, 0.0); ( 464523.4,
3807381.9, 1110.2, 1110.2, 0.0);
( 464543.4, 3807381.9, 1110.0, 1110.0, 0.0); ( 464563.4,
3807381.9, 1110.0, 1110.0, 0.0);
( 464583.4, 3807381.9, 1109.8, 1109.8, 0.0); ( 464603.4,
3807381.9, 1109.4, 1109.4, 0.0);
( 464623.4, 3807381.9, 1108.9, 1108.9, 0.0); ( 464643.4,
3807381.9, 1108.2, 1108.2, 0.0);
( 464663.4, 3807381.9, 1107.9, 1107.9, 0.0); ( 464683.4,
3807381.9, 1107.7, 1107.7, 0.0);
( 464703.4, 3807381.9, 1107.2, 1107.2, 0.0); ( 464723.4,
3807381.9, 1106.5, 1106.5, 0.0);

```

(464743.4, 3807381.9, 1106.0, 1106.0,	0.0);	(464763.4,
3807381.9, 1105.8, 1105.8, 0.0);		
(464783.4, 3807381.9, 1105.4, 1105.4,	0.0);	(464803.4,
3807381.9, 1104.9, 1104.9, 0.0);		
(464823.4, 3807381.9, 1104.2, 1104.2,	0.0);	(464843.4,
3807381.9, 1104.0, 1104.0, 0.0);		
(464863.4, 3807381.9, 1104.0, 1104.0,	0.0);	(464883.4,
3807381.9, 1103.8, 1103.8, 0.0);		
(464903.4, 3807381.9, 1103.4, 1103.4,	0.0);	(464923.4,
3807381.9, 1103.0, 1103.0, 0.0);		
(464503.4, 3807401.9, 1110.1, 1110.1,	0.0);	(464523.4,
3807401.9, 1110.0, 1110.0, 0.0);		
(464543.4, 3807401.9, 1110.0, 1110.0,	0.0);	(464563.4,
3807401.9, 1109.9, 1109.9, 0.0);		
(464583.4, 3807401.9, 1109.3, 1109.3,	0.0);	(464603.4,
3807401.9, 1109.1, 1109.1, 0.0);		
(464623.4, 3807401.9, 1108.9, 1108.9,	0.0);	(464643.4,
3807401.9, 1108.2, 1108.2, 0.0);		
(464663.4, 3807401.9, 1107.6, 1107.6,	0.0);	(464683.4,
3807401.9, 1107.1, 1107.1, 0.0);		
(464703.4, 3807401.9, 1107.0, 1107.0,	0.0);	(464723.4,
3807401.9, 1106.5, 1106.5, 0.0);		
(464743.4, 3807401.9, 1105.9, 1105.9,	0.0);	(464763.4,
3807401.9, 1105.3, 1105.3, 0.0);		
(464783.4, 3807401.9, 1105.1, 1105.1,	0.0);	(464803.4,
3807401.9, 1104.9, 1104.9, 0.0);		
(464823.4, 3807401.9, 1104.2, 1104.2,	0.0);	(464843.4,
3807401.9, 1104.0, 1104.0, 0.0);		
(464863.4, 3807401.9, 1103.9, 1103.9,	0.0);	(464883.4,
3807401.9, 1103.3, 1103.3, 0.0);		
(464903.4, 3807401.9, 1103.1, 1103.1,	0.0);	(464923.4,
3807401.9, 1102.9, 1102.9, 0.0);		
(464503.4, 3807421.9, 1110.0, 1110.0,	0.0);	(464523.4,
3807421.9, 1110.0, 1110.0, 0.0);		
(464543.4, 3807421.9, 1109.8, 1109.8,	0.0);	(464563.4,
3807421.9, 1109.4, 1109.4, 0.0);		
(464583.4, 3807421.9, 1109.1, 1109.1,	0.0);	(464603.4,
3807421.9, 1108.8, 1108.8, 0.0);		
(464623.4, 3807421.9, 1108.4, 1108.4,	0.0);	(464643.4,
3807421.9, 1108.1, 1108.1, 0.0);		
(464663.4, 3807421.9, 1107.5, 1107.5,	0.0);	(464683.4,
3807421.9, 1106.9, 1106.9, 0.0);		
(464703.4, 3807421.9, 1106.6, 1106.6,	0.0);	(464723.4,
3807421.9, 1106.3, 1106.3, 0.0);		
(464743.4, 3807421.9, 1105.9, 1105.9,	0.0);	(464763.4,
3807421.9, 1105.2, 1105.2, 0.0);		
(464783.4, 3807421.9, 1104.8, 1104.8,	0.0);	(464803.4,
3807421.9, 1104.4, 1104.4, 0.0);		
(464823.4, 3807421.9, 1104.1, 1104.1,	0.0);	(464843.4,
3807421.9, 1103.8, 1103.8, 0.0);		

```

( 464863.4, 3807421.9, 1103.4, 1103.4, 0.0); ( 464883.4,
3807421.9, 1103.1, 1103.1, 0.0);
( 464903.4, 3807421.9, 1102.8, 1102.8, 0.0); ( 464923.4,
3807421.9, 1102.4, 1102.4, 0.0);
( 464503.4, 3807441.9, 1110.0, 1110.0, 0.0); ( 464523.4,
3807441.9, 1109.8, 1109.8, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 59

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464543.4, 3807441.9, 1109.4, 1109.4, 0.0); ( 464563.4,
3807441.9, 1109.0, 1109.0, 0.0);
( 464583.4, 3807441.9, 1108.8, 1108.8, 0.0); ( 464603.4,
3807441.9, 1108.4, 1108.4, 0.0);
( 464623.4, 3807441.9, 1108.0, 1108.0, 0.0); ( 464643.4,
3807441.9, 1107.8, 1107.8, 0.0);
( 464663.4, 3807441.9, 1107.4, 1107.4, 0.0); ( 464683.4,
3807441.9, 1106.9, 1106.9, 0.0);
( 464703.4, 3807441.9, 1106.2, 1106.2, 0.0); ( 464723.4,
3807441.9, 1105.9, 1105.9, 0.0);
( 464743.4, 3807441.9, 1105.7, 1105.7, 0.0); ( 464763.4,
3807441.9, 1105.2, 1105.2, 0.0);
( 464783.4, 3807441.9, 1104.5, 1104.5, 0.0); ( 464803.4,
3807441.9, 1104.0, 1104.0, 0.0);
( 464823.4, 3807441.9, 1104.0, 1104.0, 0.0); ( 464843.4,
3807441.9, 1103.5, 1103.5, 0.0);
( 464863.4, 3807441.9, 1103.0, 1103.0, 0.0); ( 464883.4,
3807441.9, 1103.0, 1103.0, 0.0);
( 464903.4, 3807441.9, 1102.5, 1102.5, 0.0); ( 464923.4,
3807441.9, 1102.0, 1102.0, 0.0);
( 464503.4, 3807461.9, 1109.9, 1109.9, 0.0); ( 464523.4,
3807461.9, 1109.3, 1109.3, 0.0);
( 464543.4, 3807461.9, 1109.1, 1109.1, 0.0); ( 464563.4,
3807461.9, 1108.9, 1108.9, 0.0);
( 464583.4, 3807461.9, 1108.3, 1108.3, 0.0); ( 464603.4,
3807461.9, 1108.1, 1108.1, 0.0);
( 464623.4, 3807461.9, 1107.9, 1107.9, 0.0); ( 464643.4,
3807461.9, 1107.3, 1107.3, 0.0);
( 464663.4, 3807461.9, 1107.1, 1107.1, 0.0); ( 464683.4,
3807461.9, 1106.9, 1106.9, 0.0);
( 464703.4, 3807461.9, 1106.2, 1106.2, 0.0); ( 464723.4,
3807461.9, 1105.6, 1105.6, 0.0);

```

(464743.4, 3807461.9, 1105.1, 1105.1,	0.0);	(464763.4,
3807461.9, 1105.0, 1105.0, 0.0);		
(464783.4, 3807461.9, 1104.5, 1104.5,	0.0);	(464803.4,
3807461.9, 1104.0, 1104.0, 0.0);		
(464823.4, 3807461.9, 1104.0, 1104.0,	0.0);	(464843.4,
3807461.9, 1103.5, 1103.5, 0.0);		
(464863.4, 3807461.9, 1103.0, 1103.0,	0.0);	(464883.4,
3807461.9, 1103.0, 1103.0, 0.0);		
(464903.4, 3807461.9, 1102.5, 1102.5,	0.0);	(464923.4,
3807461.9, 1102.0, 1102.0, 0.0);		
(464503.4, 3807481.9, 1109.9, 1109.9,	0.0);	(464523.4,
3807481.9, 1109.2, 1109.2, 0.0);		
(464543.4, 3807481.9, 1108.8, 1108.8,	0.0);	(464563.4,
3807481.9, 1108.4, 1108.4, 0.0);		
(464583.4, 3807481.9, 1108.1, 1108.1,	0.0);	(464603.4,
3807481.9, 1107.8, 1107.8, 0.0);		
(464623.4, 3807481.9, 1107.4, 1107.4,	0.0);	(464643.4,
3807481.9, 1107.1, 1107.1, 0.0);		
(464663.4, 3807481.9, 1106.8, 1106.8,	0.0);	(464683.4,
3807481.9, 1106.4, 1106.4, 0.0);		
(464703.4, 3807481.9, 1106.1, 1106.1,	0.0);	(464723.4,
3807481.9, 1105.5, 1105.5, 0.0);		
(464743.4, 3807481.9, 1105.0, 1105.0,	0.0);	(464763.4,
3807481.9, 1105.0, 1105.0, 0.0);		
(464783.4, 3807481.9, 1104.5, 1104.5,	0.0);	(464803.4,
3807481.9, 1104.0, 1104.0, 0.0);		
(464823.4, 3807481.9, 1104.0, 1104.0,	0.0);	(464843.4,
3807481.9, 1103.5, 1103.5, 0.0);		
(464863.4, 3807481.9, 1102.9, 1102.9,	0.0);	(464883.4,
3807481.9, 1102.6, 1102.6, 0.0);		
(464903.4, 3807481.9, 1102.3, 1102.3,	0.0);	(464923.4,
3807481.9, 1101.9, 1101.9, 0.0);		
(464503.4, 3807501.9, 1109.7, 1109.7,	0.0);	(464523.4,
3807501.9, 1109.0, 1109.0, 0.0);		
(464543.4, 3807501.9, 1108.4, 1108.4,	0.0);	(464563.4,
3807501.9, 1108.0, 1108.0, 0.0);		
(464583.4, 3807501.9, 1107.8, 1107.8,	0.0);	(464603.4,
3807501.9, 1107.4, 1107.4, 0.0);		
(464623.4, 3807501.9, 1107.0, 1107.0,	0.0);	(464643.4,
3807501.9, 1106.8, 1106.8, 0.0);		
(464663.4, 3807501.9, 1106.4, 1106.4,	0.0);	(464683.4,
3807501.9, 1106.0, 1106.0, 0.0);		
(464703.4, 3807501.9, 1105.8, 1105.8,	0.0);	(464723.4,
3807501.9, 1105.4, 1105.4, 0.0);		
(464743.4, 3807501.9, 1105.0, 1105.0,	0.0);	(464763.4,
3807501.9, 1104.8, 1104.8, 0.0);		
(464783.4, 3807501.9, 1104.4, 1104.4,	0.0);	(464803.4,
3807501.9, 1104.0, 1104.0, 0.0);		
(464823.4, 3807501.9, 1103.8, 1103.8,	0.0);	(464843.4,
3807501.9, 1103.4, 1103.4, 0.0);		

```

( 464863.4, 3807501.9, 1102.9, 1102.9, 0.0); ( 464883.4,
3807501.9, 1102.2, 1102.2, 0.0);
( 464903.4, 3807501.9, 1102.0, 1102.0, 0.0); ( 464923.4,
3807501.9, 1101.9, 1101.9, 0.0);
( 464503.4, 3807521.9, 1109.0, 1109.0, 0.0); ( 464523.4,
3807521.9, 1108.3, 1108.3, 0.0);
( 464543.4, 3807521.9, 1108.1, 1108.1, 0.0); ( 464563.4,
3807521.9, 1107.9, 1107.9, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 60

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464583.4, 3807521.9, 1107.3, 1107.3, 0.0); ( 464603.4,
3807521.9, 1107.1, 1107.1, 0.0);
( 464623.4, 3807521.9, 1106.9, 1106.9, 0.0); ( 464643.4,
3807521.9, 1106.3, 1106.3, 0.0);
( 464663.4, 3807521.9, 1106.1, 1106.1, 0.0); ( 464683.4,
3807521.9, 1105.9, 1105.9, 0.0);
( 464703.4, 3807521.9, 1105.3, 1105.3, 0.0); ( 464723.4,
3807521.9, 1105.1, 1105.1, 0.0);
( 464743.4, 3807521.9, 1104.9, 1104.9, 0.0); ( 464763.4,
3807521.9, 1104.3, 1104.3, 0.0);
( 464783.4, 3807521.9, 1104.1, 1104.1, 0.0); ( 464803.4,
3807521.9, 1103.9, 1103.9, 0.0);
( 464823.4, 3807521.9, 1103.3, 1103.3, 0.0); ( 464843.4,
3807521.9, 1103.1, 1103.1, 0.0);
( 464863.4, 3807521.9, 1102.9, 1102.9, 0.0); ( 464883.4,
3807521.9, 1102.2, 1102.2, 0.0);
( 464903.4, 3807521.9, 1102.0, 1102.0, 0.0); ( 464923.4,
3807521.9, 1101.9, 1101.9, 0.0);
( 464503.4, 3807541.9, 1108.4, 1108.4, 0.0); ( 464523.4,
3807541.9, 1108.1, 1108.1, 0.0);
( 464543.4, 3807541.9, 1107.8, 1107.8, 0.0); ( 464563.4,
3807541.9, 1107.4, 1107.4, 0.0);
( 464583.4, 3807541.9, 1107.1, 1107.1, 0.0); ( 464603.4,
3807541.9, 1106.8, 1106.8, 0.0);
( 464623.4, 3807541.9, 1106.4, 1106.4, 0.0); ( 464643.4,
3807541.9, 1106.1, 1106.1, 0.0);
( 464663.4, 3807541.9, 1105.8, 1105.8, 0.0); ( 464683.4,
3807541.9, 1105.4, 1105.4, 0.0);
( 464703.4, 3807541.9, 1105.1, 1105.1, 0.0); ( 464723.4,
3807541.9, 1104.8, 1104.8, 0.0);

```


(464743.4, 3807541.9, 1104.4, 1104.4,	0.0);	(464763.4,
3807541.9, 1104.1, 1104.1, 0.0);		
(464783.4, 3807541.9, 1104.0, 1104.0,	0.0);	(464803.4,
3807541.9, 1103.9, 1103.9, 0.0);		
(464823.4, 3807541.9, 1103.2, 1103.2,	0.0);	(464843.4,
3807541.9, 1102.8, 1102.8, 0.0);		
(464863.4, 3807541.9, 1102.4, 1102.4,	0.0);	(464883.4,
3807541.9, 1102.1, 1102.1, 0.0);		
(464903.4, 3807541.9, 1101.8, 1101.8,	0.0);	(464923.4,
3807541.9, 1101.4, 1101.4, 0.0);		
(464503.4, 3807561.9, 1108.0, 1108.0,	0.0);	(464523.4,
3807561.9, 1107.8, 1107.8, 0.0);		
(464543.4, 3807561.9, 1107.4, 1107.4,	0.0);	(464563.4,
3807561.9, 1107.0, 1107.0, 0.0);		
(464583.4, 3807561.9, 1106.8, 1106.8,	0.0);	(464603.4,
3807561.9, 1106.4, 1106.4, 0.0);		
(464623.4, 3807561.9, 1106.0, 1106.0,	0.0);	(464643.4,
3807561.9, 1105.8, 1105.8, 0.0);		
(464663.4, 3807561.9, 1105.4, 1105.4,	0.0);	(464683.4,
3807561.9, 1105.0, 1105.0, 0.0);		
(464703.4, 3807561.9, 1104.8, 1104.8,	0.0);	(464723.4,
3807561.9, 1104.4, 1104.4, 0.0);		
(464743.4, 3807561.9, 1104.0, 1104.0,	0.0);	(464763.4,
3807561.9, 1104.0, 1104.0, 0.0);		
(464783.4, 3807561.9, 1103.9, 1103.9,	0.0);	(464803.4,
3807561.9, 1103.7, 1103.7, 0.0);		
(464823.4, 3807561.9, 1103.2, 1103.2,	0.0);	(464843.4,
3807561.9, 1102.5, 1102.5, 0.0);		
(464863.4, 3807561.9, 1102.0, 1102.0,	0.0);	(464883.4,
3807561.9, 1102.0, 1102.0, 0.0);		
(464903.4, 3807561.9, 1101.5, 1101.5,	0.0);	(464923.4,
3807561.9, 1101.0, 1101.0, 0.0);		
(464503.4, 3807581.9, 1107.9, 1107.9,	0.0);	(464523.4,
3807581.9, 1107.3, 1107.3, 0.0);		
(464543.4, 3807581.9, 1107.1, 1107.1,	0.0);	(464563.4,
3807581.9, 1106.9, 1106.9, 0.0);		
(464583.4, 3807581.9, 1106.3, 1106.3,	0.0);	(464603.4,
3807581.9, 1106.1, 1106.1, 0.0);		
(464623.4, 3807581.9, 1105.9, 1105.9,	0.0);	(464643.4,
3807581.9, 1105.3, 1105.3, 0.0);		
(464663.4, 3807581.9, 1105.1, 1105.1,	0.0);	(464683.4,
3807581.9, 1104.9, 1104.9, 0.0);		
(464703.4, 3807581.9, 1104.3, 1104.3,	0.0);	(464723.4,
3807581.9, 1104.1, 1104.1, 0.0);		
(464743.4, 3807581.9, 1104.0, 1104.0,	0.0);	(464763.4,
3807581.9, 1104.0, 1104.0, 0.0);		
(464783.4, 3807581.9, 1103.6, 1103.6,	0.0);	(464803.4,
3807581.9, 1103.1, 1103.1, 0.0);		
(464823.4, 3807581.9, 1103.0, 1103.0,	0.0);	(464843.4,
3807581.9, 1102.5, 1102.5, 0.0);		

```

( 464863.4, 3807581.9, 1102.0, 1102.0, 0.0); ( 464883.4,
3807581.9, 1102.0, 1102.0, 0.0);
( 464903.4, 3807581.9, 1101.5, 1101.5, 0.0); ( 464923.4,
3807581.9, 1100.9, 1100.9, 0.0);
( 464503.4, 3807601.9, 1107.3, 1107.3, 0.0); ( 464523.4,
3807601.9, 1106.7, 1106.7, 0.0);
( 464543.4, 3807601.9, 1106.5, 1106.5, 0.0); ( 464563.4,
3807601.9, 1106.4, 1106.4, 0.0);
( 464583.4, 3807601.9, 1106.1, 1106.1, 0.0); ( 464603.4,
3807601.9, 1105.8, 1105.8, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 16:42:19

```

PAGE 61

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

```

( 464623.4, 3807601.9, 1105.4, 1105.4, 0.0); ( 464643.4,
3807601.9, 1105.1, 1105.1, 0.0);
( 464663.4, 3807601.9, 1104.8, 1104.8, 0.0); ( 464683.4,
3807601.9, 1104.4, 1104.4, 0.0);
( 464703.4, 3807601.9, 1104.1, 1104.1, 0.0); ( 464723.4,
3807601.9, 1104.0, 1104.0, 0.0);
( 464743.4, 3807601.9, 1103.9, 1103.9, 0.0); ( 464763.4,
3807601.9, 1103.6, 1103.6, 0.0);
( 464783.4, 3807601.9, 1103.3, 1103.3, 0.0); ( 464803.4,
3807601.9, 1102.9, 1102.9, 0.0);
( 464823.4, 3807601.9, 1102.6, 1102.6, 0.0); ( 464843.4,
3807601.9, 1102.3, 1102.3, 0.0);
( 464863.4, 3807601.9, 1101.9, 1101.9, 0.0); ( 464883.4,
3807601.9, 1101.6, 1101.6, 0.0);
( 464903.4, 3807601.9, 1101.3, 1101.3, 0.0); ( 464923.4,
3807601.9, 1100.9, 1100.9, 0.0);
( 464503.4, 3807621.9, 1106.7, 1106.7, 0.0); ( 464523.4,
3807621.9, 1106.2, 1106.2, 0.0);
( 464543.4, 3807621.9, 1106.0, 1106.0, 0.0); ( 464563.4,
3807621.9, 1106.0, 1106.0, 0.0);
( 464583.4, 3807621.9, 1105.8, 1105.8, 0.0); ( 464603.4,
3807621.9, 1105.4, 1105.4, 0.0);
( 464623.4, 3807621.9, 1105.0, 1105.0, 0.0); ( 464643.4,
3807621.9, 1104.8, 1104.8, 0.0);
( 464663.4, 3807621.9, 1104.4, 1104.4, 0.0); ( 464683.4,
3807621.9, 1104.0, 1104.0, 0.0);
( 464703.4, 3807621.9, 1104.0, 1104.0, 0.0); ( 464723.4,
3807621.9, 1103.9, 1103.9, 0.0);

```

(464743.4, 3807621.9, 1103.7, 1103.7,	0.0);	(464763.4,
3807621.9, 1103.2, 1103.2, 0.0);		
(464783.4, 3807621.9, 1102.9, 1102.9,	0.0);	(464803.4,
3807621.9, 1102.7, 1102.7, 0.0);		
(464823.4, 3807621.9, 1102.2, 1102.2,	0.0);	(464843.4,
3807621.9, 1101.9, 1101.9, 0.0);		
(464863.4, 3807621.9, 1101.7, 1101.7,	0.0);	(464883.4,
3807621.9, 1101.2, 1101.2, 0.0);		
(464903.4, 3807621.9, 1100.9, 1100.9,	0.0);	(464923.4,
3807621.9, 1100.7, 1100.7, 0.0);		
(464503.4, 3807641.9, 1106.1, 1106.1,	0.0);	(464523.4,
3807641.9, 1106.0, 1106.0, 0.0);		
(464543.4, 3807641.9, 1106.0, 1106.0,	0.0);	(464563.4,
3807641.9, 1105.9, 1105.9, 0.0);		
(464583.4, 3807641.9, 1105.3, 1105.3,	0.0);	(464603.4,
3807641.9, 1105.1, 1105.1, 0.0);		
(464623.4, 3807641.9, 1104.9, 1104.9,	0.0);	(464643.4,
3807641.9, 1104.3, 1104.3, 0.0);		
(464663.4, 3807641.9, 1104.1, 1104.1,	0.0);	(464683.4,
3807641.9, 1104.0, 1104.0, 0.0);		
(464703.4, 3807641.9, 1104.0, 1104.0,	0.0);	(464723.4,
3807641.9, 1103.6, 1103.6, 0.0);		
(464743.4, 3807641.9, 1103.1, 1103.1,	0.0);	(464763.4,
3807641.9, 1103.0, 1103.0, 0.0);		
(464783.4, 3807641.9, 1102.6, 1102.6,	0.0);	(464803.4,
3807641.9, 1102.1, 1102.1, 0.0);		
(464823.4, 3807641.9, 1102.0, 1102.0,	0.0);	(464843.4,
3807641.9, 1101.6, 1101.6, 0.0);		
(464863.4, 3807641.9, 1101.1, 1101.1,	0.0);	(464883.4,
3807641.9, 1101.0, 1101.0, 0.0);		
(464903.4, 3807641.9, 1100.6, 1100.6,	0.0);	(464923.4,
3807641.9, 1100.1, 1100.1, 0.0);		
(464503.4, 3807661.9, 1105.5, 1105.5,	0.0);	(464523.4,
3807661.9, 1105.5, 1105.5, 0.0);		
(464543.4, 3807661.9, 1105.5, 1105.5,	0.0);	(464563.4,
3807661.9, 1105.4, 1105.4, 0.0);		
(464583.4, 3807661.9, 1105.1, 1105.1,	0.0);	(464603.4,
3807661.9, 1104.8, 1104.8, 0.0);		
(464623.4, 3807661.9, 1104.4, 1104.4,	0.0);	(464643.4,
3807661.9, 1104.1, 1104.1, 0.0);		
(464663.4, 3807661.9, 1103.8, 1103.8,	0.0);	(464683.4,
3807661.9, 1103.5, 1103.5, 0.0);		
(464703.4, 3807661.9, 1103.5, 1103.5,	0.0);	(464723.4,
3807661.9, 1103.3, 1103.3, 0.0);		
(464743.4, 3807661.9, 1102.9, 1102.9,	0.0);	(464763.4,
3807661.9, 1102.6, 1102.6, 0.0);		
(464783.4, 3807661.9, 1102.3, 1102.3,	0.0);	(464803.4,
3807661.9, 1101.9, 1101.9, 0.0);		
(464823.4, 3807661.9, 1101.6, 1101.6,	0.0);	(464843.4,
3807661.9, 1101.3, 1101.3, 0.0);		

```

( 464863.4, 3807661.9, 1100.9, 1100.9, 0.0); ( 464883.4,
3807661.9, 1100.6, 1100.6, 0.0);
( 464903.4, 3807661.9, 1100.3, 1100.3, 0.0); ( 464923.4,
3807661.9, 1099.9, 1099.9, 0.0);
( 464503.4, 3807681.9, 1104.8, 1104.8, 0.0); ( 464523.4,
3807681.9, 1104.8, 1104.8, 0.0);
( 464543.4, 3807681.9, 1104.8, 1104.8, 0.0); ( 464563.4,
3807681.9, 1104.8, 1104.8, 0.0);
( 464583.4, 3807681.9, 1104.8, 1104.8, 0.0); ( 464603.4,
3807681.9, 1104.4, 1104.4, 0.0);
( 464623.4, 3807681.9, 1104.0, 1104.0, 0.0); ( 464643.4,
3807681.9, 1103.8, 1103.8, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 62

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464663.4, 3807681.9, 1103.4, 1103.4, 0.0); ( 464683.4,
3807681.9, 1103.0, 1103.0, 0.0);
( 464703.4, 3807681.9, 1102.8, 1102.8, 0.0); ( 464723.4,
3807681.9, 1102.8, 1102.8, 0.0);
( 464743.4, 3807681.9, 1102.7, 1102.7, 0.0); ( 464763.4,
3807681.9, 1102.2, 1102.2, 0.0);
( 464783.4, 3807681.9, 1101.9, 1101.9, 0.0); ( 464803.4,
3807681.9, 1101.7, 1101.7, 0.0);
( 464823.4, 3807681.9, 1101.2, 1101.2, 0.0); ( 464843.4,
3807681.9, 1100.9, 1100.9, 0.0);
( 464863.4, 3807681.9, 1100.7, 1100.7, 0.0); ( 464883.4,
3807681.9, 1100.2, 1100.2, 0.0);
( 464903.4, 3807681.9, 1099.9, 1099.9, 0.0); ( 464923.4,
3807681.9, 1099.7, 1099.7, 0.0);
( 464523.4, 3807701.9, 1104.1, 1104.1, 0.0); ( 464543.4,
3807701.9, 1104.1, 1104.1, 0.0);
( 464563.4, 3807701.9, 1104.1, 1104.1, 0.0); ( 464583.4,
3807701.9, 1104.1, 1104.1, 0.0);
( 464603.4, 3807701.9, 1104.1, 1104.1, 0.0); ( 464623.4,
3807701.9, 1103.9, 1103.9, 0.0);
( 464643.4, 3807701.9, 1103.3, 1103.3, 0.0); ( 464663.4,
3807701.9, 1103.1, 1103.1, 0.0);
( 464683.4, 3807701.9, 1102.9, 1102.9, 0.0); ( 464703.4,
3807701.9, 1102.3, 1102.3, 0.0);
( 464723.4, 3807701.9, 1102.1, 1102.1, 0.0); ( 464743.4,
3807701.9, 1102.1, 1102.1, 0.0);

```

(464763.4, 3807701.9, 1102.0, 1102.0,	0.0);	(464783.4,
3807701.9, 1101.6, 1101.6, 0.0);		
(464803.4, 3807701.9, 1101.1, 1101.1,	0.0);	(464823.4,
3807701.9, 1101.0, 1101.0, 0.0);		
(464843.4, 3807701.9, 1100.6, 1100.6,	0.0);	(464863.4,
3807701.9, 1100.1, 1100.1, 0.0);		
(464883.4, 3807701.9, 1100.0, 1100.0,	0.0);	(464903.4,
3807701.9, 1099.6, 1099.6, 0.0);		
(464923.4, 3807701.9, 1099.1, 1099.1,	0.0);	(464543.4,
3807721.9, 1103.7, 1103.7, 0.0);		
(464563.4, 3807721.9, 1104.0, 1104.0,	0.0);	(464583.4,
3807721.9, 1104.0, 1104.0, 0.0);		
(464603.4, 3807721.9, 1104.0, 1104.0,	0.0);	(464623.4,
3807721.9, 1103.9, 1103.9, 0.0);		
(464643.4, 3807721.9, 1103.2, 1103.2,	0.0);	(464663.4,
3807721.9, 1102.8, 1102.8, 0.0);		
(464683.4, 3807721.9, 1102.4, 1102.4,	0.0);	(464703.4,
3807721.9, 1102.1, 1102.1, 0.0);		
(464723.4, 3807721.9, 1102.0, 1102.0,	0.0);	(464743.4,
3807721.9, 1101.9, 1101.9, 0.0);		
(464763.4, 3807721.9, 1101.6, 1101.6,	0.0);	(464783.4,
3807721.9, 1101.3, 1101.3, 0.0);		
(464803.4, 3807721.9, 1100.9, 1100.9,	0.0);	(464823.4,
3807721.9, 1100.6, 1100.6, 0.0);		
(464843.4, 3807721.9, 1100.3, 1100.3,	0.0);	(464863.4,
3807721.9, 1099.9, 1099.9, 0.0);		
(464883.4, 3807721.9, 1099.6, 1099.6,	0.0);	(464903.4,
3807721.9, 1099.3, 1099.3, 0.0);		
(464923.4, 3807721.9, 1098.9, 1098.9,	0.0);	(464943.4,
3807721.9, 1098.6, 1098.6, 0.0);		
(464963.4, 3807721.9, 1098.3, 1098.3,	0.0);	(464983.4,
3807721.9, 1097.9, 1097.9, 0.0);		
(465003.4, 3807721.9, 1097.6, 1097.6,	0.0);	(465023.4,
3807721.9, 1097.3, 1097.3, 0.0);		
(465043.4, 3807721.9, 1096.9, 1096.9,	0.0);	(465063.4,
3807721.9, 1096.6, 1096.6, 0.0);		
(465083.4, 3807721.9, 1096.3, 1096.3,	0.0);	(465103.4,
3807721.9, 1096.0, 1096.0, 0.0);		
(465123.4, 3807721.9, 1096.0, 1096.0,	0.0);	(465143.4,
3807721.9, 1095.8, 1095.8, 0.0);		
(465163.4, 3807721.9, 1095.5, 1095.5,	0.0);	(465183.4,
3807721.9, 1095.5, 1095.5, 0.0);		
(465203.4, 3807721.9, 1095.3, 1095.3,	0.0);	(465223.4,
3807721.9, 1094.9, 1094.9, 0.0);		
(465243.4, 3807721.9, 1094.6, 1094.6,	0.0);	(465263.4,
3807721.9, 1094.3, 1094.3, 0.0);		
(465283.4, 3807721.9, 1094.0, 1094.0,	0.0);	(465303.4,
3807721.9, 1094.0, 1094.0, 0.0);		
(465323.4, 3807721.9, 1093.8, 1093.8,	0.0);	(465343.4,
3807721.9, 1093.5, 1093.5, 0.0);		

```

( 465363.4, 3807721.9, 1093.5, 1093.5, 0.0); ( 465383.4,
3807721.9, 1093.3, 1093.3, 0.0);
( 464543.4, 3807741.9, 1102.9, 1102.9, 0.0); ( 464563.4,
3807741.9, 1103.6, 1103.6, 0.0);
( 464583.4, 3807741.9, 1103.8, 1103.8, 0.0); ( 464603.4,
3807741.9, 1103.8, 1103.8, 0.0);
( 464623.4, 3807741.9, 1103.7, 1103.7, 0.0); ( 464643.4,
3807741.9, 1103.0, 1103.0, 0.0);
( 464663.4, 3807741.9, 1102.4, 1102.4, 0.0); ( 464683.4,
3807741.9, 1102.0, 1102.0, 0.0);
( 464703.4, 3807741.9, 1102.0, 1102.0, 0.0); ( 464723.4,
3807741.9, 1101.9, 1101.9, 0.0);
( 464743.4, 3807741.9, 1101.7, 1101.7, 0.0); ( 464763.4,
3807741.9, 1101.2, 1101.2, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 63

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

```

( 464783.4, 3807741.9, 1100.9, 1100.9, 0.0); ( 464803.4,
3807741.9, 1100.7, 1100.7, 0.0);
( 464823.4, 3807741.9, 1100.2, 1100.2, 0.0); ( 464843.4,
3807741.9, 1100.0, 1100.0, 0.0);
( 464863.4, 3807741.9, 1099.9, 1099.9, 0.0); ( 464883.4,
3807741.9, 1099.2, 1099.2, 0.0);
( 464903.4, 3807741.9, 1099.0, 1099.0, 0.0); ( 464923.4,
3807741.9, 1098.9, 1098.9, 0.0);
( 464943.4, 3807741.9, 1098.2, 1098.2, 0.0); ( 464963.4,
3807741.9, 1098.0, 1098.0, 0.0);
( 464983.4, 3807741.9, 1097.9, 1097.9, 0.0); ( 465003.4,
3807741.9, 1097.2, 1097.2, 0.0);
( 465023.4, 3807741.9, 1096.9, 1096.9, 0.0); ( 465043.4,
3807741.9, 1096.7, 1096.7, 0.0);
( 465063.4, 3807741.9, 1096.2, 1096.2, 0.0); ( 465083.4,
3807741.9, 1096.0, 1096.0, 0.0);
( 465103.4, 3807741.9, 1096.0, 1096.0, 0.0); ( 465123.4,
3807741.9, 1095.8, 1095.8, 0.0);
( 465143.4, 3807741.9, 1095.4, 1095.4, 0.0); ( 465163.4,
3807741.9, 1095.0, 1095.0, 0.0);
( 465183.4, 3807741.9, 1094.8, 1094.8, 0.0); ( 465203.4,
3807741.9, 1094.8, 1094.8, 0.0);
( 465223.4, 3807741.9, 1094.7, 1094.7, 0.0); ( 465243.4,
3807741.9, 1094.2, 1094.2, 0.0);

```

(465263.4, 3807741.9, 1094.0, 1094.0,	0.0);	(465283.4,
3807741.9, 1094.0, 1094.0, 0.0);		
(465303.4, 3807741.9, 1093.8, 1093.8,	0.0);	(465323.4,
3807741.9, 1093.4, 1093.4, 0.0);		
(465343.4, 3807741.9, 1093.0, 1093.0,	0.0);	(465363.4,
3807741.9, 1092.8, 1092.8, 0.0);		
(465383.4, 3807741.9, 1092.8, 1092.8,	0.0);	(464543.4,
3807761.9, 1101.2, 1101.2, 0.0);		
(464563.4, 3807761.9, 1102.4, 1102.4,	0.0);	(464583.4,
3807761.9, 1103.0, 1103.0, 0.0);		
(464603.4, 3807761.9, 1103.1, 1103.1,	0.0);	(464623.4,
3807761.9, 1103.0, 1103.0, 0.0);		
(464643.4, 3807761.9, 1102.3, 1102.3,	0.0);	(464663.4,
3807761.9, 1102.1, 1102.1, 0.0);		
(464683.4, 3807761.9, 1102.0, 1102.0,	0.0);	(464703.4,
3807761.9, 1102.0, 1102.0, 0.0);		
(464723.4, 3807761.9, 1101.6, 1101.6,	0.0);	(464743.4,
3807761.9, 1101.1, 1101.1, 0.0);		
(464763.4, 3807761.9, 1101.0, 1101.0,	0.0);	(464783.4,
3807761.9, 1100.6, 1100.6, 0.0);		
(464803.4, 3807761.9, 1100.1, 1100.1,	0.0);	(464823.4,
3807761.9, 1100.0, 1100.0, 0.0);		
(464843.4, 3807761.9, 1100.0, 1100.0,	0.0);	(464863.4,
3807761.9, 1099.9, 1099.9, 0.0);		
(464883.4, 3807761.9, 1099.2, 1099.2,	0.0);	(464903.4,
3807761.9, 1099.0, 1099.0, 0.0);		
(464923.4, 3807761.9, 1098.9, 1098.9,	0.0);	(464943.4,
3807761.9, 1098.2, 1098.2, 0.0);		
(464963.4, 3807761.9, 1098.0, 1098.0,	0.0);	(464983.4,
3807761.9, 1097.9, 1097.9, 0.0);		
(465003.4, 3807761.9, 1097.2, 1097.2,	0.0);	(465023.4,
3807761.9, 1096.6, 1096.6, 0.0);		
(465043.4, 3807761.9, 1096.1, 1096.1,	0.0);	(465063.4,
3807761.9, 1096.0, 1096.0, 0.0);		
(465083.4, 3807761.9, 1096.0, 1096.0,	0.0);	(465103.4,
3807761.9, 1095.9, 1095.9, 0.0);		
(465123.4, 3807761.9, 1095.3, 1095.3,	0.0);	(465143.4,
3807761.9, 1095.1, 1095.1, 0.0);		
(465163.4, 3807761.9, 1094.9, 1094.9,	0.0);	(465183.4,
3807761.9, 1094.3, 1094.3, 0.0);		
(465203.4, 3807761.9, 1094.1, 1094.1,	0.0);	(465223.4,
3807761.9, 1094.1, 1094.1, 0.0);		
(465243.4, 3807761.9, 1094.0, 1094.0,	0.0);	(465263.4,
3807761.9, 1094.0, 1094.0, 0.0);		
(465283.4, 3807761.9, 1093.9, 1093.9,	0.0);	(465303.4,
3807761.9, 1093.3, 1093.3, 0.0);		
(465323.4, 3807761.9, 1093.1, 1093.1,	0.0);	(465343.4,
3807761.9, 1092.9, 1092.9, 0.0);		
(465363.4, 3807761.9, 1092.3, 1092.3,	0.0);	(465383.4,
3807761.9, 1092.1, 1092.1, 0.0);		

(464543.4, 3807781.9, 1099.3, 1102.0,	0.0);	(464563.4,
3807781.9, 1100.5, 1100.5, 0.0);		
(464583.4, 3807781.9, 1101.2, 1103.0,	0.0);	(464603.4,
3807781.9, 1101.6, 1101.6, 0.0);		
(464623.4, 3807781.9, 1101.9, 1101.9,	0.0);	(464643.4,
3807781.9, 1102.0, 1102.0, 0.0);		
(464663.4, 3807781.9, 1101.8, 1101.8,	0.0);	(464683.4,
3807781.9, 1101.5, 1101.5, 0.0);		
(464703.4, 3807781.9, 1101.5, 1101.5,	0.0);	(464723.4,
3807781.9, 1101.3, 1101.3, 0.0);		
(464743.4, 3807781.9, 1100.9, 1100.9,	0.0);	(464763.4,
3807781.9, 1100.6, 1100.6, 0.0);		
(464783.4, 3807781.9, 1100.3, 1100.3,	0.0);	(464803.4,
3807781.9, 1100.0, 1100.0, 0.0);		
(464823.4, 3807781.9, 1100.0, 1100.0,	0.0);	(464843.4,
3807781.9, 1099.8, 1099.8, 0.0);		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 64

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(464863.4, 3807781.9, 1099.4, 1099.4,	0.0);	(464883.4,
3807781.9, 1099.1, 1099.1, 0.0);		
(464903.4, 3807781.9, 1098.8, 1098.8,	0.0);	(464923.4,
3807781.9, 1098.4, 1098.4, 0.0);		
(464943.4, 3807781.9, 1098.1, 1098.1,	0.0);	(464963.4,
3807781.9, 1097.8, 1097.8, 0.0);		
(464983.4, 3807781.9, 1097.4, 1097.4,	0.0);	(465003.4,
3807781.9, 1097.1, 1097.1, 0.0);		
(465023.4, 3807781.9, 1096.5, 1096.5,	0.0);	(465043.4,
3807781.9, 1096.0, 1096.0, 0.0);		
(465063.4, 3807781.9, 1096.0, 1096.0,	0.0);	(465083.4,
3807781.9, 1095.8, 1095.8, 0.0);		
(465103.4, 3807781.9, 1095.4, 1095.4,	0.0);	(465123.4,
3807781.9, 1095.1, 1095.1, 0.0);		
(465143.4, 3807781.9, 1094.8, 1094.8,	0.0);	(465163.4,
3807781.9, 1094.4, 1094.4, 0.0);		
(465183.4, 3807781.9, 1094.1, 1094.1,	0.0);	(465203.4,
3807781.9, 1094.0, 1094.0, 0.0);		
(465223.4, 3807781.9, 1093.9, 1093.9,	0.0);	(465243.4,
3807781.9, 1093.6, 1093.6, 0.0);		
(465263.4, 3807781.9, 1093.5, 1093.5,	0.0);	(465283.4,
3807781.9, 1093.4, 1093.4, 0.0);		

(465303.4, 3807781.9, 1093.1, 1093.1,	0.0);	(465323.4,
3807781.9, 1092.8, 1092.8, 0.0);		
(465343.4, 3807781.9, 1092.4, 1092.4,	0.0);	(465363.4,
3807781.9, 1092.1, 1092.1, 0.0);		
(465383.4, 3807781.9, 1092.0, 1092.0,	0.0);	(464543.4,
3807801.9, 1097.4, 1102.0, 0.0);		
(464563.4, 3807801.9, 1098.5, 1098.5,	0.0);	(464583.4,
3807801.9, 1099.3, 1103.0, 0.0);		
(464603.4, 3807801.9, 1100.1, 1100.1,	0.0);	(464623.4,
3807801.9, 1100.9, 1100.9, 0.0);		
(464643.4, 3807801.9, 1101.6, 1101.6,	0.0);	(464663.4,
3807801.9, 1101.4, 1101.4, 0.0);		
(464683.4, 3807801.9, 1101.0, 1101.0,	0.0);	(464703.4,
3807801.9, 1101.0, 1101.0, 0.0);		
(464723.4, 3807801.9, 1100.9, 1100.9,	0.0);	(464743.4,
3807801.9, 1100.7, 1100.7, 0.0);		
(464763.4, 3807801.9, 1100.2, 1100.2,	0.0);	(464783.4,
3807801.9, 1100.0, 1100.0, 0.0);		
(464803.4, 3807801.9, 1100.0, 1100.0,	0.0);	(464823.4,
3807801.9, 1099.8, 1099.8, 0.0);		
(464843.4, 3807801.9, 1099.4, 1099.4,	0.0);	(464863.4,
3807801.9, 1099.0, 1099.0, 0.0);		
(464883.4, 3807801.9, 1098.8, 1098.8,	0.0);	(464903.4,
3807801.9, 1098.4, 1098.4, 0.0);		
(464923.4, 3807801.9, 1098.0, 1098.0,	0.0);	(464943.4,
3807801.9, 1097.8, 1097.8, 0.0);		
(464963.4, 3807801.9, 1097.4, 1097.4,	0.0);	(464983.4,
3807801.9, 1097.0, 1097.0, 0.0);		
(465003.4, 3807801.9, 1096.8, 1096.8,	0.0);	(465023.4,
3807801.9, 1096.4, 1096.4, 0.0);		
(465043.4, 3807801.9, 1096.0, 1096.0,	0.0);	(465063.4,
3807801.9, 1095.8, 1095.8, 0.0);		
(465083.4, 3807801.9, 1095.4, 1095.4,	0.0);	(465103.4,
3807801.9, 1095.0, 1095.0, 0.0);		
(465123.4, 3807801.9, 1094.8, 1094.8,	0.0);	(465143.4,
3807801.9, 1094.4, 1094.4, 0.0);		
(465163.4, 3807801.9, 1094.0, 1094.0,	0.0);	(465183.4,
3807801.9, 1094.0, 1094.0, 0.0);		
(465203.4, 3807801.9, 1093.9, 1093.9,	0.0);	(465223.4,
3807801.9, 1093.7, 1093.7, 0.0);		
(465243.4, 3807801.9, 1093.2, 1093.2,	0.0);	(465263.4,
3807801.9, 1093.0, 1093.0, 0.0);		
(465283.4, 3807801.9, 1093.0, 1093.0,	0.0);	(465303.4,
3807801.9, 1092.8, 1092.8, 0.0);		
(465323.4, 3807801.9, 1092.4, 1092.4,	0.0);	(465343.4,
3807801.9, 1092.0, 1092.0, 0.0);		
(465363.4, 3807801.9, 1092.0, 1092.0,	0.0);	(465383.4,
3807801.9, 1091.9, 1091.9, 0.0);		
(464543.4, 3807821.9, 1095.8, 1102.0,	0.0);	(464563.4,
3807821.9, 1096.6, 1103.0, 0.0);		

```

( 464583.4, 3807821.9, 1097.9, 1097.9, 0.0); ( 464603.4,
3807821.9, 1099.1, 1099.1, 0.0);
( 464623.4, 3807821.9, 1100.2, 1100.2, 0.0); ( 464643.4,
3807821.9, 1100.9, 1100.9, 0.0);
( 464663.4, 3807821.9, 1101.1, 1101.1, 0.0); ( 464683.4,
3807821.9, 1101.0, 1101.0, 0.0);
( 464703.4, 3807821.9, 1101.0, 1101.0, 0.0); ( 464723.4,
3807821.9, 1100.6, 1100.6, 0.0);
( 464743.4, 3807821.9, 1100.1, 1100.1, 0.0); ( 464763.4,
3807821.9, 1100.0, 1100.0, 0.0);
( 464783.4, 3807821.9, 1100.0, 1100.0, 0.0); ( 464803.4,
3807821.9, 1099.9, 1099.9, 0.0);
( 464823.4, 3807821.9, 1099.3, 1099.3, 0.0); ( 464843.4,
3807821.9, 1099.1, 1099.1, 0.0);
( 464863.4, 3807821.9, 1098.9, 1098.9, 0.0); ( 464883.4,
3807821.9, 1098.3, 1098.3, 0.0);
( 464903.4, 3807821.9, 1098.1, 1098.1, 0.0); ( 464923.4,
3807821.9, 1097.9, 1097.9, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 65

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464943.4, 3807821.9, 1097.3, 1097.3, 0.0); ( 464963.4,
3807821.9, 1097.1, 1097.1, 0.0);
( 464983.4, 3807821.9, 1096.9, 1096.9, 0.0); ( 465003.4,
3807821.9, 1096.3, 1096.3, 0.0);
( 465023.4, 3807821.9, 1096.1, 1096.1, 0.0); ( 465043.4,
3807821.9, 1095.9, 1095.9, 0.0);
( 465063.4, 3807821.9, 1095.3, 1095.3, 0.0); ( 465083.4,
3807821.9, 1095.1, 1095.1, 0.0);
( 465103.4, 3807821.9, 1094.9, 1094.9, 0.0); ( 465123.4,
3807821.9, 1094.3, 1094.3, 0.0);
( 465143.4, 3807821.9, 1094.1, 1094.1, 0.0); ( 465163.4,
3807821.9, 1094.0, 1094.0, 0.0);
( 465183.4, 3807821.9, 1094.0, 1094.0, 0.0); ( 465203.4,
3807821.9, 1093.6, 1093.6, 0.0);
( 465223.4, 3807821.9, 1093.1, 1093.1, 0.0); ( 465243.4,
3807821.9, 1093.0, 1093.0, 0.0);
( 465263.4, 3807821.9, 1093.0, 1093.0, 0.0); ( 465283.4,
3807821.9, 1092.9, 1092.9, 0.0);
( 465303.4, 3807821.9, 1092.3, 1092.3, 0.0); ( 465323.4,
3807821.9, 1092.1, 1092.1, 0.0);

```

(465343.4, 3807821.9, 1092.0, 1092.0,	0.0);	(465363.4,
3807821.9, 1092.0, 1092.0, 0.0);		
(465383.4, 3807821.9, 1091.6, 1091.6,	0.0);	(464543.4,
3807841.9, 1093.6, 1103.0, 0.0);		
(464563.4, 3807841.9, 1094.2, 1103.0,	0.0);	(464583.4,
3807841.9, 1095.8, 1100.0, 0.0);		
(464603.4, 3807841.9, 1097.5, 1100.0,	0.0);	(464623.4,
3807841.9, 1099.0, 1099.0, 0.0);		
(464643.4, 3807841.9, 1099.7, 1099.7,	0.0);	(464663.4,
3807841.9, 1100.2, 1100.2, 0.0);		
(464683.4, 3807841.9, 1100.5, 1100.5,	0.0);	(464723.4,
3807841.9, 1100.3, 1100.3, 0.0);		
(464743.4, 3807841.9, 1100.0, 1100.0,	0.0);	(464763.4,
3807841.9, 1100.0, 1100.0, 0.0);		
(464783.4, 3807841.9, 1099.8, 1099.8,	0.0);	(464803.4,
3807841.9, 1099.4, 1099.4, 0.0);		
(464823.4, 3807841.9, 1099.1, 1099.1,	0.0);	(464843.4,
3807841.9, 1098.8, 1098.8, 0.0);		
(464863.4, 3807841.9, 1098.4, 1098.4,	0.0);	(464883.4,
3807841.9, 1098.1, 1098.1, 0.0);		
(464903.4, 3807841.9, 1097.8, 1097.8,	0.0);	(464923.4,
3807841.9, 1097.4, 1097.4, 0.0);		
(464943.4, 3807841.9, 1097.1, 1097.1,	0.0);	(464963.4,
3807841.9, 1096.8, 1096.8, 0.0);		
(464983.4, 3807841.9, 1096.4, 1096.4,	0.0);	(465003.4,
3807841.9, 1096.1, 1096.1, 0.0);		
(465023.4, 3807841.9, 1095.8, 1095.8,	0.0);	(465043.4,
3807841.9, 1095.4, 1095.4, 0.0);		
(465063.4, 3807841.9, 1095.1, 1095.1,	0.0);	(465083.4,
3807841.9, 1094.8, 1094.8, 0.0);		
(465103.4, 3807841.9, 1094.4, 1094.4,	0.0);	(465123.4,
3807841.9, 1094.1, 1094.1, 0.0);		
(465143.4, 3807841.9, 1093.8, 1093.8,	0.0);	(465163.4,
3807841.9, 1093.5, 1093.5, 0.0);		
(465183.4, 3807841.9, 1093.5, 1093.5,	0.0);	(465203.4,
3807841.9, 1093.3, 1093.3, 0.0);		
(465223.4, 3807841.9, 1092.9, 1092.9,	0.0);	(465243.4,
3807841.9, 1092.6, 1092.6, 0.0);		
(465263.4, 3807841.9, 1092.5, 1092.5,	0.0);	(465283.4,
3807841.9, 1092.4, 1092.4, 0.0);		
(465303.4, 3807841.9, 1092.1, 1092.1,	0.0);	(465323.4,
3807841.9, 1092.0, 1092.0, 0.0);		
(465343.4, 3807841.9, 1091.9, 1091.9,	0.0);	(465363.4,
3807841.9, 1091.6, 1091.6, 0.0);		
(465383.4, 3807841.9, 1091.3, 1091.3,	0.0);	(464503.4,
3807861.9, 1092.7, 1104.0, 0.0);		
(464523.4, 3807861.9, 1092.0, 1092.0,	0.0);	(464543.4,
3807861.9, 1091.8, 1103.0, 0.0);		
(464563.4, 3807861.9, 1092.1, 1103.0,	0.0);	(464583.4,
3807861.9, 1093.7, 1100.0, 0.0);		

```

( 464603.4, 3807861.9, 1095.5, 1100.0, 0.0); ( 464723.4,
3807861.9, 1100.0, 1100.0, 0.0);
( 464743.4, 3807861.9, 1100.0, 1100.0, 0.0); ( 464763.4,
3807861.9, 1100.0, 1100.0, 0.0);
( 464783.4, 3807861.9, 1099.5, 1099.5, 0.0); ( 464803.4,
3807861.9, 1099.0, 1099.0, 0.0);
( 464823.4, 3807861.9, 1098.8, 1098.8, 0.0); ( 464843.4,
3807861.9, 1098.4, 1098.4, 0.0);
( 464863.4, 3807861.9, 1098.0, 1098.0, 0.0); ( 464883.4,
3807861.9, 1097.8, 1097.8, 0.0);
( 464903.4, 3807861.9, 1097.4, 1097.4, 0.0); ( 464923.4,
3807861.9, 1097.0, 1097.0, 0.0);
( 464943.4, 3807861.9, 1096.8, 1096.8, 0.0); ( 464963.4,
3807861.9, 1096.4, 1096.4, 0.0);
( 464983.4, 3807861.9, 1096.0, 1096.0, 0.0); ( 465003.4,
3807861.9, 1095.8, 1095.8, 0.0);
( 465023.4, 3807861.9, 1095.4, 1095.4, 0.0); ( 465043.4,
3807861.9, 1095.0, 1095.0, 0.0);
( 465063.4, 3807861.9, 1094.8, 1094.8, 0.0); ( 465083.4,
3807861.9, 1094.4, 1094.4, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 66

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465103.4, 3807861.9, 1094.0, 1094.0, 0.0); ( 465123.4,
3807861.9, 1093.8, 1093.8, 0.0);
( 465143.4, 3807861.9, 1093.4, 1093.4, 0.0); ( 465163.4,
3807861.9, 1093.0, 1093.0, 0.0);
( 465183.4, 3807861.9, 1092.8, 1092.8, 0.0); ( 465203.4,
3807861.9, 1092.8, 1092.8, 0.0);
( 465223.4, 3807861.9, 1092.7, 1092.7, 0.0); ( 465243.4,
3807861.9, 1092.2, 1092.2, 0.0);
( 465263.4, 3807861.9, 1092.0, 1092.0, 0.0); ( 465283.4,
3807861.9, 1092.0, 1092.0, 0.0);
( 465303.4, 3807861.9, 1091.8, 1091.8, 0.0); ( 465323.4,
3807861.9, 1091.8, 1091.8, 0.0);
( 465343.4, 3807861.9, 1091.7, 1091.7, 0.0); ( 465363.4,
3807861.9, 1091.2, 1091.2, 0.0);
( 465383.4, 3807861.9, 1090.9, 1090.9, 0.0); ( 464503.4,
3807881.9, 1092.0, 1104.0, 0.0);
( 464523.4, 3807881.9, 1091.3, 1104.0, 0.0); ( 464543.4,
3807881.9, 1091.1, 1091.1, 0.0);

```

(464723.4, 3807881.9, 1100.0, 1100.0,	0.0);	(464743.4,
3807881.9, 1100.0, 1100.0, 0.0);		
(464763.4, 3807881.9, 1100.0, 1100.0,	0.0);	(464783.4,
3807881.9, 1099.5, 1099.5, 0.0);		
(464803.4, 3807881.9, 1098.9, 1098.9,	0.0);	(464823.4,
3807881.9, 1098.3, 1098.3, 0.0);		
(464843.4, 3807881.9, 1098.1, 1098.1,	0.0);	(464863.4,
3807881.9, 1097.9, 1097.9, 0.0);		
(464883.4, 3807881.9, 1097.3, 1097.3,	0.0);	(464903.4,
3807881.9, 1097.1, 1097.1, 0.0);		
(464923.4, 3807881.9, 1096.9, 1096.9,	0.0);	(464943.4,
3807881.9, 1096.3, 1096.3, 0.0);		
(464963.4, 3807881.9, 1096.1, 1096.1,	0.0);	(464983.4,
3807881.9, 1095.9, 1095.9, 0.0);		
(465003.4, 3807881.9, 1095.3, 1095.3,	0.0);	(465023.4,
3807881.9, 1095.1, 1095.1, 0.0);		
(465043.4, 3807881.9, 1094.9, 1094.9,	0.0);	(465063.4,
3807881.9, 1094.3, 1094.3, 0.0);		
(465083.4, 3807881.9, 1094.1, 1094.1,	0.0);	(465103.4,
3807881.9, 1093.9, 1093.9, 0.0);		
(465123.4, 3807881.9, 1093.3, 1093.3,	0.0);	(465143.4,
3807881.9, 1093.1, 1093.1, 0.0);		
(465163.4, 3807881.9, 1092.9, 1092.9,	0.0);	(465183.4,
3807881.9, 1092.3, 1092.3, 0.0);		
(465203.4, 3807881.9, 1092.1, 1092.1,	0.0);	(465223.4,
3807881.9, 1092.1, 1092.1, 0.0);		
(465243.4, 3807881.9, 1092.0, 1092.0,	0.0);	(465263.4,
3807881.9, 1092.0, 1092.0, 0.0);		
(465283.4, 3807881.9, 1091.9, 1091.9,	0.0);	(465303.4,
3807881.9, 1091.3, 1091.3, 0.0);		
(465323.4, 3807881.9, 1091.1, 1091.1,	0.0);	(465343.4,
3807881.9, 1091.1, 1091.1, 0.0);		
(465363.4, 3807881.9, 1091.0, 1091.0,	0.0);	(465383.4,
3807881.9, 1090.6, 1090.6, 0.0);		
(464723.4, 3807901.9, 1099.4, 1099.4,	0.0);	(464743.4,
3807901.9, 1099.9, 1099.9, 0.0);		
(464763.4, 3807901.9, 1099.6, 1099.6,	0.0);	(464783.4,
3807901.9, 1099.3, 1099.3, 0.0);		
(464803.4, 3807901.9, 1098.9, 1098.9,	0.0);	(464823.4,
3807901.9, 1098.2, 1098.2, 0.0);		
(464843.4, 3807901.9, 1098.0, 1098.0,	0.0);	(464863.4,
3807901.9, 1097.9, 1097.9, 0.0);		
(464883.4, 3807901.9, 1097.2, 1097.2,	0.0);	(464903.4,
3807901.9, 1096.8, 1096.8, 0.0);		
(464923.4, 3807901.9, 1096.4, 1096.4,	0.0);	(464943.4,
3807901.9, 1096.1, 1096.1, 0.0);		
(464963.4, 3807901.9, 1096.0, 1096.0,	0.0);	(464983.4,
3807901.9, 1095.9, 1095.9, 0.0);		
(465003.4, 3807901.9, 1095.2, 1095.2,	0.0);	(465023.4,
3807901.9, 1094.8, 1094.8, 0.0);		

```

( 465043.4, 3807901.9, 1094.4, 1094.4, 0.0); ( 465063.4,
3807901.9, 1094.1, 1094.1, 0.0);
( 465083.4, 3807901.9, 1093.8, 1093.8, 0.0); ( 465103.4,
3807901.9, 1093.4, 1093.4, 0.0);
( 465123.4, 3807901.9, 1093.1, 1093.1, 0.0); ( 465143.4,
3807901.9, 1092.8, 1092.8, 0.0);
( 465163.4, 3807901.9, 1092.4, 1092.4, 0.0); ( 465183.4,
3807901.9, 1092.1, 1092.1, 0.0);
( 465203.4, 3807901.9, 1092.0, 1092.0, 0.0); ( 465223.4,
3807901.9, 1091.9, 1091.9, 0.0);
( 465243.4, 3807901.9, 1091.6, 1091.6, 0.0); ( 465263.4,
3807901.9, 1091.5, 1091.5, 0.0);
( 465283.4, 3807901.9, 1091.4, 1091.4, 0.0); ( 465303.4,
3807901.9, 1091.1, 1091.1, 0.0);
( 465323.4, 3807901.9, 1090.8, 1090.8, 0.0); ( 465343.4,
3807901.9, 1090.5, 1090.5, 0.0);
( 465363.4, 3807901.9, 1090.5, 1090.5, 0.0); ( 465383.4,
3807901.9, 1090.3, 1090.3, 0.0);
( 464723.4, 3807921.9, 1098.5, 1098.5, 0.0); ( 464743.4,
3807921.9, 1099.5, 1099.5, 0.0);
( 464763.4, 3807921.9, 1099.1, 1099.1, 0.0); ( 464783.4,
3807921.9, 1098.9, 1098.9, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 67

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

```

( 464803.4, 3807921.9, 1098.7, 1098.7, 0.0); ( 464823.4,
3807921.9, 1098.2, 1098.2, 0.0);
( 464843.4, 3807921.9, 1097.9, 1097.9, 0.0); ( 464863.4,
3807921.9, 1097.7, 1097.7, 0.0);
( 464883.4, 3807921.9, 1097.0, 1097.0, 0.0); ( 464903.4,
3807921.9, 1096.4, 1096.4, 0.0);
( 464923.4, 3807921.9, 1096.0, 1096.0, 0.0); ( 464943.4,
3807921.9, 1096.0, 1096.0, 0.0);
( 464963.4, 3807921.9, 1095.9, 1095.9, 0.0); ( 464983.4,
3807921.9, 1095.7, 1095.7, 0.0);
( 465003.4, 3807921.9, 1095.0, 1095.0, 0.0); ( 465023.4,
3807921.9, 1094.4, 1094.4, 0.0);
( 465043.4, 3807921.9, 1094.0, 1094.0, 0.0); ( 465063.4,
3807921.9, 1093.8, 1093.8, 0.0);
( 465083.4, 3807921.9, 1093.4, 1093.4, 0.0); ( 465103.4,
3807921.9, 1093.0, 1093.0, 0.0);

```

(465123.4, 3807921.9, 1092.8, 1092.8,	0.0);	(465143.4,
3807921.9, 1092.4, 1092.4, 0.0);		
(465163.4, 3807921.9, 1092.0, 1092.0,	0.0);	(465183.4,
3807921.9, 1091.8, 1091.8, 0.0);		
(465203.4, 3807921.9, 1091.8, 1091.8,	0.0);	(465223.4,
3807921.9, 1091.7, 1091.7, 0.0);		
(465243.4, 3807921.9, 1091.2, 1091.2,	0.0);	(465263.4,
3807921.9, 1090.9, 1090.9, 0.0);		
(465283.4, 3807921.9, 1090.8, 1090.8,	0.0);	(465303.4,
3807921.9, 1090.8, 1090.8, 0.0);		
(465323.4, 3807921.9, 1090.4, 1090.4,	0.0);	(465343.4,
3807921.9, 1090.0, 1090.0, 0.0);		
(465363.4, 3807921.9, 1090.0, 1090.0,	0.0);	(465383.4,
3807921.9, 1089.9, 1089.9, 0.0);		
(464723.4, 3807941.9, 1097.2, 1097.2,	0.0);	(464743.4,
3807941.9, 1098.3, 1098.3, 0.0);		
(464763.4, 3807941.9, 1098.8, 1098.8,	0.0);	(464783.4,
3807941.9, 1098.6, 1098.6, 0.0);		
(464803.4, 3807941.9, 1098.1, 1098.1,	0.0);	(464823.4,
3807941.9, 1098.0, 1098.0, 0.0);		
(464843.4, 3807941.9, 1097.6, 1097.6,	0.0);	(464863.4,
3807941.9, 1097.0, 1097.0, 0.0);		
(464883.4, 3807941.9, 1096.3, 1096.3,	0.0);	(464903.4,
3807941.9, 1096.1, 1096.1, 0.0);		
(464923.4, 3807941.9, 1096.0, 1096.0,	0.0);	(464943.4,
3807941.9, 1096.0, 1096.0, 0.0);		
(464963.4, 3807941.9, 1095.6, 1095.6,	0.0);	(464983.4,
3807941.9, 1095.0, 1095.0, 0.0);		
(465003.4, 3807941.9, 1094.3, 1094.3,	0.0);	(465023.4,
3807941.9, 1094.1, 1094.1, 0.0);		
(465043.4, 3807941.9, 1093.9, 1093.9,	0.0);	(465063.4,
3807941.9, 1093.3, 1093.3, 0.0);		
(465083.4, 3807941.9, 1093.1, 1093.1,	0.0);	(465103.4,
3807941.9, 1092.9, 1092.9, 0.0);		
(465123.4, 3807941.9, 1092.3, 1092.3,	0.0);	(465143.4,
3807941.9, 1092.1, 1092.1, 0.0);		
(465163.4, 3807941.9, 1091.9, 1091.9,	0.0);	(465183.4,
3807941.9, 1091.3, 1091.3, 0.0);		
(465203.4, 3807941.9, 1091.1, 1091.1,	0.0);	(465223.4,
3807941.9, 1091.1, 1091.1, 0.0);		
(465243.4, 3807941.9, 1091.0, 1091.0,	0.0);	(465263.4,
3807941.9, 1090.6, 1090.6, 0.0);		
(465283.4, 3807941.9, 1090.1, 1090.1,	0.0);	(465303.4,
3807941.9, 1090.1, 1090.1, 0.0);		
(465323.4, 3807941.9, 1090.1, 1090.1,	0.0);	(465343.4,
3807941.9, 1090.0, 1090.0, 0.0);		
(465363.4, 3807941.9, 1090.0, 1090.0,	0.0);	(465383.4,
3807941.9, 1089.6, 1089.6, 0.0);		
(465403.4, 3807941.9, 1089.1, 1089.1,	0.0);	(465423.4,
3807941.9, 1089.0, 1089.0, 0.0);		

```

( 465443.4, 3807941.9, 1089.0, 1089.0, 0.0); ( 465463.4,
3807941.9, 1089.1, 1089.1, 0.0);
( 465483.4, 3807941.9, 1089.0, 1089.0, 0.0); ( 465503.4,
3807941.9, 1089.0, 1089.0, 0.0);
( 465523.4, 3807941.9, 1088.9, 1088.9, 0.0); ( 465543.4,
3807941.9, 1088.3, 1088.3, 0.0);
( 465563.4, 3807941.9, 1088.1, 1088.1, 0.0); ( 465583.4,
3807941.9, 1088.0, 1088.0, 0.0);
( 465603.4, 3807941.9, 1088.0, 1088.0, 0.0); ( 465623.4,
3807941.9, 1087.6, 1087.6, 0.0);
( 465643.4, 3807941.9, 1087.1, 1087.1, 0.0); ( 465663.4,
3807941.9, 1087.0, 1087.0, 0.0);
( 465683.4, 3807941.9, 1086.6, 1086.6, 0.0); ( 465703.4,
3807941.9, 1086.1, 1086.1, 0.0);
( 464723.4, 3807961.9, 1095.2, 1098.0, 0.0); ( 464743.4,
3807961.9, 1097.1, 1097.1, 0.0);
( 464763.4, 3807961.9, 1098.1, 1098.1, 0.0); ( 464783.4,
3807961.9, 1098.3, 1098.3, 0.0);
( 464803.4, 3807961.9, 1097.9, 1097.9, 0.0); ( 464823.4,
3807961.9, 1097.6, 1097.6, 0.0);
( 464843.4, 3807961.9, 1097.3, 1097.3, 0.0); ( 464863.4,
3807961.9, 1096.9, 1096.9, 0.0);
( 464883.4, 3807961.9, 1096.2, 1096.2, 0.0); ( 464903.4,
3807961.9, 1096.0, 1096.0, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 68

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464923.4, 3807961.9, 1095.9, 1095.9, 0.0); ( 464943.4,
3807961.9, 1095.6, 1095.6, 0.0);
( 464963.4, 3807961.9, 1095.3, 1095.3, 0.0); ( 464983.4,
3807961.9, 1094.9, 1094.9, 0.0);
( 465003.4, 3807961.9, 1094.2, 1094.2, 0.0); ( 465023.4,
3807961.9, 1094.0, 1094.0, 0.0);
( 465043.4, 3807961.9, 1093.9, 1093.9, 0.0); ( 465063.4,
3807961.9, 1093.2, 1093.2, 0.0);
( 465083.4, 3807961.9, 1092.8, 1092.8, 0.0); ( 465103.4,
3807961.9, 1092.4, 1092.4, 0.0);
( 465123.4, 3807961.9, 1092.1, 1092.1, 0.0); ( 465143.4,
3807961.9, 1091.8, 1091.8, 0.0);
( 465163.4, 3807961.9, 1091.4, 1091.4, 0.0); ( 465183.4,
3807961.9, 1091.1, 1091.1, 0.0);

```


(465203.4, 3807961.9, 1090.8, 1090.8,	0.0);	(465223.4,
3807961.9, 1090.5, 1090.5, 0.0);		
(465243.4, 3807961.9, 1090.5, 1090.5,	0.0);	(465263.4,
3807961.9, 1090.3, 1090.3, 0.0);		
(465283.4, 3807961.9, 1090.0, 1090.0,	0.0);	(465303.4,
3807961.9, 1090.0, 1090.0, 0.0);		
(465323.4, 3807961.9, 1089.8, 1089.8,	0.0);	(465343.4,
3807961.9, 1089.5, 1089.5, 0.0);		
(465363.4, 3807961.9, 1089.5, 1089.5,	0.0);	(465383.4,
3807961.9, 1089.3, 1089.3, 0.0);		
(465403.4, 3807961.9, 1088.9, 1088.9,	0.0);	(465423.4,
3807961.9, 1088.6, 1088.6, 0.0);		
(465443.4, 3807961.9, 1088.5, 1088.5,	0.0);	(465463.4,
3807961.9, 1088.9, 1088.9, 0.0);		
(465483.4, 3807961.9, 1088.6, 1088.6,	0.0);	(465503.4,
3807961.9, 1088.5, 1088.5, 0.0);		
(465523.4, 3807961.9, 1088.4, 1088.4,	0.0);	(465543.4,
3807961.9, 1088.1, 1088.1, 0.0);		
(465563.4, 3807961.9, 1088.0, 1088.0,	0.0);	(465583.4,
3807961.9, 1087.9, 1087.9, 0.0);		
(465603.4, 3807961.9, 1087.6, 1087.6,	0.0);	(465623.4,
3807961.9, 1087.3, 1087.3, 0.0);		
(465643.4, 3807961.9, 1086.9, 1086.9,	0.0);	(465663.4,
3807961.9, 1086.6, 1086.6, 0.0);		
(465683.4, 3807961.9, 1086.3, 1086.3,	0.0);	(465703.4,
3807961.9, 1086.0, 1086.0, 0.0);		
(464743.4, 3807981.9, 1095.7, 1095.7,	0.0);	(464763.4,
3807981.9, 1097.1, 1097.1, 0.0);		
(464783.4, 3807981.9, 1097.7, 1097.7,	0.0);	(464803.4,
3807981.9, 1097.7, 1097.7, 0.0);		
(464823.4, 3807981.9, 1097.0, 1097.0,	0.0);	(464843.4,
3807981.9, 1096.8, 1096.8, 0.0);		
(464863.4, 3807981.9, 1096.7, 1096.7,	0.0);	(464883.4,
3807981.9, 1096.0, 1096.0, 0.0);		
(464903.4, 3807981.9, 1095.8, 1095.8,	0.0);	(464923.4,
3807981.9, 1095.7, 1095.7, 0.0);		
(464943.4, 3807981.9, 1095.2, 1095.2,	0.0);	(464963.4,
3807981.9, 1094.9, 1094.9, 0.0);		
(464983.4, 3807981.9, 1094.7, 1094.7,	0.0);	(465003.4,
3807981.9, 1094.2, 1094.2, 0.0);		
(465023.4, 3807981.9, 1093.9, 1093.9,	0.0);	(465043.4,
3807981.9, 1093.7, 1093.7, 0.0);		
(465063.4, 3807981.9, 1093.2, 1093.2,	0.0);	(465083.4,
3807981.9, 1092.5, 1092.5, 0.0);		
(465103.4, 3807981.9, 1092.0, 1092.0,	0.0);	(465123.4,
3807981.9, 1092.0, 1092.0, 0.0);		
(465143.4, 3807981.9, 1091.5, 1091.5,	0.0);	(465163.4,
3807981.9, 1091.0, 1091.0, 0.0);		
(465183.4, 3807981.9, 1090.8, 1090.8,	0.0);	(465203.4,
3807981.9, 1090.4, 1090.4, 0.0);		

```

( 465223.4, 3807981.9, 1090.0, 1090.0, 0.0); ( 465243.4,
3807981.9, 1090.0, 1090.0, 0.0);
( 465263.4, 3807981.9, 1090.0, 1090.0, 0.0); ( 465283.4,
3807981.9, 1090.0, 1090.0, 0.0);
( 465303.4, 3807981.9, 1089.8, 1089.8, 0.0); ( 465323.4,
3807981.9, 1089.4, 1089.4, 0.0);
( 465343.4, 3807981.9, 1089.0, 1089.0, 0.0); ( 465363.4,
3807981.9, 1088.8, 1088.8, 0.0);
( 465383.4, 3807981.9, 1088.8, 1088.8, 0.0); ( 465403.4,
3807981.9, 1088.7, 1088.7, 0.0);
( 465423.4, 3807981.9, 1088.2, 1088.2, 0.0); ( 465443.4,
3807981.9, 1088.0, 1088.0, 0.0);
( 465463.4, 3807981.9, 1088.7, 1088.7, 0.0); ( 465483.4,
3807981.9, 1088.2, 1088.2, 0.0);
( 465503.4, 3807981.9, 1088.0, 1088.0, 0.0); ( 465523.4,
3807981.9, 1088.0, 1088.0, 0.0);
( 465543.4, 3807981.9, 1087.8, 1087.8, 0.0); ( 465563.4,
3807981.9, 1087.8, 1087.8, 0.0);
( 465583.4, 3807981.9, 1087.7, 1087.7, 0.0); ( 465603.4,
3807981.9, 1087.2, 1087.2, 0.0);
( 465623.4, 3807981.9, 1086.9, 1086.9, 0.0); ( 465643.4,
3807981.9, 1086.7, 1086.7, 0.0);
( 465663.4, 3807981.9, 1086.2, 1086.2, 0.0); ( 465683.4,
3807981.9, 1086.0, 1086.0, 0.0);
( 465703.4, 3807981.9, 1086.0, 1086.0, 0.0); ( 464763.4,
3808001.9, 1095.6, 1095.6, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 69

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464783.4, 3808001.9, 1096.7, 1096.7, 0.0); ( 464803.4,
3808001.9, 1097.0, 1097.0, 0.0);
( 464823.4, 3808001.9, 1096.3, 1096.3, 0.0); ( 464843.4,
3808001.9, 1096.1, 1096.1, 0.0);
( 464863.4, 3808001.9, 1096.0, 1096.0, 0.0); ( 464883.4,
3808001.9, 1095.3, 1095.3, 0.0);
( 464903.4, 3808001.9, 1095.1, 1095.1, 0.0); ( 464923.4,
3808001.9, 1095.1, 1095.1, 0.0);
( 464943.4, 3808001.9, 1095.0, 1095.0, 0.0); ( 464963.4,
3808001.9, 1094.6, 1094.6, 0.0);
( 464983.4, 3808001.9, 1094.1, 1094.1, 0.0); ( 465003.4,
3808001.9, 1094.0, 1094.0, 0.0);

```

(465023.4, 3808001.9, 1093.6, 1093.6,	0.0);	(465043.4,
3808001.9, 1093.1, 1093.1, 0.0);		
(465063.4, 3808001.9, 1093.0, 1093.0,	0.0);	(465083.4,
3808001.9, 1092.5, 1092.5, 0.0);		
(465103.4, 3808001.9, 1092.0, 1092.0,	0.0);	(465123.4,
3808001.9, 1092.0, 1092.0, 0.0);		
(465143.4, 3808001.9, 1091.5, 1091.5,	0.0);	(465163.4,
3808001.9, 1090.9, 1090.9, 0.0);		
(465183.4, 3808001.9, 1090.3, 1090.3,	0.0);	(465203.4,
3808001.9, 1090.1, 1090.1, 0.0);		
(465223.4, 3808001.9, 1090.0, 1090.0,	0.0);	(465243.4,
3808001.9, 1090.0, 1090.0, 0.0);		
(465263.4, 3808001.9, 1090.0, 1090.0,	0.0);	(465283.4,
3808001.9, 1089.9, 1089.9, 0.0);		
(465303.4, 3808001.9, 1089.3, 1089.3,	0.0);	(465323.4,
3808001.9, 1089.1, 1089.1, 0.0);		
(465343.4, 3808001.9, 1088.9, 1088.9,	0.0);	(465363.4,
3808001.9, 1088.3, 1088.3, 0.0);		
(465383.4, 3808001.9, 1088.1, 1088.1,	0.0);	(465403.4,
3808001.9, 1088.1, 1088.1, 0.0);		
(465423.4, 3808001.9, 1088.0, 1088.0,	0.0);	(465443.4,
3808001.9, 1088.0, 1088.0, 0.0);		
(465463.4, 3808001.9, 1088.1, 1088.1,	0.0);	(465483.4,
3808001.9, 1088.0, 1088.0, 0.0);		
(465503.4, 3808001.9, 1088.0, 1088.0,	0.0);	(465523.4,
3808001.9, 1087.9, 1087.9, 0.0);		
(465543.4, 3808001.9, 1087.3, 1087.3,	0.0);	(465563.4,
3808001.9, 1087.1, 1087.1, 0.0);		
(465583.4, 3808001.9, 1087.1, 1087.1,	0.0);	(465603.4,
3808001.9, 1087.0, 1087.0, 0.0);		
(465623.4, 3808001.9, 1086.6, 1086.6,	0.0);	(465643.4,
3808001.9, 1086.1, 1086.1, 0.0);		
(465663.4, 3808001.9, 1086.0, 1086.0,	0.0);	(465683.4,
3808001.9, 1086.0, 1086.0, 0.0);		
(465703.4, 3808001.9, 1085.9, 1085.9,	0.0);	(464763.4,
3808021.9, 1093.5, 1096.0, 0.0);		
(464783.4, 3808021.9, 1094.6, 1097.0,	0.0);	(464803.4,
3808021.9, 1095.4, 1095.4, 0.0);		
(464823.4, 3808021.9, 1095.5, 1095.5,	0.0);	(464843.4,
3808021.9, 1095.5, 1095.5, 0.0);		
(464863.4, 3808021.9, 1095.4, 1095.4,	0.0);	(464883.4,
3808021.9, 1095.1, 1095.1, 0.0);		
(464903.4, 3808021.9, 1094.8, 1094.8,	0.0);	(464923.4,
3808021.9, 1094.5, 1094.5, 0.0);		
(464943.4, 3808021.9, 1094.5, 1094.5,	0.0);	(464963.4,
3808021.9, 1094.3, 1094.3, 0.0);		
(464983.4, 3808021.9, 1093.9, 1093.9,	0.0);	(465003.4,
3808021.9, 1093.6, 1093.6, 0.0);		
(465023.4, 3808021.9, 1093.3, 1093.3,	0.0);	(465043.4,
3808021.9, 1092.9, 1092.9, 0.0);		

```

( 465063.4, 3808021.9, 1092.6, 1092.6, 0.0); ( 465083.4,
3808021.9, 1092.3, 1092.3, 0.0);
( 465103.4, 3808021.9, 1091.9, 1091.9, 0.0); ( 465123.4,
3808021.9, 1091.6, 1091.6, 0.0);
( 465143.4, 3808021.9, 1091.3, 1091.3, 0.0); ( 465163.4,
3808021.9, 1090.9, 1090.9, 0.0);
( 465183.4, 3808021.9, 1090.2, 1090.2, 0.0); ( 465203.4,
3808021.9, 1090.0, 1090.0, 0.0);
( 465223.4, 3808021.9, 1089.9, 1089.9, 0.0); ( 465243.4,
3808021.9, 1089.6, 1089.6, 0.0);
( 465263.4, 3808021.9, 1089.5, 1089.5, 0.0); ( 465283.4,
3808021.9, 1089.4, 1089.4, 0.0);
( 465303.4, 3808021.9, 1089.1, 1089.1, 0.0); ( 465323.4,
3808021.9, 1088.8, 1088.8, 0.0);
( 465343.4, 3808021.9, 1088.4, 1088.4, 0.0); ( 465363.4,
3808021.9, 1088.1, 1088.1, 0.0);
( 465383.4, 3808021.9, 1088.0, 1088.0, 0.0); ( 465403.4,
3808021.9, 1087.9, 1087.9, 0.0);
( 465423.4, 3808021.9, 1087.6, 1087.6, 0.0); ( 465443.4,
3808021.9, 1087.5, 1087.5, 0.0);
( 465463.4, 3808021.9, 1087.9, 1087.9, 0.0); ( 465483.4,
3808021.9, 1087.6, 1087.6, 0.0);
( 465503.4, 3808021.9, 1087.5, 1087.5, 0.0); ( 465523.4,
3808021.9, 1087.4, 1087.4, 0.0);
( 465543.4, 3808021.9, 1087.1, 1087.1, 0.0); ( 465563.4,
3808021.9, 1086.8, 1086.8, 0.0);
( 465583.4, 3808021.9, 1086.5, 1086.5, 0.0); ( 465603.4,
3808021.9, 1086.5, 1086.5, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 70

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465623.4, 3808021.9, 1086.3, 1086.3, 0.0); ( 465643.4,
3808021.9, 1086.0, 1086.0, 0.0);
( 465663.4, 3808021.9, 1086.0, 1086.0, 0.0); ( 465683.4,
3808021.9, 1085.8, 1085.8, 0.0);
( 465703.4, 3808021.9, 1085.4, 1085.4, 0.0); ( 464783.4,
3808041.9, 1092.6, 1097.0, 0.0);
( 464803.4, 3808041.9, 1093.7, 1093.7, 0.0); ( 464823.4,
3808041.9, 1094.4, 1094.4, 0.0);
( 464843.4, 3808041.9, 1094.7, 1094.7, 0.0); ( 464863.4,
3808041.9, 1094.8, 1094.8, 0.0);

```

(464883.4, 3808041.9, 1094.8, 1094.8,	0.0);	(464903.4,
3808041.9, 1094.4, 1094.4, 0.0);		
(464923.4, 3808041.9, 1094.0, 1094.0,	0.0);	(464943.4,
3808041.9, 1094.0, 1094.0, 0.0);		
(464963.4, 3808041.9, 1094.0, 1094.0,	0.0);	(464983.4,
3808041.9, 1093.9, 1093.9, 0.0);		
(465003.4, 3808041.9, 1093.2, 1093.2,	0.0);	(465023.4,
3808041.9, 1092.9, 1092.9, 0.0);		
(465043.4, 3808041.9, 1092.7, 1092.7,	0.0);	(465063.4,
3808041.9, 1092.2, 1092.2, 0.0);		
(465083.4, 3808041.9, 1091.9, 1091.9,	0.0);	(465103.4,
3808041.9, 1091.7, 1091.7, 0.0);		
(465123.4, 3808041.9, 1091.2, 1091.2,	0.0);	(465143.4,
3808041.9, 1090.9, 1090.9, 0.0);		
(465163.4, 3808041.9, 1090.7, 1090.7,	0.0);	(465183.4,
3808041.9, 1090.2, 1090.2, 0.0);		
(465203.4, 3808041.9, 1089.9, 1089.9,	0.0);	(465223.4,
3808041.9, 1089.7, 1089.7, 0.0);		
(465243.4, 3808041.9, 1089.2, 1089.2,	0.0);	(465263.4,
3808041.9, 1088.9, 1088.9, 0.0);		
(465283.4, 3808041.9, 1088.8, 1088.8,	0.0);	(465303.4,
3808041.9, 1088.8, 1088.8, 0.0);		
(465323.4, 3808041.9, 1088.4, 1088.4,	0.0);	(465343.4,
3808041.9, 1088.0, 1088.0, 0.0);		
(465363.4, 3808041.9, 1087.8, 1087.8,	0.0);	(465383.4,
3808041.9, 1087.8, 1087.8, 0.0);		
(465403.4, 3808041.9, 1087.7, 1087.7,	0.0);	(465423.4,
3808041.9, 1087.2, 1087.2, 0.0);		
(465443.4, 3808041.9, 1087.0, 1087.0,	0.0);	(465463.4,
3808041.9, 1087.7, 1087.7, 0.0);		
(465483.4, 3808041.9, 1087.2, 1087.2,	0.0);	(465503.4,
3808041.9, 1086.9, 1086.9, 0.0);		
(465523.4, 3808041.9, 1086.8, 1086.8,	0.0);	(465543.4,
3808041.9, 1086.8, 1086.8, 0.0);		
(465563.4, 3808041.9, 1086.4, 1086.4,	0.0);	(465583.4,
3808041.9, 1086.0, 1086.0, 0.0);		
(465603.4, 3808041.9, 1086.0, 1086.0,	0.0);	(465623.4,
3808041.9, 1086.0, 1086.0, 0.0);		
(465643.4, 3808041.9, 1086.0, 1086.0,	0.0);	(465663.4,
3808041.9, 1085.8, 1085.8, 0.0);		
(465683.4, 3808041.9, 1085.4, 1085.4,	0.0);	(465703.4,
3808041.9, 1085.0, 1085.0, 0.0);		
(464803.4, 3808061.9, 1092.4, 1092.4,	0.0);	(464823.4,
3808061.9, 1093.0, 1093.0, 0.0);		
(464843.4, 3808061.9, 1093.7, 1093.7,	0.0);	(464863.4,
3808061.9, 1094.1, 1094.1, 0.0);		
(464883.4, 3808061.9, 1094.1, 1094.1,	0.0);	(464903.4,
3808061.9, 1094.1, 1094.1, 0.0);		
(464923.4, 3808061.9, 1094.0, 1094.0,	0.0);	(464943.4,
3808061.9, 1094.0, 1094.0, 0.0);		

```

( 464963.4, 3808061.9, 1094.0, 1094.0, 0.0); ( 464983.4,
3808061.9, 1093.9, 1093.9, 0.0);
( 465003.4, 3808061.9, 1093.2, 1093.2, 0.0); ( 465023.4,
3808061.9, 1092.6, 1092.6, 0.0);
( 465043.4, 3808061.9, 1092.1, 1092.1, 0.0); ( 465063.4,
3808061.9, 1092.0, 1092.0, 0.0);
( 465083.4, 3808061.9, 1091.6, 1091.6, 0.0); ( 465103.4,
3808061.9, 1091.1, 1091.1, 0.0);
( 465123.4, 3808061.9, 1091.0, 1091.0, 0.0); ( 465143.4,
3808061.9, 1090.6, 1090.6, 0.0);
( 465163.4, 3808061.9, 1090.1, 1090.1, 0.0); ( 465183.4,
3808061.9, 1090.0, 1090.0, 0.0);
( 465203.4, 3808061.9, 1089.6, 1089.6, 0.0); ( 465223.4,
3808061.9, 1089.1, 1089.1, 0.0);
( 465243.4, 3808061.9, 1089.0, 1089.0, 0.0); ( 465263.4,
3808061.9, 1088.6, 1088.6, 0.0);
( 465283.4, 3808061.9, 1088.1, 1088.1, 0.0); ( 465303.4,
3808061.9, 1088.1, 1088.1, 0.0);
( 465323.4, 3808061.9, 1088.1, 1088.1, 0.0); ( 465343.4,
3808061.9, 1087.9, 1087.9, 0.0);
( 465363.4, 3808061.9, 1087.3, 1087.3, 0.0); ( 465383.4,
3808061.9, 1087.1, 1087.1, 0.0);
( 465403.4, 3808061.9, 1087.1, 1087.1, 0.0); ( 465423.4,
3808061.9, 1087.0, 1087.0, 0.0);
( 465443.4, 3808061.9, 1087.0, 1087.0, 0.0); ( 465463.4,
3808061.9, 1087.1, 1087.1, 0.0);
( 465483.4, 3808061.9, 1087.0, 1087.0, 0.0); ( 465503.4,
3808061.9, 1086.6, 1086.6, 0.0);
( 465523.4, 3808061.9, 1086.1, 1086.1, 0.0); ( 465543.4,
3808061.9, 1086.1, 1086.1, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 71

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465563.4, 3808061.9, 1086.1, 1086.1, 0.0); ( 465583.4,
3808061.9, 1086.0, 1086.0, 0.0);
( 465603.4, 3808061.9, 1086.0, 1086.0, 0.0); ( 465623.4,
3808061.9, 1086.0, 1086.0, 0.0);
( 465643.4, 3808061.9, 1085.9, 1085.9, 0.0); ( 465663.4,
3808061.9, 1085.3, 1085.3, 0.0);
( 465683.4, 3808061.9, 1085.1, 1085.1, 0.0); ( 465703.4,
3808061.9, 1085.0, 1085.0, 0.0);

```

(464823.4, 3808081.9, 1092.2, 1092.2,	0.0);	(464843.4,
3808081.9, 1092.7, 1092.7, 0.0);		
(464863.4, 3808081.9, 1093.0, 1093.0,	0.0);	(464883.4,
3808081.9, 1093.3, 1093.3, 0.0);		
(464903.4, 3808081.9, 1093.7, 1093.7,	0.0);	(464923.4,
3808081.9, 1094.0, 1094.0, 0.0);		
(464943.4, 3808081.9, 1094.0, 1094.0,	0.0);	(464963.4,
3808081.9, 1093.8, 1093.8, 0.0);		
(464983.4, 3808081.9, 1093.4, 1093.4,	0.0);	(465003.4,
3808081.9, 1093.1, 1093.1, 0.0);		
(465023.4, 3808081.9, 1092.5, 1092.5,	0.0);	(465043.4,
3808081.9, 1092.0, 1092.0, 0.0);		
(465063.4, 3808081.9, 1092.0, 1092.0,	0.0);	(465083.4,
3808081.9, 1091.5, 1091.5, 0.0);		
(465103.4, 3808081.9, 1090.9, 1090.9,	0.0);	(465123.4,
3808081.9, 1090.6, 1090.6, 0.0);		
(465143.4, 3808081.9, 1090.3, 1090.3,	0.0);	(465163.4,
3808081.9, 1089.9, 1089.9, 0.0);		
(465183.4, 3808081.9, 1089.6, 1089.6,	0.0);	(465203.4,
3808081.9, 1089.3, 1089.3, 0.0);		
(465223.4, 3808081.9, 1088.9, 1088.9,	0.0);	(465243.4,
3808081.9, 1088.6, 1088.6, 0.0);		
(465263.4, 3808081.9, 1088.3, 1088.3,	0.0);	(465283.4,
3808081.9, 1088.0, 1088.0, 0.0);		
(465303.4, 3808081.9, 1088.0, 1088.0,	0.0);	(465323.4,
3808081.9, 1087.8, 1087.8, 0.0);		
(465343.4, 3808081.9, 1087.4, 1087.4,	0.0);	(465363.4,
3808081.9, 1087.1, 1087.1, 0.0);		
(465383.4, 3808081.9, 1087.0, 1087.0,	0.0);	(465403.4,
3808081.9, 1086.9, 1086.9, 0.0);		
(465423.4, 3808081.9, 1086.6, 1086.6,	0.0);	(465443.4,
3808081.9, 1086.5, 1086.5, 0.0);		
(465463.4, 3808081.9, 1086.9, 1086.9,	0.0);	(465483.4,
3808081.9, 1086.6, 1086.6, 0.0);		
(465503.4, 3808081.9, 1086.3, 1086.3,	0.0);	(465523.4,
3808081.9, 1085.9, 1085.9, 0.0);		
(465543.4, 3808081.9, 1085.6, 1085.6,	0.0);	(465563.4,
3808081.9, 1085.5, 1085.5, 0.0);		
(465583.4, 3808081.9, 1085.5, 1085.5,	0.0);	(465603.4,
3808081.9, 1085.5, 1085.5, 0.0);		
(465623.4, 3808081.9, 1085.5, 1085.5,	0.0);	(465643.4,
3808081.9, 1085.4, 1085.4, 0.0);		
(465663.4, 3808081.9, 1085.1, 1085.1,	0.0);	(465683.4,
3808081.9, 1085.0, 1085.0, 0.0);		
(465703.4, 3808081.9, 1084.9, 1084.9,	0.0);	(464843.4,
3808101.9, 1091.8, 1091.8, 0.0);		
(464863.4, 3808101.9, 1092.1, 1092.1,	0.0);	(464883.4,
3808101.9, 1092.8, 1092.8, 0.0);		
(464903.4, 3808101.9, 1093.4, 1093.4,	0.0);	(464923.4,
3808101.9, 1093.8, 1093.8, 0.0);		

```

( 464943.4, 3808101.9, 1093.8, 1093.8, 0.0); ( 464963.4,
3808101.9, 1093.4, 1093.4, 0.0);
( 464983.4, 3808101.9, 1093.0, 1093.0, 0.0); ( 465003.4,
3808101.9, 1092.8, 1092.8, 0.0);
( 465023.4, 3808101.9, 1092.4, 1092.4, 0.0); ( 465043.4,
3808101.9, 1092.0, 1092.0, 0.0);
( 465063.4, 3808101.9, 1091.8, 1091.8, 0.0); ( 465083.4,
3808101.9, 1091.3, 1091.3, 0.0);
( 465103.4, 3808101.9, 1090.7, 1090.7, 0.0); ( 465123.4,
3808101.9, 1090.2, 1090.2, 0.0);
( 465143.4, 3808101.9, 1090.0, 1090.0, 0.0); ( 465163.4,
3808101.9, 1089.9, 1089.9, 0.0);
( 465183.4, 3808101.9, 1089.2, 1089.2, 0.0); ( 465203.4,
3808101.9, 1088.9, 1088.9, 0.0);
( 465223.4, 3808101.9, 1088.7, 1088.7, 0.0); ( 465243.4,
3808101.9, 1088.2, 1088.2, 0.0);
( 465263.4, 3808101.9, 1088.0, 1088.0, 0.0); ( 465283.4,
3808101.9, 1088.0, 1088.0, 0.0);
( 465303.4, 3808101.9, 1087.8, 1087.8, 0.0); ( 465323.4,
3808101.9, 1087.4, 1087.4, 0.0);
( 465343.4, 3808101.9, 1087.0, 1087.0, 0.0); ( 465363.4,
3808101.9, 1086.8, 1086.8, 0.0);
( 465383.4, 3808101.9, 1086.8, 1086.8, 0.0); ( 465403.4,
3808101.9, 1086.7, 1086.7, 0.0);
( 465423.4, 3808101.9, 1086.2, 1086.2, 0.0); ( 465443.4,
3808101.9, 1086.0, 1086.0, 0.0);
( 465463.4, 3808101.9, 1086.7, 1086.7, 0.0); ( 465483.4,
3808101.9, 1086.2, 1086.2, 0.0);
( 465503.4, 3808101.9, 1085.9, 1085.9, 0.0); ( 465523.4,
3808101.9, 1085.7, 1085.7, 0.0);
( 465543.4, 3808101.9, 1085.2, 1085.2, 0.0); ( 465563.4,
3808101.9, 1085.0, 1085.0, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 72

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465583.4, 3808101.9, 1085.0, 1085.0, 0.0); ( 465603.4,
3808101.9, 1085.0, 1085.0, 0.0);
( 465623.4, 3808101.9, 1085.0, 1085.0, 0.0); ( 465643.4,
3808101.9, 1085.0, 1085.0, 0.0);
( 465663.4, 3808101.9, 1084.8, 1084.8, 0.0); ( 465683.4,
3808101.9, 1084.8, 1084.8, 0.0);

```


(465703.4, 3808101.9, 1084.7, 1084.7,	0.0);	(464863.4,
3808121.9, 1092.1, 1092.1, 0.0);		
(464883.4, 3808121.9, 1092.8, 1092.8,	0.0);	(464903.4,
3808121.9, 1093.1, 1093.1, 0.0);		
(464923.4, 3808121.9, 1093.1, 1093.1,	0.0);	(464943.4,
3808121.9, 1093.1, 1093.1, 0.0);		
(464963.4, 3808121.9, 1093.1, 1093.1,	0.0);	(464983.4,
3808121.9, 1092.9, 1092.9, 0.0);		
(465003.4, 3808121.9, 1092.3, 1092.3,	0.0);	(465023.4,
3808121.9, 1092.1, 1092.1, 0.0);		
(465043.4, 3808121.9, 1091.9, 1091.9,	0.0);	(465063.4,
3808121.9, 1091.3, 1091.3, 0.0);		
(465083.4, 3808121.9, 1090.7, 1090.7,	0.0);	(465103.4,
3808121.9, 1090.1, 1090.1, 0.0);		
(465123.4, 3808121.9, 1090.0, 1090.0,	0.0);	(465143.4,
3808121.9, 1090.0, 1090.0, 0.0);		
(465163.4, 3808121.9, 1089.9, 1089.9,	0.0);	(465183.4,
3808121.9, 1089.2, 1089.2, 0.0);		
(465203.4, 3808121.9, 1088.6, 1088.6,	0.0);	(465223.4,
3808121.9, 1088.1, 1088.1, 0.0);		
(465243.4, 3808121.9, 1088.0, 1088.0,	0.0);	(465263.4,
3808121.9, 1088.0, 1088.0, 0.0);		
(465283.4, 3808121.9, 1087.9, 1087.9,	0.0);	(465303.4,
3808121.9, 1087.3, 1087.3, 0.0);		
(465323.4, 3808121.9, 1087.1, 1087.1,	0.0);	(465343.4,
3808121.9, 1086.9, 1086.9, 0.0);		
(465363.4, 3808121.9, 1086.3, 1086.3,	0.0);	(465383.4,
3808121.9, 1086.1, 1086.1, 0.0);		
(465403.4, 3808121.9, 1086.1, 1086.1,	0.0);	(465423.4,
3808121.9, 1086.0, 1086.0, 0.0);		
(465443.4, 3808121.9, 1086.0, 1086.0,	0.0);	(465463.4,
3808121.9, 1086.1, 1086.1, 0.0);		
(465483.4, 3808121.9, 1086.0, 1086.0,	0.0);	(465503.4,
3808121.9, 1085.6, 1085.6, 0.0);		
(465523.4, 3808121.9, 1085.1, 1085.1,	0.0);	(465543.4,
3808121.9, 1085.0, 1085.0, 0.0);		
(465563.4, 3808121.9, 1085.0, 1085.0,	0.0);	(465583.4,
3808121.9, 1085.0, 1085.0, 0.0);		
(465603.4, 3808121.9, 1085.0, 1085.0,	0.0);	(465623.4,
3808121.9, 1085.0, 1085.0, 0.0);		
(465643.4, 3808121.9, 1084.9, 1084.9,	0.0);	(465663.4,
3808121.9, 1084.3, 1084.3, 0.0);		
(465683.4, 3808121.9, 1084.1, 1084.1,	0.0);	(465703.4,
3808121.9, 1084.1, 1084.1, 0.0);		
(464883.4, 3808141.9, 1092.1, 1092.1,	0.0);	(464903.4,
3808141.9, 1092.7, 1092.7, 0.0);		
(464923.4, 3808141.9, 1093.0, 1093.0,	0.0);	(464943.4,
3808141.9, 1093.0, 1093.0, 0.0);		
(464963.4, 3808141.9, 1093.0, 1093.0,	0.0);	(464983.4,
3808141.9, 1092.9, 1092.9, 0.0);		

```

( 465003.4, 3808141.9, 1092.2, 1092.2, 0.0); ( 465023.4,
3808141.9, 1092.0, 1092.0, 0.0);
( 465043.4, 3808141.9, 1091.9, 1091.9, 0.0); ( 465063.4,
3808141.9, 1091.2, 1091.2, 0.0);
( 465083.4, 3808141.9, 1090.5, 1090.5, 0.0); ( 465103.4,
3808141.9, 1090.0, 1090.0, 0.0);
( 465123.4, 3808141.9, 1090.0, 1090.0, 0.0); ( 465143.4,
3808141.9, 1089.8, 1089.8, 0.0);
( 465163.4, 3808141.9, 1089.4, 1089.4, 0.0); ( 465183.4,
3808141.9, 1089.1, 1089.1, 0.0);
( 465203.4, 3808141.9, 1088.5, 1088.5, 0.0); ( 465223.4,
3808141.9, 1088.0, 1088.0, 0.0);
( 465243.4, 3808141.9, 1088.0, 1088.0, 0.0); ( 465263.4,
3808141.9, 1087.8, 1087.8, 0.0);
( 465283.4, 3808141.9, 1087.4, 1087.4, 0.0); ( 465303.4,
3808141.9, 1087.1, 1087.1, 0.0);
( 465323.4, 3808141.9, 1086.8, 1086.8, 0.0); ( 465343.4,
3808141.9, 1086.4, 1086.4, 0.0);
( 465363.4, 3808141.9, 1086.1, 1086.1, 0.0); ( 465383.4,
3808141.9, 1086.0, 1086.0, 0.0);
( 465403.4, 3808141.9, 1085.9, 1085.9, 0.0); ( 465423.4,
3808141.9, 1085.6, 1085.6, 0.0);
( 465443.4, 3808141.9, 1085.5, 1085.5, 0.0); ( 465463.4,
3808141.9, 1085.5, 1085.5, 0.0);
( 465483.4, 3808141.9, 1085.5, 1085.5, 0.0); ( 465503.4,
3808141.9, 1085.3, 1085.3, 0.0);
( 465523.4, 3808141.9, 1084.9, 1084.9, 0.0); ( 465543.4,
3808141.9, 1084.6, 1084.6, 0.0);
( 465563.4, 3808141.9, 1084.5, 1084.5, 0.0); ( 465583.4,
3808141.9, 1084.5, 1084.5, 0.0);
( 465603.4, 3808141.9, 1084.5, 1084.5, 0.0); ( 465623.4,
3808141.9, 1084.5, 1084.5, 0.0);
( 465643.4, 3808141.9, 1084.4, 1084.4, 0.0); ( 465663.4,
3808141.9, 1084.1, 1084.1, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 73

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465683.4, 3808141.9, 1083.8, 1083.8, 0.0); ( 465703.4,
3808141.9, 1083.5, 1083.5, 0.0);
( 464883.4, 3808161.9, 1091.3, 1091.3, 0.0); ( 464903.4,
3808161.9, 1092.2, 1092.2, 0.0);

```

(464923.4, 3808161.9, 1092.8, 1092.8,	0.0);	(464943.4,
3808161.9, 1092.8, 1092.8, 0.0);		
(464963.4, 3808161.9, 1092.8, 1092.8,	0.0);	(464983.4,
3808161.9, 1092.7, 1092.7, 0.0);		
(465003.4, 3808161.9, 1092.2, 1092.2,	0.0);	(465023.4,
3808161.9, 1091.9, 1091.9, 0.0);		
(465043.4, 3808161.9, 1091.7, 1091.7,	0.0);	(465063.4,
3808161.9, 1091.0, 1091.0, 0.0);		
(465083.4, 3808161.9, 1090.4, 1090.4,	0.0);	(465103.4,
3808161.9, 1090.0, 1090.0, 0.0);		
(465123.4, 3808161.9, 1089.8, 1089.8,	0.0);	(465143.4,
3808161.9, 1089.4, 1089.4, 0.0);		
(465163.4, 3808161.9, 1089.0, 1089.0,	0.0);	(465183.4,
3808161.9, 1088.8, 1088.8, 0.0);		
(465203.4, 3808161.9, 1088.4, 1088.4,	0.0);	(465223.4,
3808161.9, 1088.0, 1088.0, 0.0);		
(465243.4, 3808161.9, 1087.8, 1087.8,	0.0);	(465263.4,
3808161.9, 1087.4, 1087.4, 0.0);		
(465283.4, 3808161.9, 1087.0, 1087.0,	0.0);	(465303.4,
3808161.9, 1086.8, 1086.8, 0.0);		
(465323.4, 3808161.9, 1086.4, 1086.4,	0.0);	(465343.4,
3808161.9, 1086.0, 1086.0, 0.0);		
(465363.4, 3808161.9, 1085.8, 1085.8,	0.0);	(465383.4,
3808161.9, 1085.8, 1085.8, 0.0);		
(465403.4, 3808161.9, 1085.7, 1085.7,	0.0);	(465423.4,
3808161.9, 1085.2, 1085.2, 0.0);		
(465443.4, 3808161.9, 1085.0, 1085.0,	0.0);	(465463.4,
3808161.9, 1085.0, 1085.0, 0.0);		
(465483.4, 3808161.9, 1084.8, 1084.8,	0.0);	(465503.4,
3808161.9, 1084.8, 1084.8, 0.0);		
(465523.4, 3808161.9, 1084.7, 1084.7,	0.0);	(465543.4,
3808161.9, 1084.2, 1084.2, 0.0);		
(465563.4, 3808161.9, 1084.0, 1084.0,	0.0);	(465583.4,
3808161.9, 1084.0, 1084.0, 0.0);		
(465603.4, 3808161.9, 1084.0, 1084.0,	0.0);	(465623.4,
3808161.9, 1083.9, 1083.9, 0.0);		
(465643.4, 3808161.9, 1083.8, 1083.8,	0.0);	(465663.4,
3808161.9, 1083.8, 1083.8, 0.0);		
(465683.4, 3808161.9, 1083.4, 1083.4,	0.0);	(465703.4,
3808161.9, 1083.0, 1083.0, 0.0);		
(464903.4, 3808181.9, 1091.6, 1091.6,	0.0);	(464923.4,
3808181.9, 1092.1, 1092.1, 0.0);		
(464943.4, 3808181.9, 1092.1, 1092.1,	0.0);	(464963.4,
3808181.9, 1092.1, 1092.1, 0.0);		
(464983.4, 3808181.9, 1092.1, 1092.1,	0.0);	(465003.4,
3808181.9, 1092.0, 1092.0, 0.0);		
(465023.4, 3808181.9, 1091.6, 1091.6,	0.0);	(465043.4,
3808181.9, 1091.0, 1091.0, 0.0);		
(465063.4, 3808181.9, 1090.3, 1090.3,	0.0);	(465083.4,
3808181.9, 1090.1, 1090.1, 0.0);		

```

( 465103.4, 3808181.9, 1089.9, 1089.9, 0.0); ( 465123.4,
3808181.9, 1089.3, 1089.3, 0.0);
( 465143.4, 3808181.9, 1089.1, 1089.1, 0.0); ( 465163.4,
3808181.9, 1088.9, 1088.9, 0.0);
( 465183.4, 3808181.9, 1088.3, 1088.3, 0.0); ( 465203.4,
3808181.9, 1088.1, 1088.1, 0.0);
( 465223.4, 3808181.9, 1087.9, 1087.9, 0.0); ( 465243.4,
3808181.9, 1087.3, 1087.3, 0.0);
( 465263.4, 3808181.9, 1087.1, 1087.1, 0.0); ( 465283.4,
3808181.9, 1086.9, 1086.9, 0.0);
( 465303.4, 3808181.9, 1086.3, 1086.3, 0.0); ( 465323.4,
3808181.9, 1086.1, 1086.1, 0.0);
( 465343.4, 3808181.9, 1085.9, 1085.9, 0.0); ( 465363.4,
3808181.9, 1085.3, 1085.3, 0.0);
( 465383.4, 3808181.9, 1085.1, 1085.1, 0.0); ( 465403.4,
3808181.9, 1085.1, 1085.1, 0.0);
( 465423.4, 3808181.9, 1085.0, 1085.0, 0.0); ( 465443.4,
3808181.9, 1085.0, 1085.0, 0.0);
( 465463.4, 3808181.9, 1084.9, 1084.9, 0.0); ( 465483.4,
3808181.9, 1084.3, 1084.3, 0.0);
( 465503.4, 3808181.9, 1084.1, 1084.1, 0.0); ( 465523.4,
3808181.9, 1084.1, 1084.1, 0.0);
( 465543.4, 3808181.9, 1084.0, 1084.0, 0.0); ( 465563.4,
3808181.9, 1084.0, 1084.0, 0.0);
( 465583.4, 3808181.9, 1084.0, 1084.0, 0.0); ( 465603.4,
3808181.9, 1084.0, 1084.0, 0.0);
( 465623.4, 3808181.9, 1083.6, 1083.6, 0.0); ( 465643.4,
3808181.9, 1083.1, 1083.1, 0.0);
( 465663.4, 3808181.9, 1083.1, 1083.1, 0.0); ( 465683.4,
3808181.9, 1083.1, 1083.1, 0.0);
( 465703.4, 3808181.9, 1082.9, 1082.9, 0.0); ( 464923.4,
3808201.9, 1091.0, 1091.0, 0.0);
( 464943.4, 3808201.9, 1091.3, 1091.3, 0.0); ( 464963.4,
3808201.9, 1091.5, 1091.5, 0.0);
( 464983.4, 3808201.9, 1091.5, 1091.5, 0.0); ( 465003.4,
3808201.9, 1091.5, 1091.5, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 74

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 465023.4, 3808201.9, 1091.0, 1091.0, 0.0); ( 465043.4,
3808201.9, 1090.4, 1090.4, 0.0);

```

(465063.4, 3808201.9, 1090.1, 1090.1,	0.0);	(465083.4,
3808201.9, 1089.8, 1089.8, 0.0);		
(465103.4, 3808201.9, 1089.4, 1089.4,	0.0);	(465123.4,
3808201.9, 1089.1, 1089.1, 0.0);		
(465143.4, 3808201.9, 1088.8, 1088.8,	0.0);	(465163.4,
3808201.9, 1088.4, 1088.4, 0.0);		
(465183.4, 3808201.9, 1088.1, 1088.1,	0.0);	(465203.4,
3808201.9, 1087.8, 1087.8, 0.0);		
(465223.4, 3808201.9, 1087.4, 1087.4,	0.0);	(465243.4,
3808201.9, 1087.1, 1087.1, 0.0);		
(465263.4, 3808201.9, 1086.8, 1086.8,	0.0);	(465283.4,
3808201.9, 1086.4, 1086.4, 0.0);		
(465303.4, 3808201.9, 1086.1, 1086.1,	0.0);	(465323.4,
3808201.9, 1085.8, 1085.8, 0.0);		
(465343.4, 3808201.9, 1085.4, 1085.4,	0.0);	(465363.4,
3808201.9, 1085.1, 1085.1, 0.0);		
(465383.4, 3808201.9, 1084.8, 1084.8,	0.0);	(465403.4,
3808201.9, 1084.5, 1084.5, 0.0);		
(465423.4, 3808201.9, 1084.5, 1084.5,	0.0);	(465443.4,
3808201.9, 1084.5, 1084.5, 0.0);		
(465463.4, 3808201.9, 1084.4, 1084.4,	0.0);	(465483.4,
3808201.9, 1084.1, 1084.1, 0.0);		
(465503.4, 3808201.9, 1084.0, 1084.0,	0.0);	(465523.4,
3808201.9, 1084.0, 1084.0, 0.0);		
(465543.4, 3808201.9, 1084.0, 1084.0,	0.0);	(465563.4,
3808201.9, 1083.8, 1083.8, 0.0);		
(465583.4, 3808201.9, 1083.5, 1083.5,	0.0);	(465603.4,
3808201.9, 1083.5, 1083.5, 0.0);		
(465623.4, 3808201.9, 1083.3, 1083.3,	0.0);	(465643.4,
3808201.9, 1083.0, 1083.0, 0.0);		
(465663.4, 3808201.9, 1083.0, 1083.0,	0.0);	(465683.4,
3808201.9, 1082.8, 1082.8, 0.0);		
(465703.4, 3808201.9, 1082.4, 1082.4,	0.0);	(464943.4,
3808221.9, 1090.5, 1090.5, 0.0);		
(464963.4, 3808221.9, 1090.8, 1090.8,	0.0);	(464983.4,
3808221.9, 1090.8, 1090.8, 0.0);		
(465003.4, 3808221.9, 1090.8, 1090.8,	0.0);	(465023.4,
3808221.9, 1090.4, 1090.4, 0.0);		
(465043.4, 3808221.9, 1090.0, 1090.0,	0.0);	(465063.4,
3808221.9, 1089.8, 1089.8, 0.0);		
(465083.4, 3808221.9, 1089.3, 1089.3,	0.0);	(465103.4,
3808221.9, 1088.8, 1088.8, 0.0);		
(465123.4, 3808221.9, 1088.8, 1088.8,	0.0);	(465143.4,
3808221.9, 1088.4, 1088.4, 0.0);		
(465163.4, 3808221.9, 1088.0, 1088.0,	0.0);	(465183.4,
3808221.9, 1087.8, 1087.8, 0.0);		
(465203.4, 3808221.9, 1087.4, 1087.4,	0.0);	(465223.4,
3808221.9, 1087.0, 1087.0, 0.0);		
(465243.4, 3808221.9, 1086.8, 1086.8,	0.0);	(465263.4,
3808221.9, 1086.4, 1086.4, 0.0);		

```

( 465283.4, 3808221.9, 1086.0, 1086.0, 0.0); ( 465303.4,
3808221.9, 1085.8, 1085.8, 0.0);
( 465323.4, 3808221.9, 1085.4, 1085.4, 0.0); ( 465343.4,
3808221.9, 1085.0, 1085.0, 0.0);
( 465363.4, 3808221.9, 1084.8, 1084.8, 0.0); ( 465383.4,
3808221.9, 1084.4, 1084.4, 0.0);
( 465403.4, 3808221.9, 1084.0, 1084.0, 0.0); ( 465423.4,
3808221.9, 1084.0, 1084.0, 0.0);
( 465443.4, 3808221.9, 1084.0, 1084.0, 0.0); ( 465463.4,
3808221.9, 1084.0, 1084.0, 0.0);
( 465483.4, 3808221.9, 1084.0, 1084.0, 0.0); ( 465503.4,
3808221.9, 1083.9, 1083.9, 0.0);
( 465523.4, 3808221.9, 1083.8, 1083.8, 0.0); ( 465543.4,
3808221.9, 1083.8, 1083.8, 0.0);
( 465563.4, 3808221.9, 1083.4, 1083.4, 0.0); ( 465583.4,
3808221.9, 1083.0, 1083.0, 0.0);
( 465603.4, 3808221.9, 1083.0, 1083.0, 0.0); ( 465623.4,
3808221.9, 1082.9, 1082.9, 0.0);
( 465643.4, 3808221.9, 1082.8, 1082.8, 0.0); ( 465663.4,
3808221.9, 1082.8, 1082.8, 0.0);
( 465683.4, 3808221.9, 1082.4, 1082.4, 0.0); ( 465703.4,
3808221.9, 1082.0, 1082.0, 0.0);
( 464963.4, 3808241.9, 1090.1, 1090.1, 0.0); ( 464983.4,
3808241.9, 1090.1, 1090.1, 0.0);
( 465003.4, 3808241.9, 1090.1, 1090.1, 0.0); ( 465023.4,
3808241.9, 1090.1, 1090.1, 0.0);
( 465043.4, 3808241.9, 1089.9, 1089.9, 0.0); ( 465063.4,
3808241.9, 1089.3, 1089.3, 0.0);
( 465083.4, 3808241.9, 1088.7, 1088.7, 0.0); ( 465103.4,
3808241.9, 1088.1, 1088.1, 0.0);
( 465123.4, 3808241.9, 1088.1, 1088.1, 0.0); ( 465143.4,
3808241.9, 1088.1, 1088.1, 0.0);
( 465163.4, 3808241.9, 1087.9, 1087.9, 0.0); ( 465183.4,
3808241.9, 1087.3, 1087.3, 0.0);
( 465203.4, 3808241.9, 1087.1, 1087.1, 0.0); ( 465223.4,
3808241.9, 1086.9, 1086.9, 0.0);
( 465243.4, 3808241.9, 1086.3, 1086.3, 0.0); ( 465263.4,
3808241.9, 1086.1, 1086.1, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***

```

*** 16:42:19

PAGE 75

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(465283.4, 3808241.9, 1085.9, 1085.9,	0.0);	(465303.4,
3808241.9, 1085.3, 1085.3, 0.0);		
(465323.4, 3808241.9, 1085.1, 1085.1,	0.0);	(465343.4,
3808241.9, 1084.9, 1084.9, 0.0);		
(465363.4, 3808241.9, 1084.3, 1084.3,	0.0);	(465383.4,
3808241.9, 1084.1, 1084.1, 0.0);		
(465403.4, 3808241.9, 1084.0, 1084.0,	0.0);	(465423.4,
3808241.9, 1084.0, 1084.0, 0.0);		
(465443.4, 3808241.9, 1084.0, 1084.0,	0.0);	(465463.4,
3808241.9, 1084.0, 1084.0, 0.0);		
(465483.4, 3808241.9, 1084.0, 1084.0,	0.0);	(465503.4,
3808241.9, 1083.6, 1083.6, 0.0);		
(465523.4, 3808241.9, 1083.1, 1083.1,	0.0);	(465543.4,
3808241.9, 1083.1, 1083.1, 0.0);		
(465563.4, 3808241.9, 1083.1, 1083.1,	0.0);	(465583.4,
3808241.9, 1083.0, 1083.0, 0.0);		
(465603.4, 3808241.9, 1083.0, 1083.0,	0.0);	(465623.4,
3808241.9, 1082.6, 1082.6, 0.0);		
(465643.4, 3808241.9, 1082.1, 1082.1,	0.0);	(465663.4,
3808241.9, 1082.1, 1082.1, 0.0);		
(465683.4, 3808241.9, 1082.1, 1082.1,	0.0);	(465703.4,
3808241.9, 1081.9, 1081.9, 0.0);		
(464983.4, 3808261.9, 1088.5, 1088.5,	0.0);	(465003.4,
3808261.9, 1088.8, 1088.8, 0.0);		
(465023.4, 3808261.9, 1088.9, 1088.9,	0.0);	(465043.4,
3808261.9, 1088.9, 1088.9, 0.0);		
(465063.4, 3808261.9, 1088.6, 1088.6,	0.0);	(465083.4,
3808261.9, 1088.3, 1088.3, 0.0);		
(465103.4, 3808261.9, 1087.9, 1087.9,	0.0);	(465123.4,
3808261.9, 1087.6, 1087.6, 0.0);		
(465143.4, 3808261.9, 1087.5, 1087.5,	0.0);	(465163.4,
3808261.9, 1087.4, 1087.4, 0.0);		
(465183.4, 3808261.9, 1087.1, 1087.1,	0.0);	(465203.4,
3808261.9, 1086.8, 1086.8, 0.0);		
(465223.4, 3808261.9, 1086.4, 1086.4,	0.0);	(465243.4,
3808261.9, 1086.1, 1086.1, 0.0);		
(465263.4, 3808261.9, 1086.0, 1086.0,	0.0);	(465283.4,
3808261.9, 1085.9, 1085.9, 0.0);		
(465303.4, 3808261.9, 1085.2, 1085.2,	0.0);	(465323.4,
3808261.9, 1084.8, 1084.8, 0.0);		
(465343.4, 3808261.9, 1084.4, 1084.4,	0.0);	(465363.4,
3808261.9, 1084.1, 1084.1, 0.0);		
(465383.4, 3808261.9, 1083.8, 1083.8,	0.0);	(465403.4,
3808261.9, 1083.5, 1083.5, 0.0);		
(465423.4, 3808261.9, 1083.5, 1083.5,	0.0);	(465443.4,
3808261.9, 1083.5, 1083.5, 0.0);		
(465463.4, 3808261.9, 1083.5, 1083.5,	0.0);	(465483.4,
3808261.9, 1083.5, 1083.5, 0.0);		
(465503.4, 3808261.9, 1083.3, 1083.3,	0.0);	(465523.4,
3808261.9, 1083.0, 1083.0, 0.0);		

```

( 465543.4, 3808261.9, 1083.0, 1083.0, 0.0); ( 465563.4,
3808261.9, 1082.8, 1082.8, 0.0);
( 465583.4, 3808261.9, 1082.5, 1082.5, 0.0); ( 465603.4,
3808261.9, 1082.5, 1082.5, 0.0);
( 465623.4, 3808261.9, 1082.3, 1082.3, 0.0); ( 465643.4,
3808261.9, 1081.9, 1081.9, 0.0);
( 465663.4, 3808261.9, 1081.6, 1081.6, 0.0); ( 465683.4,
3808261.9, 1081.5, 1081.5, 0.0);
( 465703.4, 3808261.9, 1081.4, 1081.4, 0.0); ( 465003.4,
3808281.9, 1087.4, 1087.4, 0.0);
( 465023.4, 3808281.9, 1087.7, 1087.7, 0.0); ( 465043.4,
3808281.9, 1087.8, 1087.8, 0.0);
( 465063.4, 3808281.9, 1087.6, 1087.6, 0.0); ( 465083.4,
3808281.9, 1087.7, 1087.7, 0.0);
( 465103.4, 3808281.9, 1087.7, 1087.7, 0.0); ( 465123.4,
3808281.9, 1087.2, 1087.2, 0.0);
( 465143.4, 3808281.9, 1087.0, 1087.0, 0.0); ( 465163.4,
3808281.9, 1087.0, 1087.0, 0.0);
( 465183.4, 3808281.9, 1086.8, 1086.8, 0.0); ( 465203.4,
3808281.9, 1086.4, 1086.4, 0.0);
( 465223.4, 3808281.9, 1086.0, 1086.0, 0.0); ( 465243.4,
3808281.9, 1086.0, 1086.0, 0.0);
( 465263.4, 3808281.9, 1085.9, 1085.9, 0.0); ( 465283.4,
3808281.9, 1085.7, 1085.7, 0.0);
( 465303.4, 3808281.9, 1085.0, 1085.0, 0.0); ( 465323.4,
3808281.9, 1084.4, 1084.4, 0.0);
( 465343.4, 3808281.9, 1084.0, 1084.0, 0.0); ( 465363.4,
3808281.9, 1083.8, 1083.8, 0.0);
( 465383.4, 3808281.9, 1083.4, 1083.4, 0.0); ( 465403.4,
3808281.9, 1083.0, 1083.0, 0.0);
( 465423.4, 3808281.9, 1082.8, 1082.8, 0.0); ( 465443.4,
3808281.9, 1082.8, 1082.8, 0.0);
( 465463.4, 3808281.9, 1083.0, 1083.0, 0.0); ( 465483.4,
3808281.9, 1083.0, 1083.0, 0.0);
( 465503.4, 3808281.9, 1083.0, 1083.0, 0.0); ( 465523.4,
3808281.9, 1083.0, 1083.0, 0.0);
( 465543.4, 3808281.9, 1082.8, 1082.8, 0.0); ( 465563.4,
3808281.9, 1082.4, 1082.4, 0.0);
( 465583.4, 3808281.9, 1082.0, 1082.0, 0.0); ( 465603.4,
3808281.9, 1082.0, 1082.0, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 76

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

(465623.4, 3808281.9, 1081.9, 1081.9,	0.0);	(465643.4,
3808281.9, 1081.7, 1081.7, 0.0);		
(465663.4, 3808281.9, 1081.2, 1081.2,	0.0);	(465683.4,
3808281.9, 1080.9, 1080.9, 0.0);		
(465703.4, 3808281.9, 1080.8, 1080.8,	0.0);	(465003.4,
3808301.9, 1086.2, 1086.2, 0.0);		
(465023.4, 3808301.9, 1086.7, 1086.7,	0.0);	(465043.4,
3808301.9, 1087.0, 1087.0, 0.0);		
(465063.4, 3808301.9, 1086.5, 1086.5,	0.0);	(465083.4,
3808301.9, 1086.7, 1086.7, 0.0);		
(465103.4, 3808301.9, 1087.1, 1087.1,	0.0);	(465123.4,
3808301.9, 1087.0, 1087.0, 0.0);		
(465143.4, 3808301.9, 1087.0, 1087.0,	0.0);	(465163.4,
3808301.9, 1086.9, 1086.9, 0.0);		
(465183.4, 3808301.9, 1086.3, 1086.3,	0.0);	(465203.4,
3808301.9, 1086.1, 1086.1, 0.0);		
(465223.4, 3808301.9, 1086.0, 1086.0,	0.0);	(465243.4,
3808301.9, 1086.0, 1086.0, 0.0);		
(465263.4, 3808301.9, 1085.6, 1085.6,	0.0);	(465283.4,
3808301.9, 1085.0, 1085.0, 0.0);		
(465303.4, 3808301.9, 1084.3, 1084.3,	0.0);	(465323.4,
3808301.9, 1084.1, 1084.1, 0.0);		
(465343.4, 3808301.9, 1083.9, 1083.9,	0.0);	(465363.4,
3808301.9, 1083.3, 1083.3, 0.0);		
(465383.4, 3808301.9, 1083.1, 1083.1,	0.0);	(465403.4,
3808301.9, 1082.9, 1082.9, 0.0);		
(465423.4, 3808301.9, 1082.3, 1082.3,	0.0);	(465443.4,
3808301.9, 1082.1, 1082.1, 0.0);		
(465463.4, 3808301.9, 1083.0, 1083.0,	0.0);	(465483.4,
3808301.9, 1083.0, 1083.0, 0.0);		
(465503.4, 3808301.9, 1083.0, 1083.0,	0.0);	(465523.4,
3808301.9, 1082.9, 1082.9, 0.0);		
(465543.4, 3808301.9, 1082.3, 1082.3,	0.0);	(465563.4,
3808301.9, 1082.1, 1082.1, 0.0);		
(465583.4, 3808301.9, 1082.0, 1082.0,	0.0);	(465603.4,
3808301.9, 1082.0, 1082.0, 0.0);		
(465623.4, 3808301.9, 1081.6, 1081.6,	0.0);	(465643.4,
3808301.9, 1081.1, 1081.1, 0.0);		
(465663.4, 3808301.9, 1081.0, 1081.0,	0.0);	(465683.4,
3808301.9, 1080.6, 1080.6, 0.0);		
(465703.4, 3808301.9, 1080.1, 1080.1,	0.0);	(465043.4,
3808321.9, 1085.9, 1085.9, 0.0);		
(465063.4, 3808321.9, 1086.0, 1086.0,	0.0);	(465083.4,
3808321.9, 1086.2, 1086.2, 0.0);		
(465103.4, 3808321.9, 1086.5, 1086.5,	0.0);	(465123.4,
3808321.9, 1086.5, 1086.5, 0.0);		
(465143.4, 3808321.9, 1086.5, 1086.5,	0.0);	(465163.4,
3808321.9, 1086.4, 1086.4, 0.0);		

```

( 465183.4, 3808321.9, 1086.1, 1086.1, 0.0); ( 465203.4,
3808321.9, 1086.0, 1086.0, 0.0);
( 465223.4, 3808321.9, 1085.9, 1085.9, 0.0); ( 465243.4,
3808321.9, 1085.6, 1085.6, 0.0);
( 465263.4, 3808321.9, 1085.0, 1085.0, 0.0); ( 465283.4,
3808321.9, 1084.4, 1084.4, 0.0);
( 465303.4, 3808321.9, 1084.1, 1084.1, 0.0); ( 465323.4,
3808321.9, 1083.8, 1083.8, 0.0);
( 465343.4, 3808321.9, 1083.4, 1083.4, 0.0); ( 465363.4,
3808321.9, 1083.1, 1083.1, 0.0);
( 465383.4, 3808321.9, 1082.8, 1082.8, 0.0); ( 465403.4,
3808321.9, 1082.4, 1082.4, 0.0);
( 465423.4, 3808321.9, 1082.1, 1082.1, 0.0); ( 465443.4,
3808321.9, 1082.0, 1082.0, 0.0);
( 465463.4, 3808321.9, 1082.5, 1082.5, 0.0); ( 465483.4,
3808321.9, 1082.5, 1082.5, 0.0);
( 465503.4, 3808321.9, 1082.5, 1082.5, 0.0); ( 465523.4,
3808321.9, 1082.4, 1082.4, 0.0);
( 465543.4, 3808321.9, 1082.1, 1082.1, 0.0); ( 465563.4,
3808321.9, 1082.0, 1082.0, 0.0);
( 465583.4, 3808321.9, 1081.9, 1081.9, 0.0); ( 465603.4,
3808321.9, 1081.6, 1081.6, 0.0);
( 465623.4, 3808321.9, 1081.3, 1081.3, 0.0); ( 465643.4,
3808321.9, 1080.9, 1080.9, 0.0);
( 465663.4, 3808321.9, 1080.6, 1080.6, 0.0); ( 465683.4,
3808321.9, 1080.3, 1080.3, 0.0);
( 465703.4, 3808321.9, 1079.9, 1079.9, 0.0); ( 465083.4,
3808341.9, 1085.8, 1085.8, 0.0);
( 465103.4, 3808341.9, 1085.8, 1085.8, 0.0); ( 465123.4,
3808341.9, 1086.0, 1086.0, 0.0);
( 465143.4, 3808341.9, 1086.0, 1086.0, 0.0); ( 465163.4,
3808341.9, 1086.0, 1086.0, 0.0);
( 465183.4, 3808341.9, 1086.0, 1086.0, 0.0); ( 465203.4,
3808341.9, 1085.9, 1085.9, 0.0);
( 465223.4, 3808341.9, 1085.7, 1085.7, 0.0); ( 465243.4,
3808341.9, 1085.2, 1085.2, 0.0);
( 465263.4, 3808341.9, 1084.5, 1084.5, 0.0); ( 465283.4,
3808341.9, 1084.0, 1084.0, 0.0);
( 465303.4, 3808341.9, 1083.8, 1083.8, 0.0); ( 465323.4,
3808341.9, 1083.3, 1083.3, 0.0);
( 465343.4, 3808341.9, 1082.8, 1082.8, 0.0); ( 465363.4,
3808341.9, 1082.8, 1082.8, 0.0);

```

```

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 16:42:19

```

```

PAGE 77

```

```

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(465383.4, 3808341.9, 1082.4, 1082.4, 0.0);	(465403.4,
3808341.9, 1082.0, 1082.0, 0.0);	
(465423.4, 3808341.9, 1081.8, 1081.8, 0.0);	(465443.4,
3808341.9, 1081.8, 1081.8, 0.0);	
(465463.4, 3808341.9, 1082.0, 1082.0, 0.0);	(465483.4,
3808341.9, 1082.0, 1082.0, 0.0);	
(465503.4, 3808341.9, 1082.0, 1082.0, 0.0);	(465523.4,
3808341.9, 1082.0, 1082.0, 0.0);	
(465543.4, 3808341.9, 1081.8, 1081.8, 0.0);	(465563.4,
3808341.9, 1081.8, 1081.8, 0.0);	
(465583.4, 3808341.9, 1081.7, 1081.7, 0.0);	(465603.4,
3808341.9, 1081.2, 1081.2, 0.0);	
(465623.4, 3808341.9, 1080.9, 1080.9, 0.0);	(465643.4,
3808341.9, 1080.7, 1080.7, 0.0);	
(465663.4, 3808341.9, 1080.2, 1080.2, 0.0);	(465683.4,
3808341.9, 1079.9, 1079.9, 0.0);	
(465703.4, 3808341.9, 1079.7, 1079.7, 0.0);	(465103.4,
3808361.9, 1085.2, 1085.2, 0.0);	
(465123.4, 3808361.9, 1085.8, 1085.8, 0.0);	(465143.4,
3808361.9, 1086.0, 1086.0, 0.0);	
(465163.4, 3808361.9, 1086.0, 1086.0, 0.0);	(465183.4,
3808361.9, 1086.0, 1086.0, 0.0);	
(465203.4, 3808361.9, 1085.6, 1085.6, 0.0);	(465223.4,
3808361.9, 1085.1, 1085.1, 0.0);	
(465243.4, 3808361.9, 1085.0, 1085.0, 0.0);	(465263.4,
3808361.9, 1084.5, 1084.5, 0.0);	
(465283.4, 3808361.9, 1083.9, 1083.9, 0.0);	(465303.4,
3808361.9, 1083.3, 1083.3, 0.0);	
(465323.4, 3808361.9, 1082.7, 1082.7, 0.0);	(465343.4,
3808361.9, 1082.1, 1082.1, 0.0);	
(465363.4, 3808361.9, 1082.1, 1082.1, 0.0);	(465383.4,
3808361.9, 1082.1, 1082.1, 0.0);	
(465403.4, 3808361.9, 1081.9, 1081.9, 0.0);	(465423.4,
3808361.9, 1081.3, 1081.3, 0.0);	
(465443.4, 3808361.9, 1081.1, 1081.1, 0.0);	(465463.4,
3808361.9, 1082.0, 1082.0, 0.0);	
(465483.4, 3808361.9, 1082.0, 1082.0, 0.0);	(465503.4,
3808361.9, 1082.0, 1082.0, 0.0);	
(465523.4, 3808361.9, 1081.9, 1081.9, 0.0);	(465543.4,
3808361.9, 1081.3, 1081.3, 0.0);	
(465563.4, 3808361.9, 1081.1, 1081.1, 0.0);	(465583.4,
3808361.9, 1081.1, 1081.1, 0.0);	
(465603.4, 3808361.9, 1081.0, 1081.0, 0.0);	(465623.4,
3808361.9, 1080.6, 1080.6, 0.0);	
(465643.4, 3808361.9, 1080.1, 1080.1, 0.0);	(465663.4,
3808361.9, 1080.0, 1080.0, 0.0);	

```

( 465683.4, 3808361.9, 1079.6, 1079.6, 0.0); ( 465703.4,
3808361.9, 1079.1, 1079.1, 0.0);
( 465183.4, 3808381.9, 1085.0, 1085.0, 0.0); ( 465203.4,
3808381.9, 1084.7, 1084.7, 0.0);
( 465223.4, 3808381.9, 1084.4, 1084.4, 0.0); ( 465243.4,
3808381.9, 1084.0, 1084.0, 0.0);
( 465263.4, 3808381.9, 1083.5, 1083.5, 0.0); ( 465283.4,
3808381.9, 1082.9, 1082.9, 0.0);
( 465303.4, 3808381.9, 1082.6, 1082.6, 0.0); ( 465323.4,
3808381.9, 1082.0, 1082.0, 0.0);
( 465343.4, 3808381.9, 1081.5, 1081.5, 0.0); ( 465363.4,
3808381.9, 1081.5, 1081.5, 0.0);
( 465383.4, 3808381.9, 1081.5, 1081.5, 0.0); ( 465403.4,
3808381.9, 1081.4, 1081.4, 0.0);
( 465423.4, 3808381.9, 1081.1, 1081.1, 0.0); ( 465443.4,
3808381.9, 1081.0, 1081.0, 0.0);
( 465463.4, 3808381.9, 1081.5, 1081.5, 0.0); ( 465483.4,
3808381.9, 1081.5, 1081.5, 0.0);
( 465503.4, 3808381.9, 1081.5, 1081.5, 0.0); ( 465523.4,
3808381.9, 1081.4, 1081.4, 0.0);
( 465543.4, 3808381.9, 1081.1, 1081.1, 0.0); ( 465563.4,
3808381.9, 1080.8, 1080.8, 0.0);
( 465583.4, 3808381.9, 1080.5, 1080.5, 0.0); ( 465603.4,
3808381.9, 1080.5, 1080.5, 0.0);
( 465623.4, 3808381.9, 1080.3, 1080.3, 0.0); ( 465643.4,
3808381.9, 1079.9, 1079.9, 0.0);
( 465663.4, 3808381.9, 1079.6, 1079.6, 0.0); ( 465683.4,
3808381.9, 1079.3, 1079.3, 0.0);
( 465703.4, 3808381.9, 1078.9, 1078.9, 0.0); ( 465303.4,
3808401.9, 1081.6, 1081.6, 0.0);
( 465323.4, 3808401.9, 1081.2, 1081.2, 0.0); ( 465343.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465363.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465383.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465403.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465423.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465443.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465463.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465483.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465503.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465523.4, 3808401.9, 1080.8, 1080.8, 0.0); ( 465543.4,
3808401.9, 1080.8, 1080.8, 0.0);
( 465563.4, 3808401.9, 1080.4, 1080.4, 0.0); ( 465583.4,
3808401.9, 1080.0, 1080.0, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 16:42:19

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(465603.4, 3808401.9, 1080.0, 1080.0, 0.0);	(465623.4,
3808401.9, 1079.9, 1079.9, 0.0);	
(465643.4, 3808401.9, 1079.7, 1079.7, 0.0);	(465663.4,
3808401.9, 1079.2, 1079.2, 0.0);	
(465683.4, 3808401.9, 1078.9, 1078.9, 0.0);	(465703.4,
3808401.9, 1078.7, 1078.7, 0.0);	
(465323.4, 3808421.9, 1080.2, 1080.2, 0.0);	(465343.4,
3808421.9, 1080.1, 1080.1, 0.0);	
(465363.4, 3808421.9, 1080.1, 1080.1, 0.0);	(465383.4,
3808421.9, 1080.1, 1080.1, 0.0);	
(465403.4, 3808421.9, 1080.1, 1080.1, 0.0);	(465423.4,
3808421.9, 1080.1, 1080.1, 0.0);	
(465443.4, 3808421.9, 1080.1, 1080.1, 0.0);	(465463.4,
3808421.9, 1080.1, 1080.1, 0.0);	
(465483.4, 3808421.9, 1080.1, 1080.1, 0.0);	(465503.4,
3808421.9, 1080.1, 1080.1, 0.0);	
(465523.4, 3808421.9, 1080.1, 1080.1, 0.0);	(465543.4,
3808421.9, 1080.1, 1080.1, 0.0);	
(465563.4, 3808421.9, 1080.1, 1080.1, 0.0);	(465583.4,
3808421.9, 1080.0, 1080.0, 0.0);	
(465603.4, 3808421.9, 1080.0, 1080.0, 0.0);	(465623.4,
3808421.9, 1079.6, 1079.6, 0.0);	
(465643.4, 3808421.9, 1079.1, 1079.1, 0.0);	(465663.4,
3808421.9, 1079.0, 1079.0, 0.0);	
(465683.4, 3808421.9, 1078.6, 1078.6, 0.0);	(465703.4,
3808421.9, 1078.1, 1078.1, 0.0);	
(465323.4, 3808441.9, 1079.5, 1079.5, 0.0);	(465343.4,
3808441.9, 1079.5, 1079.5, 0.0);	
(465363.4, 3808441.9, 1079.9, 1079.9, 0.0);	(465383.4,
3808441.9, 1080.0, 1080.0, 0.0);	
(465403.4, 3808441.9, 1080.0, 1080.0, 0.0);	(465423.4,
3808441.9, 1080.0, 1080.0, 0.0);	
(465443.4, 3808441.9, 1080.0, 1080.0, 0.0);	(465463.4,
3808441.9, 1080.0, 1080.0, 0.0);	
(465483.4, 3808441.9, 1080.0, 1080.0, 0.0);	(465503.4,
3808441.9, 1080.0, 1080.0, 0.0);	
(465523.4, 3808441.9, 1080.0, 1080.0, 0.0);	(465543.4,
3808441.9, 1080.0, 1080.0, 0.0);	
(465563.4, 3808441.9, 1080.0, 1080.0, 0.0);	(465583.4,
3808441.9, 1080.0, 1080.0, 0.0);	
(465603.4, 3808441.9, 1080.0, 1080.0, 0.0);	(465623.4,
3808441.9, 1079.5, 1079.5, 0.0);	
(465643.4, 3808441.9, 1078.9, 1078.9, 0.0);	(465663.4,
3808441.9, 1078.6, 1078.6, 0.0);	

```

( 465683.4, 3808441.9, 1078.3, 1078.3, 0.0); ( 465703.4,
3808441.9, 1078.0, 1078.0, 0.0);
( 465343.4, 3808461.9, 1078.9, 1078.9, 0.0); ( 465363.4,
3808461.9, 1079.4, 1079.4, 0.0);
( 465383.4, 3808461.9, 1079.7, 1079.7, 0.0); ( 465403.4,
3808461.9, 1079.8, 1079.8, 0.0);
( 465423.4, 3808461.9, 1079.8, 1079.8, 0.0); ( 465443.4,
3808461.9, 1079.8, 1079.8, 0.0);
( 465463.4, 3808461.9, 1079.8, 1079.8, 0.0); ( 465483.4,
3808461.9, 1079.8, 1079.8, 0.0);
( 465503.4, 3808461.9, 1079.9, 1079.9, 0.0); ( 465523.4,
3808461.9, 1080.0, 1080.0, 0.0);
( 465543.4, 3808461.9, 1080.0, 1080.0, 0.0); ( 465563.4,
3808461.9, 1080.0, 1080.0, 0.0);
( 465583.4, 3808461.9, 1080.0, 1080.0, 0.0); ( 465603.4,
3808461.9, 1080.0, 1080.0, 0.0);
( 465623.4, 3808461.9, 1079.5, 1079.5, 0.0); ( 465643.4,
3808461.9, 1078.9, 1078.9, 0.0);
( 465663.4, 3808461.9, 1078.2, 1078.2, 0.0); ( 465683.4,
3808461.9, 1078.0, 1078.0, 0.0);
( 465703.4, 3808461.9, 1078.0, 1078.0, 0.0); ( 465343.4,
3808481.9, 1078.1, 1078.1, 0.0);
( 465363.4, 3808481.9, 1078.2, 1078.2, 0.0); ( 465383.4,
3808481.9, 1078.7, 1078.7, 0.0);
( 465403.4, 3808481.9, 1079.1, 1079.1, 0.0); ( 465423.4,
3808481.9, 1079.1, 1079.1, 0.0);
( 465443.4, 3808481.9, 1079.1, 1079.1, 0.0); ( 465463.4,
3808481.9, 1079.1, 1079.1, 0.0);
( 465483.4, 3808481.9, 1079.1, 1079.1, 0.0); ( 465503.4,
3808481.9, 1079.5, 1079.5, 0.0);
( 465523.4, 3808481.9, 1080.0, 1080.0, 0.0); ( 465543.4,
3808481.9, 1080.0, 1080.0, 0.0);
( 465563.4, 3808481.9, 1080.0, 1080.0, 0.0); ( 465583.4,
3808481.9, 1080.0, 1080.0, 0.0);
( 465603.4, 3808481.9, 1080.0, 1080.0, 0.0); ( 465623.4,
3808481.9, 1079.5, 1079.5, 0.0);
( 465643.4, 3808481.9, 1078.9, 1078.9, 0.0); ( 465663.4,
3808481.9, 1078.2, 1078.2, 0.0);
( 465683.4, 3808481.9, 1078.0, 1078.0, 0.0); ( 465703.4,
3808481.9, 1077.9, 1077.9, 0.0);
( 465463.4, 3808501.9, 1078.9, 1078.9, 0.0); ( 465483.4,
3808501.9, 1078.6, 1078.6, 0.0);
( 465503.4, 3808501.9, 1078.9, 1078.9, 0.0); ( 465523.4,
3808501.9, 1079.5, 1079.5, 0.0);
( 465543.4, 3808501.9, 1079.5, 1079.5, 0.0); ( 465563.4,
3808501.9, 1079.7, 1079.7, 0.0);

```

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```

```

*** AERMET - VERSION 14134 *** ***

```

```

*** 16:42:19

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(465583.4, 3808501.9, 1079.9, 1079.9, 0.0);	(465603.4,
3808501.9, 1079.6, 1079.6, 0.0);	
(465623.4, 3808501.9, 1079.3, 1079.3, 0.0);	(465643.4,
3808501.9, 1078.9, 1078.9, 0.0);	
(465663.4, 3808501.9, 1078.2, 1078.2, 0.0);	(465683.4,
3808501.9, 1078.0, 1078.0, 0.0);	
(465703.4, 3808501.9, 1077.9, 1077.9, 0.0);	(465523.4,
3808521.9, 1078.8, 1078.8, 0.0);	
(465543.4, 3808521.9, 1078.8, 1078.8, 0.0);	(465563.4,
3808521.9, 1079.3, 1079.3, 0.0);	
(465583.4, 3808521.9, 1079.7, 1079.7, 0.0);	(465603.4,
3808521.9, 1079.2, 1079.2, 0.0);	
(465623.4, 3808521.9, 1078.9, 1078.9, 0.0);	(465643.4,
3808521.9, 1078.7, 1078.7, 0.0);	
(465663.4, 3808521.9, 1078.2, 1078.2, 0.0);	(465683.4,
3808521.9, 1077.9, 1077.9, 0.0);	
(465703.4, 3808521.9, 1077.7, 1077.7, 0.0);	(464239.3,
3809562.3, 1075.1, 1075.1, 0.0);	
(464277.3, 3809562.3, 1074.5, 1074.5, 0.0);	(463745.3,
3809591.4, 1069.0, 1069.0, 0.0);	
(463783.3, 3809591.4, 1070.3, 1070.3, 0.0);	(463821.3,
3809591.4, 1071.6, 1079.0, 0.0);	
(463859.3, 3809591.4, 1074.2, 1077.0, 0.0);	(463897.3,
3809591.4, 1077.1, 1077.1, 0.0);	
(463935.3, 3809591.4, 1079.0, 1079.0, 0.0);	(464239.3,
3809591.4, 1074.7, 1074.7, 0.0);	
(464277.3, 3809591.4, 1074.1, 1074.1, 0.0);	(463745.3,
3809620.4, 1067.1, 1067.1, 0.0);	
(463783.3, 3809620.4, 1068.6, 1068.6, 0.0);	(463821.3,
3809620.4, 1070.6, 1070.6, 0.0);	
(463859.3, 3809620.4, 1072.6, 1072.6, 0.0);	(463897.3,
3809620.4, 1075.2, 1075.2, 0.0);	
(463935.3, 3809620.4, 1077.5, 1077.5, 0.0);	(463973.3,
3809620.4, 1078.2, 1078.2, 0.0);	
(464011.3, 3809620.4, 1078.0, 1078.0, 0.0);	(464049.3,
3809620.4, 1077.2, 1077.2, 0.0);	
(464087.3, 3809620.4, 1076.1, 1076.1, 0.0);	(464125.3,
3809620.4, 1075.6, 1075.6, 0.0);	
(464163.3, 3809620.4, 1075.0, 1075.0, 0.0);	(464201.3,
3809620.4, 1074.2, 1074.2, 0.0);	
(464239.3, 3809620.4, 1074.1, 1074.1, 0.0);	(464277.3,
3809620.4, 1073.5, 1073.5, 0.0);	

```

( 463745.3, 3809649.5, 1065.0, 1065.0, 0.0); ( 463783.3,
3809649.5, 1067.3, 1067.3, 0.0);
( 463821.3, 3809649.5, 1069.1, 1069.1, 0.0); ( 463859.3,
3809649.5, 1071.0, 1071.0, 0.0);
( 463897.3, 3809649.5, 1073.2, 1073.2, 0.0); ( 463935.3,
3809649.5, 1075.5, 1075.5, 0.0);
( 463973.3, 3809649.5, 1075.6, 1075.6, 0.0); ( 464011.3,
3809649.5, 1076.2, 1076.2, 0.0);
( 464049.3, 3809649.5, 1076.2, 1076.2, 0.0); ( 464087.3,
3809649.5, 1075.2, 1075.2, 0.0);
( 464125.3, 3809649.5, 1075.1, 1075.1, 0.0); ( 464163.3,
3809649.5, 1074.4, 1074.4, 0.0);
( 464201.3, 3809649.5, 1074.0, 1074.0, 0.0); ( 464239.3,
3809649.5, 1073.8, 1073.8, 0.0);
( 464277.3, 3809649.5, 1073.1, 1073.1, 0.0); ( 464315.3,
3809649.5, 1072.3, 1072.3, 0.0);
( 464353.3, 3809649.5, 1072.2, 1072.2, 0.0); ( 464391.3,
3809649.5, 1072.0, 1072.0, 0.0);
( 464429.3, 3809649.5, 1071.5, 1071.5, 0.0); ( 464467.3,
3809649.5, 1071.2, 1071.2, 0.0);
( 464505.3, 3809649.5, 1070.9, 1070.9, 0.0); ( 463745.3,
3809678.5, 1062.4, 1067.0, 0.0);
( 463783.3, 3809678.5, 1065.0, 1065.0, 0.0); ( 463821.3,
3809678.5, 1067.7, 1067.7, 0.0);
( 463859.3, 3809678.5, 1069.1, 1069.1, 0.0); ( 463897.3,
3809678.5, 1071.3, 1071.3, 0.0);
( 463935.3, 3809678.5, 1073.6, 1073.6, 0.0); ( 463973.3,
3809678.5, 1074.2, 1074.2, 0.0);
( 464011.3, 3809678.5, 1074.4, 1074.4, 0.0); ( 464049.3,
3809678.5, 1075.2, 1075.2, 0.0);
( 464087.3, 3809678.5, 1075.0, 1075.0, 0.0); ( 464125.3,
3809678.5, 1074.6, 1074.6, 0.0);
( 464163.3, 3809678.5, 1074.0, 1074.0, 0.0); ( 464201.3,
3809678.5, 1074.0, 1074.0, 0.0);
( 464239.3, 3809678.5, 1073.2, 1073.2, 0.0); ( 464277.3,
3809678.5, 1072.6, 1072.6, 0.0);
( 464315.3, 3809678.5, 1072.0, 1072.0, 0.0); ( 464353.3,
3809678.5, 1072.0, 1072.0, 0.0);
( 464391.3, 3809678.5, 1071.7, 1071.7, 0.0); ( 464429.3,
3809678.5, 1071.1, 1071.1, 0.0);
( 464467.3, 3809678.5, 1071.0, 1071.0, 0.0); ( 464505.3,
3809678.5, 1070.2, 1070.2, 0.0);
( 463745.3, 3809707.6, 1060.4, 1067.0, 0.0); ( 463783.3,
3809707.6, 1062.8, 1067.0, 0.0);
( 463821.3, 3809707.6, 1065.5, 1065.5, 0.0); ( 463859.3,
3809707.6, 1067.7, 1067.7, 0.0);
( 463897.3, 3809707.6, 1069.4, 1069.4, 0.0); ( 463935.3,
3809707.6, 1071.7, 1071.7, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

```


*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 80

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(463973.3, 3809707.6, 1072.9, 1072.9, 0.0);	(464011.3,
3809707.6, 1073.3, 1073.3, 0.0);	
(464049.3, 3809707.6, 1074.2, 1074.2, 0.0);	(464087.3,
3809707.6, 1074.3, 1074.3, 0.0);	
(464125.3, 3809707.6, 1074.1, 1074.1, 0.0);	(464163.3,
3809707.6, 1074.0, 1074.0, 0.0);	
(464201.3, 3809707.6, 1073.3, 1073.3, 0.0);	(464239.3,
3809707.6, 1072.8, 1072.8, 0.0);	
(464277.3, 3809707.6, 1072.1, 1072.1, 0.0);	(464315.3,
3809707.6, 1072.0, 1072.0, 0.0);	
(464353.3, 3809707.6, 1071.3, 1071.3, 0.0);	(464391.3,
3809707.6, 1071.2, 1071.2, 0.0);	
(464429.3, 3809707.6, 1070.5, 1070.5, 0.0);	(464467.3,
3809707.6, 1070.3, 1070.3, 0.0);	
(464505.3, 3809707.6, 1070.0, 1070.0, 0.0);	(463745.3,
3809736.7, 1059.1, 1059.1, 0.0);	
(463783.3, 3809736.7, 1060.8, 1067.0, 0.0);	(463821.3,
3809736.7, 1062.7, 1068.0, 0.0);	
(463859.3, 3809736.7, 1065.2, 1068.0, 0.0);	(463897.3,
3809736.7, 1067.5, 1067.5, 0.0);	
(463935.3, 3809736.7, 1069.2, 1069.2, 0.0);	(463973.3,
3809736.7, 1071.4, 1071.4, 0.0);	
(464011.3, 3809736.7, 1072.8, 1072.8, 0.0);	(464049.3,
3809736.7, 1073.3, 1073.3, 0.0);	
(464087.3, 3809736.7, 1074.0, 1074.0, 0.0);	(464125.3,
3809736.7, 1074.0, 1074.0, 0.0);	
(464163.3, 3809736.7, 1074.0, 1074.0, 0.0);	(464201.3,
3809736.7, 1073.0, 1073.0, 0.0);	
(464239.3, 3809736.7, 1072.7, 1072.7, 0.0);	(464277.3,
3809736.7, 1072.0, 1072.0, 0.0);	
(464315.3, 3809736.7, 1071.4, 1071.4, 0.0);	(464353.3,
3809736.7, 1071.0, 1071.0, 0.0);	
(464391.3, 3809736.7, 1070.7, 1070.7, 0.0);	(464429.3,
3809736.7, 1070.1, 1070.1, 0.0);	
(464467.3, 3809736.7, 1070.0, 1070.0, 0.0);	(464505.3,
3809736.7, 1069.9, 1069.9, 0.0);	
(463745.3, 3809765.7, 1058.2, 1058.2, 0.0);	(463783.3,
3809765.7, 1059.5, 1059.5, 0.0);	
(463821.3, 3809765.7, 1060.8, 1068.0, 0.0);	(463859.3,
3809765.7, 1063.0, 1063.0, 0.0);	

(463897.3, 3809765.7, 1065.5, 1065.5,	0.0);	(463935.3,
3809765.7, 1066.8, 1070.0, 0.0);		
(463973.3, 3809765.7, 1068.2, 1072.0,	0.0);	(464011.3,
3809765.7, 1071.5, 1071.5, 0.0);		
(464049.3, 3809765.7, 1073.0, 1073.0,	0.0);	(464087.3,
3809765.7, 1073.5, 1073.5, 0.0);		
(464125.3, 3809765.7, 1074.0, 1074.0,	0.0);	(464163.3,
3809765.7, 1074.0, 1074.0, 0.0);		
(464201.3, 3809765.7, 1073.0, 1073.0,	0.0);	(464239.3,
3809765.7, 1072.7, 1072.7, 0.0);		
(464277.3, 3809765.7, 1072.0, 1072.0,	0.0);	(464315.3,
3809765.7, 1071.2, 1071.2, 0.0);		
(464353.3, 3809765.7, 1070.9, 1070.9,	0.0);	(464391.3,
3809765.7, 1070.2, 1070.2, 0.0);		
(464429.3, 3809765.7, 1070.0, 1070.0,	0.0);	(464467.3,
3809765.7, 1070.0, 1070.0, 0.0);		
(464505.3, 3809765.7, 1069.3, 1069.3,	0.0);	(463745.3,
3809794.8, 1057.3, 1057.3, 0.0);		
(463783.3, 3809794.8, 1057.8, 1057.8,	0.0);	(463821.3,
3809794.8, 1059.1, 1059.1, 0.0);		
(463859.3, 3809794.8, 1060.6, 1067.0,	0.0);	(463897.3,
3809794.8, 1062.9, 1065.0, 0.0);		
(463935.3, 3809794.8, 1064.2, 1072.0,	0.0);	(463973.3,
3809794.8, 1065.6, 1073.0, 0.0);		
(464011.3, 3809794.8, 1068.7, 1073.0,	0.0);	(464049.3,
3809794.8, 1072.3, 1072.3, 0.0);		
(464087.3, 3809794.8, 1073.1, 1073.1,	0.0);	(464125.3,
3809794.8, 1073.4, 1073.4, 0.0);		
(464163.3, 3809794.8, 1073.4, 1073.4,	0.0);	(464201.3,
3809794.8, 1073.0, 1073.0, 0.0);		
(464239.3, 3809794.8, 1072.3, 1072.3,	0.0);	(464277.3,
3809794.8, 1071.6, 1071.6, 0.0);		
(464315.3, 3809794.8, 1071.1, 1071.1,	0.0);	(464353.3,
3809794.8, 1070.3, 1070.3, 0.0);		
(464391.3, 3809794.8, 1070.0, 1070.0,	0.0);	(464429.3,
3809794.8, 1070.0, 1070.0, 0.0);		
(464467.3, 3809794.8, 1069.4, 1069.4,	0.0);	(464505.3,
3809794.8, 1069.0, 1069.0, 0.0);		
(463745.3, 3809823.8, 1056.5, 1056.5,	0.0);	(463783.3,
3809823.8, 1056.4, 1056.4, 0.0);		
(463821.3, 3809823.8, 1056.6, 1056.6,	0.0);	(463859.3,
3809823.8, 1058.2, 1065.0, 0.0);		
(463897.3, 3809823.8, 1060.1, 1066.0,	0.0);	(463935.3,
3809823.8, 1061.4, 1073.0, 0.0);		
(463973.3, 3809823.8, 1063.1, 1073.0,	0.0);	(464011.3,
3809823.8, 1065.6, 1073.0, 0.0);		
(464049.3, 3809823.8, 1069.5, 1072.0,	0.0);	(464087.3,
3809823.8, 1072.1, 1072.1, 0.0);		
(464125.3, 3809823.8, 1073.0, 1073.0,	0.0);	(464163.3,
3809823.8, 1073.0, 1073.0, 0.0);		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 81

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(464201.3, 3809823.8, 1072.4, 1072.4, 0.0);	(464239.3, 3809823.8, 1072.0, 1072.0, 0.0);
(464277.3, 3809823.8, 1071.4, 1071.4, 0.0);	(464315.3, 3809823.8, 1070.5, 1070.5, 0.0);
(464353.3, 3809823.8, 1070.0, 1070.0, 0.0);	(464391.3, 3809823.8, 1069.8, 1069.8, 0.0);
(464429.3, 3809823.8, 1069.4, 1069.4, 0.0);	(464467.3, 3809823.8, 1069.0, 1069.0, 0.0);
(464505.3, 3809823.8, 1068.4, 1068.4, 0.0);	(463745.3, 3809852.9, 1056.2, 1078.0, 0.0);
(463783.3, 3809852.9, 1055.9, 1055.9, 0.0);	(463821.3, 3809852.9, 1055.0, 1055.0, 0.0);
(463859.3, 3809852.9, 1056.2, 1065.0, 0.0);	(463897.3, 3809852.9, 1057.3, 1072.0, 0.0);
(463935.3, 3809852.9, 1058.6, 1073.0, 0.0);	(463973.3, 3809852.9, 1060.5, 1073.0, 0.0);
(464011.3, 3809852.9, 1062.7, 1073.0, 0.0);	(464049.3, 3809852.9, 1066.2, 1073.0, 0.0);
(464087.3, 3809852.9, 1069.2, 1073.0, 0.0);	(464125.3, 3809852.9, 1071.0, 1071.0, 0.0);
(464163.3, 3809852.9, 1071.3, 1071.3, 0.0);	(464201.3, 3809852.9, 1070.9, 1070.9, 0.0);
(464239.3, 3809852.9, 1070.9, 1070.9, 0.0);	(464277.3, 3809852.9, 1070.6, 1070.6, 0.0);
(464315.3, 3809852.9, 1070.1, 1070.1, 0.0);	(464353.3, 3809852.9, 1069.4, 1069.4, 0.0);
(464391.3, 3809852.9, 1069.3, 1069.3, 0.0);	(464429.3, 3809852.9, 1069.0, 1069.0, 0.0);
(464467.3, 3809852.9, 1068.5, 1068.5, 0.0);	(464505.3, 3809852.9, 1068.0, 1068.0, 0.0);
(463745.3, 3809882.0, 1056.2, 1078.0, 0.0);	(463783.3, 3809882.0, 1055.3, 1055.3, 0.0);
(463821.3, 3809882.0, 1054.3, 1054.3, 0.0);	(463859.3, 3809882.0, 1054.6, 1054.6, 0.0);
(463897.3, 3809882.0, 1054.9, 1072.0, 0.0);	(463935.3, 3809882.0, 1055.8, 1073.0, 0.0);
(463973.3, 3809882.0, 1058.1, 1073.0, 0.0);	(464011.3, 3809882.0, 1060.3, 1073.0, 0.0);

(464049.3, 3809882.0, 1063.3, 1073.0,	0.0);	(464087.3,
3809882.0, 1065.9, 1073.0, 0.0);		
(464125.3, 3809882.0, 1067.9, 1073.0,	0.0);	(464163.3,
3809882.0, 1068.4, 1068.4, 0.0);		
(464201.3, 3809882.0, 1068.9, 1068.9,	0.0);	(464239.3,
3809882.0, 1068.9, 1068.9, 0.0);		
(464277.3, 3809882.0, 1069.2, 1069.2,	0.0);	(464315.3,
3809882.0, 1069.5, 1069.5, 0.0);		
(464353.3, 3809882.0, 1069.0, 1069.0,	0.0);	(464391.3,
3809882.0, 1069.0, 1069.0, 0.0);		
(464429.3, 3809882.0, 1068.7, 1068.7,	0.0);	(464467.3,
3809882.0, 1068.0, 1068.0, 0.0);		
(464505.3, 3809882.0, 1067.9, 1067.9,	0.0);	(463745.3,
3809911.0, 1055.7, 1078.0, 0.0);		
(463783.3, 3809911.0, 1054.4, 1076.0,	0.0);	(463821.3,
3809911.0, 1053.8, 1053.8, 0.0);		
(463859.3, 3809911.0, 1053.5, 1053.5,	0.0);	(463897.3,
3809911.0, 1053.5, 1072.0, 0.0);		
(463935.3, 3809911.0, 1053.8, 1073.0,	0.0);	(463973.3,
3809911.0, 1055.7, 1073.0, 0.0);		
(464011.3, 3809911.0, 1057.9, 1073.0,	0.0);	(464049.3,
3809911.0, 1060.9, 1073.0, 0.0);		
(464087.3, 3809911.0, 1063.4, 1073.0,	0.0);	(464125.3,
3809911.0, 1065.3, 1073.0, 0.0);		
(464163.3, 3809911.0, 1066.4, 1066.4,	0.0);	(464201.3,
3809911.0, 1067.5, 1067.5, 0.0);		
(464239.3, 3809911.0, 1067.6, 1067.6,	0.0);	(464277.3,
3809911.0, 1068.3, 1068.3, 0.0);		
(464315.3, 3809911.0, 1068.5, 1068.5,	0.0);	(464353.3,
3809911.0, 1068.5, 1068.5, 0.0);		
(464391.3, 3809911.0, 1068.5, 1068.5,	0.0);	(464429.3,
3809911.0, 1068.2, 1068.2, 0.0);		
(464467.3, 3809911.0, 1068.0, 1068.0,	0.0);	(464505.3,
3809911.0, 1067.4, 1067.4, 0.0);		
(463745.3, 3809940.1, 1055.0, 1079.0,	0.0);	(463783.3,
3809940.1, 1053.5, 1078.0, 0.0);		
(463821.3, 3809940.1, 1053.1, 1073.0,	0.0);	(463859.3,
3809940.1, 1052.5, 1052.5, 0.0);		
(463897.3, 3809940.1, 1052.5, 1052.5,	0.0);	(463935.3,
3809940.1, 1052.7, 1073.0, 0.0);		
(463973.3, 3809940.1, 1054.0, 1073.0,	0.0);	(464011.3,
3809940.1, 1055.3, 1073.0, 0.0);		
(464049.3, 3809940.1, 1058.1, 1073.0,	0.0);	(464087.3,
3809940.1, 1060.5, 1073.0, 0.0);		
(464125.3, 3809940.1, 1062.6, 1065.0,	0.0);	(464163.3,
3809940.1, 1064.7, 1064.7, 0.0);		
(464201.3, 3809940.1, 1066.5, 1066.5,	0.0);	(464239.3,
3809940.1, 1067.2, 1067.2, 0.0);		
(464277.3, 3809940.1, 1067.5, 1067.5,	0.0);	(464315.3,
3809940.1, 1067.9, 1067.9, 0.0);		

```

( 464353.3, 3809940.1, 1068.0, 1068.0, 0.0); ( 464391.3,
3809940.1, 1068.0, 1068.0, 0.0);
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 82

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

( 464429.3, 3809940.1, 1068.0, 1068.0, 0.0); ( 464467.3,
3809940.1, 1067.6, 1067.6, 0.0);
( 464505.3, 3809940.1, 1067.0, 1067.0, 0.0); ( 463745.3,
3809969.1, 1056.0, 1078.0, 0.0);
( 463783.3, 3809969.1, 1053.3, 1076.0, 0.0); ( 463821.3,
3809969.1, 1052.3, 1073.0, 0.0);
( 463859.3, 3809969.1, 1051.7, 1072.0, 0.0); ( 463897.3,
3809969.1, 1051.6, 1051.6, 0.0);
( 463935.3, 3809969.1, 1051.7, 1072.0, 0.0); ( 463973.3,
3809969.1, 1052.8, 1073.0, 0.0);
( 464011.3, 3809969.1, 1053.4, 1073.0, 0.0); ( 464049.3,
3809969.1, 1055.1, 1073.0, 0.0);
( 464087.3, 3809969.1, 1057.6, 1073.0, 0.0); ( 464125.3,
3809969.1, 1060.4, 1065.0, 0.0);
( 464163.3, 3809969.1, 1062.8, 1062.8, 0.0); ( 464201.3,
3809969.1, 1065.2, 1065.2, 0.0);
( 464239.3, 3809969.1, 1066.7, 1066.7, 0.0); ( 464277.3,
3809969.1, 1067.0, 1067.0, 0.0);
( 464315.3, 3809969.1, 1067.5, 1067.5, 0.0); ( 464353.3,
3809969.1, 1068.0, 1068.0, 0.0);
( 464391.3, 3809969.1, 1068.0, 1068.0, 0.0); ( 464429.3,
3809969.1, 1067.7, 1067.7, 0.0);
( 464467.3, 3809969.1, 1067.0, 1067.0, 0.0); ( 464505.3,
3809969.1, 1066.9, 1066.9, 0.0);
( 463745.3, 3809998.2, 1058.8, 1073.0, 0.0); ( 463783.3,
3809998.2, 1054.6, 1073.0, 0.0);
( 463821.3, 3809998.2, 1052.5, 1073.0, 0.0); ( 463859.3,
3809998.2, 1051.4, 1073.0, 0.0);
( 463897.3, 3809998.2, 1051.0, 1070.0, 0.0); ( 463935.3,
3809998.2, 1050.8, 1050.8, 0.0);
( 463973.3, 3809998.2, 1051.6, 1073.0, 0.0); ( 464011.3,
3809998.2, 1052.3, 1073.0, 0.0);
( 464049.3, 3809998.2, 1053.6, 1073.0, 0.0); ( 464087.3,
3809998.2, 1055.7, 1073.0, 0.0);
( 464125.3, 3809998.2, 1058.7, 1061.0, 0.0); ( 464163.3,
3809998.2, 1061.3, 1061.3, 0.0);

```

(464201.3, 3809998.2, 1063.7, 1063.7,	0.0);	(464239.3,
3809998.2, 1065.5, 1065.5, 0.0);		
(464277.3, 3809998.2, 1066.6, 1066.6,	0.0);	(464315.3,
3809998.2, 1067.0, 1067.0, 0.0);		
(464353.3, 3809998.2, 1067.6, 1067.6,	0.0);	(464391.3,
3809998.2, 1067.6, 1067.6, 0.0);		
(464429.3, 3809998.2, 1067.2, 1067.2,	0.0);	(464467.3,
3809998.2, 1067.0, 1067.0, 0.0);		
(464505.3, 3809998.2, 1066.5, 1066.5,	0.0);	(463745.3,
3810027.3, 1061.8, 1073.0, 0.0);		
(463783.3, 3810027.3, 1056.8, 1073.0,	0.0);	(463821.3,
3810027.3, 1053.6, 1073.0, 0.0);		
(463859.3, 3810027.3, 1051.7, 1073.0,	0.0);	(463897.3,
3810027.3, 1051.0, 1072.0, 0.0);		
(463935.3, 3810027.3, 1050.1, 1050.1,	0.0);	(463973.3,
3810027.3, 1050.8, 1050.8, 0.0);		
(464011.3, 3810027.3, 1051.4, 1073.0,	0.0);	(464049.3,
3810027.3, 1052.6, 1073.0, 0.0);		
(464087.3, 3810027.3, 1054.0, 1061.0,	0.0);	(464125.3,
3810027.3, 1056.6, 1061.0, 0.0);		
(464163.3, 3810027.3, 1059.7, 1059.7,	0.0);	(464201.3,
3810027.3, 1062.3, 1062.3, 0.0);		
(464239.3, 3810027.3, 1063.9, 1063.9,	0.0);	(464277.3,
3810027.3, 1065.6, 1065.6, 0.0);		
(464315.3, 3810027.3, 1066.6, 1066.6,	0.0);	(464353.3,
3810027.3, 1067.0, 1067.0, 0.0);		
(464391.3, 3810027.3, 1067.0, 1067.0,	0.0);	(464429.3,
3810027.3, 1067.0, 1067.0, 0.0);		
(464467.3, 3810027.3, 1066.7, 1066.7,	0.0);	(464505.3,
3810027.3, 1065.9, 1065.9, 0.0);		
(463745.3, 3810056.3, 1065.1, 1073.0,	0.0);	(463783.3,
3810056.3, 1059.2, 1073.0, 0.0);		
(463821.3, 3810056.3, 1054.8, 1073.0,	0.0);	(463859.3,
3810056.3, 1052.5, 1073.0, 0.0);		
(463897.3, 3810056.3, 1051.1, 1073.0,	0.0);	(463935.3,
3810056.3, 1050.0, 1071.0, 0.0);		
(463973.3, 3810056.3, 1050.3, 1050.3,	0.0);	(464011.3,
3810056.3, 1050.6, 1050.6, 0.0);		
(464049.3, 3810056.3, 1051.3, 1051.3,	0.0);	(464087.3,
3810056.3, 1052.6, 1052.6, 0.0);		
(464125.3, 3810056.3, 1054.5, 1063.0,	0.0);	(464163.3,
3810056.3, 1057.6, 1059.0, 0.0);		
(464201.3, 3810056.3, 1060.4, 1060.4,	0.0);	(464239.3,
3810056.3, 1062.6, 1062.6, 0.0);		
(464277.3, 3810056.3, 1064.1, 1064.1,	0.0);	(464315.3,
3810056.3, 1065.5, 1065.5, 0.0);		
(464353.3, 3810056.3, 1066.7, 1066.7,	0.0);	(464391.3,
3810056.3, 1067.0, 1067.0, 0.0);		
(464429.3, 3810056.3, 1066.8, 1066.8,	0.0);	(464467.3,
3810056.3, 1066.1, 1066.1, 0.0);		

```

      ( 464505.3, 3810056.3, 1065.5, 1065.5, 0.0);      ( 463745.3,
3810085.4, 1068.3, 1068.3, 0.0);
      ( 463783.3, 3810085.4, 1061.8, 1073.0, 0.0);      ( 463821.3,
3810085.4, 1056.5, 1073.0, 0.0);

```

```

▲ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22

```

```

*** AERMET - VERSION 14134 ***      ***
***                                     16:42:19

```

PAGE 83

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

      ( 463859.3, 3810085.4, 1053.3, 1073.0, 0.0);      ( 463897.3,
3810085.4, 1051.4, 1073.0, 0.0);
      ( 463935.3, 3810085.4, 1050.3, 1071.0, 0.0);      ( 463973.3,
3810085.4, 1050.0, 1050.0, 0.0);
      ( 464011.3, 3810085.4, 1049.8, 1049.8, 0.0);      ( 464049.3,
3810085.4, 1049.7, 1049.7, 0.0);
      ( 464087.3, 3810085.4, 1051.1, 1051.1, 0.0);      ( 464125.3,
3810085.4, 1052.9, 1059.0, 0.0);
      ( 464163.3, 3810085.4, 1055.5, 1061.0, 0.0);      ( 464201.3,
3810085.4, 1058.2, 1058.2, 0.0);
      ( 464239.3, 3810085.4, 1060.8, 1060.8, 0.0);      ( 464277.3,
3810085.4, 1062.7, 1062.7, 0.0);
      ( 464315.3, 3810085.4, 1064.2, 1064.2, 0.0);      ( 464353.3,
3810085.4, 1065.5, 1065.5, 0.0);
      ( 464391.3, 3810085.4, 1066.2, 1066.2, 0.0);      ( 464429.3,
3810085.4, 1065.9, 1065.9, 0.0);
      ( 464467.3, 3810085.4, 1065.4, 1065.4, 0.0);      ( 464505.3,
3810085.4, 1064.7, 1064.7, 0.0);
      ( 463745.3, 3810114.4, 1070.4, 1070.4, 0.0);      ( 463783.3,
3810114.4, 1064.9, 1072.0, 0.0);
      ( 463821.3, 3810114.4, 1058.8, 1073.0, 0.0);      ( 463859.3,
3810114.4, 1055.5, 1073.0, 0.0);
      ( 463897.3, 3810114.4, 1052.5, 1072.0, 0.0);      ( 463935.3,
3810114.4, 1050.8, 1071.0, 0.0);
      ( 463973.3, 3810114.4, 1049.7, 1068.0, 0.0);      ( 464011.3,
3810114.4, 1049.2, 1049.2, 0.0);
      ( 464049.3, 3810114.4, 1048.7, 1048.7, 0.0);      ( 464087.3,
3810114.4, 1049.7, 1049.7, 0.0);
      ( 464125.3, 3810114.4, 1050.9, 1057.0, 0.0);      ( 464163.3,
3810114.4, 1053.0, 1063.0, 0.0);
      ( 464201.3, 3810114.4, 1055.5, 1063.0, 0.0);      ( 464239.3,
3810114.4, 1058.9, 1058.9, 0.0);
      ( 464277.3, 3810114.4, 1061.2, 1061.2, 0.0);      ( 464315.3,
3810114.4, 1062.3, 1062.3, 0.0);

```

(464353.3, 3810114.4, 1063.2, 1063.2,	0.0);	(464391.3,
3810114.4, 1063.7, 1063.7, 0.0);		
(464429.3, 3810114.4, 1064.3, 1064.3,	0.0);	(464467.3,
3810114.4, 1063.8, 1063.8, 0.0);		
(464505.3, 3810114.4, 1063.8, 1063.8,	0.0);	(463745.3,
3810143.5, 1071.2, 1071.2, 0.0);		
(463783.3, 3810143.5, 1066.8, 1071.0,	0.0);	(463821.3,
3810143.5, 1062.4, 1071.0, 0.0);		
(463859.3, 3810143.5, 1058.3, 1071.0,	0.0);	(463897.3,
3810143.5, 1053.6, 1072.0, 0.0);		
(463935.3, 3810143.5, 1050.8, 1071.0,	0.0);	(463973.3,
3810143.5, 1048.9, 1069.0, 0.0);		
(464011.3, 3810143.5, 1048.8, 1068.0,	0.0);	(464049.3,
3810143.5, 1048.0, 1067.0, 0.0);		
(464087.3, 3810143.5, 1048.0, 1048.0,	0.0);	(464125.3,
3810143.5, 1049.1, 1049.1, 0.0);		
(464163.3, 3810143.5, 1051.0, 1063.0,	0.0);	(464201.3,
3810143.5, 1053.3, 1061.0, 0.0);		
(464239.3, 3810143.5, 1056.2, 1061.0,	0.0);	(464277.3,
3810143.5, 1059.4, 1061.0, 0.0);		
(464315.3, 3810143.5, 1060.7, 1060.7,	0.0);	(464353.3,
3810143.5, 1060.9, 1060.9, 0.0);		
(464391.3, 3810143.5, 1061.8, 1061.8,	0.0);	(464429.3,
3810143.5, 1062.2, 1062.2, 0.0);		
(464467.3, 3810143.5, 1062.7, 1062.7,	0.0);	(464505.3,
3810143.5, 1062.9, 1062.9, 0.0);		
(464383.8, 3807479.3, 1110.0, 1110.0,	0.0);	(464355.0,
3807405.2, 1111.0, 1111.0, 0.0);		
(464402.1, 3807352.1, 1111.8, 1111.8,	0.0);	(464367.2,
3807296.3, 1112.6, 1112.6, 0.0);		
(464358.5, 3807238.0, 1114.7, 1114.7,	0.0);	(464385.5,
3807161.3, 1114.8, 1114.8, 0.0);		
(463132.3, 3810926.4, 1066.9, 1066.9,	0.0);	(463237.8,
3811199.3, 1062.0, 1062.0, 0.0);		
(464944.3, 3809244.9, 1073.1, 1073.1,	0.0);	(465700.3,
3809255.5, 1068.0, 1068.0, 0.0);		
(465716.2, 3808536.5, 1077.1, 1077.1,	0.0);	(465544.4,
3808533.8, 1078.4, 1078.4, 0.0);		
(465420.1, 3808486.3, 1079.0, 1079.0,	0.0);	(465348.8,
3808491.6, 1077.9, 1077.9, 0.0);		
(465317.0, 3808444.0, 1079.4, 1079.4,	0.0);	(465327.6,
3808407.0, 1080.9, 1080.9, 0.0);		
(465108.2, 3808370.0, 1085.1, 1085.1,	0.0);	(464999.9,
3808301.2, 1086.3, 1086.3, 0.0);		
(464722.3, 3807973.5, 1093.9, 1100.0,	0.0);	(464717.0,
3807836.0, 1100.5, 1100.5, 0.0);		
(464344.3, 3807936.5, 1104.0, 1104.0,	0.0);	(464349.6,
3807780.5, 1095.5, 1105.0, 0.0);		
(464386.6, 3807785.8, 1094.8, 1104.0,	0.0);	(464521.4,
3807859.8, 1092.2, 1092.2, 0.0);		

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON
WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23,
10.80,

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 86
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

Surface file: ..\I15 Industrial Park8.16.21\723825\723825R.SFC
Met Version: 14134
Profile file: ..\I15 Industrial Park8.16.21\723825\723825R.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 23131 Upper air station no.: 3160
Name: UNKNOWN Name: DESERT_ROCK
Year: 2009 Year: 2009

First 24 hours of scalar data
YR MO DY JDY HR H0 U* W* DT/DZ ZICNV ZIMCH M-O LEN Z0 BOWEN
ALBEDO REF WS WD HT REF TA HT
- - - - -
09 01 02 2 01 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0 0.28 1.40
1.00 999.00 999. -9.0 999.0 -9.0
09 01 02 2 02 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0 0.28 1.40
1.00 999.00 999. -9.0 999.0 -9.0
09 01 02 2 03 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0 0.28 1.40
1.00 999.00 999. -9.0 999.0 -9.0
09 01 02 2 04 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0 0.28 1.40
1.00 999.00 999. -9.0 999.0 -9.0

09	01	02	2	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	07	-25.6	0.245	-9.000	-9.000	-999.	291.	46.9	0.28	1.40
1.00	2.86	149.			10.0	275.1	2.0						
09	01	02	2	08	1.5	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.54	999.00	999.			-9.0	279.6	2.0						
09	01	02	2	09	28.7	0.290	0.429	0.012	89.	375.	-69.3	0.27	1.40
0.32	2.36	210.			10.0	284.1	2.0						
09	01	02	2	10	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.24	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	11	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.21	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	12	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.20	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	13	141.6	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.21	0.00	0.			10.0	292.1	2.0						
09	01	02	2	14	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.22	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	15	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.25	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	16	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.35	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
0.63	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						
09	01	02	2	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.28	1.40
1.00	999.00	999.			-9.0	999.0	-9.0						

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
09	01	02	01	10.0	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 87

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***
INCLUDING SOURCE(S): L0005936 , L0005937
, L0005938 , L0005939 , L0005940 ,
L0005941 , L0005942 , L0005943 , L0005944 , L0005945
, L0005946 , L0005947 , L0005948 ,
L0005949 , L0005950 , L0005951 , L0005952 , L0005953
, L0005954 , L0005955 , L0005956 ,
L0005957 , L0005958 , L0005959 , L0005960 , L0005961
, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
462160.55	3809377.75	0.22275	462051.48
3809270.62	0.19457		
462014.47	3809029.10	0.11419	462010.58
3808855.75	0.07716		
461936.56	3808886.92	0.07307	461936.56
3808997.94	0.08979		
461909.30	3808768.10	0.05829	461835.28
3808894.71	0.06476		
461845.02	3808995.99	0.07785	461833.33
3809114.80	0.09749		
461843.07	3809210.24	0.13727	461809.96
3809297.89	0.15538		
461856.71	3809385.54	0.16545	461841.13
3809482.92	0.16624		
462004.74	3809379.69	0.19015	461763.22
3808793.43	0.04971		
461753.48	3808699.93	0.04803	461835.28
3808686.30	0.04893		
461823.60	3808579.17	0.04335	461761.27
3808585.02	0.04087		
462301.19	3807807.15	0.06004	462304.78
3807868.16	0.05827		
462216.84	3807882.52	0.05037	462116.34
3807886.11	0.04383		

462114.55	3807789.20	0.04372	462012.25
3807887.90	0.03862		
462008.66	3807975.84	0.04129	461917.14
3807972.25	0.03738		
461922.52	3808187.60	0.04825	461908.17
3808288.10	0.04977		
461848.94	3808377.83	0.04679	461831.00
3808494.48	0.04427		
462421.43	3808393.98	0.09794	462459.11
3808501.66	0.10407		
462437.58	3808580.62	0.10475	462654.73
3809189.00	0.39913		
462559.49	3809194.32	0.34840	465763.86
3807935.19	0.18080		
465819.84	3807935.19	0.17307	465875.82
3807935.19	0.16583		
465931.80	3807935.19	0.15909	465987.78
3807935.19	0.15276		
466043.76	3807935.19	0.14683	466099.74
3807935.19	0.14125		
466155.72	3807935.19	0.13601	466211.70
3807935.19	0.13106		
466267.68	3807935.19	0.12641	466323.66
3807935.19	0.12193		
466379.64	3807935.19	0.11779	466435.62
3807935.19	0.11387		
466491.60	3807935.19	0.11016	466547.58
3807935.19	0.10645		
466603.56	3807935.19	0.10307	466659.54
3807935.19	0.09986		
466715.52	3807935.19	0.09682	466771.50
3807935.19	0.09390		
466827.48	3807935.19	0.09105	466883.46
3807935.19	0.08839		
465763.86	3808001.41	0.18834	465819.84
3808001.41	0.18018		
465875.82	3808001.41	0.17254	465931.80
3808001.41	0.16539		
465987.78	3808001.41	0.15883	466043.76
3808001.41	0.15244		
466099.74	3808001.41	0.14676	466155.72
3808001.41	0.14123		
466211.70	3808001.41	0.13606	466267.68
3808001.41	0.13114		
466323.66	3808001.41	0.12649	466379.64
3808001.41	0.12209		
466435.62	3808001.41	0.11792	466491.60
3808001.41	0.11398		
466547.58	3808001.41	0.11018	466603.56
3808001.41	0.10666		

466659.54	3808001.41	0.10331	466715.52
3808001.41	0.09993		
466771.50	3808001.41	0.09691	466827.48
3808001.41	0.09400		
466883.46	3808001.41	0.09116	465763.86
3808067.63	0.19689		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 88

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465819.84	3808067.63	0.18815	465875.82
3808067.63	0.18006		
465931.80	3808067.63	0.17250	465987.78
3808067.63	0.16543		
466043.76	3808067.63	0.15881	466099.74
3808067.63	0.15260		
466155.72	3808067.63	0.14677	466211.70
3808067.63	0.14127		
466267.68	3808067.63	0.13608	466323.66
3808067.63	0.13116		
466379.64	3808067.63	0.12651	466435.62
3808067.63	0.12225		
466491.60	3808067.63	0.11795	466547.58
3808067.63	0.11401		
466603.56	3808067.63	0.11027	466659.54

3808067.63	0.10672		
466715.52	3808067.63	0.10338	466771.50
3808067.63	0.10019		
466827.48	3808067.63	0.09707	466883.46
3808067.63	0.09406		
465763.86	3808133.85	0.20629	465819.84
3808133.85	0.19693		
465875.82	3808133.85	0.18824	465931.80
3808133.85	0.18014		
465987.78	3808133.85	0.17280	466043.76
3808133.85	0.16568		
466099.74	3808133.85	0.15902	466155.72
3808133.85	0.15276		
466211.70	3808133.85	0.14688	466267.68
3808133.85	0.14136		
466323.66	3808133.85	0.13617	466379.64
3808133.85	0.13130		
466435.62	3808133.85	0.12668	466491.60
3808133.85	0.12231		
466547.58	3808133.85	0.11812	466603.56
3808133.85	0.11419		
466659.54	3808133.85	0.11047	466715.52
3808133.85	0.10691		
466771.50	3808133.85	0.10340	466827.48
3808133.85	0.10021		
466883.46	3808133.85	0.09715	465763.86
3808200.07	0.21644		
465819.84	3808200.07	0.20635	465875.82
3808200.07	0.19698		
465931.80	3808200.07	0.18850	465987.78
3808200.07	0.18036		
466043.76	3808200.07	0.17276	466099.74
3808200.07	0.16564		
466155.72	3808200.07	0.15897	466211.70
3808200.07	0.15271		
466267.68	3808200.07	0.14684	466323.66
3808200.07	0.14149		
466379.64	3808200.07	0.13627	466435.62
3808200.07	0.13134		
466491.60	3808200.07	0.12669	466547.58
3808200.07	0.12229		
466603.56	3808200.07	0.11813	466659.54
3808200.07	0.11418		
466715.52	3808200.07	0.11045	466771.50
3808200.07	0.10686		
466827.48	3808200.07	0.10340	466883.46
3808200.07	0.10019		
465763.86	3808266.29	0.22671	465819.84
3808266.29	0.21618		
465875.82	3808266.29	0.20626	465931.80

3808266.29	0.19689		
465987.78	3808266.29	0.18816	466043.76
3808266.29	0.18003		
466099.74	3808266.29	0.17243	466155.72
3808266.29	0.16532		
466211.70	3808266.29	0.15868	466267.68
3808266.29	0.15255		
466323.66	3808266.29	0.14667	466379.64
3808266.29	0.14130		
466435.62	3808266.29	0.13611	466491.60
3808266.29	0.13111		
466547.58	3808266.29	0.12645	466603.56
3808266.29	0.12203		
466659.54	3808266.29	0.11795	466715.52
3808266.29	0.11394		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 89

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.11022	466827.48
3808266.29	0.10662		
466883.46	3808266.29	0.10325	465763.86
3808332.51	0.23732		
465819.84	3808332.51	0.22616	465875.82
3808332.51	0.21533		

465931.80	3808332.51	0.20529	465987.78
3808332.51	0.19597		
466043.76	3808332.51	0.18729	466099.74
3808332.51	0.17920		
466155.72	3808332.51	0.17172	466211.70
3808332.51	0.16466		
466267.68	3808332.51	0.15802	466323.66
3808332.51	0.15207		
466379.64	3808332.51	0.14620	466435.62
3808332.51	0.14067		
466491.60	3808332.51	0.13546	466547.58
3808332.51	0.13054		
466603.56	3808332.51	0.12614	466659.54
3808332.51	0.12177		
466715.52	3808332.51	0.11760	466771.50
3808332.51	0.11348		
466827.48	3808332.51	0.10978	466883.46
3808332.51	0.10625		
465763.86	3808398.73	0.24767	465819.84
3808398.73	0.23567		
465875.82	3808398.73	0.22411	465931.80
3808398.73	0.21344		
465987.78	3808398.73	0.20352	466043.76
3808398.73	0.19431		
466099.74	3808398.73	0.18591	466155.72
3808398.73	0.17785		
466211.70	3808398.73	0.17033	466267.68
3808398.73	0.16368		
466323.66	3808398.73	0.15707	466379.64
3808398.73	0.15090		
466435.62	3808398.73	0.14523	466491.60
3808398.73	0.13979		
466547.58	3808398.73	0.13466	466603.56
3808398.73	0.12984		
466659.54	3808398.73	0.12527	466715.52
3808398.73	0.12089		
466771.50	3808398.73	0.11679	466827.48
3808398.73	0.11286		
466883.46	3808398.73	0.10916	465763.86
3808464.95	0.25737		
465819.84	3808464.95	0.24450	465875.82
3808464.95	0.23219		
465931.80	3808464.95	0.22095	465987.78
3808464.95	0.21058		
466043.76	3808464.95	0.20111	466099.74
3808464.95	0.19203		
466155.72	3808464.95	0.18357	466211.70
3808464.95	0.17569		
466267.68	3808464.95	0.16863	466323.66
3808464.95	0.16172		

466379.64	3808464.95	0.15542	466435.62
3808464.95	0.14936		
466491.60	3808464.95	0.14383	466547.58
3808464.95	0.13843		
466603.56	3808464.95	0.13336	466659.54
3808464.95	0.12857		
466715.52	3808464.95	0.12406	466771.50
3808464.95	0.11979		
466827.48	3808464.95	0.11575	466883.46
3808464.95	0.11193		
465763.86	3808531.17	0.26628	465819.84
3808531.17	0.25230		
465875.82	3808531.17	0.23944	465931.80
3808531.17	0.22756		
465987.78	3808531.17	0.21690	466043.76
3808531.17	0.20685		
466099.74	3808531.17	0.19754	466155.72
3808531.17	0.18873		
466211.70	3808531.17	0.18055	466267.68
3808531.17	0.17310		
466323.66	3808531.17	0.16610	466379.64
3808531.17	0.15942		
466435.62	3808531.17	0.15331	466491.60
3808531.17	0.14738		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 90

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
466547.58	3808531.17	0.14180	466603.56
3808531.17	0.13655		
466659.54	3808531.17	0.13159	466715.52
3808531.17	0.12694		
466771.50	3808531.17	0.12250	466827.48
3808531.17	0.11837		
466883.46	3808531.17	0.11443	465763.86
3808597.39	0.27331		
465819.84	3808597.39	0.25934	465875.82
3808597.39	0.24595		
465931.80	3808597.39	0.23326	465987.78
3808597.39	0.22220		
466043.76	3808597.39	0.21204	466099.74
3808597.39	0.20228		
466155.72	3808597.39	0.19327	466211.70
3808597.39	0.18490		
466267.68	3808597.39	0.17699	466323.66
3808597.39	0.16986		
466379.64	3808597.39	0.16312	466435.62
3808597.39	0.15663		
466491.60	3808597.39	0.15063	466547.58
3808597.39	0.14494		
466603.56	3808597.39	0.13951	466659.54
3808597.39	0.13440		
466715.52	3808597.39	0.12959	466771.50
3808597.39	0.12505		
466827.48	3808597.39	0.12075	466883.46
3808597.39	0.11677		
465763.86	3808663.61	0.27871	465819.84
3808663.61	0.26458		
465875.82	3808663.61	0.25097	465931.80
3808663.61	0.23844		
465987.78	3808663.61	0.22687	466043.76
3808663.61	0.21613		
466099.74	3808663.61	0.20633	466155.72
3808663.61	0.19702		
466211.70	3808663.61	0.18831	466267.68
3808663.61	0.18022		
466323.66	3808663.61	0.17303	466379.64
3808663.61	0.16594		
466435.62	3808663.61	0.15964	466491.60
3808663.61	0.15337		
466547.58	3808663.61	0.14746	466603.56
3808663.61	0.14191		
466659.54	3808663.61	0.13667	466715.52
3808663.61	0.13177		
466771.50	3808663.61	0.12713	466827.48

3808663.61	0.12291		
466883.46	3808663.61	0.11873	465763.86
3808729.83	0.28325		
465819.84	3808729.83	0.26909	465875.82
3808729.83	0.25528		
465931.80	3808729.83	0.24237	465987.78
3808729.83	0.23047		
466043.76	3808729.83	0.21949	466099.74
3808729.83	0.20931		
466155.72	3808729.83	0.19985	466211.70
3808729.83	0.19102		
466267.68	3808729.83	0.18281	466323.66
3808729.83	0.17550		
466379.64	3808729.83	0.16845	466435.62
3808729.83	0.16171		
466491.60	3808729.83	0.15556	466547.58
3808729.83	0.14956		
466603.56	3808729.83	0.14392	466659.54
3808729.83	0.13890		
466715.52	3808729.83	0.13387	466771.50
3808729.83	0.12914		
466827.48	3808729.83	0.12475	466883.46
3808729.83	0.12052		
465763.86	3808796.05	0.28530	465819.84
3808796.05	0.27188		
465875.82	3808796.05	0.25753	465931.80
3808796.05	0.24478		
465987.78	3808796.05	0.23288	466043.76
3808796.05	0.22190		
466099.74	3808796.05	0.21170	466155.72
3808796.05	0.20220		
466211.70	3808796.05	0.19335	466267.68
3808796.05	0.18507		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 91

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961

, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466323.66	3808796.05	0.17744	466379.64
3808796.05	0.17025		
466435.62	3808796.05	0.16367	466491.60
3808796.05	0.15724		
466547.58	3808796.05	0.15124	466603.56
3808796.05	0.14575		
466659.54	3808796.05	0.14040	466715.52
3808796.05	0.13542		
466771.50	3808796.05	0.13066	466827.48
3808796.05	0.12614		
466883.46	3808796.05	0.12199	465763.86
3808862.27	0.28486		
465819.84	3808862.27	0.27128	465875.82
3808862.27	0.25840		
465931.80	3808862.27	0.24573	465987.78
3808862.27	0.23396		
466043.76	3808862.27	0.22302	466099.74
3808862.27	0.21306		
466155.72	3808862.27	0.20335	466211.70
3808862.27	0.19450		
466267.68	3808862.27	0.18649	466323.66
3808862.27	0.17875		
466379.64	3808862.27	0.17161	466435.62
3808862.27	0.16487		
466491.60	3808862.27	0.15853	466547.58
3808862.27	0.15258		
466603.56	3808862.27	0.14688	466659.54
3808862.27	0.14168		
466715.52	3808862.27	0.13658	466771.50
3808862.27	0.13181		
466827.48	3808862.27	0.12736	466883.46
3808862.27	0.12311		
465763.86	3808928.49	0.28198	465819.84
3808928.49	0.26874		
465875.82	3808928.49	0.25673	465931.80
3808928.49	0.24510		
465987.78	3808928.49	0.23407	466043.76
3808928.49	0.22382		

466099.74	3808928.49	0.21348	466155.72
3808928.49	0.20411		
466211.70	3808928.49	0.19536	466267.68
3808928.49	0.18713		
466323.66	3808928.49	0.17940	466379.64
3808928.49	0.17215		
466435.62	3808928.49	0.16556	466491.60
3808928.49	0.15929		
466547.58	3808928.49	0.15330	466603.56
3808928.49	0.14785		
466659.54	3808928.49	0.14247	466715.52
3808928.49	0.13748		
466771.50	3808928.49	0.13267	466827.48
3808928.49	0.12825		
466883.46	3808928.49	0.12393	465763.86
3808994.71	0.28058		
465819.84	3808994.71	0.26673	465875.82
3808994.71	0.25459		
465931.80	3808994.71	0.24379	465987.78
3808994.71	0.23376		
466043.76	3808994.71	0.22336	466099.74
3808994.71	0.21339		
466155.72	3808994.71	0.20394	466211.70
3808994.71	0.19534		
466267.68	3808994.71	0.18724	466323.66
3808994.71	0.17964		
466379.64	3808994.71	0.17250	466435.62
3808994.71	0.16578		
466491.60	3808994.71	0.15962	466547.58
3808994.71	0.15390		
466603.56	3808994.71	0.14830	466659.54
3808994.71	0.14293		
466715.52	3808994.71	0.13817	466771.50
3808994.71	0.13333		
466827.48	3808994.71	0.12875	466883.46
3808994.71	0.12458		
465763.86	3809060.93	0.27873	465819.84
3809060.93	0.26527		
465875.82	3809060.93	0.25331	465931.80
3809060.93	0.24224		
465987.78	3809060.93	0.23189	466043.76
3809060.93	0.22212		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466099.74	3809060.93	0.21214	466155.72
3809060.93	0.20319		
466211.70	3809060.93	0.19465	466267.68
3809060.93	0.18674		
466323.66	3809060.93	0.17928	466379.64
3809060.93	0.17225		
466435.62	3809060.93	0.16587	466491.60
3809060.93	0.15977		
466547.58	3809060.93	0.15385	466603.56
3809060.93	0.14836		
466659.54	3809060.93	0.14334	466715.52
3809060.93	0.13828		
466771.50	3809060.93	0.13353	466827.48
3809060.93	0.12909		
466883.46	3809060.93	0.12492	465763.86
3809127.15	0.27673		
465819.84	3809127.15	0.26388	465875.82
3809127.15	0.25209		
465931.80	3809127.15	0.24084	465987.78
3809127.15	0.23036		
466043.76	3809127.15	0.21982	466099.74
3809127.15	0.21002		
466155.72	3809127.15	0.20117	466211.70
3809127.15	0.19364		
466267.68	3809127.15	0.18615	466323.66
3809127.15	0.17892		
466379.64	3809127.15	0.17193	466435.62
3809127.15	0.16549		
466491.60	3809127.15	0.15940	466547.58

3809127.15	0.15368		
466603.56	3809127.15	0.14834	466659.54
3809127.15	0.14309		
466715.52	3809127.15	0.13821	466771.50
3809127.15	0.13356		
466827.48	3809127.15	0.12909	466883.46
3809127.15	0.12499		
465763.86	3809193.37	0.27293	465819.84
3809193.37	0.26119		
465875.82	3809193.37	0.24969	465931.80
3809193.37	0.23868		
465987.78	3809193.37	0.22769	466043.76
3809193.37	0.21646		
466099.74	3809193.37	0.20777	466155.72
3809193.37	0.19928		
466211.70	3809193.37	0.19179	466267.68
3809193.37	0.18470		
466323.66	3809193.37	0.17782	466379.64
3809193.37	0.17125		
466435.62	3809193.37	0.16482	466491.60
3809193.37	0.15885		
466547.58	3809193.37	0.15320	466603.56
3809193.37	0.14796		
466659.54	3809193.37	0.14278	466715.52
3809193.37	0.13804		
466771.50	3809193.37	0.13337	466827.48
3809193.37	0.12905		
466883.46	3809193.37	0.12488	465763.86
3809259.59	0.26763		
465819.84	3809259.59	0.25638	465875.82
3809259.59	0.24532		
465931.80	3809259.59	0.23489	465987.78
3809259.59	0.22424		
466043.76	3809259.59	0.21423	466099.74
3809259.59	0.20510		
466155.72	3809259.59	0.19744	466211.70
3809259.59	0.19019		
466267.68	3809259.59	0.18332	466323.66
3809259.59	0.17631		
466379.64	3809259.59	0.16987	466435.62
3809259.59	0.16381		
466491.60	3809259.59	0.15789	466547.58
3809259.59	0.15252		
466603.56	3809259.59	0.14722	466659.54
3809259.59	0.14220		
466715.52	3809259.59	0.13763	466771.50
3809259.59	0.13303		
466827.48	3809259.59	0.12875	466883.46
3809259.59	0.12464		
464503.41	3807141.91	0.15892	464523.41

3807141.91 0.15898

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 93

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***

INCLUDING SOURCE(S): L0005936 , L0005937
, L0005938 , L0005939 , L0005940 ,
L0005941 , L0005942 , L0005943 , L0005944 , L0005945
, L0005946 , L0005947 , L0005948 ,
L0005949 , L0005950 , L0005951 , L0005952 , L0005953
, L0005954 , L0005955 , L0005956 ,
L0005957 , L0005958 , L0005959 , L0005960 , L0005961
, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464543.41	3807141.91	0.15745	464563.41
3807141.91	0.15534		
464583.41	3807141.91	0.15458	464603.41
3807141.91	0.15252		
464623.41	3807141.91	0.14991	464643.41
3807141.91	0.14807		
464663.41	3807141.91	0.14529	464683.41
3807141.91	0.14217		
464703.41	3807141.91	0.14003	464723.41
3807141.91	0.13672		
464743.41	3807141.91	0.13282	464763.41
3807141.91	0.12930		
464783.41	3807141.91	0.12553	464803.41
3807141.91	0.12197		
464823.41	3807141.91	0.12025	464843.41
3807141.91	0.11732		
464863.41	3807141.91	0.11387	464883.41
3807141.91	0.11104		
464903.41	3807141.91	0.10964	464923.41
3807141.91	0.10878		

464503.41	3807161.91	0.16197	464523.41
3807161.91	0.16187		
464543.41	3807161.91	0.16014	464563.41
3807161.91	0.15781		
464583.41	3807161.91	0.15685	464603.41
3807161.91	0.15549		
464623.41	3807161.91	0.15355	464643.41
3807161.91	0.15019		
464663.41	3807161.91	0.14772	464683.41
3807161.91	0.14541		
464703.41	3807161.91	0.14169	464723.41
3807161.91	0.13770		
464743.41	3807161.91	0.13395	464763.41
3807161.91	0.13207		
464783.41	3807161.91	0.12877	464803.41
3807161.91	0.12491		
464823.41	3807161.91	0.12145	464843.41
3807161.91	0.11786		
464863.41	3807161.91	0.11474	464883.41
3807161.91	0.11401		
464903.41	3807161.91	0.11202	464923.41
3807161.91	0.10984		
464503.41	3807181.91	0.16651	464523.41
3807181.91	0.16514		
464543.41	3807181.91	0.16355	464563.41
3807181.91	0.16167		
464583.41	3807181.91	0.15946	464603.41
3807181.91	0.15771		
464623.41	3807181.91	0.15578	464643.41
3807181.91	0.15189		
464663.41	3807181.91	0.14935	464683.41
3807181.91	0.14713		
464703.41	3807181.91	0.14291	464723.41
3807181.91	0.13955		
464743.41	3807181.91	0.13663	464763.41
3807181.91	0.13376		
464783.41	3807181.91	0.13007	464803.41
3807181.91	0.12632		
464823.41	3807181.91	0.12403	464843.41
3807181.91	0.12087		
464863.41	3807181.91	0.11754	464883.41
3807181.91	0.11574		
464903.41	3807181.91	0.11433	464923.41
3807181.91	0.11319		
464503.41	3807201.91	0.17099	464523.41
3807201.91	0.16836		
464543.41	3807201.91	0.16690	464563.41
3807201.91	0.16552		
464583.41	3807201.91	0.16247	464603.41
3807201.91	0.16007		

464623.41	3807201.91	0.15765	464643.41
3807201.91	0.15396		
464663.41	3807201.91	0.15112	464683.41
3807201.91	0.14845		
464703.41	3807201.91	0.14455	464723.41
3807201.91	0.14177		
464743.41	3807201.91	0.13927	464763.41
3807201.91	0.13498		
464783.41	3807201.91	0.13119	464803.41
3807201.91	0.12804		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 94

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.12672	464843.41
3807201.91	0.12440		
464863.41	3807201.91	0.12144	464883.41
3807201.91	0.11806		
464903.41	3807201.91	0.11692	464923.41
3807201.91	0.11670		
464503.41	3807221.91	0.17415	464523.41
3807221.91	0.17126		
464543.41	3807221.91	0.16957	464563.41
3807221.91	0.16824		
464583.41	3807221.91	0.16643	464603.41

3807221.91	0.16329		
464623.41	3807221.91	0.15967	464643.41
3807221.91	0.15739		
464663.41	3807221.91	0.15386	464683.41
3807221.91	0.14997		
464703.41	3807221.91	0.14777	464723.41
3807221.91	0.14433		
464743.41	3807221.91	0.14016	464763.41
3807221.91	0.13577		
464783.41	3807221.91	0.13335	464803.41
3807221.91	0.13173		
464823.41	3807221.91	0.12828	464843.41
3807221.91	0.12688		
464863.41	3807221.91	0.12616	464883.41
3807221.91	0.12280		
464903.41	3807221.91	0.12008	464923.41
3807221.91	0.11820		
464503.41	3807241.91	0.17751	464523.41
3807241.91	0.17554		
464543.41	3807241.91	0.17319	464563.41
3807241.91	0.17068		
464583.41	3807241.91	0.16897	464603.41
3807241.91	0.16547		
464623.41	3807241.91	0.16140	464643.41
3807241.91	0.15930		
464663.41	3807241.91	0.15645	464683.41
3807241.91	0.15315		
464703.41	3807241.91	0.14984	464723.41
3807241.91	0.14563		
464743.41	3807241.91	0.14132	464763.41
3807241.91	0.13856		
464783.41	3807241.91	0.13594	464803.41
3807241.91	0.13355		
464823.41	3807241.91	0.13162	464843.41
3807241.91	0.12990		
464863.41	3807241.91	0.12804	464883.41
3807241.91	0.12469		
464903.41	3807241.91	0.12315	464923.41
3807241.91	0.12256		
464503.41	3807261.91	0.18085	464523.41
3807261.91	0.17976		
464543.41	3807261.91	0.17674	464563.41
3807261.91	0.17304		
464583.41	3807261.91	0.17111	464603.41
3807261.91	0.16770		
464623.41	3807261.91	0.16371	464643.41
3807261.91	0.16095		
464663.41	3807261.91	0.15869	464683.41
3807261.91	0.15627		
464703.41	3807261.91	0.15141	464723.41

3807261.91	0.14704		
464743.41	3807261.91	0.14335	464763.41
3807261.91	0.14160		
464783.41	3807261.91	0.13877	464803.41
3807261.91	0.13579		
464823.41	3807261.91	0.13517	464843.41
3807261.91	0.13324		
464863.41	3807261.91	0.13046	464883.41
3807261.91	0.12713		
464903.41	3807261.91	0.12722	464923.41
3807261.91	0.12842		
464503.41	3807281.91	0.18400	464523.41
3807281.91	0.18266		
464543.41	3807281.91	0.17935	464563.41
3807281.91	0.17534		
464583.41	3807281.91	0.17319	464603.41
3807281.91	0.17071		
464623.41	3807281.91	0.16772	464643.41
3807281.91	0.16302		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 95

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464663.41	3807281.91	0.16001	464683.41
3807281.91	0.15751		

464703.41	3807281.91	0.15249	464723.41
3807281.91	0.14957		
464743.41	3807281.91	0.14749	464763.41
3807281.91	0.14342		
464783.41	3807281.91	0.14157	464803.41
3807281.91	0.14060		
464823.41	3807281.91	0.13726	464843.41
3807281.91	0.13651		
464863.41	3807281.91	0.13653	464883.41
3807281.91	0.13322		
464903.41	3807281.91	0.13364	464923.41
3807281.91	0.13520		
464503.41	3807301.91	0.18891	464523.41
3807301.91	0.18598		
464543.41	3807301.91	0.18282	464563.41
3807301.91	0.17940		
464583.41	3807301.91	0.17568	464603.41
3807301.91	0.17278		
464623.41	3807301.91	0.16987	464643.41
3807301.91	0.16455		
464663.41	3807301.91	0.16129	464683.41
3807301.91	0.15872		
464703.41	3807301.91	0.15356	464723.41
3807301.91	0.15093		
464743.41	3807301.91	0.14961	464763.41
3807301.91	0.14718		
464783.41	3807301.91	0.14496	464803.41
3807301.91	0.14260		
464823.41	3807301.91	0.13864	464843.41
3807301.91	0.13823		
464863.41	3807301.91	0.13951	464883.41
3807301.91	0.13907		
464903.41	3807301.91	0.13874	464923.41
3807301.91	0.14274		
464503.41	3807321.91	0.19373	464523.41
3807321.91	0.18921		
464543.41	3807321.91	0.18619	464563.41
3807321.91	0.18336		
464583.41	3807321.91	0.17806	464603.41
3807321.91	0.17453		
464623.41	3807321.91	0.17146	464643.41
3807321.91	0.16590		
464663.41	3807321.91	0.16253	464683.41
3807321.91	0.16001		
464703.41	3807321.91	0.15542	464723.41
3807321.91	0.15261		
464743.41	3807321.91	0.15104	464763.41
3807321.91	0.15087		
464783.41	3807321.91	0.14803	464803.41
3807321.91	0.14398		

464823.41	3807321.91	0.14100	464843.41
3807321.91	0.14116		
464863.41	3807321.91	0.14294	464883.41
3807321.91	0.14423		
464903.41	3807321.91	0.14756	464923.41
3807321.91	0.14475		
464503.41	3807341.91	0.19688	464523.41
3807341.91	0.19199		
464543.41	3807341.91	0.18867	464563.41
3807341.91	0.18558		
464583.41	3807341.91	0.17996	464603.41
3807341.91	0.17621		
464623.41	3807341.91	0.17299	464643.41
3807341.91	0.16721		
464663.41	3807341.91	0.16374	464683.41
3807341.91	0.16163		
464703.41	3807341.91	0.15961	464723.41
3807341.91	0.15599		
464743.41	3807341.91	0.15220	464763.41
3807341.91	0.15214		
464783.41	3807341.91	0.14934	464803.41
3807341.91	0.14592		
464823.41	3807341.91	0.14660	464843.41
3807341.91	0.14826		
464863.41	3807341.91	0.14986	464883.41
3807341.91	0.14740		
464903.41	3807341.91	0.14949	464923.41
3807341.91	0.14861		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 96

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

464503.41	3807361.91	0.20024		464523.41
3807361.91	0.19647			
464543.41	3807361.91	0.19236		464563.41
3807361.91	0.18773			
464583.41	3807361.91	0.18178		464603.41
3807361.91	0.17783			
464623.41	3807361.91	0.17477		464643.41
3807361.91	0.17059			
464663.41	3807361.91	0.16650		464683.41
3807361.91	0.16288			
464703.41	3807361.91	0.16147		464723.41
3807361.91	0.15928			
464743.41	3807361.91	0.15672		464763.41
3807361.91	0.15441			
464783.41	3807361.91	0.15264		464803.41
3807361.91	0.15185			
464823.41	3807361.91	0.15370		464843.41
3807361.91	0.15393			
464863.41	3807361.91	0.15802		464883.41
3807361.91	0.15467			
464903.41	3807361.91	0.15739		464923.41
3807361.91	0.16219			
464503.41	3807381.91	0.20433		464523.41
3807381.91	0.20106			
464543.41	3807381.91	0.19595		464563.41
3807381.91	0.18990			
464583.41	3807381.91	0.18425		464603.41
3807381.91	0.17993			
464623.41	3807381.91	0.17647		464643.41
3807381.91	0.17398			
464663.41	3807381.91	0.16978		464683.41
3807381.91	0.16518			
464703.41	3807381.91	0.16301		464723.41
3807381.91	0.16214			
464743.41	3807381.91	0.16154		464763.41
3807381.91	0.15788			
464783.41	3807381.91	0.15690		464803.41
3807381.91	0.15762			
464823.41	3807381.91	0.15998		464843.41
3807381.91	0.16370			
464863.41	3807381.91	0.16033		464883.41
3807381.91	0.16076			
464903.41	3807381.91	0.16755		464923.41

3807381.91	0.20850		
464503.41	3807401.91	0.21016	464523.41
3807401.91	0.20449		
464543.41	3807401.91	0.19830	464563.41
3807401.91	0.19229		
464583.41	3807401.91	0.18866	464603.41
3807401.91	0.18341		
464623.41	3807401.91	0.17789	464643.41
3807401.91	0.17537		
464663.41	3807401.91	0.17299	464683.41
3807401.91	0.17037		
464703.41	3807401.91	0.16539	464723.41
3807401.91	0.16359		
464743.41	3807401.91	0.16379	464763.41
3807401.91	0.16414		
464783.41	3807401.91	0.16200	464803.41
3807401.91	0.15952		
464823.41	3807401.91	0.16206	464843.41
3807401.91	0.16593		
464863.41	3807401.91	0.16467	464883.41
3807401.91	0.17708		
464903.41	3807401.91	0.19829	464923.41
3807401.91	0.21483		
464503.41	3807421.91	0.21382	464523.41
3807421.91	0.20730		
464543.41	3807421.91	0.20180	464563.41
3807421.91	0.19675		
464583.41	3807421.91	0.19163	464603.41
3807421.91	0.18673		
464623.41	3807421.91	0.18204	464643.41
3807421.91	0.17750		
464663.41	3807421.91	0.17481	464683.41
3807421.91	0.17315		
464703.41	3807421.91	0.17015	464723.41
3807421.91	0.16746		
464743.41	3807421.91	0.16558	464763.41
3807421.91	0.16694		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 97

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945

```

, L0005946      , L0005947      , L0005948      ,
                  L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
                  L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
464783.41	3807421.91	0.16694	464803.41
3807421.91	0.16615		
464823.41	3807421.91	0.16550	464843.41
3807421.91	0.17473		
464863.41	3807421.91	0.17971	464883.41
3807421.91	0.20353		
464903.41	3807421.91	0.22422	464923.41
3807421.91	0.22882		
464503.41	3807441.91	0.21694	464523.41
3807441.91	0.21068		
464543.41	3807441.91	0.20580	464563.41
3807441.91	0.20123		
464583.41	3807441.91	0.19484	464603.41
3807441.91	0.19028		
464623.41	3807441.91	0.18634	464643.41
3807441.91	0.18058		
464663.41	3807441.91	0.17706	464683.41
3807441.91	0.17510		
464703.41	3807441.91	0.17487	464723.41
3807441.91	0.17224		
464743.41	3807441.91	0.16904	464763.41
3807441.91	0.16936		
464783.41	3807441.91	0.17124	464803.41
3807441.91	0.17855		
464823.41	3807441.91	0.17457	464843.41
3807441.91	0.18359		
464863.41	3807441.91	0.23069	464883.41
3807441.91	0.22636		
464903.41	3807441.91	0.23313	464923.41
3807441.91	0.27089		
464503.41	3807461.91	0.22032	464523.41
3807461.91	0.21622		
464543.41	3807461.91	0.21021	464563.41
3807461.91	0.20374		

464583.41	3807461.91	0.19997	464603.41
3807461.91	0.19437		
464623.41	3807461.91	0.18851	464643.41
3807461.91	0.18592		
464663.41	3807461.91	0.18142	464683.41
3807461.91	0.17677		
464703.41	3807461.91	0.17671	464723.41
3807461.91	0.17700		
464743.41	3807461.91	0.17682	464763.41
3807461.91	0.17306		
464783.41	3807461.91	0.17363	464803.41
3807461.91	0.18120		
464823.41	3807461.91	0.17724	464843.41
3807461.91	0.18649		
464863.41	3807461.91	0.23438	464883.41
3807461.91	0.23000		
464903.41	3807461.91	0.23691	464923.41
3807461.91	0.27536		
464503.41	3807481.91	0.22325	464523.41
3807481.91	0.21941		
464543.41	3807481.91	0.21443	464563.41
3807481.91	0.20885		
464583.41	3807481.91	0.20337	464603.41
3807481.91	0.19835		
464623.41	3807481.91	0.19372	464643.41
3807481.91	0.18939		
464663.41	3807481.91	0.18571	464683.41
3807481.91	0.18257		
464703.41	3807481.91	0.17978	464723.41
3807481.91	0.17976		
464743.41	3807481.91	0.18041	464763.41
3807481.91	0.17577		
464783.41	3807481.91	0.17620	464803.41
3807481.91	0.18401		
464823.41	3807481.91	0.18010	464843.41
3807481.91	0.18957		
464863.41	3807481.91	0.24010	464883.41
3807481.91	0.24508		
464903.41	3807481.91	0.27994	464923.41
3807481.91	0.27996		
464503.41	3807501.91	0.22726	464523.41
3807501.91	0.22325		
464543.41	3807501.91	0.21891	464563.41
3807501.91	0.21408		
464583.41	3807501.91	0.20717	464603.41
3807501.91	0.20270		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464623.41	3807501.91	0.19917	464643.41
3807501.91	0.19338		
464663.41	3807501.91	0.19052	464683.41
3807501.91	0.18879		
464703.41	3807501.91	0.18438	464723.41
3807501.91	0.18324		
464743.41	3807501.91	0.18317	464763.41
3807501.91	0.17998		
464783.41	3807501.91	0.18018	464803.41
3807501.91	0.18725		
464823.41	3807501.91	0.18768	464843.41
3807501.91	0.19540		
464863.41	3807501.91	0.24599	464883.41
3807501.91	0.29161		
464903.41	3807501.91	0.28978	464923.41
3807501.91	0.28466		
464503.41	3807521.91	0.23441	464523.41
3807521.91	0.23045		
464543.41	3807521.91	0.22398	464563.41
3807521.91	0.21693		
464583.41	3807521.91	0.21346	464603.41
3807521.91	0.20784		
464623.41	3807521.91	0.20196	464643.41
3807521.91	0.20038		
464663.41	3807521.91	0.19632	464683.41

3807521.91	0.19194		
464703.41	3807521.91	0.19239	464723.41
3807521.91	0.18984		
464743.41	3807521.91	0.18682	464763.41
3807521.91	0.18882		
464783.41	3807521.91	0.18743	464803.41
3807521.91	0.19287		
464823.41	3807521.91	0.20708	464843.41
3807521.91	0.23128		
464863.41	3807521.91	0.25021	464883.41
3807521.91	0.29664		
464903.41	3807521.91	0.29473	464923.41
3807521.91	0.28948		
464503.41	3807541.91	0.24163	464523.41
3807541.91	0.23506		
464543.41	3807541.91	0.22891	464563.41
3807541.91	0.22315		
464583.41	3807541.91	0.21767	464603.41
3807541.91	0.21292		
464623.41	3807541.91	0.20875	464643.41
3807541.91	0.20500		
464663.41	3807541.91	0.20206	464683.41
3807541.91	0.19970		
464703.41	3807541.91	0.19765	464723.41
3807541.91	0.19631		
464743.41	3807541.91	0.19541	464763.41
3807541.91	0.19466		
464783.41	3807541.91	0.19780	464803.41
3807541.91	0.19647		
464823.41	3807541.91	0.23069	464843.41
3807541.91	0.26190		
464863.41	3807541.91	0.26693	464883.41
3807541.91	0.30539		
464903.41	3807541.91	0.29988	464923.41
3807541.91	0.29453		
464503.41	3807561.91	0.24815	464523.41
3807561.91	0.23988		
464543.41	3807561.91	0.23426	464563.41
3807561.91	0.22964		
464583.41	3807561.91	0.22248	464603.41
3807561.91	0.21857		
464623.41	3807561.91	0.21595	464643.41
3807561.91	0.21036		
464663.41	3807561.91	0.20846	464683.41
3807561.91	0.20780		
464703.41	3807561.91	0.20370	464723.41
3807561.91	0.20343		
464743.41	3807561.91	0.21058	464763.41
3807561.91	0.20584		
464783.41	3807561.91	0.20408	464803.41

```

3807561.91      0.20689
      464823.41      3807561.91      0.23852      464843.41
3807561.91      0.27283
      464863.41      3807561.91      0.31673      464883.41
3807561.91      0.31079
^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***      16:42:19

```

PAGE 99

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE      ***
      INCLUDING SOURCE(S):      L0005936      , L0005937
, L0005938      , L0005939      , L0005940      ,
      L0005941      , L0005942      , L0005943      , L0005944      , L0005945
, L0005946      , L0005947      , L0005948      ,
      L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
      L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464903.41	3807561.91	0.30515	464923.41
3807561.91	0.29969		
464503.41	3807581.91	0.25202	464523.41
3807581.91	0.24748		
464543.41	3807581.91	0.24048	464563.41
3807581.91	0.23316		
464583.41	3807581.91	0.23063	464603.41
3807581.91	0.22535		
464623.41	3807581.91	0.21973	464643.41
3807581.91	0.21955		
464663.41	3807581.91	0.21607	464683.41
3807581.91	0.21209		
464703.41	3807581.91	0.21380	464723.41
3807581.91	0.21175		
464743.41	3807581.91	0.21440	464763.41
3807581.91	0.20970		

464783.41	3807581.91	0.21797	464803.41
3807581.91	0.25177		
464823.41	3807581.91	0.25262	464843.41
3807581.91	0.27780		
464863.41	3807581.91	0.32242	464883.41
3807581.91	0.31630		
464903.41	3807581.91	0.31049	464923.41
3807581.91	0.30489		
464503.41	3807601.91	0.26031	464523.41
3807601.91	0.25696		
464543.41	3807601.91	0.24975	464563.41
3807601.91	0.24117		
464583.41	3807601.91	0.23616	464603.41
3807601.91	0.23209		
464623.41	3807601.91	0.22870	464643.41
3807601.91	0.22571		
464663.41	3807601.91	0.22357	464683.41
3807601.91	0.22196		
464703.41	3807601.91	0.22058	464723.41
3807601.91	0.22355		
464743.41	3807601.91	0.22096	464763.41
3807601.91	0.22716		
464783.41	3807601.91	0.25173	464803.41
3807601.91	0.28291		
464823.41	3807601.91	0.28834	464843.41
3807601.91	0.32883		
464863.41	3807601.91	0.32828	464883.41
3807601.91	0.32208		
464903.41	3807601.91	0.31604	464923.41
3807601.91	0.31019		
464503.41	3807621.91	0.27048	464523.41
3807621.91	0.26630		
464543.41	3807621.91	0.25869	464563.41
3807621.91	0.24965		
464583.41	3807621.91	0.24252	464603.41
3807621.91	0.23958		
464623.41	3807621.91	0.23809	464643.41
3807621.91	0.23277		
464663.41	3807621.91	0.23182	464683.41
3807621.91	0.23923		
464703.41	3807621.91	0.23334	464723.41
3807621.91	0.23084		
464743.41	3807621.91	0.23349	464763.41
3807621.91	0.26832		
464783.41	3807621.91	0.29448	464803.41
3807621.91	0.29531		
464823.41	3807621.91	0.34781	464843.41
3807621.91	0.34098		
464863.41	3807621.91	0.33434	464883.41
3807621.91	0.32799		

464903.41	3807621.91	0.32174	464923.41
3807621.91	0.31565		
464503.41	3807641.91	0.28141	464523.41
3807641.91	0.27204		
464543.41	3807641.91	0.26244	464563.41
3807641.91	0.25431		
464583.41	3807641.91	0.25323	464603.41
3807641.91	0.24848		
464623.41	3807641.91	0.24323	464643.41
3807641.91	0.24445		
464663.41	3807641.91	0.24149	464683.41
3807641.91	0.24382		
464703.41	3807641.91	0.23796	464723.41
3807641.91	0.24669		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 100

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464743.41	3807641.91	0.28400	464763.41
3807641.91	0.28444		
464783.41	3807641.91	0.30986	464803.41
3807641.91	0.36178		
464823.41	3807641.91	0.35444	464843.41
3807641.91	0.34744		
464863.41	3807641.91	0.34066	464883.41

3807641.91	0.33396		
464903.41	3807641.91	0.32755	464923.41
3807641.91	0.32133		
464503.41	3807661.91	0.29458	464523.41
3807661.91	0.28384		
464543.41	3807661.91	0.27367	464563.41
3807661.91	0.26484		
464583.41	3807661.91	0.26056	464603.41
3807661.91	0.25730		
464623.41	3807661.91	0.25471	464643.41
3807661.91	0.25243		
464663.41	3807661.91	0.26441	464683.41
3807661.91	0.26963		
464703.41	3807661.91	0.26329	464723.41
3807661.91	0.28488		
464743.41	3807661.91	0.31935	464763.41
3807661.91	0.32492		
464783.41	3807661.91	0.37000	464803.41
3807661.91	0.36885		
464823.41	3807661.91	0.36135	464843.41
3807661.91	0.35407		
464863.41	3807661.91	0.34701	464883.41
3807661.91	0.34016		
464903.41	3807661.91	0.33350	464923.41
3807661.91	0.32703		
464503.41	3807681.91	0.30975	464523.41
3807681.91	0.29876		
464543.41	3807681.91	0.28841	464563.41
3807681.91	0.27872		
464583.41	3807681.91	0.26973	464603.41
3807681.91	0.26703		
464623.41	3807681.91	0.27489	464643.41
3807681.91	0.27350		
464663.41	3807681.91	0.28251	464683.41
3807681.91	0.34655		
464703.41	3807681.91	0.34380	464723.41
3807681.91	0.33850		
464743.41	3807681.91	0.33374	464763.41
3807681.91	0.39249		
464783.41	3807681.91	0.38419	464803.41
3807681.91	0.37612		
464823.41	3807681.91	0.36843	464843.41
3807681.91	0.36087		
464863.41	3807681.91	0.35353	464883.41
3807681.91	0.34649		
464903.41	3807681.91	0.33959	464923.41
3807681.91	0.33286		
464523.41	3807701.91	0.31530	464543.41
3807701.91	0.30472		
464563.41	3807701.91	0.29485	464583.41

3807701.91	0.28569		
464603.41	3807701.91	0.27841	464623.41
3807701.91	0.28389		
464643.41	3807701.91	0.30196	464663.41
3807701.91	0.33412		
464683.41	3807701.91	0.35894	464703.41
3807701.91	0.37049		
464723.41	3807701.91	0.41880	464743.41
3807701.91	0.40948		
464763.41	3807701.91	0.40050	464783.41
3807701.91	0.39197		
464803.41	3807701.91	0.38373	464823.41
3807701.91	0.37559		
464843.41	3807701.91	0.36782	464863.41
3807701.91	0.36030		
464883.41	3807701.91	0.35289	464903.41
3807701.91	0.34578		
464923.41	3807701.91	0.33889	464543.41
3807721.91	0.33727		
464563.41	3807721.91	0.31244	464583.41
3807721.91	0.30298		
464603.41	3807721.91	0.29424	464623.41
3807721.91	0.29014		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 101

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464643.41	3807721.91	0.33662		464663.41
3807721.91	0.37912			
464683.41	3807721.91	0.38434		464703.41
3807721.91	0.43767			
464723.41	3807721.91	0.42770		464743.41
3807721.91	0.41806			
464763.41	3807721.91	0.40888		464783.41
3807721.91	0.39998			
464803.41	3807721.91	0.39137		464823.41
3807721.91	0.38303			
464843.41	3807721.91	0.37495		464863.41
3807721.91	0.36710			
464883.41	3807721.91	0.35950		464903.41
3807721.91	0.35211			
464923.41	3807721.91	0.34493		464943.41
3807721.91	0.33794			
464963.41	3807721.91	0.33112		464983.41
3807721.91	0.32446			
465003.41	3807721.91	0.31795		465023.41
3807721.91	0.31160			
465043.41	3807721.91	0.30539		465063.41
3807721.91	0.29934			
465083.41	3807721.91	0.29345		465103.41
3807721.91	0.28773			
465123.41	3807721.91	0.28222		465143.41
3807721.91	0.27680			
465163.41	3807721.91	0.27150		465183.41
3807721.91	0.26641			
465203.41	3807721.91	0.26140		465223.41
3807721.91	0.25648			
465243.41	3807721.91	0.25168		465263.41
3807721.91	0.24700			
465283.41	3807721.91	0.24246		465303.41
3807721.91	0.23812			
465323.41	3807721.91	0.23381		465343.41
3807721.91	0.22960			
465363.41	3807721.91	0.22558		465383.41
3807721.91	0.22160			
464543.41	3807741.91	0.44806		464563.41
3807741.91	0.33740			
464583.41	3807741.91	0.32056		464603.41
3807741.91	0.30860			
464623.41	3807741.91	0.30657		464643.41
3807741.91	0.36295			
464663.41	3807741.91	0.40223		464683.41
3807741.91	0.45796			
464703.41	3807741.91	0.44719		464723.41
3807741.91	0.43684			

464743.41	3807741.91	0.42691	464763.41
3807741.91	0.41746		
464783.41	3807741.91	0.40821	464803.41
3807741.91	0.39922		
464823.41	3807741.91	0.39064	464843.41
3807741.91	0.38221		
464863.41	3807741.91	0.37401	464883.41
3807741.91	0.36623		
464903.41	3807741.91	0.35854	464923.41
3807741.91	0.35105		
464943.41	3807741.91	0.34384	464963.41
3807741.91	0.33676		
464983.41	3807741.91	0.32986	465003.41
3807741.91	0.32308		
465023.41	3807741.91	0.31649	465043.41
3807741.91	0.31011		
465063.41	3807741.91	0.30381	465083.41
3807741.91	0.29777		
465103.41	3807741.91	0.29194	465123.41
3807741.91	0.28624		
465143.41	3807741.91	0.28060	465163.41
3807741.91	0.27509		
465183.41	3807741.91	0.26983	465203.41
3807741.91	0.26473		
465223.41	3807741.91	0.25975	465243.41
3807741.91	0.25476		
465263.41	3807741.91	0.25001	465283.41
3807741.91	0.24544		
465303.41	3807741.91	0.24095	465323.41
3807741.91	0.23649		
465343.41	3807741.91	0.23213	465363.41
3807741.91	0.22798		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 102

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465383.41	3807741.91	0.22397	464543.41
3807761.91	0.55984		
464563.41	3807761.91	0.47286	464583.41
3807761.91	0.43261		
464603.41	3807761.91	0.37945	464623.41
3807761.91	0.38084		
464643.41	3807761.91	0.42494	464663.41
3807761.91	0.47970		
464683.41	3807761.91	0.46813	464703.41
3807761.91	0.45694		
464723.41	3807761.91	0.44636	464743.41
3807761.91	0.43619		
464763.41	3807761.91	0.42616	464783.41
3807761.91	0.41662		
464803.41	3807761.91	0.40741	464823.41
3807761.91	0.39834		
464843.41	3807761.91	0.38954	464863.41
3807761.91	0.38105		
464883.41	3807761.91	0.37299	464903.41
3807761.91	0.36502		
464923.41	3807761.91	0.35726	464943.41
3807761.91	0.34981		
464963.41	3807761.91	0.34248	464983.41
3807761.91	0.33535		
465003.41	3807761.91	0.32834	465023.41
3807761.91	0.32145		
465043.41	3807761.91	0.31478	465063.41
3807761.91	0.30840		
465083.41	3807761.91	0.30222	465103.41
3807761.91	0.29619		
465123.41	3807761.91	0.29018	465143.41
3807761.91	0.28442		
465163.41	3807761.91	0.27885	465183.41
3807761.91	0.27329		
465203.41	3807761.91	0.26801	465223.41
3807761.91	0.26293		
465243.41	3807761.91	0.25796	465263.41
3807761.91	0.25315		
465283.41	3807761.91	0.24844	465303.41

3807761.91	0.24370		
465323.41	3807761.91	0.23919	465343.41
3807761.91	0.23483		
465363.41	3807761.91	0.23044	465383.41
3807761.91	0.22631		
464543.41	3807781.91	0.57554	464563.41
3807781.91	0.55953		
464583.41	3807781.91	0.54443	464603.41
3807781.91	0.53004		
464623.41	3807781.91	0.51629	464643.41
3807781.91	0.50323		
464663.41	3807781.91	0.49084	464683.41
3807781.91	0.47893		
464703.41	3807781.91	0.46729	464723.41
3807781.91	0.45618		
464743.41	3807781.91	0.44552	464763.41
3807781.91	0.43523		
464783.41	3807781.91	0.42527	464803.41
3807781.91	0.41561		
464823.41	3807781.91	0.40617	464843.41
3807781.91	0.39712		
464863.41	3807781.91	0.38839	464883.41
3807781.91	0.37991		
464903.41	3807781.91	0.37168	464923.41
3807781.91	0.36368		
464943.41	3807781.91	0.35588	464963.41
3807781.91	0.34828		
464983.41	3807781.91	0.34086	465003.41
3807781.91	0.33364		
465023.41	3807781.91	0.32655	465043.41
3807781.91	0.31964		
465063.41	3807781.91	0.31309	465083.41
3807781.91	0.30666		
465103.41	3807781.91	0.30037	465123.41
3807781.91	0.29426		
465143.41	3807781.91	0.28831	465163.41
3807781.91	0.28252		
465183.41	3807781.91	0.27690	465203.41
3807781.91	0.27151		
465223.41	3807781.91	0.26629	465243.41
3807781.91	0.26111		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

PAGE 103

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: IDLE

INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3807781.91	0.25615	465283.41
3807781.91	0.25136		
465303.41	3807781.91	0.24659	465323.41
3807781.91	0.24196		
465343.41	3807781.91	0.23744	465363.41
3807781.91	0.23306		
465383.41	3807781.91	0.22887	464543.41
3807801.91	0.59087		
464563.41	3807801.91	0.57496	464583.41
3807801.91	0.55921		
464603.41	3807801.91	0.54398	464623.41
3807801.91	0.52933		
464643.41	3807801.91	0.51531	464663.41
3807801.91	0.50234		
464683.41	3807801.91	0.49002	464703.41
3807801.91	0.47791		
464723.41	3807801.91	0.46629	464743.41
3807801.91	0.45513		
464763.41	3807801.91	0.44451	464783.41
3807801.91	0.43410		
464803.41	3807801.91	0.42397	464823.41
3807801.91	0.41422		
464843.41	3807801.91	0.40489	464863.41
3807801.91	0.39586		
464883.41	3807801.91	0.38700	464903.41
3807801.91	0.37847		
464923.41	3807801.91	0.37015	464943.41
3807801.91	0.36205		
464963.41	3807801.91	0.35414	464983.41
3807801.91	0.34641		

465003.41	3807801.91	0.33899	465023.41
3807801.91	0.33170		
465043.41	3807801.91	0.32460	465063.41
3807801.91	0.31781		
465083.41	3807801.91	0.31112	465103.41
3807801.91	0.30460		
465123.41	3807801.91	0.29838	465143.41
3807801.91	0.29224		
465163.41	3807801.91	0.28625	465183.41
3807801.91	0.28061		
465203.41	3807801.91	0.27509	465223.41
3807801.91	0.26969		
465243.41	3807801.91	0.26431	465263.41
3807801.91	0.25922		
465283.41	3807801.91	0.25433	465303.41
3807801.91	0.24954		
465323.41	3807801.91	0.24477	465343.41
3807801.91	0.24012		
465363.41	3807801.91	0.23578	465383.41
3807801.91	0.23151		
464543.41	3807821.91	0.60506	464563.41
3807821.91	0.58920		
464583.41	3807821.91	0.57383	464603.41
3807821.91	0.55805		
464623.41	3807821.91	0.54256	464643.41
3807821.91	0.52795		
464663.41	3807821.91	0.51423	464683.41
3807821.91	0.50118		
464703.41	3807821.91	0.48857	464723.41
3807821.91	0.47664		
464743.41	3807821.91	0.46518	464763.41
3807821.91	0.45392		
464783.41	3807821.91	0.44303	464803.41
3807821.91	0.43254		
464823.41	3807821.91	0.42259	464843.41
3807821.91	0.41283		
464863.41	3807821.91	0.40336	464883.41
3807821.91	0.39426		
464903.41	3807821.91	0.38535	464923.41
3807821.91	0.37670		
464943.41	3807821.91	0.36824	464963.41
3807821.91	0.36005		
464983.41	3807821.91	0.35213	465003.41
3807821.91	0.34432		
465023.41	3807821.91	0.33685	465043.41
3807821.91	0.32962		
465063.41	3807821.91	0.32246	465083.41
3807821.91	0.31563		
465103.41	3807821.91	0.30903	465123.41
3807821.91	0.30245		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 104

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807821.91	0.29621	465163.41
3807821.91	0.29022		
465183.41	3807821.91	0.28443	465203.41
3807821.91	0.27866		
465223.41	3807821.91	0.27300	465243.41
3807821.91	0.26768		
465263.41	3807821.91	0.26253	465283.41
3807821.91	0.25751		
465303.41	3807821.91	0.25243	465323.41
3807821.91	0.24763		
465343.41	3807821.91	0.24304	465363.41
3807821.91	0.23861		
465383.41	3807821.91	0.23415	464543.41
3807841.91	0.61804		
464563.41	3807841.91	0.60163	464583.41
3807841.91	0.58708		
464603.41	3807841.91	0.57227	464623.41
3807841.91	0.55655		
464643.41	3807841.91	0.54133	464663.41
3807841.91	0.52683		
464683.41	3807841.91	0.51299	464723.41

3807841.91	0.48731		
464743.41	3807841.91	0.47526	464763.41
3807841.91	0.46350		
464783.41	3807841.91	0.45228	464803.41
3807841.91	0.44148		
464823.41	3807841.91	0.43103	464843.41
3807841.91	0.42092		
464863.41	3807841.91	0.41111	464883.41
3807841.91	0.40158		
464903.41	3807841.91	0.39232	464923.41
3807841.91	0.38331		
464943.41	3807841.91	0.37456	464963.41
3807841.91	0.36606		
464983.41	3807841.91	0.35782	465003.41
3807841.91	0.34984		
465023.41	3807841.91	0.34209	465043.41
3807841.91	0.33457		
465063.41	3807841.91	0.32729	465083.41
3807841.91	0.32023		
465103.41	3807841.91	0.31337	465123.41
3807841.91	0.30672		
465143.41	3807841.91	0.30027	465163.41
3807841.91	0.29403		
465183.41	3807841.91	0.28811	465203.41
3807841.91	0.28227		
465223.41	3807841.91	0.27656	465243.41
3807841.91	0.27100		
465263.41	3807841.91	0.26571	465283.41
3807841.91	0.26060		
465303.41	3807841.91	0.25553	465323.41
3807841.91	0.25070		
465343.41	3807841.91	0.24602	465363.41
3807841.91	0.24136		
465383.41	3807841.91	0.23684	464503.41
3807861.91	0.67116		
464523.41	3807861.91	0.65007	464543.41
3807861.91	0.63086		
464563.41	3807861.91	0.61354	464583.41
3807861.91	0.59925		
464603.41	3807861.91	0.58509	464723.41
3807861.91	0.49823		
464743.41	3807861.91	0.48554	464763.41
3807861.91	0.47331		
464783.41	3807861.91	0.46174	464803.41
3807861.91	0.45060		
464823.41	3807861.91	0.43966	464843.41
3807861.91	0.42915		
464863.41	3807861.91	0.41894	464883.41
3807861.91	0.40903		
464903.41	3807861.91	0.39938	464923.41

```

3807861.91      0.38998
      464943.41      3807861.91      0.38097      464963.41
3807861.91      0.37216
      464983.41      3807861.91      0.36359      465003.41
3807861.91      0.35543
      465023.41      3807861.91      0.34741      465043.41
3807861.91      0.33962
      465063.41      3807861.91      0.33221      465083.41
3807861.91      0.32491
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 105

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***
      INCLUDING SOURCE(S):      L0005936      , L0005937
, L0005938      , L0005939      , L0005940      ,
      L0005941      , L0005942      , L0005943      , L0005944      , L0005945
, L0005946      , L0005947      , L0005948      ,
      L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
      L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465103.41	3807861.91	0.31780	465123.41
3807861.91	0.31107		
465143.41	3807861.91	0.30441	465163.41
3807861.91	0.29793		
465183.41	3807861.91	0.29181	465203.41
3807861.91	0.28592		
465223.41	3807861.91	0.28018	465243.41
3807861.91	0.27441		
465263.41	3807861.91	0.26898	465283.41
3807861.91	0.26379		
465303.41	3807861.91	0.25870	465323.41
3807861.91	0.25380		

465343.41	3807861.91	0.24902	465363.41
3807861.91	0.24419		
465383.41	3807861.91	0.23961	464503.41
3807881.91	0.68846		
464523.41	3807881.91	0.66626	464543.41
3807881.91	0.64619		
464723.41	3807881.91	0.50929	464743.41
3807881.91	0.49608		
464763.41	3807881.91	0.48335	464783.41
3807881.91	0.47132		
464803.41	3807881.91	0.45979	464823.41
3807881.91	0.44853		
464843.41	3807881.91	0.43754	464863.41
3807881.91	0.42690		
464883.41	3807881.91	0.41653	464903.41
3807881.91	0.40653		
464923.41	3807881.91	0.39688	464943.41
3807881.91	0.38740		
464963.41	3807881.91	0.37835	464983.41
3807881.91	0.36963		
465003.41	3807881.91	0.36101	465023.41
3807881.91	0.35282		
465043.41	3807881.91	0.34493	465063.41
3807881.91	0.33709		
465083.41	3807881.91	0.32966	465103.41
3807881.91	0.32251		
465123.41	3807881.91	0.31537	465143.41
3807881.91	0.30863		
465163.41	3807881.91	0.30214	465183.41
3807881.91	0.29564		
465203.41	3807881.91	0.28955	465223.41
3807881.91	0.28373		
465243.41	3807881.91	0.27806	465263.41
3807881.91	0.27259		
465283.41	3807881.91	0.26725	465303.41
3807881.91	0.26184		
465323.41	3807881.91	0.25679	465343.41
3807881.91	0.25196		
465363.41	3807881.91	0.24724	465383.41
3807881.91	0.24251		
464723.41	3807901.91	0.52100	464743.41
3807901.91	0.50692		
464763.41	3807901.91	0.49388	464783.41
3807901.91	0.48128		
464803.41	3807901.91	0.46915	464823.41
3807901.91	0.45748		
464843.41	3807901.91	0.44606	464863.41
3807901.91	0.43503		
464883.41	3807901.91	0.42426	464903.41
3807901.91	0.41382		

464923.41	3807901.91	0.40377	464943.41
3807901.91	0.39407		
464963.41	3807901.91	0.38480	464983.41
3807901.91	0.37583		
465003.41	3807901.91	0.36691	465023.41
3807901.91	0.35836		
465043.41	3807901.91	0.35016	465063.41
3807901.91	0.34223		
465083.41	3807901.91	0.33456	465103.41
3807901.91	0.32713		
465123.41	3807901.91	0.31995	465143.41
3807901.91	0.31299		
465163.41	3807901.91	0.30625	465183.41
3807901.91	0.29974		
465203.41	3807901.91	0.29356	465223.41
3807901.91	0.28760		
465243.41	3807901.91	0.28167	465263.41
3807901.91	0.27604		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 106

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465283.41	3807901.91	0.27063	465303.41
3807901.91	0.26524		
465323.41	3807901.91	0.26001	465343.41

3807901.91	0.25496		
465363.41	3807901.91	0.25021	465383.41
3807901.91	0.24549		
464723.41	3807921.91	0.53315	464743.41
3807921.91	0.51826		
464763.41	3807921.91	0.50469	464783.41
3807921.91	0.49152		
464803.41	3807921.91	0.47882	464823.41
3807921.91	0.46664		
464843.41	3807921.91	0.45479	464863.41
3807921.91	0.44334		
464883.41	3807921.91	0.43213	464903.41
3807921.91	0.42126		
464923.41	3807921.91	0.41082	464943.41
3807921.91	0.40096		
464963.41	3807921.91	0.39140	464983.41
3807921.91	0.38211		
465003.41	3807921.91	0.37291	465023.41
3807921.91	0.36405		
465043.41	3807921.91	0.35554	465063.41
3807921.91	0.34751		
465083.41	3807921.91	0.33958	465103.41
3807921.91	0.33189		
465123.41	3807921.91	0.32465	465143.41
3807921.91	0.31748		
465163.41	3807921.91	0.31051	465183.41
3807921.91	0.30397		
465203.41	3807921.91	0.29768	465223.41
3807921.91	0.29157		
465243.41	3807921.91	0.28541	465263.41
3807921.91	0.27959		
465283.41	3807921.91	0.27405	465303.41
3807921.91	0.26873		
465323.41	3807921.91	0.26339	465343.41
3807921.91	0.25816		
465363.41	3807921.91	0.25333	465383.41
3807921.91	0.24860		
464723.41	3807941.91	0.54507	464743.41
3807941.91	0.53026		
464763.41	3807941.91	0.51570	464783.41
3807941.91	0.50199		
464803.41	3807941.91	0.48882	464823.41
3807941.91	0.47604		
464843.41	3807941.91	0.46371	464863.41
3807941.91	0.45168		
464883.41	3807941.91	0.43997	464903.41
3807941.91	0.42886		
464923.41	3807941.91	0.41827	464943.41
3807941.91	0.40809		
464963.41	3807941.91	0.39808	464983.41

3807941.91	0.38831		
465003.41	3807941.91	0.37880	465023.41
3807941.91	0.36986		
465043.41	3807941.91	0.36129	465063.41
3807941.91	0.35277		
465083.41	3807941.91	0.34474	465103.41
3807941.91	0.33703		
465123.41	3807941.91	0.32933	465143.41
3807941.91	0.32209		
465163.41	3807941.91	0.31514	465183.41
3807941.91	0.30817		
465203.41	3807941.91	0.30167	465223.41
3807941.91	0.29549		
465243.41	3807941.91	0.28946	465263.41
3807941.91	0.28343		
465283.41	3807941.91	0.27756	465303.41
3807941.91	0.27216		
465323.41	3807941.91	0.26688	465343.41
3807941.91	0.26176		
465363.41	3807941.91	0.25683	465383.41
3807941.91	0.25185		
465403.41	3807941.91	0.24697	465423.41
3807941.91	0.24244		
465443.41	3807941.91	0.23807	465463.41
3807941.91	0.23391		
465483.41	3807941.91	0.22976	465503.41
3807941.91	0.22575		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 107

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)		Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)		CONC		

	465523.41	3807941.91	0.22183	465543.41
3807941.91		0.21781		
	465563.41	3807941.91	0.21404	465583.41
3807941.91		0.21045		
	465603.41	3807941.91	0.20699	465623.41
3807941.91		0.20347		
	465643.41	3807941.91	0.19999	465663.41
3807941.91		0.19677		
	465683.41	3807941.91	0.19350	465703.41
3807941.91		0.19029		
	464723.41	3807961.91	0.55585	464743.41
3807961.91		0.54184		
	464763.41	3807961.91	0.52711	464783.41
3807961.91		0.51272		
	464803.41	3807961.91	0.49896	464823.41
3807961.91		0.48566		
	464843.41	3807961.91	0.47282	464863.41
3807961.91		0.46040		
	464883.41	3807961.91	0.44828	464903.41
3807961.91		0.43684		
	464923.41	3807961.91	0.42590	464943.41
3807961.91		0.41521		
	464963.41	3807961.91	0.40493	464983.41
3807961.91		0.39499		
	465003.41	3807961.91	0.38521	465023.41
3807961.91		0.37605		
	465043.41	3807961.91	0.36730	465063.41
3807961.91		0.35849		
	465083.41	3807961.91	0.35011	465103.41
3807961.91		0.34210		
	465123.41	3807961.91	0.33438	465143.41
3807961.91		0.32691		
	465163.41	3807961.91	0.31970	465183.41
3807961.91		0.31274		
	465203.41	3807961.91	0.30599	465223.41
3807961.91		0.29951		
	465243.41	3807961.91	0.29342	465263.41
3807961.91		0.28740		
	465283.41	3807961.91	0.28155	465303.41
3807961.91		0.27603		
	465323.41	3807961.91	0.27055	465343.41
3807961.91		0.26521		
	465363.41	3807961.91	0.26020	465383.41
3807961.91		0.25523		

465403.41	3807961.91	0.25035	465423.41
3807961.91	0.24560		
465443.41	3807961.91	0.24111	465463.41
3807961.91	0.23705		
465483.41	3807961.91	0.23270	465503.41
3807961.91	0.22860		
465523.41	3807961.91	0.22463	465543.41
3807961.91	0.22065		
465563.41	3807961.91	0.21689	465583.41
3807961.91	0.21325		
465603.41	3807961.91	0.20958	465623.41
3807961.91	0.20601		
465643.41	3807961.91	0.20255	465663.41
3807961.91	0.19917		
465683.41	3807961.91	0.19588	465703.41
3807961.91	0.19271		
464743.41	3807981.91	0.55284	464763.41
3807981.91	0.53842		
464783.41	3807981.91	0.52371	464803.41
3807981.91	0.50939		
464823.41	3807981.91	0.49540	464843.41
3807981.91	0.48209		
464863.41	3807981.91	0.46936	464883.41
3807981.91	0.45682		
464903.41	3807981.91	0.44499	464923.41
3807981.91	0.43370		
464943.41	3807981.91	0.42257	464963.41
3807981.91	0.41200		
464983.41	3807981.91	0.40188	465003.41
3807981.91	0.39191		
465023.41	3807981.91	0.38247	465043.41
3807981.91	0.37342		
465063.41	3807981.91	0.36447	465083.41
3807981.91	0.35577		
465103.41	3807981.91	0.34741	465123.41
3807981.91	0.33973		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 108

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,

```

          L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
          L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807981.91	0.33201	465163.41
3807981.91	0.32446		
465183.41	3807981.91	0.31748	465203.41
3807981.91	0.31054		
465223.41	3807981.91	0.30381	465243.41
3807981.91	0.29761		
465263.41	3807981.91	0.29161	465283.41
3807981.91	0.28578		
465303.41	3807981.91	0.28008	465323.41
3807981.91	0.27438		
465343.41	3807981.91	0.26884	465363.41
3807981.91	0.26366		
465383.41	3807981.91	0.25869	465403.41
3807981.91	0.25385		
465423.41	3807981.91	0.24891	465443.41
3807981.91	0.24431		
465463.41	3807981.91	0.24031	465483.41
3807981.91	0.23579		
465503.41	3807981.91	0.23158	465523.41
3807981.91	0.22757		
465543.41	3807981.91	0.22361	465563.41
3807981.91	0.21981		
465583.41	3807981.91	0.21608	465603.41
3807981.91	0.21226		
465623.41	3807981.91	0.20867	465643.41
3807981.91	0.20520		
465663.41	3807981.91	0.20168	465683.41
3807981.91	0.19840		
465703.41	3807981.91	0.19528	464763.41
3808001.91	0.54919		
464783.41	3808001.91	0.53454	464803.41
3808001.91	0.51992		
464823.41	3808001.91	0.50528	464843.41
3808001.91	0.49151		
464863.41	3808001.91	0.47834	464883.41

3808001.91	0.46532		
464903.41	3808001.91	0.45313	464923.41
3808001.91	0.44154		
464943.41	3808001.91	0.43035	464963.41
3808001.91	0.41937		
464983.41	3808001.91	0.40875	465003.41
3808001.91	0.39881		
465023.41	3808001.91	0.38900	465043.41
3808001.91	0.37951		
465063.41	3808001.91	0.37064	465083.41
3808001.91	0.36182		
465103.41	3808001.91	0.35325	465123.41
3808001.91	0.34539		
465143.41	3808001.91	0.33749	465163.41
3808001.91	0.32971		
465183.41	3808001.91	0.32223	465203.41
3808001.91	0.31526		
465223.41	3808001.91	0.30865	465243.41
3808001.91	0.30232		
465263.41	3808001.91	0.29618	465283.41
3808001.91	0.29019		
465303.41	3808001.91	0.28407	465323.41
3808001.91	0.27836		
465343.41	3808001.91	0.27289	465363.41
3808001.91	0.26733		
465383.41	3808001.91	0.26219	465403.41
3808001.91	0.25730		
465423.41	3808001.91	0.25252	465443.41
3808001.91	0.24792		
465463.41	3808001.91	0.24354	465483.41
3808001.91	0.23916		
465503.41	3808001.91	0.23494	465523.41
3808001.91	0.23081		
465543.41	3808001.91	0.22656	465563.41
3808001.91	0.22262		
465583.41	3808001.91	0.21888	465603.41
3808001.91	0.21519		
465623.41	3808001.91	0.21146	465643.41
3808001.91	0.20780		
465663.41	3808001.91	0.20441	465683.41
3808001.91	0.20114		
465703.41	3808001.91	0.19792	464763.41
3808021.91	0.55886		
464783.41	3808021.91	0.54436	464803.41
3808021.91	0.52991		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 , L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 , L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 , L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3808021.91	0.51525	464843.41
3808021.91	0.50119		
464863.41	3808021.91	0.48763	464883.41
3808021.91	0.47444		
464903.41	3808021.91	0.46175	464923.41
3808021.91	0.44960		
464943.41	3808021.91	0.43816	464963.41
3808021.91	0.42700		
464983.41	3808021.91	0.41620	465003.41
3808021.91	0.40578		
465023.41	3808021.91	0.39578	465043.41
3808021.91	0.38616		
465063.41	3808021.91	0.37687	465083.41
3808021.91	0.36793		
465103.41	3808021.91	0.35933	465123.41
3808021.91	0.35102		
465143.41	3808021.91	0.34301	465163.41
3808021.91	0.33526		
465183.41	3808021.91	0.32754	465203.41
3808021.91	0.32043		
465223.41	3808021.91	0.31369	465243.41
3808021.91	0.30695		
465263.41	3808021.91	0.30061	465283.41
3808021.91	0.29453		
465303.41	3808021.91	0.28846	465323.41
3808021.91	0.28257		

465343.41	3808021.91	0.27687	465363.41
3808021.91	0.27136		
465383.41	3808021.91	0.26617	465403.41
3808021.91	0.26116		
465423.41	3808021.91	0.25613	465443.41
3808021.91	0.25139		
465463.41	3808021.91	0.24712	465483.41
3808021.91	0.24252		
465503.41	3808021.91	0.23818	465523.41
3808021.91	0.23399		
465543.41	3808021.91	0.22979	465563.41
3808021.91	0.22570		
465583.41	3808021.91	0.22175	465603.41
3808021.91	0.21805		
465623.41	3808021.91	0.21434	465643.41
3808021.91	0.21071		
465663.41	3808021.91	0.20730	465683.41
3808021.91	0.20388		
465703.41	3808021.91	0.20049	464783.41
3808041.91	0.55382		
464803.41	3808041.91	0.53965	464823.41
3808041.91	0.52529		
464843.41	3808041.91	0.51108	464863.41
3808041.91	0.49725		
464883.41	3808041.91	0.48389	464903.41
3808041.91	0.47078		
464923.41	3808041.91	0.45812	464943.41
3808041.91	0.44635		
464963.41	3808041.91	0.43505	464983.41
3808041.91	0.42410		
465003.41	3808041.91	0.41314	465023.41
3808041.91	0.40287		
465043.41	3808041.91	0.39309	465063.41
3808041.91	0.38341		
465083.41	3808041.91	0.37429	465103.41
3808041.91	0.36557		
465123.41	3808041.91	0.35691	465143.41
3808041.91	0.34875		
465163.41	3808041.91	0.34095	465183.41
3808041.91	0.33316		
465203.41	3808041.91	0.32585	465223.41
3808041.91	0.31884		
465243.41	3808041.91	0.31181	465263.41
3808041.91	0.30522		
465283.41	3808041.91	0.29897	465303.41
3808041.91	0.29300		
465323.41	3808041.91	0.28697	465343.41
3808041.91	0.28106		
465363.41	3808041.91	0.27557	465383.41
3808041.91	0.27030		

465403.41	3808041.91	0.26517	465423.41
3808041.91	0.25991		
465443.41	3808041.91	0.25504	465463.41
3808041.91	0.25084		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 110

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465483.41	3808041.91	0.24603	465503.41
3808041.91	0.24152		
465523.41	3808041.91	0.23723	465543.41
3808041.91	0.23312		
465563.41	3808041.91	0.22893	465583.41
3808041.91	0.22482		
465603.41	3808041.91	0.22104	465623.41
3808041.91	0.21738		
465643.41	3808041.91	0.21379	465663.41
3808041.91	0.21025		
465683.41	3808041.91	0.20668	465703.41
3808041.91	0.20318		
464803.41	3808061.91	0.54977	464823.41
3808061.91	0.53518		
464843.41	3808061.91	0.52101	464863.41
3808061.91	0.50719		
464883.41	3808061.91	0.49343	464903.41

3808061.91	0.48018		
464923.41	3808061.91	0.46747	464943.41
3808061.91	0.45534		
464963.41	3808061.91	0.44370	464983.41
3808061.91	0.43244		
465003.41	3808061.91	0.42117	465023.41
3808061.91	0.41036		
465043.41	3808061.91	0.40006	465063.41
3808061.91	0.39050		
465083.41	3808061.91	0.38101	465103.41
3808061.91	0.37182		
465123.41	3808061.91	0.36331	465143.41
3808061.91	0.35483		
465163.41	3808061.91	0.34659	465183.41
3808061.91	0.33898		
465203.41	3808061.91	0.33136	465223.41
3808061.91	0.32395		
465243.41	3808061.91	0.31712	465263.41
3808061.91	0.31025		
465283.41	3808061.91	0.30358	465303.41
3808061.91	0.29749		
465323.41	3808061.91	0.29154	465343.41
3808061.91	0.28571		
465363.41	3808061.91	0.27977	465383.41
3808061.91	0.27430		
465403.41	3808061.91	0.26912	465423.41
3808061.91	0.26404		
465443.41	3808061.91	0.25915	465463.41
3808061.91	0.25451		
465483.41	3808061.91	0.24986	465503.41
3808061.91	0.24516		
465523.41	3808061.91	0.24056	465543.41
3808061.91	0.23637		
465563.41	3808061.91	0.23227	465583.41
3808061.91	0.22826		
465603.41	3808061.91	0.22441	465623.41
3808061.91	0.22066		
465643.41	3808061.91	0.21696	465663.41
3808061.91	0.21313		
465683.41	3808061.91	0.20956	465703.41
3808061.91	0.20617		
464823.41	3808081.91	0.54607	464843.41
3808081.91	0.53131		
464863.41	3808081.91	0.51697	464883.41
3808081.91	0.50324		
464903.41	3808081.91	0.49005	464923.41
3808081.91	0.47730		
464943.41	3808081.91	0.46480	464963.41
3808081.91	0.45261		
464983.41	3808081.91	0.44082	465003.41

3808081.91	0.42951		
465023.41	3808081.91	0.41845	465043.41
3808081.91	0.40781		
465063.41	3808081.91	0.39806	465083.41
3808081.91	0.38830		
465103.41	3808081.91	0.37875	465123.41
3808081.91	0.36978		
465143.41	3808081.91	0.36116	465163.41
3808081.91	0.35286		
465183.41	3808081.91	0.34483	465203.41
3808081.91	0.33711		
465223.41	3808081.91	0.32966	465243.41
3808081.91	0.32244		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 111

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3808081.91	0.31549	465283.41
3808081.91	0.30882		
465303.41	3808081.91	0.30258	465323.41
3808081.91	0.29636		
465343.41	3808081.91	0.29027	465363.41
3808081.91	0.28439		
465383.41	3808081.91	0.27885	465403.41
3808081.91	0.27352		

465423.41	3808081.91	0.26814	465443.41
3808081.91	0.26309		
465463.41	3808081.91	0.25857	465483.41
3808081.91	0.25366		
465503.41	3808081.91	0.24891	465523.41
3808081.91	0.24430		
465543.41	3808081.91	0.23981	465563.41
3808081.91	0.23559		
465583.41	3808081.91	0.23155	465603.41
3808081.91	0.22762		
465623.41	3808081.91	0.22379	465643.41
3808081.91	0.22004		
465663.41	3808081.91	0.21626	465683.41
3808081.91	0.21268		
465703.41	3808081.91	0.20922	464843.41
3808101.91	0.54211		
464863.41	3808101.91	0.52741	464883.41
3808101.91	0.51375		
464903.41	3808101.91	0.50045	464923.41
3808101.91	0.48748		
464943.41	3808101.91	0.47459	464963.41
3808101.91	0.46191		
464983.41	3808101.91	0.44965	465003.41
3808101.91	0.43819		
465023.41	3808101.91	0.42693	465043.41
3808101.91	0.41606		
465063.41	3808101.91	0.40592	465083.41
3808101.91	0.39584		
465103.41	3808101.91	0.38599	465123.41
3808101.91	0.37661		
465143.41	3808101.91	0.36790	465163.41
3808101.91	0.35957		
465183.41	3808101.91	0.35104	465203.41
3808101.91	0.34313		
465223.41	3808101.91	0.33560	465243.41
3808101.91	0.32804		
465263.41	3808101.91	0.32104	465283.41
3808101.91	0.31441		
465303.41	3808101.91	0.30791	465323.41
3808101.91	0.30140		
465343.41	3808101.91	0.29506	465363.41
3808101.91	0.28919		
465383.41	3808101.91	0.28355	465403.41
3808101.91	0.27807		
465423.41	3808101.91	0.27244	465443.41
3808101.91	0.26723		
465463.41	3808101.91	0.26276	465483.41
3808101.91	0.25762		
465503.41	3808101.91	0.25280	465523.41
3808101.91	0.24817		

465543.41	3808101.91	0.24346	465563.41
3808101.91	0.23911		
465583.41	3808101.91	0.23498	465603.41
3808101.91	0.23096		
465623.41	3808101.91	0.22705	465643.41
3808101.91	0.22324		
465663.41	3808101.91	0.21947	465683.41
3808101.91	0.21585		
465703.41	3808101.91	0.21229	464863.41
3808121.91	0.53972		
464883.41	3808121.91	0.52559	464903.41
3808121.91	0.51148		
464923.41	3808121.91	0.49772	464943.41
3808121.91	0.48445		
464963.41	3808121.91	0.47167	464983.41
3808121.91	0.45931		
465003.41	3808121.91	0.44705	465023.41
3808121.91	0.43561		
465043.41	3808121.91	0.42471	465063.41
3808121.91	0.41383		
465083.41	3808121.91	0.40332	465103.41
3808121.91	0.39325		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 112

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -				
465123.41	3808121.91	0.38404		465143.41
3808121.91	0.37523			
465163.41	3808121.91	0.36667		465183.41
3808121.91	0.35790			
465203.41	3808121.91	0.34950		465223.41
3808121.91	0.34149			
465243.41	3808121.91	0.33414		465263.41
3808121.91	0.32708			
465283.41	3808121.91	0.32020		465303.41
3808121.91	0.31315			
465323.41	3808121.91	0.30661		465343.41
3808121.91	0.30035			
465363.41	3808121.91	0.29396		465383.41
3808121.91	0.28810			
465403.41	3808121.91	0.28253		465423.41
3808121.91	0.27709			
465443.41	3808121.91	0.27186		465463.41
3808121.91	0.26689			
465483.41	3808121.91	0.26191		465503.41
3808121.91	0.25687			
465523.41	3808121.91	0.25195		465543.41
3808121.91	0.24740			
465563.41	3808121.91	0.24303		465583.41
3808121.91	0.23880			
465603.41	3808121.91	0.23469		465623.41
3808121.91	0.23068			
465643.41	3808121.91	0.22674		465663.41
3808121.91	0.22264			
465683.41	3808121.91	0.21887		465703.41
3808121.91	0.21528			
464883.41	3808141.91	0.53720		464903.41
3808141.91	0.52307			
464923.41	3808141.91	0.50912		464943.41
3808141.91	0.49541			
464963.41	3808141.91	0.48228		464983.41
3808141.91	0.46958			
465003.41	3808141.91	0.45684		465023.41
3808141.91	0.44507			
465043.41	3808141.91	0.43389		465063.41
3808141.91	0.42258			
465083.41	3808141.91	0.41171		465103.41
3808141.91	0.40136			
465123.41	3808141.91	0.39197		465143.41
3808141.91	0.38269			
465163.41	3808141.91	0.37366		465183.41
3808141.91	0.36497			
465203.41	3808141.91	0.35639		465223.41
3808141.91	0.34810			
465243.41	3808141.91	0.34062		465263.41

3808141.91	0.33317		
465283.41	3808141.91	0.32590	465303.41
3808141.91	0.31888		
465323.41	3808141.91	0.31209	465343.41
3808141.91	0.30552		
465363.41	3808141.91	0.29918	465383.41
3808141.91	0.29322		
465403.41	3808141.91	0.28748	465423.41
3808141.91	0.28170		
465443.41	3808141.91	0.27627	465463.41
3808141.91	0.27110		
465483.41	3808141.91	0.26607	465503.41
3808141.91	0.26104		
465523.41	3808141.91	0.25610	465543.41
3808141.91	0.25128		
465563.41	3808141.91	0.24676	465583.41
3808141.91	0.24243		
465603.41	3808141.91	0.23822	465623.41
3808141.91	0.23413		
465643.41	3808141.91	0.23011	465663.41
3808141.91	0.22606		
465683.41	3808141.91	0.22211	465703.41
3808141.91	0.21830		
464883.41	3808161.91	0.54918	464903.41
3808161.91	0.53517		
464923.41	3808161.91	0.52109	464943.41
3808161.91	0.50691		
464963.41	3808161.91	0.49334	464983.41
3808161.91	0.48024		
465003.41	3808161.91	0.46722	465023.41
3808161.91	0.45501		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 113

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465043.41	3808161.91	0.44335	465063.41
3808161.91	0.43168		
465083.41	3808161.91	0.42055	465103.41
3808161.91	0.40998		
465123.41	3808161.91	0.40016	465143.41
3808161.91	0.39042		
465163.41	3808161.91	0.38099	465183.41
3808161.91	0.37224		
465203.41	3808161.91	0.36353	465223.41
3808161.91	0.35509		
465243.41	3808161.91	0.34726	465263.41
3808161.91	0.33944		
465283.41	3808161.91	0.33185	465303.41
3808161.91	0.32482		
465323.41	3808161.91	0.31777	465343.41
3808161.91	0.31091		
465363.41	3808161.91	0.30456	465383.41
3808161.91	0.29849		
465403.41	3808161.91	0.29257	465423.41
3808161.91	0.28649		
465443.41	3808161.91	0.28087	465463.41
3808161.91	0.27555		
465483.41	3808161.91	0.27030	465503.41
3808161.91	0.26528		
465523.41	3808161.91	0.26036	465543.41
3808161.91	0.25529		
465563.41	3808161.91	0.25061	465583.41
3808161.91	0.24618		
465603.41	3808161.91	0.24187	465623.41
3808161.91	0.23763		
465643.41	3808161.91	0.23349	465663.41
3808161.91	0.22953		
465683.41	3808161.91	0.22547	465703.41
3808161.91	0.22147		
464903.41	3808181.91	0.54761	464923.41
3808181.91	0.53313		
464943.41	3808181.91	0.51848	464963.41
3808181.91	0.50445		
464983.41	3808181.91	0.49100	465003.41
3808181.91	0.47803		

465023.41	3808181.91	0.46523	465043.41
3808181.91	0.45276		
465063.41	3808181.91	0.44069	465083.41
3808181.91	0.42953		
465103.41	3808181.91	0.41894	465123.41
3808181.91	0.40830		
465143.41	3808181.91	0.39843	465163.41
3808181.91	0.38902		
465183.41	3808181.91	0.37952	465203.41
3808181.91	0.37072		
465223.41	3808181.91	0.36231	465243.41
3808181.91	0.35380		
465263.41	3808181.91	0.34591	465283.41
3808181.91	0.33837		
465303.41	3808181.91	0.33070	465323.41
3808181.91	0.32360		
465343.41	3808181.91	0.31681	465363.41
3808181.91	0.30989		
465383.41	3808181.91	0.30353	465403.41
3808181.91	0.29752		
465423.41	3808181.91	0.29163	465443.41
3808181.91	0.28598		
465463.41	3808181.91	0.28044	465483.41
3808181.91	0.27472		
465503.41	3808181.91	0.26946	465523.41
3808181.91	0.26449		
465543.41	3808181.91	0.25959	465563.41
3808181.91	0.25489		
465583.41	3808181.91	0.25034	465603.41
3808181.91	0.24591		
465623.41	3808181.91	0.24137	465643.41
3808181.91	0.23691		
465663.41	3808181.91	0.23286	465683.41
3808181.91	0.22888		
465703.41	3808181.91	0.22494	464923.41
3808201.91	0.54501		
464943.41	3808201.91	0.53041	464963.41
3808201.91	0.51607		
464983.41	3808201.91	0.50218	465003.41
3808201.91	0.48888		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 114

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***

			INCLUDING SOURCE(S):	L0005936	, L0005937
, L0005938	, L0005939	, L0005940	,		
	L0005941	, L0005942	, L0005943	, L0005944	, L0005945
, L0005946	, L0005947	, L0005948	,		
	L0005949	, L0005950	, L0005951	, L0005952	, L0005953
, L0005954	, L0005955	, L0005956	,		
	L0005957	, L0005958	, L0005959	, L0005960	, L0005961
, L0005962	, L0005963	, . . .	,		

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
465023.41	3808201.91	0.47558	465043.41
3808201.91	0.46264		
465063.41	3808201.91	0.45059	465083.41
3808201.91	0.43898		
465103.41	3808201.91	0.42782	465123.41
3808201.91	0.41714		
465143.41	3808201.91	0.40684	465163.41
3808201.91	0.39693		
465183.41	3808201.91	0.38742	465203.41
3808201.91	0.37824		
465223.41	3808201.91	0.36939	465243.41
3808201.91	0.36088		
465263.41	3808201.91	0.35266	465283.41
3808201.91	0.34472		
465303.41	3808201.91	0.33708	465323.41
3808201.91	0.32968		
465343.41	3808201.91	0.32254	465363.41
3808201.91	0.31565		
465383.41	3808201.91	0.30897	465403.41
3808201.91	0.30255		
465423.41	3808201.91	0.29658	465443.41
3808201.91	0.29080		
465463.41	3808201.91	0.28516	465483.41
3808201.91	0.27948		
465503.41	3808201.91	0.27414	465523.41
3808201.91	0.26903		
465543.41	3808201.91	0.26408	465563.41
3808201.91	0.25910		
465583.41	3808201.91	0.25424	465603.41
3808201.91	0.24971		
465623.41	3808201.91	0.24516	465643.41

3808201.91	0.24072		
465663.41	3808201.91	0.23656	465683.41
3808201.91	0.23238		
465703.41	3808201.91	0.22825	464943.41
3808221.91	0.54281		
464963.41	3808221.91	0.52820	464983.41
3808221.91	0.51382		
465003.41	3808221.91	0.50004	465023.41
3808221.91	0.48638		
465043.41	3808221.91	0.47316	465063.41
3808221.91	0.46090		
465083.41	3808221.91	0.44868	465103.41
3808221.91	0.43689		
465123.41	3808221.91	0.42623	465143.41
3808221.91	0.41555		
465163.41	3808221.91	0.40517	465183.41
3808221.91	0.39556		
465203.41	3808221.91	0.38600	465223.41
3808221.91	0.37674		
465243.41	3808221.91	0.36816	465263.41
3808221.91	0.35961		
465283.41	3808221.91	0.35130	465303.41
3808221.91	0.34362		
465323.41	3808221.91	0.33592	465343.41
3808221.91	0.32845		
465363.41	3808221.91	0.32153	465383.41
3808221.91	0.31459		
465403.41	3808221.91	0.30785	465423.41
3808221.91	0.30172		
465443.41	3808221.91	0.29578	465463.41
3808221.91	0.29002		
465483.41	3808221.91	0.28444	465503.41
3808221.91	0.27896		
465523.41	3808221.91	0.27363	465543.41
3808221.91	0.26854		
465563.41	3808221.91	0.26334	465583.41
3808221.91	0.25824		
465603.41	3808221.91	0.25359	465623.41
3808221.91	0.24902		
465643.41	3808221.91	0.24457	465663.41
3808221.91	0.24030		
465683.41	3808221.91	0.23593	465703.41
3808221.91	0.23163		
464963.41	3808241.91	0.54082	464983.41
3808241.91	0.52591		
465003.41	3808241.91	0.51164	465023.41
3808241.91	0.49787		
465043.41	3808241.91	0.48455	465063.41
3808241.91	0.47124		

▲ *** AERMOD - VERSION 19191 ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 115

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 , L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 , L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 , L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465083.41	3808241.91	0.45840	465103.41
3808241.91	0.44618		
465123.41	3808241.91	0.43517	465143.41
3808241.91	0.42449		
465163.41	3808241.91	0.41410	465183.41
3808241.91	0.40363		
465203.41	3808241.91	0.39394	465223.41
3808241.91	0.38470		
465243.41	3808241.91	0.37534	465263.41
3808241.91	0.36669		
465283.41	3808241.91	0.35842	465303.41
3808241.91	0.35003		
465323.41	3808241.91	0.34227	465343.41
3808241.91	0.33485		
465363.41	3808241.91	0.32729	465383.41
3808241.91	0.32030		
465403.41	3808241.91	0.31370	465423.41
3808241.91	0.30738		
465443.41	3808241.91	0.30126	465463.41
3808241.91	0.29533		
465483.41	3808241.91	0.28958	465503.41
3808241.91	0.28371		

465523.41	3808241.91	0.27795	465543.41
3808241.91	0.27273		
465563.41	3808241.91	0.26762	465583.41
3808241.91	0.26264		
465603.41	3808241.91	0.25786	465623.41
3808241.91	0.25296		
465643.41	3808241.91	0.24815	465663.41
3808241.91	0.24379		
465683.41	3808241.91	0.23950	465703.41
3808241.91	0.23526		
464983.41	3808261.91	0.53669	465003.41
3808261.91	0.52255		
465023.41	3808261.91	0.50862	465043.41
3808261.91	0.49499		
465063.41	3808261.91	0.48157	465083.41
3808261.91	0.46872		
465103.41	3808261.91	0.45637	465123.41
3808261.91	0.44447		
465143.41	3808261.91	0.43338	465163.41
3808261.91	0.42278		
465183.41	3808261.91	0.41228	465203.41
3808261.91	0.40215		
465223.41	3808261.91	0.39240	465243.41
3808261.91	0.38303		
465263.41	3808261.91	0.37426	465283.41
3808261.91	0.36579		
465303.41	3808261.91	0.35703	465323.41
3808261.91	0.34880		
465343.41	3808261.91	0.34098	465363.41
3808261.91	0.33345		
465383.41	3808261.91	0.32616	465403.41
3808261.91	0.31916		
465423.41	3808261.91	0.31266	465443.41
3808261.91	0.30637		
465463.41	3808261.91	0.30028	465483.41
3808261.91	0.29438		
465503.41	3808261.91	0.28848	465523.41
3808261.91	0.28273		
465543.41	3808261.91	0.27736	465563.41
3808261.91	0.27197		
465583.41	3808261.91	0.26672	465603.41
3808261.91	0.26182		
465623.41	3808261.91	0.25691	465643.41
3808261.91	0.25208		
465663.41	3808261.91	0.24737	465683.41
3808261.91	0.24295		
465703.41	3808261.91	0.23869	465003.41
3808281.91	0.53345		
465023.41	3808281.91	0.51932	465043.41
3808281.91	0.50548		

465063.41	3808281.91	0.49187	465083.41
3808281.91	0.47908		
465103.41	3808281.91	0.46678	465123.41
3808281.91	0.45421		
465143.41	3808281.91	0.44262	465163.41
3808281.91	0.43171		
465183.41	3808281.91	0.42108	465203.41
3808281.91	0.41051		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 116

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808281.91	0.40031	465243.41
3808281.91	0.39101		
465263.41	3808281.91	0.38195	465283.41
3808281.91	0.37307		
465303.41	3808281.91	0.36404	465323.41
3808281.91	0.35542		
465343.41	3808281.91	0.34723	465363.41
3808281.91	0.33967		
465383.41	3808281.91	0.33209	465403.41
3808281.91	0.32471		
465423.41	3808281.91	0.31791	465443.41
3808281.91	0.31140		
465463.41	3808281.91	0.30532	465483.41

3808281.91	0.29925		
465503.41	3808281.91	0.29337	465523.41
3808281.91	0.28766		
465543.41	3808281.91	0.28203	465563.41
3808281.91	0.27637		
465583.41	3808281.91	0.27086	465603.41
3808281.91	0.26583		
465623.41	3808281.91	0.26089	465643.41
3808281.91	0.25602		
465663.41	3808281.91	0.25106	465683.41
3808281.91	0.24643		
465703.41	3808281.91	0.24204	465003.41
3808301.91	0.54478		
465023.41	3808301.91	0.53050	465043.41
3808301.91	0.51670		
465063.41	3808301.91	0.50183	465083.41
3808301.91	0.48889		
465103.41	3808301.91	0.47686	465123.41
3808301.91	0.46448		
465143.41	3808301.91	0.45268	465163.41
3808301.91	0.44125		
465183.41	3808301.91	0.42965	465203.41
3808301.91	0.41893		
465223.41	3808301.91	0.40884	465243.41
3808301.91	0.39922		
465263.41	3808301.91	0.38951	465283.41
3808301.91	0.37992		
465303.41	3808301.91	0.37060	465323.41
3808301.91	0.36205		
465343.41	3808301.91	0.35393	465363.41
3808301.91	0.34566		
465383.41	3808301.91	0.33802	465403.41
3808301.91	0.33072		
465423.41	3808301.91	0.32326	465443.41
3808301.91	0.31645		
465463.41	3808301.91	0.31081	465483.41
3808301.91	0.30456		
465503.41	3808301.91	0.29851	465523.41
3808301.91	0.29257		
465543.41	3808301.91	0.28644	465563.41
3808301.91	0.28075		
465583.41	3808301.91	0.27537	465603.41
3808301.91	0.27021		
465623.41	3808301.91	0.26492	465643.41
3808301.91	0.25972		
465663.41	3808301.91	0.25495	465683.41
3808301.91	0.25010		
465703.41	3808301.91	0.24535	465043.41
3808321.91	0.52736		
465063.41	3808321.91	0.51310	465083.41

3808321.91	0.49972		
465103.41	3808321.91	0.48694	465123.41
3808321.91	0.47426		
465143.41	3808321.91	0.46210	465163.41
3808321.91	0.45034		
465183.41	3808321.91	0.43871	465203.41
3808321.91	0.42781		
465223.41	3808321.91	0.41739	465243.41
3808321.91	0.40700		
465263.41	3808321.91	0.39677	465283.41
3808321.91	0.38687		
465303.41	3808321.91	0.37767	465323.41
3808321.91	0.36879		
465343.41	3808321.91	0.36023	465363.41
3808321.91	0.35199		
465383.41	3808321.91	0.34403	465403.41
3808321.91	0.33634		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 117

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465423.41	3808321.91	0.32894	465443.41
3808321.91	0.32201		
465463.41	3808321.91	0.31585	465483.41
3808321.91	0.30943		

465503.41	3808321.91	0.30322	465523.41
3808321.91	0.29716		
465543.41	3808321.91	0.29107	465563.41
3808321.91	0.28535		
465583.41	3808321.91	0.27984	465603.41
3808321.91	0.27428		
465623.41	3808321.91	0.26890	465643.41
3808321.91	0.26370		
465663.41	3808321.91	0.25863	465683.41
3808321.91	0.25372		
465703.41	3808321.91	0.24897	465083.41
3808341.91	0.51068		
465103.41	3808341.91	0.49704	465123.41
3808341.91	0.48416		
465143.41	3808341.91	0.47164	465163.41
3808341.91	0.45956		
465183.41	3808341.91	0.44797	465203.41
3808341.91	0.43671		
465223.41	3808341.91	0.42576	465243.41
3808341.91	0.41481		
465263.41	3808341.91	0.40417	465283.41
3808341.91	0.39400		
465303.41	3808341.91	0.38475	465323.41
3808341.91	0.37541		
465343.41	3808341.91	0.36635	465363.41
3808341.91	0.35824		
465383.41	3808341.91	0.35002	465403.41
3808341.91	0.34199		
465423.41	3808341.91	0.33458	465443.41
3808341.91	0.32750		
465463.41	3808341.91	0.32090	465483.41
3808341.91	0.31431		
465503.41	3808341.91	0.30794	465523.41
3808341.91	0.30176		
465543.41	3808341.91	0.29568	465563.41
3808341.91	0.28986		
465583.41	3808341.91	0.28417	465603.41
3808341.91	0.27832		
465623.41	3808341.91	0.27287	465643.41
3808341.91	0.26763		
465663.41	3808341.91	0.26229	465683.41
3808341.91	0.25732		
465703.41	3808341.91	0.25254	465103.41
3808361.91	0.50719		
465123.41	3808361.91	0.49460	465143.41
3808361.91	0.48187		
465163.41	3808361.91	0.46937	465183.41
3808361.91	0.45737		
465203.41	3808361.91	0.44532	465223.41
3808361.91	0.43362		

465243.41	3808361.91	0.42291	465263.41
3808361.91	0.41212		
465283.41	3808361.91	0.40154	465303.41
3808361.91	0.39145		
465323.41	3808361.91	0.38167	465343.41
3808361.91	0.37236		
465363.41	3808361.91	0.36403	465383.41
3808361.91	0.35592		
465403.41	3808361.91	0.34798	465423.41
3808361.91	0.33988		
465443.41	3808361.91	0.33248	465463.41
3808361.91	0.32637		
465483.41	3808361.91	0.31960	465503.41
3808361.91	0.31305		
465523.41	3808361.91	0.30663	465543.41
3808361.91	0.30001		
465563.41	3808361.91	0.29393	465583.41
3808361.91	0.28818		
465603.41	3808361.91	0.28255	465623.41
3808361.91	0.27683		
465643.41	3808361.91	0.27125	465663.41
3808361.91	0.26613		
465683.41	3808361.91	0.26092	465703.41
3808361.91	0.25583		
465183.41	3808381.91	0.46530	465203.41
3808381.91	0.45300		
*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15 Industrial Park\I15 Industrial *** 05/09/22 *** AERMET - VERSION 14134 *** *** *** 16:42:19			

PAGE 118

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	0.44119	465243.41
3808381.91	0.42981		
465263.41	3808381.91	0.41861	465283.41
3808381.91	0.40778		
465303.41	3808381.91	0.39776	465323.41
3808381.91	0.38782		
465343.41	3808381.91	0.37825	465363.41
3808381.91	0.36971		
465383.41	3808381.91	0.36147	465403.41
3808381.91	0.35346		
465423.41	3808381.91	0.34544	465443.41
3808381.91	0.33793		
465463.41	3808381.91	0.33127	465483.41
3808381.91	0.32433		
465503.41	3808381.91	0.31763	465523.41
3808381.91	0.31109		
465543.41	3808381.91	0.30453	465563.41
3808381.91	0.29817		
465583.41	3808381.91	0.29207	465603.41
3808381.91	0.28639		
465623.41	3808381.91	0.28071	465643.41
3808381.91	0.27512		
465663.41	3808381.91	0.26969	465683.41
3808381.91	0.26444		
465703.41	3808381.91	0.25935	465303.41
3808401.91	0.40361		
465323.41	3808401.91	0.39367	465343.41
3808401.91	0.38401		
465363.41	3808401.91	0.37526	465383.41
3808401.91	0.36682		
465403.41	3808401.91	0.35868	465423.41
3808401.91	0.35082		
465443.41	3808401.91	0.34323	465463.41
3808401.91	0.33591		
465483.41	3808401.91	0.32882	465503.41
3808401.91	0.32197		
465523.41	3808401.91	0.31534	465543.41
3808401.91	0.30892		
465563.41	3808401.91	0.30239	465583.41
3808401.91	0.29601		
465603.41	3808401.91	0.29020	465623.41
3808401.91	0.28451		
465643.41	3808401.91	0.27890	465663.41
3808401.91	0.27320		
465683.41	3808401.91	0.26789	465703.41

3808401.91	0.26278		
465323.41	3808421.91	0.39898	465343.41
3808421.91	0.38959		
465363.41	3808421.91	0.38064	465383.41
3808421.91	0.37201		
465403.41	3808421.91	0.36369	465423.41
3808421.91	0.35565		
465443.41	3808421.91	0.34790	465463.41
3808421.91	0.34041		
465483.41	3808421.91	0.33317	465503.41
3808421.91	0.32617		
465523.41	3808421.91	0.31941	465543.41
3808421.91	0.31286		
465563.41	3808421.91	0.30647	465583.41
3808421.91	0.30027		
465603.41	3808421.91	0.29433	465623.41
3808421.91	0.28826		
465643.41	3808421.91	0.28230	465663.41
3808421.91	0.27684		
465683.41	3808421.91	0.27130	465703.41
3808421.91	0.26588		
465323.41	3808441.91	0.40445	465343.41
3808441.91	0.39504		
465363.41	3808441.91	0.38635	465383.41
3808441.91	0.37767		
465403.41	3808441.91	0.36914	465423.41
3808441.91	0.36092		
465443.41	3808441.91	0.35299	465463.41
3808441.91	0.34532		
465483.41	3808441.91	0.33792	465503.41
3808441.91	0.33077		
465523.41	3808441.91	0.32385	465543.41
3808441.91	0.31716		
465563.41	3808441.91	0.31069	465583.41
3808441.91	0.30442		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 119

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953

, L0005954 , L0005955 , L0005956 ,
L0005957 , L0005958 , L0005959 , L0005960 , L0005961
, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465603.41	3808441.91	0.29836	465623.41
3808441.91	0.29211		
465643.41	3808441.91	0.28592	465663.41
3808441.91	0.28015		
465683.41	3808441.91	0.27457	465703.41
3808441.91	0.26922		
465343.41	3808461.91	0.40020	465363.41
3808461.91	0.39160		
465383.41	3808461.91	0.38291	465403.41
3808461.91	0.37434		
465423.41	3808461.91	0.36594	465443.41
3808461.91	0.35784		
465463.41	3808461.91	0.35002	465483.41
3808461.91	0.34246		
465503.41	3808461.91	0.33525	465523.41
3808461.91	0.32829		
465543.41	3808461.91	0.32146	465563.41
3808461.91	0.31485		
465583.41	3808461.91	0.30846	465603.41
3808461.91	0.30227		
465623.41	3808461.91	0.29589	465643.41
3808461.91	0.28954		
465663.41	3808461.91	0.28339	465683.41
3808461.91	0.27781		
465703.41	3808461.91	0.27255	465343.41
3808481.91	0.40493		
465363.41	3808481.91	0.39556	465383.41
3808481.91	0.38697		
465403.41	3808481.91	0.37874	465423.41
3808481.91	0.37020		
465443.41	3808481.91	0.36195	465463.41
3808481.91	0.35399		
465483.41	3808481.91	0.34630	465503.41
3808481.91	0.33929		
465523.41	3808481.91	0.33258	465543.41
3808481.91	0.32561		

465563.41	3808481.91	0.31887	465583.41
3808481.91	0.31235		
465603.41	3808481.91	0.30604	465623.41
3808481.91	0.29955		
465643.41	3808481.91	0.29309	465663.41
3808481.91	0.28683		
465683.41	3808481.91	0.28115	465703.41
3808481.91	0.27573		
465463.41	3808501.91	0.35827	465483.41
3808501.91	0.35006		
465503.41	3808501.91	0.34288	465523.41
3808501.91	0.33615		
465543.41	3808501.91	0.32908	465563.41
3808501.91	0.32246		
465583.41	3808501.91	0.31604	465603.41
3808501.91	0.30931		
465623.41	3808501.91	0.30282	465643.41
3808501.91	0.29650		
465663.41	3808501.91	0.29014	465683.41
3808501.91	0.28436		
465703.41	3808501.91	0.27883	465523.41
3808521.91	0.33936		
465543.41	3808521.91	0.33219	465563.41
3808521.91	0.32570		
465583.41	3808521.91	0.31940	465603.41
3808521.91	0.31239		
465623.41	3808521.91	0.30587	465643.41
3808521.91	0.29961		
465663.41	3808521.91	0.29327	465683.41
3808521.91	0.28736		
465703.41	3808521.91	0.28168	464239.31
3809562.31	0.82639		
464277.31	3809562.31	0.78888	463745.31
3809591.37	1.09102		
463783.31	3809591.37	1.09129	463821.31
3809591.37	1.08880		
463859.31	3809591.37	1.09106	463897.31
3809591.37	1.09064		
463935.31	3809591.37	1.07968	464239.31
3809591.37	0.79719		
464277.31	3809591.37	0.76141	463745.31
3809620.43	1.03547		
463783.31	3809620.43	1.03680	463821.31
3809620.43	1.03825		
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15 Industrial Park\I15 Industrial *** 05/09/22 *** AERMET - VERSION 14134 *** *** *** 16:42:19			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***
INCLUDING SOURCE(S): L0005936 , L0005937
, L0005938 , L0005939 , L0005940 ,
L0005941 , L0005942 , L0005943 , L0005944 , L0005945
, L0005946 , L0005947 , L0005948 ,
L0005949 , L0005950 , L0005951 , L0005952 , L0005953
, L0005954 , L0005955 , L0005956 ,
L0005957 , L0005958 , L0005959 , L0005960 , L0005961
, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463859.31	3809620.43	1.03677	463897.31
3809620.43	1.03503		
463935.31	3809620.43	1.02761	463973.31
3809620.43	1.00723		
464011.31	3809620.43	0.97944	464049.31
3809620.43	0.94544		
464087.31	3809620.43	0.90866	464125.31
3809620.43	0.87328		
464163.31	3809620.43	0.83761	464201.31
3809620.43	0.80082		
464239.31	3809620.43	0.76844	464277.31
3809620.43	0.73501		
463745.31	3809649.49	0.98325	463783.31
3809649.49	0.98893		
463821.31	3809649.49	0.98888	463859.31
3809649.49	0.98682		
463897.31	3809649.49	0.98348	463935.31
3809649.49	0.97644		
463973.31	3809649.49	0.95519	464011.31
3809649.49	0.93301		
464049.31	3809649.49	0.90561	464087.31
3809649.49	0.87148		
464125.31	3809649.49	0.84048	464163.31
3809649.49	0.80621		
464201.31	3809649.49	0.77357	464239.31
3809649.49	0.74224		
464277.31	3809649.49	0.71035	464315.31

3809649.49	0.67969		
464353.31	3809649.49	0.65284	464391.31
3809649.49	0.62739		
464429.31	3809649.49	0.60241	464467.31
3809649.49	0.57963		
464505.31	3809649.49	0.55786	463745.31
3809678.55	0.93258		
463783.31	3809678.55	0.93881	463821.31
3809678.55	0.94345		
463859.31	3809678.55	0.93906	463897.31
3809678.55	0.93567		
463935.31	3809678.55	0.92988	463973.31
3809678.55	0.91243		
464011.31	3809678.55	0.89005	464049.31
3809678.55	0.86827		
464087.31	3809678.55	0.83980	464125.31
3809678.55	0.80950		
464163.31	3809678.55	0.77790	464201.31
3809678.55	0.74836		
464239.31	3809678.55	0.71658	464277.31
3809678.55	0.68664		
464315.31	3809678.55	0.65838	464353.31
3809678.55	0.63322		
464391.31	3809678.55	0.60870	464429.31
3809678.55	0.58454		
464467.31	3809678.55	0.56340	464505.31
3809678.55	0.54141		
463745.31	3809707.61	0.88845	463783.31
3809707.61	0.89311		
463821.31	3809707.61	0.89707	463859.31
3809707.61	0.89658		
463897.31	3809707.61	0.89162	463935.31
3809707.61	0.88627		
463973.31	3809707.61	0.87261	464011.31
3809707.61	0.85284		
464049.31	3809707.61	0.83329	464087.31
3809707.61	0.80777		
464125.31	3809707.61	0.78033	464163.31
3809707.61	0.75226		
464201.31	3809707.61	0.72190	464239.31
3809707.61	0.69301		
464277.31	3809707.61	0.66446	464315.31
3809707.61	0.63896		
464353.31	3809707.61	0.61282	464391.31
3809707.61	0.59004		
464429.31	3809707.61	0.56701	464467.31
3809707.61	0.54643		
464505.31	3809707.61	0.52690	463745.31
3809736.67	0.85084		
463783.31	3809736.67	0.85152	463821.31

3809736.67 0.85175
 463859.31 3809736.67 0.85268 463897.31
 3809736.67 0.85021

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 121

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

463935.31	3809736.67	0.84298	463973.31
3809736.67	0.83476		
464011.31	3809736.67	0.82079	464049.31
3809736.67	0.80058		
464087.31	3809736.67	0.77938	464125.31
3809736.67	0.75409		
464163.31	3809736.67	0.72813	464201.31
3809736.67	0.69843		
464239.31	3809736.67	0.67168	464277.31
3809736.67	0.64444		
464315.31	3809736.67	0.61871	464353.31
3809736.67	0.59476		
464391.31	3809736.67	0.57260	464429.31
3809736.67	0.55066		
464467.31	3809736.67	0.53140	464505.31
3809736.67	0.51318		
463745.31	3809765.73	0.81655	463783.31
3809765.73	0.81578		

463821.31	3809765.73	0.81384	463859.31
3809765.73	0.81292		
463897.31	3809765.73	0.81169	463935.31
3809765.73	0.80308		
463973.31	3809765.73	0.79271	464011.31
3809765.73	0.78721		
464049.31	3809765.73	0.77234	464087.31
3809765.73	0.75170		
464125.31	3809765.73	0.72975	464163.31
3809765.73	0.70521		
464201.31	3809765.73	0.67706	464239.31
3809765.73	0.65166		
464277.31	3809765.73	0.62575	464315.31
3809765.73	0.60042		
464353.31	3809765.73	0.57814	464391.31
3809765.73	0.55566		
464429.31	3809765.73	0.53586	464467.31
3809765.73	0.51773		
464505.31	3809765.73	0.49879	463745.31
3809794.79	0.78473		
463783.31	3809794.79	0.78129	463821.31
3809794.79	0.77890		
463859.31	3809794.79	0.77566	463897.31
3809794.79	0.77355		
463935.31	3809794.79	0.76548	463973.31
3809794.79	0.75566		
464011.31	3809794.79	0.75003	464049.31
3809794.79	0.74427		
464087.31	3809794.79	0.72588	464125.31
3809794.79	0.70443		
464163.31	3809794.79	0.68129	464201.31
3809794.79	0.65661		
464239.31	3809794.79	0.63123	464277.31
3809794.79	0.60681		
464315.31	3809794.79	0.58344	464353.31
3809794.79	0.56075		
464391.31	3809794.79	0.54035	464429.31
3809794.79	0.52195		
464467.31	3809794.79	0.50316	464505.31
3809794.79	0.48576		
463745.31	3809823.85	0.75501	463783.31
3809823.85	0.74949		
463821.31	3809823.85	0.74361	463859.31
3809823.85	0.74091		
463897.31	3809823.85	0.73715	463935.31
3809823.85	0.72964		
463973.31	3809823.85	0.72156	464011.31
3809823.85	0.71443		
464049.31	3809823.85	0.71027	464087.31
3809823.85	0.69943		

464125.31	3809823.85	0.68134	464163.31
3809823.85	0.65946		
464201.31	3809823.85	0.63542	464239.31
3809823.85	0.61230		
464277.31	3809823.85	0.58916	464315.31
3809823.85	0.56592		
464353.31	3809823.85	0.54489	464391.31
3809823.85	0.52565		
464429.31	3809823.85	0.50711	464467.31
3809823.85	0.48964		
464505.31	3809823.85	0.47251	463745.31
3809852.91	0.72852		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 122

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	0.72276	463821.31
3809852.91	0.71360		
463859.31	3809852.91	0.70962	463897.31
3809852.91	0.70363		
463935.31	3809852.91	0.69656	463973.31
3809852.91	0.68962		
464011.31	3809852.91	0.68188	464049.31
3809852.91	0.67673		
464087.31	3809852.91	0.66820	464125.31

3809852.91	0.65432		
464163.31	3809852.91	0.63462	464201.31
3809852.91	0.61249		
464239.31	3809852.91	0.59175	464277.31
3809852.91	0.57071		
464315.31	3809852.91	0.54956	464353.31
3809852.91	0.52911		
464391.31	3809852.91	0.51089	464429.31
3809852.91	0.49339		
464467.31	3809852.91	0.47629	464505.31
3809852.91	0.46023		
463745.31	3809881.97	0.70453	463783.31
3809881.97	0.69737		
463821.31	3809881.97	0.68831	463859.31
3809881.97	0.68192		
463897.31	3809881.97	0.67402	463935.31
3809881.97	0.66587		
463973.31	3809881.97	0.66046	464011.31
3809881.97	0.65329		
464049.31	3809881.97	0.64681	464087.31
3809881.97	0.63750		
464125.31	3809881.97	0.62533	464163.31
3809881.97	0.60759		
464201.31	3809881.97	0.58957	464239.31
3809881.97	0.57000		
464277.31	3809881.97	0.55160	464315.31
3809881.97	0.53350		
464353.31	3809881.97	0.51438	464391.31
3809881.97	0.49732		
464429.31	3809881.97	0.48037	464467.31
3809881.97	0.46375		
464505.31	3809881.97	0.44910	463745.31
3809911.03	0.68052		
463783.31	3809911.03	0.67229	463821.31
3809911.03	0.66492		
463859.31	3809911.03	0.65716	463897.31
3809911.03	0.64882		
463935.31	3809911.03	0.63963	463973.31
3809911.03	0.63327		
464011.31	3809911.03	0.62639	464049.31
3809911.03	0.62035		
464087.31	3809911.03	0.61126	464125.31
3809911.03	0.59951		
464163.31	3809911.03	0.58465	464201.31
3809911.03	0.56929		
464239.31	3809911.03	0.55116	464277.31
3809911.03	0.53454		
464315.31	3809911.03	0.51725	464353.31
3809911.03	0.50012		
464391.31	3809911.03	0.48378	464429.31

3809911.03	0.46758		
464467.31	3809911.03	0.45257	464505.31
3809911.03	0.43754		
463745.31	3809940.09	0.65689	463783.31
3809940.09	0.64860		
463821.31	3809940.09	0.64228	463859.31
3809940.09	0.63413		
463897.31	3809940.09	0.62625	463935.31
3809940.09	0.61738		
463973.31	3809940.09	0.60975	464011.31
3809940.09	0.60078		
464049.31	3809940.09	0.59429	464087.31
3809940.09	0.58567		
464125.31	3809940.09	0.57527	464163.31
3809940.09	0.56399		
464201.31	3809940.09	0.55132	464239.31
3809940.09	0.53527		
464277.31	3809940.09	0.51875	464315.31
3809940.09	0.50271		
464353.31	3809940.09	0.48647	464391.31
3809940.09	0.47082		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 123

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

464429.31	3809940.09	0.45595	464467.31
3809940.09	0.44100		
464505.31	3809940.09	0.42660	463745.31
3809969.15	0.63920		
463783.31	3809969.15	0.62807	463821.31
3809969.15	0.62049		
463859.31	3809969.15	0.61274	463897.31
3809969.15	0.60491		
463935.31	3809969.15	0.59653	463973.31
3809969.15	0.58887		
464011.31	3809969.15	0.57873	464049.31
3809969.15	0.56977		
464087.31	3809969.15	0.56185	464125.31
3809969.15	0.55358		
464163.31	3809969.15	0.54364	464201.31
3809969.15	0.53317		
464239.31	3809969.15	0.52015	464277.31
3809969.15	0.50423		
464315.31	3809969.15	0.48905	464353.31
3809969.15	0.47451		
464391.31	3809969.15	0.45945	464429.31
3809969.15	0.44457		
464467.31	3809969.15	0.42971	464505.31
3809969.15	0.41671		
463745.31	3809998.21	0.62782	463783.31
3809998.21	0.61229		
463821.31	3809998.21	0.60217	463859.31
3809998.21	0.59353		
463897.31	3809998.21	0.58563	463935.31
3809998.21	0.57677		
463973.31	3809998.21	0.56896	464011.31
3809998.21	0.55959		
464049.31	3809998.21	0.55025	464087.31
3809998.21	0.54173		
464125.31	3809998.21	0.53454	464163.31
3809998.21	0.52554		
464201.31	3809998.21	0.51556	464239.31
3809998.21	0.50396		
464277.31	3809998.21	0.49074	464315.31
3809998.21	0.47595		
464353.31	3809998.21	0.46214	464391.31
3809998.21	0.44768		
464429.31	3809998.21	0.43317	464467.31
3809998.21	0.41976		
464505.31	3809998.21	0.40653	463745.31
3810027.27	0.61736		
463783.31	3810027.27	0.59984	463821.31
3810027.27	0.58705		
463859.31	3810027.27	0.57694	463897.31
3810027.27	0.56863		

463935.31	3810027.27	0.55869	463973.31
3810027.27	0.55101		
464011.31	3810027.27	0.54201	464049.31
3810027.27	0.53294		
464087.31	3810027.27	0.52338	464125.31
3810027.27	0.51546		
464163.31	3810027.27	0.50819	464201.31
3810027.27	0.49921		
464239.31	3810027.27	0.48774	464277.31
3810027.27	0.47621		
464315.31	3810027.27	0.46345	464353.31
3810027.27	0.44990		
464391.31	3810027.27	0.43602	464429.31
3810027.27	0.42280		
464467.31	3810027.27	0.40964	464505.31
3810027.27	0.39650		
463745.31	3810056.33	0.60814	463783.31
3810056.33	0.58859		
463821.31	3810056.33	0.57287	463859.31
3810056.33	0.56201		
463897.31	3810056.33	0.55250	463935.31
3810056.33	0.54265		
463973.31	3810056.33	0.53456	464011.31
3810056.33	0.52543		
464049.31	3810056.33	0.51577	464087.31
3810056.33	0.50656		
464125.31	3810056.33	0.49757	464163.31
3810056.33	0.49064		
464201.31	3810056.33	0.48246	464239.31
3810056.33	0.47285		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 124

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464277.31	3810056.33	0.46152	464315.31
3810056.33	0.45022		
464353.31	3810056.33	0.43872	464391.31
3810056.33	0.42596		
464429.31	3810056.33	0.41280	464467.31
3810056.33	0.39944		
464505.31	3810056.33	0.38714	463745.31
3810085.39	0.59921		
463783.31	3810085.39	0.57811	463821.31
3810085.39	0.56057		
463859.31	3810085.39	0.54803	463897.31
3810085.39	0.53772		
463935.31	3810085.39	0.52810	463973.31
3810085.39	0.51930		
464011.31	3810085.39	0.50949	464049.31
3810085.39	0.49889		
464087.31	3810085.39	0.49028	464125.31
3810085.39	0.48157		
464163.31	3810085.39	0.47383	464201.31
3810085.39	0.46592		
464239.31	3810085.39	0.45758	464277.31
3810085.39	0.44764		
464315.31	3810085.39	0.43711	464353.31
3810085.39	0.42622		
464391.31	3810085.39	0.41474	464429.31
3810085.39	0.40206		
464467.31	3810085.39	0.38952	464505.31
3810085.39	0.37735		
463745.31	3810114.45	0.58739	463783.31
3810114.45	0.56981		
463821.31	3810114.45	0.55040	463859.31
3810114.45	0.53758		
463897.31	3810114.45	0.52513	463935.31
3810114.45	0.51471		
463973.31	3810114.45	0.50475	464011.31
3810114.45	0.49486		
464049.31	3810114.45	0.48406	464087.31
3810114.45	0.47504		
464125.31	3810114.45	0.46579	464163.31
3810114.45	0.45740		
464201.31	3810114.45	0.44955	464239.31

3810114.45	0.44291		
464277.31	3810114.45	0.43426	464315.31
3810114.45	0.42347		
464353.31	3810114.45	0.41239	464391.31
3810114.45	0.40109		
464429.31	3810114.45	0.39047	464467.31
3810114.45	0.37840		
464505.31	3810114.45	0.36785	463745.31
3810143.51	0.57243		
463783.31	3810143.51	0.55844	463821.31
3810143.51	0.54368		
463859.31	3810143.51	0.52914	463897.31
3810143.51	0.51315		
463935.31	3810143.51	0.50107	463973.31
3810143.51	0.48982		
464011.31	3810143.51	0.48108	464049.31
3810143.51	0.47037		
464087.31	3810143.51	0.46008	464125.31
3810143.51	0.45107		
464163.31	3810143.51	0.44282	464201.31
3810143.51	0.43481		
464239.31	3810143.51	0.42758	464277.31
3810143.51	0.42099		
464315.31	3810143.51	0.41089	464353.31
3810143.51	0.39913		
464391.31	3810143.51	0.38897	464429.31
3810143.51	0.37855		
464467.31	3810143.51	0.36866	464505.31
3810143.51	0.35882		
464383.78	3807479.29	0.26329	464355.03
3807405.24	0.24260		
464402.07	3807352.10	0.21578	464367.23
3807296.35	0.20364		
464358.52	3807237.99	0.18286	464385.52
3807161.33	0.16517		
463132.27	3810926.37	0.30697	463237.82
3811199.31	0.25277		
464944.35	3809244.89	0.54089	465700.32
3809255.46	0.28207		

*** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial
 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 125

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE
 INCLUDING SOURCE(S): L0005936 , L0005937

```

, L0005938      , L0005939      , L0005940      ,
                  L0005941      , L0005942      , L0005943      , L0005944      , L0005945
, L0005946      , L0005947      , L0005948      ,
                  L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
                  L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465716.18	3808536.49	0.27986	465544.37
3808533.85	0.33360		
465420.13	3808486.27	0.37247	465348.77
3808491.56	0.40461		
465317.05	3808443.98	0.40811	465327.62
3808406.97	0.39296		
465108.23	3808369.97	0.50807	464999.86
3808301.24	0.54710		
464722.31	3807973.48	0.56241	464717.03
3807836.03	0.48800		
464344.33	3807936.47	0.61351	464349.61
3807780.52	0.74856		
464386.62	3807785.81	0.71622	464521.43
3807859.82	0.65044		
464537.28	3807719.72	0.34091	464426.27
3807613.99	0.31587		
464368.43	3807532.62	0.29959	464324.60
3807121.91	0.16014		
464123.31	3807123.54	0.19556	463930.13
3806909.26	0.14327		
463831.11	3806906.01	0.14469	463821.36
3806720.95	0.10731		
463727.21	3806727.44	0.10676	463598.97
3806334.59	0.06691		
463001.06	3806361.54	0.03507	

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
462160.55	3809377.75	0.04788	462051.48
3809270.62	0.04092		
462014.47	3809029.10	0.03151	462010.58
3808855.75	0.03058		
461936.56	3808886.92	0.02790	461936.56
3808997.94	0.02834		
461909.30	3808768.10	0.02741	461835.28
3808894.71	0.02505		
461845.02	3808995.99	0.02602	461833.33
3809114.80	0.02883		
461843.07	3809210.24	0.03192	461809.96
3809297.89	0.03337		
461856.71	3809385.54	0.03521	461841.13
3809482.92	0.03333		
462004.74	3809379.69	0.04071	461763.22
3808793.43	0.02302		
461753.48	3808699.93	0.02407	461835.28
3808686.30	0.02553		
461823.60	3808579.17	0.02456	461761.27
3808585.02	0.02331		
462301.19	3807807.15	0.02537	462304.78
3807868.16	0.02633		
462216.84	3807882.52	0.02519	462116.34
3807886.11	0.02392		
462114.55	3807789.20	0.02223	462012.25
3807887.90	0.02268		
462008.66	3807975.84	0.02420	461917.14

3807972.25	0.02279		
461922.52	3808187.60	0.02523	461908.17
3808288.10	0.02532		
461848.94	3808377.83	0.02456	461831.00
3808494.48	0.02460		
462421.43	3808393.98	0.04314	462459.11
3808501.66	0.04656		
462437.58	3808580.62	0.04660	462654.73
3809189.00	0.08344		
462559.49	3809194.32	0.07125	465763.86
3807935.19	0.06902		
465819.84	3807935.19	0.06856	465875.82
3807935.19	0.06977		
465931.80	3807935.19	0.07003	465987.78
3807935.19	0.07078		
466043.76	3807935.19	0.07099	466099.74
3807935.19	0.07185		
466155.72	3807935.19	0.07205	466211.70
3807935.19	0.07346		
466267.68	3807935.19	0.07374	466323.66
3807935.19	0.07564		
466379.64	3807935.19	0.07708	466435.62
3807935.19	0.07870		
466491.60	3807935.19	0.07977	466547.58
3807935.19	0.08116		
466603.56	3807935.19	0.08212	466659.54
3807935.19	0.08125		
466715.52	3807935.19	0.08164	466771.50
3807935.19	0.08216		
466827.48	3807935.19	0.08109	466883.46
3807935.19	0.07903		
465763.86	3808001.41	0.07452	465819.84
3808001.41	0.07481		
465875.82	3808001.41	0.07516	465931.80
3808001.41	0.07590		
465987.78	3808001.41	0.07524	466043.76
3808001.41	0.07706		
466099.74	3808001.41	0.07541	466155.72
3808001.41	0.07674		
466211.70	3808001.41	0.07657	466267.68
3808001.41	0.07674		
466323.66	3808001.41	0.07863	466379.64
3808001.41	0.08059		
466435.62	3808001.41	0.08185	466491.60
3808001.41	0.08362		
466547.58	3808001.41	0.08355	466603.56
3808001.41	0.08423		
466659.54	3808001.41	0.08409	466715.52
3808001.41	0.08608		
466771.50	3808001.41	0.08466	466827.48

3808001.41 0.08296
466883.46 3808001.41 0.08078 465763.86
3808067.63 0.08042

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 127

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK111 ***

INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465819.84	3808067.63	0.08140	465875.82
3808067.63	0.08115		
465931.80	3808067.63	0.08101	465987.78
3808067.63	0.08142		
466043.76	3808067.63	0.08102	466099.74
3808067.63	0.08230		
466155.72	3808067.63	0.08196	466211.70
3808067.63	0.08298		
466267.68	3808067.63	0.08332	466323.66
3808067.63	0.08530		
466379.64	3808067.63	0.08655	466435.62
3808067.63	0.08649		
466491.60	3808067.63	0.08778	466547.58
3808067.63	0.08876		
466603.56	3808067.63	0.08862	466659.54
3808067.63	0.08814		
466715.52	3808067.63	0.08839	466771.50
3808067.63	0.08676		

466827.48	3808067.63	0.08486	466883.46
3808067.63	0.08255		
465763.86	3808133.85	0.08782	465819.84
3808133.85	0.08780		
465875.82	3808133.85	0.08737	465931.80
3808133.85	0.08771		
465987.78	3808133.85	0.08570	466043.76
3808133.85	0.08701		
466099.74	3808133.85	0.08674	466155.72
3808133.85	0.08814		
466211.70	3808133.85	0.08895	466267.68
3808133.85	0.08941		
466323.66	3808133.85	0.09128	466379.64
3808133.85	0.09191		
466435.62	3808133.85	0.09162	466491.60
3808133.85	0.09087		
466547.58	3808133.85	0.09169	466603.56
3808133.85	0.09167		
466659.54	3808133.85	0.09205	466715.52
3808133.85	0.09113		
466771.50	3808133.85	0.08924	466827.48
3808133.85	0.08677		
466883.46	3808133.85	0.08437	465763.86
3808200.07	0.09530		
465819.84	3808200.07	0.09500	465875.82
3808200.07	0.09467		
465931.80	3808200.07	0.09229	465987.78
3808200.07	0.09343		
466043.76	3808200.07	0.09328	466099.74
3808200.07	0.09419		
466155.72	3808200.07	0.09600	466211.70
3808200.07	0.09798		
466267.68	3808200.07	0.09712	466323.66
3808200.07	0.09693		
466379.64	3808200.07	0.09664	466435.62
3808200.07	0.09583		
466491.60	3808200.07	0.09645	466547.58
3808200.07	0.09642		
466603.56	3808200.07	0.09692	466659.54
3808200.07	0.09560		
466715.52	3808200.07	0.09365	466771.50
3808200.07	0.09133		
466827.48	3808200.07	0.08870	466883.46
3808200.07	0.08618		
465763.86	3808266.29	0.10579	465819.84
3808266.29	0.10211		
465875.82	3808266.29	0.10018	465931.80
3808266.29	0.10113		
465987.78	3808266.29	0.10061	466043.76
3808266.29	0.10147		

466099.74	3808266.29	0.10290	466155.72
3808266.29	0.10465		
466211.70	3808266.29	0.10376	466267.68
3808266.29	0.10370		
466323.66	3808266.29	0.10318	466379.64
3808266.29	0.10119		
466435.62	3808266.29	0.09995	466491.60
3808266.29	0.10169		
466547.58	3808266.29	0.10228	466603.56
3808266.29	0.10102		
466659.54	3808266.29	0.09863	466715.52
3808266.29	0.09628		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 128

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.09343	466827.48
3808266.29	0.09067		
466883.46	3808266.29	0.08802	465763.86
3808332.51	0.11441		
465819.84	3808332.51	0.10913	465875.82
3808332.51	0.10985		
465931.80	3808332.51	0.10930	465987.78
3808332.51	0.10964		
466043.76	3808332.51	0.11091	466099.74

3808332.51	0.11266		
466155.72	3808332.51	0.11083	466211.70
3808332.51	0.11140		
466267.68	3808332.51	0.11080	466323.66
3808332.51	0.10766		
466379.64	3808332.51	0.10644	466435.62
3808332.51	0.10665		
466491.60	3808332.51	0.10678	466547.58
3808332.51	0.10686		
466603.56	3808332.51	0.10397	466659.54
3808332.51	0.10142		
466715.52	3808332.51	0.09860	466771.50
3808332.51	0.09555		
466827.48	3808332.51	0.09266	466883.46
3808332.51	0.08989		
465763.86	3808398.73	0.12564	465819.84
3808398.73	0.12075		
465875.82	3808398.73	0.11925	465931.80
3808398.73	0.11888		
465987.78	3808398.73	0.12019	466043.76
3808398.73	0.12135		
466099.74	3808398.73	0.12135	466155.72
3808398.73	0.12064		
466211.70	3808398.73	0.11907	466267.68
3808398.73	0.11496		
466323.66	3808398.73	0.11568	466379.64
3808398.73	0.11487		
466435.62	3808398.73	0.11266	466491.60
3808398.73	0.11271		
466547.58	3808398.73	0.11042	466603.56
3808398.73	0.10766		
466659.54	3808398.73	0.10422	466715.52
3808398.73	0.10092		
466771.50	3808398.73	0.09776	466827.48
3808398.73	0.09472		
466883.46	3808398.73	0.09181	465763.86
3808464.95	0.13735		
465819.84	3808464.95	0.13300	465875.82
3808464.95	0.13441		
465931.80	3808464.95	0.13373	465987.78
3808464.95	0.13182		
466043.76	3808464.95	0.13072	466099.74
3808464.95	0.12966		
466155.72	3808464.95	0.12773	466211.70
3808464.95	0.12820		
466267.68	3808464.95	0.12413	466323.66
3808464.95	0.12348		
466379.64	3808464.95	0.12069	466435.62
3808464.95	0.12037		
466491.60	3808464.95	0.11708	466547.58

3808464.95	0.11421		
466603.56	3808464.95	0.11041	466659.54
3808464.95	0.10678		
466715.52	3808464.95	0.10331	466771.50
3808464.95	0.10000		
466827.48	3808464.95	0.09682	466883.46
3808464.95	0.09379		
465763.86	3808531.17	0.14625	465819.84
3808531.17	0.14694		
465875.82	3808531.17	0.14809	465931.80
3808531.17	0.14870		
465987.78	3808531.17	0.14347	466043.76
3808531.17	0.14107		
466099.74	3808531.17	0.13756	466155.72
3808531.17	0.13781		
466211.70	3808531.17	0.13628	466267.68
3808531.17	0.13305		
466323.66	3808531.17	0.13127	466379.64
3808531.17	0.12848		
466435.62	3808531.17	0.12498	466491.60
3808531.17	0.12146		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 129

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

466547.58	3808531.17	0.11725	466603.56
3808531.17	0.11324		
466659.54	3808531.17	0.10942	466715.52
3808531.17	0.10578		
466771.50	3808531.17	0.10229	466827.48
3808531.17	0.09899		
466883.46	3808531.17	0.09582	465763.86
3808597.39	0.16188		
465819.84	3808597.39	0.15673	465875.82
3808597.39	0.15677		
465931.80	3808597.39	0.15986	465987.78
3808597.39	0.15493		
466043.76	3808597.39	0.14924	466099.74
3808597.39	0.14912		
466155.72	3808597.39	0.14666	466211.70
3808597.39	0.14337		
466267.68	3808597.39	0.14286	466323.66
3808597.39	0.13801		
466379.64	3808597.39	0.13367	466435.62
3808597.39	0.12953		
466491.60	3808597.39	0.12488	466547.58
3808597.39	0.12045		
466603.56	3808597.39	0.11622	466659.54
3808597.39	0.11219		
466715.52	3808597.39	0.10836	466771.50
3808597.39	0.10472		
466827.48	3808597.39	0.10126	466883.46
3808597.39	0.09800		
465763.86	3808663.61	0.17979	465819.84
3808663.61	0.17134		
465875.82	3808663.61	0.17031	465931.80
3808663.61	0.16694		
465987.78	3808663.61	0.16273	466043.76
3808663.61	0.16187		
466099.74	3808663.61	0.15847	466155.72
3808663.61	0.15526		
466211.70	3808663.61	0.15419	466267.68
3808663.61	0.14919		
466323.66	3808663.61	0.14369	466379.64
3808663.61	0.13855		
466435.62	3808663.61	0.13340	466491.60
3808663.61	0.12845		
466547.58	3808663.61	0.12374	466603.56
3808663.61	0.11928		
466659.54	3808663.61	0.11504	466715.52
3808663.61	0.11104		
466771.50	3808663.61	0.10724	466827.48
3808663.61	0.10370		
466883.46	3808663.61	0.10027	465763.86
3808729.83	0.19301		

465819.84	3808729.83	0.17861	465875.82
3808729.83	0.17744		
465931.80	3808729.83	0.17543	465987.78
3808729.83	0.17497		
466043.76	3808729.83	0.17208	466099.74
3808729.83	0.17098		
466155.72	3808729.83	0.16679	466211.70
3808729.83	0.16113		
466267.68	3808729.83	0.15491	466323.66
3808729.83	0.14876		
466379.64	3808729.83	0.14291	466435.62
3808729.83	0.13737		
466491.60	3808729.83	0.13219	466547.58
3808729.83	0.12722		
466603.56	3808729.83	0.12253	466659.54
3808729.83	0.11821		
466715.52	3808729.83	0.11401	466771.50
3808729.83	0.11004		
466827.48	3808729.83	0.10633	466883.46
3808729.83	0.10277		
465763.86	3808796.05	0.21006	465819.84
3808796.05	0.19244		
465875.82	3808796.05	0.19140	465931.80
3808796.05	0.18619		
465987.78	3808796.05	0.18450	466043.76
3808796.05	0.18192		
466099.74	3808796.05	0.17979	466155.72
3808796.05	0.17406		
466211.70	3808796.05	0.16744	466267.68
3808796.05	0.16036		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 130

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466323.66	3808796.05	0.15374	466379.64
3808796.05	0.14752		
466435.62	3808796.05	0.14172	466491.60
3808796.05	0.13617		
466547.58	3808796.05	0.13096	466603.56
3808796.05	0.12612		
466659.54	3808796.05	0.12148	466715.52
3808796.05	0.11714		
466771.50	3808796.05	0.11302	466827.48
3808796.05	0.10910		
466883.46	3808796.05	0.10548	465763.86
3808862.27	0.23678		
465819.84	3808862.27	0.22230	465875.82
3808862.27	0.21054		
465931.80	3808862.27	0.20326	465987.78
3808862.27	0.19994		
466043.76	3808862.27	0.19699	466099.74
3808862.27	0.18932		
466155.72	3808862.27	0.18174	466211.70
3808862.27	0.17366		
466267.68	3808862.27	0.16617	466323.66
3808862.27	0.15910		
466379.64	3808862.27	0.15251	466435.62
3808862.27	0.14631		
466491.60	3808862.27	0.14050	466547.58
3808862.27	0.13506		
466603.56	3808862.27	0.12989	466659.54
3808862.27	0.12512		
466715.52	3808862.27	0.12054	466771.50
3808862.27	0.11625		
466827.48	3808862.27	0.11223	466883.46
3808862.27	0.10843		
465763.86	3808928.49	0.27097	465819.84
3808928.49	0.25589		
465875.82	3808928.49	0.24100	465931.80
3808928.49	0.22785		
465987.78	3808928.49	0.21699	466043.76
3808928.49	0.20653		
466099.74	3808928.49	0.19845	466155.72
3808928.49	0.18915		
466211.70	3808928.49	0.18050	466267.68

3808928.49	0.17243		
466323.66	3808928.49	0.16487	466379.64
3808928.49	0.15781		
466435.62	3808928.49	0.15131	466491.60
3808928.49	0.14521		
466547.58	3808928.49	0.13945	466603.56
3808928.49	0.13416		
466659.54	3808928.49	0.12907	466715.52
3808928.49	0.12434		
466771.50	3808928.49	0.11983	466827.48
3808928.49	0.11567		
466883.46	3808928.49	0.11167	465763.86
3808994.71	0.28738		
465819.84	3808994.71	0.27072	465875.82
3808994.71	0.25575		
465931.80	3808994.71	0.24219	465987.78
3808994.71	0.22854		
466043.76	3808994.71	0.21761	466099.74
3808994.71	0.20727		
466155.72	3808994.71	0.19719	466211.70
3808994.71	0.18792		
466267.68	3808994.71	0.17929	466323.66
3808994.71	0.17126		
466379.64	3808994.71	0.16378	466435.62
3808994.71	0.15681		
466491.60	3808994.71	0.15040	466547.58
3808994.71	0.14446		
466603.56	3808994.71	0.13880	466659.54
3808994.71	0.13344		
466715.52	3808994.71	0.12861	466771.50
3808994.71	0.12387		
466827.48	3808994.71	0.11941	466883.46
3808994.71	0.11532		
465763.86	3809060.93	0.30416	465819.84
3809060.93	0.28637		
465875.82	3809060.93	0.26987	465931.80
3809060.93	0.25489		
465987.78	3809060.93	0.24120	466043.76
3809060.93	0.22865		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 131

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494

```

, L0006495      , L0006496      , L0006497      ,
                  L0006498      , L0006499      , L0006500      , L0006501      , L0006502
, L0006503      , L0006504      , L0006505      ,
                  L0006506      , L0006507      , L0006508      , L0006509      , L0006510
, L0006511      , L0006512      , L0006513      ,
                  L0006514      , L0006515      , L0006516      , L0006517      , L0006518
, L0006519      , L0006520      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466099.74	3809060.93	0.21684	466155.72
3809060.93	0.20607		
466211.70	3809060.93	0.19605	466267.68
3809060.93	0.18683		
466323.66	3809060.93	0.17827	466379.64
3809060.93	0.17032		
466435.62	3809060.93	0.16307	466491.60
3809060.93	0.15629		
466547.58	3809060.93	0.14985	466603.56
3809060.93	0.14391		
466659.54	3809060.93	0.13846	466715.52
3809060.93	0.13317		
466771.50	3809060.93	0.12821	466827.48
3809060.93	0.12361		
466883.46	3809060.93	0.11930	465763.86
3809127.15	0.32213		
465819.84	3809127.15	0.30312	465875.82
3809127.15	0.28547		
465931.80	3809127.15	0.26939	465987.78
3809127.15	0.25430		
466043.76	3809127.15	0.24022	466099.74
3809127.15	0.22725		
466155.72	3809127.15	0.21551	466211.70
3809127.15	0.20519		
466267.68	3809127.15	0.19544	466323.66
3809127.15	0.18634		
466379.64	3809127.15	0.17781	466435.62
3809127.15	0.16998		
466491.60	3809127.15	0.16272	466547.58
3809127.15	0.15597		
466603.56	3809127.15	0.14972	466659.54
3809127.15	0.14376		

466715.52	3809127.15	0.13825	466771.50
3809127.15	0.13306		
466827.48	3809127.15	0.12815	466883.46
3809127.15	0.12363		
465763.86	3809193.37	0.34449	465819.84
3809193.37	0.32213		
465875.82	3809193.37	0.30302	465931.80
3809193.37	0.28573		
465987.78	3809193.37	0.26883	466043.76
3809193.37	0.25267		
466099.74	3809193.37	0.23903	466155.72
3809193.37	0.22635		
466211.70	3809193.37	0.21510	466267.68
3809193.37	0.20475		
466323.66	3809193.37	0.19509	466379.64
3809193.37	0.18612		
466435.62	3809193.37	0.17768	466491.60
3809193.37	0.16991		
466547.58	3809193.37	0.16270	466603.56
3809193.37	0.15606		
466659.54	3809193.37	0.14972	466715.52
3809193.37	0.14390		
466771.50	3809193.37	0.13834	466827.48
3809193.37	0.13320		
466883.46	3809193.37	0.12833	465763.86
3809259.59	0.37131		
465819.84	3809259.59	0.34644	465875.82
3809259.59	0.32426		
465931.80	3809259.59	0.30386	465987.78
3809259.59	0.28499		
466043.76	3809259.59	0.26772	466099.74
3809259.59	0.25218		
466155.72	3809259.59	0.23881	466211.70
3809259.59	0.22659		
466267.68	3809259.59	0.21537	466323.66
3809259.59	0.20470		
466379.64	3809259.59	0.19501	466435.62
3809259.59	0.18609		
466491.60	3809259.59	0.17769	466547.58
3809259.59	0.17008		
466603.56	3809259.59	0.16285	466659.54
3809259.59	0.15612		
466715.52	3809259.59	0.14999	466771.50
3809259.59	0.14405		
466827.48	3809259.59	0.13857	466883.46
3809259.59	0.13339		
464503.41	3807141.91	0.04988	464523.41
3807141.91	0.05035		

▲ *** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 132

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464543.41	3807141.91	0.05045	464563.41
3807141.91	0.05045		
464583.41	3807141.91	0.05086	464603.41
3807141.91	0.05097		
464623.41	3807141.91	0.05098	464643.41
3807141.91	0.05122		
464663.41	3807141.91	0.05124	464683.41
3807141.91	0.05119		
464703.41	3807141.91	0.05138	464723.41
3807141.91	0.05128		
464743.41	3807141.91	0.05102	464763.41
3807141.91	0.05085		
464783.41	3807141.91	0.05059	464803.41
3807141.91	0.05036		
464823.41	3807141.91	0.05047	464843.41
3807141.91	0.05028		
464863.41	3807141.91	0.04996	464883.41
3807141.91	0.04972		
464903.41	3807141.91	0.04970	464923.41
3807141.91	0.04971		
464503.41	3807161.91	0.05042	464523.41
3807161.91	0.05089		
464543.41	3807161.91	0.05099	464563.41

3807161.91	0.05099		
464583.41	3807161.91	0.05140	464603.41
3807161.91	0.05175		
464623.41	3807161.91	0.05198	464643.41
3807161.91	0.05187		
464663.41	3807161.91	0.05201	464683.41
3807161.91	0.05219		
464703.41	3807161.91	0.05202	464723.41
3807161.91	0.05178		
464743.41	3807161.91	0.05158	464763.41
3807161.91	0.05177		
464783.41	3807161.91	0.05161	464803.41
3807161.91	0.05131		
464823.41	3807161.91	0.05106	464843.41
3807161.91	0.05074		
464863.41	3807161.91	0.05048	464883.41
3807161.91	0.05060		
464903.41	3807161.91	0.05044	464923.41
3807161.91	0.05021		
464503.41	3807181.91	0.05133	464523.41
3807181.91	0.05154		
464543.41	3807181.91	0.05173	464563.41
3807181.91	0.05191		
464583.41	3807181.91	0.05204	464603.41
3807181.91	0.05234		
464623.41	3807181.91	0.05262	464643.41
3807181.91	0.05243		
464663.41	3807181.91	0.05259	464683.41
3807181.91	0.05281		
464703.41	3807181.91	0.05256	464723.41
3807181.91	0.05249		
464743.41	3807181.91	0.05249	464763.41
3807181.91	0.05245		
464783.41	3807181.91	0.05222	464803.41
3807181.91	0.05194		
464823.41	3807181.91	0.05190	464843.41
3807181.91	0.05165		
464863.41	3807181.91	0.05133	464883.41
3807181.91	0.05123		
464903.41	3807181.91	0.05114	464923.41
3807181.91	0.05104		
464503.41	3807201.91	0.05223	464523.41
3807201.91	0.05218		
464543.41	3807201.91	0.05246	464563.41
3807201.91	0.05282		
464583.41	3807201.91	0.05280	464603.41
3807201.91	0.05298		
464623.41	3807201.91	0.05319	464643.41
3807201.91	0.05310		
464663.41	3807201.91	0.05322	464683.41

```

3807201.91      0.05336
      464703.41      3807201.91      0.05321      464723.41
3807201.91      0.05328
      464743.41      3807201.91      0.05336      464763.41
3807201.91      0.05304
      464783.41      3807201.91      0.05280      464803.41
3807201.91      0.05263
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 133

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
      INCLUDING SOURCE(S):      L0006493      , L0006494
, L0006495      , L0006496      , L0006497      ,
      L0006498      , L0006499      , L0006500      , L0006501      , L0006502
, L0006503      , L0006504      , L0006505      ,
      L0006506      , L0006507      , L0006508      , L0006509      , L0006510
, L0006511      , L0006512      , L0006513      ,
      L0006514      , L0006515      , L0006516      , L0006517      , L0006518
, L0006519      , L0006520      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.05273	464843.41
3807201.91	0.05260		
464863.41	3807201.91	0.05233	464883.41
3807201.91	0.05195		
464903.41	3807201.91	0.05187	464923.41
3807201.91	0.05187		
464503.41	3807221.91	0.05280	464523.41
3807221.91	0.05274		
464543.41	3807221.91	0.05303	464563.41
3807221.91	0.05346		
464583.41	3807221.91	0.05381	464603.41
3807221.91	0.05386		
464623.41	3807221.91	0.05381	464643.41
3807221.91	0.05410		

464663.41	3807221.91	0.05408	464683.41
3807221.91	0.05397		
464703.41	3807221.91	0.05420	464723.41
3807221.91	0.05413		
464743.41	3807221.91	0.05388	464763.41
3807221.91	0.05356		
464783.41	3807221.91	0.05356	464803.41
3807221.91	0.05364		
464823.41	3807221.91	0.05336	464843.41
3807221.91	0.05335		
464863.41	3807221.91	0.05338	464883.41
3807221.91	0.05299		
464903.41	3807221.91	0.05266	464923.41
3807221.91	0.05240		
464503.41	3807241.91	0.05343	464523.41
3807241.91	0.05366		
464543.41	3807241.91	0.05384	464563.41
3807241.91	0.05404		
464583.41	3807241.91	0.05447	464603.41
3807241.91	0.05449		
464623.41	3807241.91	0.05438	464643.41
3807241.91	0.05475		
464663.41	3807241.91	0.05491	464683.41
3807241.91	0.05494		
464703.41	3807241.91	0.05494	464723.41
3807241.91	0.05473		
464743.41	3807241.91	0.05446	464763.41
3807241.91	0.05444		
464783.41	3807241.91	0.05439	464803.41
3807241.91	0.05431		
464823.41	3807241.91	0.05425	464843.41
3807241.91	0.05416		
464863.41	3807241.91	0.05400	464883.41
3807241.91	0.05360		
464903.41	3807241.91	0.05340	464923.41
3807241.91	0.05329		
464503.41	3807261.91	0.05406	464523.41
3807261.91	0.05456		
464543.41	3807261.91	0.05465	464563.41
3807261.91	0.05462		
464583.41	3807261.91	0.05505	464603.41
3807261.91	0.05514		
464623.41	3807261.91	0.05511	464643.41
3807261.91	0.05535		
464663.41	3807261.91	0.05566	464683.41
3807261.91	0.05589		
464703.41	3807261.91	0.05559	464723.41
3807261.91	0.05536		
464743.41	3807261.91	0.05521	464763.41
3807261.91	0.05534		

464783.41	3807261.91	0.05523	464803.41
3807261.91	0.05504		
464823.41	3807261.91	0.05514	464843.41
3807261.91	0.05499		
464863.41	3807261.91	0.05468	464883.41
3807261.91	0.05427		
464903.41	3807261.91	0.05426	464923.41
3807261.91	0.05432		
464503.41	3807281.91	0.05465	464523.41
3807281.91	0.05516		
464543.41	3807281.91	0.05524	464563.41
3807281.91	0.05521		
464583.41	3807281.91	0.05564	464603.41
3807281.91	0.05599		
464623.41	3807281.91	0.05622	464643.41
3807281.91	0.05606		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 134

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464663.41	3807281.91	0.05624	464683.41
3807281.91	0.05646		
464703.41	3807281.91	0.05615	464723.41
3807281.91	0.05619		
464743.41	3807281.91	0.05630	464763.41

3807281.91	0.05603		
464783.41	3807281.91	0.05604	464803.41
3807281.91	0.05611		
464823.41	3807281.91	0.05580	464843.41
3807281.91	0.05578		
464863.41	3807281.91	0.05580	464883.41
3807281.91	0.05538		
464903.41	3807281.91	0.05536	464923.41
3807281.91	0.05542		
464503.41	3807301.91	0.05567	464523.41
3807301.91	0.05587		
464543.41	3807301.91	0.05606	464563.41
3807301.91	0.05622		
464583.41	3807301.91	0.05634	464603.41
3807301.91	0.05664		
464623.41	3807301.91	0.05692	464643.41
3807301.91	0.05667		
464663.41	3807301.91	0.05682	464683.41
3807301.91	0.05704		
464703.41	3807301.91	0.05672	464723.41
3807301.91	0.05681		
464743.41	3807301.91	0.05703	464763.41
3807301.91	0.05699		
464783.41	3807301.91	0.05692	464803.41
3807301.91	0.05677		
464823.41	3807301.91	0.05636	464843.41
3807301.91	0.05637		
464863.41	3807301.91	0.05652	464883.41
3807301.91	0.05641		
464903.41	3807301.91	0.05627	464923.41
3807301.91	0.05606		
464503.41	3807321.91	0.05666	464523.41
3807321.91	0.05657		
464543.41	3807321.91	0.05686	464563.41
3807321.91	0.05722		
464583.41	3807321.91	0.05704	464603.41
3807321.91	0.05725		
464623.41	3807321.91	0.05753	464643.41
3807321.91	0.05727		
464663.41	3807321.91	0.05741	464683.41
3807321.91	0.05764		
464703.41	3807321.91	0.05744	464723.41
3807321.91	0.05748		
464743.41	3807321.91	0.05765	464763.41
3807321.91	0.05791		
464783.41	3807321.91	0.05773	464803.41
3807321.91	0.05734		
464823.41	3807321.91	0.05705	464843.41
3807321.91	0.05710		
464863.41	3807321.91	0.05727	464883.41

3807321.91	0.05733		
464903.41	3807321.91	0.05704	464923.41
3807321.91	0.05659		
464503.41	3807341.91	0.05728	464523.41
3807341.91	0.05719		
464543.41	3807341.91	0.05748	464563.41
3807341.91	0.05784		
464583.41	3807341.91	0.05765	464603.41
3807341.91	0.05786		
464623.41	3807341.91	0.05813	464643.41
3807341.91	0.05786		
464663.41	3807341.91	0.05800	464683.41
3807341.91	0.05831		
464703.41	3807341.91	0.05854	464723.41
3807341.91	0.05843		
464743.41	3807341.91	0.05823	464763.41
3807341.91	0.05849		
464783.41	3807341.91	0.05830	464803.41
3807341.91	0.05798		
464823.41	3807341.91	0.05812	464843.41
3807341.91	0.05829		
464863.41	3807341.91	0.05839	464883.41
3807341.91	0.05802		
464903.41	3807341.91	0.05757	464923.41
3807341.91	0.05719		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 135

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)

3807361.91	464503.41	3807361.91	0.05798	464523.41
3807361.91	0.05820			
3807361.91	464543.41	3807361.91	0.05838	464563.41
3807361.91	0.05846			
3807361.91	464583.41	3807361.91	0.05827	464603.41
3807361.91	0.05847			
3807361.91	464623.41	3807361.91	0.05881	464643.41
3807361.91	0.05887			
3807361.91	464663.41	3807361.91	0.05889	464683.41
3807361.91	0.05893			
3807361.91	464703.41	3807361.91	0.05924	464723.41
3807361.91	0.05933			
3807361.91	464743.41	3807361.91	0.05928	464763.41
3807361.91	0.05920			
3807361.91	464783.41	3807361.91	0.05912	464803.41
3807361.91	0.05909			
3807361.91	464823.41	3807361.91	0.05931	464843.41
3807361.91	0.05928			
3807361.91	464863.41	3807361.91	0.05907	464883.41
3807361.91	0.05860			
3807361.91	464903.41	3807361.91	0.05835	464923.41
3807361.91	0.05820			
3807381.91	464503.41	3807381.91	0.05884	464523.41
3807381.91	0.05924			
3807381.91	464543.41	3807381.91	0.05927	464563.41
3807381.91	0.05912			
3807381.91	464583.41	3807381.91	0.05904	464603.41
3807381.91	0.05920			
3807381.91	464623.41	3807381.91	0.05948	464643.41
3807381.91	0.05986			
3807381.91	464663.41	3807381.91	0.05985	464683.41
3807381.91	0.05972			
3807381.91	464703.41	3807381.91	0.05989	464723.41
3807381.91	0.06015			
3807381.91	464743.41	3807381.91	0.06033	464763.41
3807381.91	0.06005			
3807381.91	464783.41	3807381.91	0.06003	464803.41
3807381.91	0.06015			
3807381.91	464823.41	3807381.91	0.06037	464843.41
3807381.91	0.06012			
3807381.91	464863.41	3807381.91	0.05967	464883.41
3807381.91	0.05931			
3807381.91	464903.41	3807381.91	0.05923	464923.41
3807381.91	0.05918			
3807401.91	464503.41	3807401.91	0.06006	464523.41
3807401.91	0.06004			

464543.41	3807401.91	0.05992	464563.41
3807401.91	0.05984		
464583.41	3807401.91	0.06020	464603.41
3807401.91	0.06021		
464623.41	3807401.91	0.06011	464643.41
3807401.91	0.06049		
464663.41	3807401.91	0.06079	464683.41
3807401.91	0.06094		
464703.41	3807401.91	0.06066	464723.41
3807401.91	0.06077		
464743.41	3807401.91	0.06103	464763.41
3807401.91	0.06120		
464783.41	3807401.91	0.06102	464803.41
3807401.91	0.06075		
464823.41	3807401.91	0.06097	464843.41
3807401.91	0.06071		
464863.41	3807401.91	0.06033	464883.41
3807401.91	0.06042		
464903.41	3807401.91	0.06017	464923.41
3807401.91	0.05983		
464503.41	3807421.91	0.06086	464523.41
3807421.91	0.06073		
464543.41	3807421.91	0.06082	464563.41
3807421.91	0.06097		
464583.41	3807421.91	0.06108	464603.41
3807421.91	0.06117		
464623.41	3807421.91	0.06124	464643.41
3807421.91	0.06126		
464663.41	3807421.91	0.06149	464683.41
3807421.91	0.06177		
464703.41	3807421.91	0.06175	464723.41
3807421.91	0.06170		
464743.41	3807421.91	0.06167	464763.41
3807421.91	0.06193		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 136

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S):				L0006493	, L0006494	
, L0006495	, L0006496	, L0006497	,			
	L0006498	, L0006499	, L0006500	, L0006501	, L0006502	
, L0006503	, L0006504	, L0006505	,			
	L0006506	, L0006507	, L0006508	, L0006509	, L0006510	
, L0006511	, L0006512	, L0006513	,			

L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)

464783.41	3807421.91	0.06196	464803.41
3807421.91	0.06185		
464823.41	3807421.91	0.06170	464843.41
3807421.91	0.06157		
464863.41	3807421.91	0.06142	464883.41
3807421.91	0.06124		
464903.41	3807421.91	0.06107	464923.41
3807421.91	0.06090		
464503.41	3807441.91	0.06156	464523.41
3807441.91	0.06156		
464543.41	3807441.91	0.06182	464563.41
3807441.91	0.06209		
464583.41	3807441.91	0.06200	464603.41
3807441.91	0.06216		
464623.41	3807441.91	0.06236	464643.41
3807441.91	0.06217		
464663.41	3807441.91	0.06226	464683.41
3807441.91	0.06247		
464703.41	3807441.91	0.06280	464723.41
3807441.91	0.06271		
464743.41	3807441.91	0.06249	464763.41
3807441.91	0.06261		
464783.41	3807441.91	0.06282	464803.41
3807441.91	0.06293		
464823.41	3807441.91	0.06243	464843.41
3807441.91	0.06240		
464863.41	3807441.91	0.06247	464883.41
3807441.91	0.06195		
464903.41	3807441.91	0.06189	464923.41
3807441.91	0.06193		
464503.41	3807461.91	0.06233	464523.41
3807461.91	0.06280		
464543.41	3807461.91	0.06289	464563.41
3807461.91	0.06286		
464583.41	3807461.91	0.06324	464603.41
3807461.91	0.06323		
464623.41	3807461.91	0.06311	464643.41

3807461.91	0.06341		
464663.41	3807461.91	0.06332	464683.41
3807461.91	0.06314		
464703.41	3807461.91	0.06346	464723.41
3807461.91	0.06370		
464743.41	3807461.91	0.06379	464763.41
3807461.91	0.06342		
464783.41	3807461.91	0.06346	464803.41
3807461.91	0.06357		
464823.41	3807461.91	0.06306	464843.41
3807461.91	0.06303		
464863.41	3807461.91	0.06310	464883.41
3807461.91	0.06256		
464903.41	3807461.91	0.06250	464923.41
3807461.91	0.06253		
464503.41	3807481.91	0.06304	464523.41
3807481.91	0.06360		
464543.41	3807481.91	0.06392	464563.41
3807481.91	0.06407		
464583.41	3807481.91	0.06417	464603.41
3807481.91	0.06426		
464623.41	3807481.91	0.06432	464643.41
3807481.91	0.06433		
464663.41	3807481.91	0.06434	464683.41
3807481.91	0.06432		
464703.41	3807481.91	0.06426	464723.41
3807481.91	0.06443		
464743.41	3807481.91	0.06459	464763.41
3807481.91	0.06411		
464783.41	3807481.91	0.06411	464803.41
3807481.91	0.06422		
464823.41	3807481.91	0.06369	464843.41
3807481.91	0.06366		
464863.41	3807481.91	0.06379	464883.41
3807481.91	0.06363		
464903.41	3807481.91	0.06343	464923.41
3807481.91	0.06321		
464503.41	3807501.91	0.06396	464523.41
3807501.91	0.06453		
464543.41	3807501.91	0.06498	464563.41
3807501.91	0.06527		
464583.41	3807501.91	0.06516	464603.41
3807501.91	0.06532		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464623.41	3807501.91	0.06552	464643.41
3807501.91	0.06531		
464663.41	3807501.91	0.06540	464683.41
3807501.91	0.06551		
464703.41	3807501.91	0.06523	464723.41
3807501.91	0.06524		
464743.41	3807501.91	0.06529	464763.41
3807501.91	0.06495		
464783.41	3807501.91	0.06490	464803.41
3807501.91	0.06490		
464823.41	3807501.91	0.06451	464843.41
3807501.91	0.06443		
464863.41	3807501.91	0.06449	464883.41
3807501.91	0.06468		
464903.41	3807501.91	0.06435	464923.41
3807501.91	0.06389		
464503.41	3807521.91	0.06541	464523.41
3807521.91	0.06600		
464543.41	3807521.91	0.06612	464563.41
3807521.91	0.06609		
464583.41	3807521.91	0.06648	464603.41
3807521.91	0.06647		
464623.41	3807521.91	0.06633	464643.41
3807521.91	0.06663		
464663.41	3807521.91	0.06653	464683.41
3807521.91	0.06631		
464703.41	3807521.91	0.06654	464723.41
3807521.91	0.06636		

464743.41	3807521.91	0.06607	464763.41
3807521.91	0.06624		
464783.41	3807521.91	0.06600	464803.41
3807521.91	0.06566		
464823.41	3807521.91	0.06578	464843.41
3807521.91	0.06551		
464863.41	3807521.91	0.06515	464883.41
3807521.91	0.06534		
464903.41	3807521.91	0.06500	464923.41
3807521.91	0.06453		
464503.41	3807541.91	0.06683	464523.41
3807541.91	0.06703		
464543.41	3807541.91	0.06722	464563.41
3807541.91	0.06738		
464583.41	3807541.91	0.06748	464603.41
3807541.91	0.06756		
464623.41	3807541.91	0.06762	464643.41
3807541.91	0.06762		
464663.41	3807541.91	0.06762	464683.41
3807541.91	0.06759		
464703.41	3807541.91	0.06752	464723.41
3807541.91	0.06744		
464743.41	3807541.91	0.06734	464763.41
3807541.91	0.06720		
464783.41	3807541.91	0.06678	464803.41
3807541.91	0.06636		
464823.41	3807541.91	0.06658	464843.41
3807541.91	0.06655		
464863.41	3807541.91	0.06636	464883.41
3807541.91	0.06614		
464903.41	3807541.91	0.06594	464923.41
3807541.91	0.06572		
464503.41	3807561.91	0.06810	464523.41
3807561.91	0.06809		
464543.41	3807561.91	0.06836	464563.41
3807561.91	0.06866		
464583.41	3807561.91	0.06853	464603.41
3807561.91	0.06870		
464623.41	3807561.91	0.06890	464643.41
3807561.91	0.06867		
464663.41	3807561.91	0.06875	464683.41
3807561.91	0.06886		
464703.41	3807561.91	0.06855	464723.41
3807561.91	0.06855		
464743.41	3807561.91	0.06857	464763.41
3807561.91	0.06803		
464783.41	3807561.91	0.06759	464803.41
3807561.91	0.06727		
464823.41	3807561.91	0.06732	464843.41
3807561.91	0.06749		

464863.41 3807561.91 0.06755 464883.41
 3807561.91 0.06694
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 138

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464903.41	3807561.91	0.06686	464923.41
3807561.91	0.06691		
464503.41	3807581.91	0.06898	464523.41
3807581.91	0.06950		
464543.41	3807581.91	0.06958	464563.41
3807581.91	0.06953		
464583.41	3807581.91	0.06995	464603.41
3807581.91	0.06992		
464623.41	3807581.91	0.06977	464643.41
3807581.91	0.07009		
464663.41	3807581.91	0.06997	464683.41
3807581.91	0.06972		
464703.41	3807581.91	0.06995	464723.41
3807581.91	0.06975		
464743.41	3807581.91	0.06931	464763.41
3807581.91	0.06876		
464783.41	3807581.91	0.06868	464803.41
3807581.91	0.06870		
464823.41	3807581.91	0.06822	464843.41

3807581.91	0.06820		
464863.41	3807581.91	0.06826	464883.41
3807581.91	0.06763		
464903.41	3807581.91	0.06755	464923.41
3807581.91	0.06770		
464503.41	3807601.91	0.07044	464523.41
3807601.91	0.07107		
464543.41	3807601.91	0.07112	464563.41
3807601.91	0.07092		
464583.41	3807601.91	0.07101	464603.41
3807601.91	0.07110		
464623.41	3807601.91	0.07115	464643.41
3807601.91	0.07115		
464663.41	3807601.91	0.07114	464683.41
3807601.91	0.07110		
464703.41	3807601.91	0.07100	464723.41
3807601.91	0.07061		
464743.41	3807601.91	0.07014	464763.41
3807601.91	0.07002		
464783.41	3807601.91	0.06985	464803.41
3807601.91	0.06966		
464823.41	3807601.91	0.06949	464843.41
3807601.91	0.06928		
464863.41	3807601.91	0.06905	464883.41
3807601.91	0.06885		
464903.41	3807601.91	0.06861	464923.41
3807601.91	0.06842		
464503.41	3807621.91	0.07206	464523.41
3807621.91	0.07254		
464543.41	3807621.91	0.07254	464563.41
3807621.91	0.07229		
464583.41	3807621.91	0.07214	464603.41
3807621.91	0.07232		
464623.41	3807621.91	0.07252	464643.41
3807621.91	0.07227		
464663.41	3807621.91	0.07235	464683.41
3807621.91	0.07243		
464703.41	3807621.91	0.07192	464723.41
3807621.91	0.07150		
464743.41	3807621.91	0.07120	464763.41
3807621.91	0.07130		
464783.41	3807621.91	0.07105	464803.41
3807621.91	0.07070		
464823.41	3807621.91	0.07075	464843.41
3807621.91	0.07046		
464863.41	3807621.91	0.07007	464883.41
3807621.91	0.07010		
464903.41	3807621.91	0.06978	464923.41
3807621.91	0.06936		
464503.41	3807641.91	0.07366	464523.41

3807641.91	0.07358		
464543.41	3807641.91	0.07337	464563.41
3807641.91	0.07322		
464583.41	3807641.91	0.07366	464603.41
3807641.91	0.07363		
464623.41	3807641.91	0.07346	464643.41
3807641.91	0.07379		
464663.41	3807641.91	0.07366	464683.41
3807641.91	0.07325		
464703.41	3807641.91	0.07273	464723.41
3807641.91	0.07269		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 139

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

				INCLUDING SOURCE(S):		L0006493	, L0006494
, L0006495	, L0006496	, L0006497	,				
	L0006498	, L0006499	, L0006500	, L0006501	, L0006502		
, L0006503	, L0006504	, L0006505	,				
	L0006506	, L0006507	, L0006508	, L0006509	, L0006510		
, L0006511	, L0006512	, L0006513	,				
	L0006514	, L0006515	, L0006516	, L0006517	, L0006518		
, L0006519	, L0006520	, . . .	,				

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464743.41	3807641.91	0.07276	464763.41
3807641.91	0.07229		
464783.41	3807641.91	0.07222	464803.41
3807641.91	0.07224		
464823.41	3807641.91	0.07172	464843.41
3807641.91	0.07161		
464863.41	3807641.91	0.07159	464883.41
3807641.91	0.07104		
464903.41	3807641.91	0.07091	464923.41
3807641.91	0.07086		

464503.41	3807661.91	0.07539	464523.41
3807661.91	0.07518		
464543.41	3807661.91	0.07493	464563.41
3807661.91	0.07471		
464583.41	3807661.91	0.07481	464603.41
3807661.91	0.07489		
464623.41	3807661.91	0.07495	464643.41
3807661.91	0.07493		
464663.41	3807661.91	0.07491	464683.41
3807661.91	0.07480		
464703.41	3807661.91	0.07426	464723.41
3807661.91	0.07397		
464743.41	3807661.91	0.07382	464763.41
3807661.91	0.07368		
464783.41	3807661.91	0.07349	464803.41
3807661.91	0.07328		
464823.41	3807661.91	0.07309	464843.41
3807661.91	0.07286		
464863.41	3807661.91	0.07261	464883.41
3807661.91	0.07240		
464903.41	3807661.91	0.07214	464923.41
3807661.91	0.07187		
464503.41	3807681.91	0.07721	464523.41
3807681.91	0.07699		
464543.41	3807681.91	0.07673	464563.41
3807681.91	0.07643		
464583.41	3807681.91	0.07609	464603.41
3807681.91	0.07620		
464623.41	3807681.91	0.07642	464643.41
3807681.91	0.07614		
464663.41	3807681.91	0.07622	464683.41
3807681.91	0.07633		
464703.41	3807681.91	0.07595	464723.41
3807681.91	0.07544		
464743.41	3807681.91	0.07496	464763.41
3807681.91	0.07507		
464783.41	3807681.91	0.07479	464803.41
3807681.91	0.07441		
464823.41	3807681.91	0.07446	464843.41
3807681.91	0.07415		
464863.41	3807681.91	0.07373	464883.41
3807681.91	0.07375		
464903.41	3807681.91	0.07341	464923.41
3807681.91	0.07296		
464523.41	3807701.91	0.07884	464543.41
3807701.91	0.07857		
464563.41	3807701.91	0.07826	464583.41
3807701.91	0.07791		
464603.41	3807701.91	0.07761	464623.41
3807701.91	0.07742		

464643.41	3807701.91	0.07778	464663.41
3807701.91	0.07762		
464683.41	3807701.91	0.07733	464703.41
3807701.91	0.07758		
464723.41	3807701.91	0.07724	464743.41
3807701.91	0.07664		
464763.41	3807701.91	0.07613	464783.41
3807701.91	0.07606		
464803.41	3807701.91	0.07607	464823.41
3807701.91	0.07551		
464843.41	3807701.91	0.07540	464863.41
3807701.91	0.07537		
464883.41	3807701.91	0.07478	464903.41
3807701.91	0.07464		
464923.41	3807701.91	0.07459	464543.41
3807721.91	0.08013		
464563.41	3807721.91	0.07939	464583.41
3807721.91	0.07903		
464603.41	3807721.91	0.07863	464623.41
3807721.91	0.07835		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 140

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464643.41	3807721.91	0.07883	464663.41

3807721.91	0.07898		
464683.41	3807721.91	0.07892	464703.41
3807721.91	0.07880		
464723.41	3807721.91	0.07833	464743.41
3807721.91	0.07779		
464763.41	3807721.91	0.07763	464783.41
3807721.91	0.07743		
464803.41	3807721.91	0.07720	464823.41
3807721.91	0.07700		
464843.41	3807721.91	0.07675	464863.41
3807721.91	0.07649		
464883.41	3807721.91	0.07625	464903.41
3807721.91	0.07598		
464923.41	3807721.91	0.07569	464943.41
3807721.91	0.07542		
464963.41	3807721.91	0.07512	464983.41
3807721.91	0.07479		
465003.41	3807721.91	0.07450	465023.41
3807721.91	0.07415		
465043.41	3807721.91	0.07378	465063.41
3807721.91	0.07344		
465083.41	3807721.91	0.07305	465103.41
3807721.91	0.07255		
465123.41	3807721.91	0.07168	465143.41
3807721.91	0.07113		
465163.41	3807721.91	0.07064	465183.41
3807721.91	0.06973		
465203.41	3807721.91	0.06911	465223.41
3807721.91	0.06864		
465243.41	3807721.91	0.06820	465263.41
3807721.91	0.06774		
465283.41	3807721.91	0.06717	465303.41
3807721.91	0.06624		
465323.41	3807721.91	0.06565	465343.41
3807721.91	0.06514		
465363.41	3807721.91	0.06422	465383.41
3807721.91	0.06362		
464543.41	3807741.91	0.08225	464563.41
3807741.91	0.08089		
464583.41	3807741.91	0.08032	464603.41
3807741.91	0.07985		
464623.41	3807741.91	0.07957	464643.41
3807741.91	0.08006		
464663.41	3807741.91	0.08039	464683.41
3807741.91	0.08048		
464703.41	3807741.91	0.07988	464723.41
3807741.91	0.07939		
464743.41	3807741.91	0.07903	464763.41
3807741.91	0.07914		
464783.41	3807741.91	0.07884	464803.41

3807741.91	0.07843		
464823.41	3807741.91	0.07849	464843.41
3807741.91	0.07802		
464863.41	3807741.91	0.07744	464883.41
3807741.91	0.07767		
464903.41	3807741.91	0.07723	464923.41
3807741.91	0.07663		
464943.41	3807741.91	0.07682	464963.41
3807741.91	0.07636		
464983.41	3807741.91	0.07572	465003.41
3807741.91	0.07588		
465023.41	3807741.91	0.07550	465043.41
3807741.91	0.07495		
465063.41	3807741.91	0.07486	465083.41
3807741.91	0.07425		
465103.41	3807741.91	0.07340	465123.41
3807741.91	0.07269		
465143.41	3807741.91	0.07238	465163.41
3807741.91	0.07213		
465183.41	3807741.91	0.07139	465203.41
3807741.91	0.07053		
465223.41	3807741.91	0.06972	465243.41
3807741.91	0.06954		
465263.41	3807741.91	0.06885	465283.41
3807741.91	0.06793		
465303.41	3807741.91	0.06717	465323.41
3807741.91	0.06682		
465343.41	3807741.91	0.06655	465363.41
3807741.91	0.06581		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 141

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465383.41	3807741.91	0.06497	464543.41
3807761.91	0.08591		
464563.41	3807761.91	0.08379	464583.41
3807761.91	0.08252		
464603.41	3807761.91	0.08180	464623.41
3807761.91	0.08152		
464643.41	3807761.91	0.08203	464663.41
3807761.91	0.08191		
464683.41	3807761.91	0.08144	464703.41
3807761.91	0.08083		
464723.41	3807761.91	0.08078	464743.41
3807761.91	0.08085		
464763.41	3807761.91	0.08030	464783.41
3807761.91	0.08022		
464803.41	3807761.91	0.08023	464823.41
3807761.91	0.07963		
464843.41	3807761.91	0.07893	464863.41
3807761.91	0.07835		
464883.41	3807761.91	0.07858	464903.41
3807761.91	0.07813		
464923.41	3807761.91	0.07752	464943.41
3807761.91	0.07772		
464963.41	3807761.91	0.07724	464983.41
3807761.91	0.07660		
465003.41	3807761.91	0.07676	465023.41
3807761.91	0.07681		
465043.41	3807761.91	0.07668	465063.41
3807761.91	0.07594		
465083.41	3807761.91	0.07510	465103.41
3807761.91	0.07435		
465123.41	3807761.91	0.07430	465143.41
3807761.91	0.07374		
465163.41	3807761.91	0.07306	465183.41
3807761.91	0.07298		
465203.41	3807761.91	0.07230	465223.41
3807761.91	0.07137		
465243.41	3807761.91	0.07054	465263.41
3807761.91	0.06962		
465283.41	3807761.91	0.06880	465303.41
3807761.91	0.06870		
465323.41	3807761.91	0.06811	465343.41
3807761.91	0.06741		

465363.41	3807761.91	0.06733	465383.41
3807761.91	0.06667		
464543.41	3807781.91	0.09016	464563.41
3807781.91	0.08779		
464583.41	3807781.91	0.08630	464603.41
3807781.91	0.08514		
464623.41	3807781.91	0.08418	464643.41
3807781.91	0.08358		
464663.41	3807781.91	0.08338	464683.41
3807781.91	0.08324		
464703.41	3807781.91	0.08261	464723.41
3807781.91	0.08228		
464743.41	3807781.91	0.08210	464763.41
3807781.91	0.08193		
464783.41	3807781.91	0.08172	464803.41
3807781.91	0.08138		
464823.41	3807781.91	0.08063	464843.41
3807781.91	0.08023		
464863.41	3807781.91	0.07998	464883.41
3807781.91	0.07969		
464903.41	3807781.91	0.07942	464923.41
3807781.91	0.07914		
464943.41	3807781.91	0.07882	464963.41
3807781.91	0.07851		
464983.41	3807781.91	0.07820	465003.41
3807781.91	0.07784		
465023.41	3807781.91	0.07781	465043.41
3807781.91	0.07777		
465063.41	3807781.91	0.07688	465083.41
3807781.91	0.07634		
465103.41	3807781.91	0.07594	465123.41
3807781.91	0.07549		
465143.41	3807781.91	0.07507	465163.41
3807781.91	0.07463		
465183.41	3807781.91	0.07416	465203.41
3807781.91	0.07334		
465223.41	3807781.91	0.07246	465243.41
3807781.91	0.07201		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apol1\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 142

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,

```

        L0006498      , L0006499      , L0006500      , L0006501      , L0006502
, L0006503      , L0006504      , L0006505      ,
        L0006506      , L0006507      , L0006508      , L0006509      , L0006510
, L0006511      , L0006512      , L0006513      ,
        L0006514      , L0006515      , L0006516      , L0006517      , L0006518
, L0006519      , L0006520      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3807781.91	0.07121	465283.41
3807781.91	0.07030		
465303.41	3807781.91	0.06981	465323.41
3807781.91	0.06935		
465343.41	3807781.91	0.06890	465363.41
3807781.91	0.06843		
465383.41	3807781.91	0.06763	464543.41
3807801.91	0.09456		
464563.41	3807801.91	0.09223	464583.41
3807801.91	0.09044		
464603.41	3807801.91	0.08864	464623.41
3807801.91	0.08686		
464643.41	3807801.91	0.08525	464663.41
3807801.91	0.08491		
464683.41	3807801.91	0.08500	464703.41
3807801.91	0.08436		
464723.41	3807801.91	0.08383	464743.41
3807801.91	0.08345		
464763.41	3807801.91	0.08357	464783.41
3807801.91	0.08312		
464803.41	3807801.91	0.08239	464823.41
3807801.91	0.08183		
464843.41	3807801.91	0.08170	464863.41
3807801.91	0.08163		
464883.41	3807801.91	0.08103	464903.41
3807801.91	0.08087		
464923.41	3807801.91	0.08077	464943.41
3807801.91	0.08014		
464963.41	3807801.91	0.07995	464983.41
3807801.91	0.07981		
465003.41	3807801.91	0.07915	465023.41
3807801.91	0.07891		
465043.41	3807801.91	0.07873	465063.41

3807801.91	0.07802		
465083.41	3807801.91	0.07774	465103.41
3807801.91	0.07752		
465123.41	3807801.91	0.07677	465143.41
3807801.91	0.07645		
465163.41	3807801.91	0.07617	465183.41
3807801.91	0.07519		
465203.41	3807801.91	0.07434	465223.41
3807801.91	0.07366		
465243.41	3807801.91	0.07350	465263.41
3807801.91	0.07278		
465283.41	3807801.91	0.07180	465303.41
3807801.91	0.07100		
465323.41	3807801.91	0.07065	465343.41
3807801.91	0.07036		
465363.41	3807801.91	0.06937	465383.41
3807801.91	0.06855		
464543.41	3807821.91	0.09875	464563.41
3807821.91	0.09682		
464583.41	3807821.91	0.09417	464603.41
3807821.91	0.09153		
464623.41	3807821.91	0.08906	464643.41
3807821.91	0.08739		
464663.41	3807821.91	0.08656	464683.41
3807821.91	0.08605		
464703.41	3807821.91	0.08540	464723.41
3807821.91	0.08535		
464743.41	3807821.91	0.08543	464763.41
3807821.91	0.08484		
464783.41	3807821.91	0.08414	464803.41
3807821.91	0.08353		
464823.41	3807821.91	0.08368	464843.41
3807821.91	0.08328		
464863.41	3807821.91	0.08275	464883.41
3807821.91	0.08286		
464903.41	3807821.91	0.08244	464923.41
3807821.91	0.08188		
464943.41	3807821.91	0.08196	464963.41
3807821.91	0.08150		
464983.41	3807821.91	0.08091	465003.41
3807821.91	0.08095		
465023.41	3807821.91	0.08045	465043.41
3807821.91	0.07981		
465063.41	3807821.91	0.07981	465083.41
3807821.91	0.07927		
465103.41	3807821.91	0.07858	465123.41
3807821.91	0.07855		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 143

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807821.91	0.07797	465163.41
3807821.91	0.07709		
465183.41	3807821.91	0.07609	465203.41
3807821.91	0.07571		
465223.41	3807821.91	0.07549	465243.41
3807821.91	0.07461		
465263.41	3807821.91	0.07363	465283.41
3807821.91	0.07277		
465303.41	3807821.91	0.07269	465323.41
3807821.91	0.07208		
465343.41	3807821.91	0.07118	465363.41
3807821.91	0.07018		
465383.41	3807821.91	0.06983	464543.41
3807841.91	0.10423		
464563.41	3807841.91	0.10273	464583.41
3807841.91	0.09906		
464603.41	3807841.91	0.09547	464623.41
3807841.91	0.09226		
464643.41	3807841.91	0.09052	464663.41
3807841.91	0.08915		
464683.41	3807841.91	0.08801	464723.41
3807841.91	0.08699		
464743.41	3807841.91	0.08670	464763.41
3807841.91	0.08595		

464783.41	3807841.91	0.08558	464803.41
3807841.91	0.08535		
464823.41	3807841.91	0.08508	464843.41
3807841.91	0.08482		
464863.41	3807841.91	0.08456	464883.41
3807841.91	0.08425		
464903.41	3807841.91	0.08397	464923.41
3807841.91	0.08367		
464943.41	3807841.91	0.08334	464963.41
3807841.91	0.08302		
464983.41	3807841.91	0.08269	465003.41
3807841.91	0.08231		
465023.41	3807841.91	0.08195	465043.41
3807841.91	0.08158		
465063.41	3807841.91	0.08115	465083.41
3807841.91	0.08075		
465103.41	3807841.91	0.08034	465123.41
3807841.91	0.07988		
465143.41	3807841.91	0.07944	465163.41
3807841.91	0.07891		
465183.41	3807841.91	0.07789	465203.41
3807841.91	0.07721		
465223.41	3807841.91	0.07670	465243.41
3807841.91	0.07625		
465263.41	3807841.91	0.07540	465283.41
3807841.91	0.07444		
465303.41	3807841.91	0.07393	465323.41
3807841.91	0.07305		
465343.41	3807841.91	0.07212	465363.41
3807841.91	0.07169		
465383.41	3807841.91	0.07124	464503.41
3807861.91	0.10827		
464523.41	3807861.91	0.10934	464543.41
3807861.91	0.10941		
464563.41	3807861.91	0.10837	464583.41
3807861.91	0.10460		
464603.41	3807861.91	0.10043	464723.41
3807861.91	0.08853		
464743.41	3807861.91	0.08779	464763.41
3807861.91	0.08704		
464783.41	3807861.91	0.08701	464803.41
3807861.91	0.08717		
464823.41	3807861.91	0.08657	464843.41
3807861.91	0.08643		
464863.41	3807861.91	0.08636	464883.41
3807861.91	0.08573		
464903.41	3807861.91	0.08556	464923.41
3807861.91	0.08547		
464943.41	3807861.91	0.08481	464963.41
3807861.91	0.08460		

464983.41	3807861.91	0.08447	465003.41
3807861.91	0.08377		
465023.41	3807861.91	0.08352	465043.41
3807861.91	0.08334		
465063.41	3807861.91	0.08260	465083.41
3807861.91	0.08231		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 144

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465103.41	3807861.91	0.08209	465123.41
3807861.91	0.08130		
465143.41	3807861.91	0.08098	465163.41
3807861.91	0.08074		
465183.41	3807861.91	0.07992	465203.41
3807861.91	0.07895		
465223.41	3807861.91	0.07805	465243.41
3807861.91	0.07790		
465263.41	3807861.91	0.07714	465283.41
3807861.91	0.07610		
465303.41	3807861.91	0.07526	465323.41
3807861.91	0.07428		
465343.41	3807861.91	0.07338	465363.41
3807861.91	0.07326		
465383.41	3807861.91	0.07270	464503.41

3807881.91	0.11125		
464523.41	3807881.91	0.11236	464543.41
3807881.91	0.11241		
464723.41	3807881.91	0.08967	464743.41
3807881.91	0.08892		
464763.41	3807881.91	0.08815	464783.41
3807881.91	0.08813		
464803.41	3807881.91	0.08843	464823.41
3807881.91	0.08859		
464843.41	3807881.91	0.08818	464863.41
3807881.91	0.08762		
464883.41	3807881.91	0.08775	464903.41
3807881.91	0.08730		
464923.41	3807881.91	0.08671	464943.41
3807881.91	0.08681		
464963.41	3807881.91	0.08633	464983.41
3807881.91	0.08569		
465003.41	3807881.91	0.08576	465023.41
3807881.91	0.08523		
465043.41	3807881.91	0.08456	465063.41
3807881.91	0.08458		
465083.41	3807881.91	0.08401	465103.41
3807881.91	0.08329		
465123.41	3807881.91	0.08328	465143.41
3807881.91	0.08267		
465163.41	3807881.91	0.08192	465183.41
3807881.91	0.08189		
465203.41	3807881.91	0.08113	465223.41
3807881.91	0.08008		
465243.41	3807881.91	0.07914	465263.41
3807881.91	0.07810		
465283.41	3807881.91	0.07719	465303.41
3807881.91	0.07714		
465323.41	3807881.91	0.07637	465343.41
3807881.91	0.07533		
465363.41	3807881.91	0.07442	465383.41
3807881.91	0.07440		
464723.41	3807901.91	0.09188	464743.41
3807901.91	0.09018		
464763.41	3807901.91	0.09003	464783.41
3807901.91	0.08978		
464803.41	3807901.91	0.08960	464823.41
3807901.91	0.08993		
464843.41	3807901.91	0.08946	464863.41
3807901.91	0.08878		
464883.41	3807901.91	0.08907	464903.41
3807901.91	0.08899		
464923.41	3807901.91	0.08869	464943.41
3807901.91	0.08834		
464963.41	3807901.91	0.08758	464983.41

3807901.91	0.08684		
465003.41	3807901.91	0.08706	465023.41
3807901.91	0.08690		
465043.41	3807901.91	0.08652	465063.41
3807901.91	0.08608		
465083.41	3807901.91	0.08566	465103.41
3807901.91	0.08524		
465123.41	3807901.91	0.08476	465143.41
3807901.91	0.08432		
465163.41	3807901.91	0.08386	465183.41
3807901.91	0.08336		
465203.41	3807901.91	0.08244	465223.41
3807901.91	0.08144		
465243.41	3807901.91	0.08097	465263.41
3807901.91	0.08007		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 145

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465283.41	3807901.91	0.07904	465303.41
3807901.91	0.07852		
465323.41	3807901.91	0.07818	465343.41
3807901.91	0.07802		
465363.41	3807901.91	0.07692	465383.41
3807901.91	0.07649		

464723.41	3807921.91	0.09476	464743.41
3807921.91	0.09210		
464763.41	3807921.91	0.09202	464783.41
3807921.91	0.09159		
464803.41	3807921.91	0.09111	464823.41
3807921.91	0.09120		
464843.41	3807921.91	0.09081	464863.41
3807921.91	0.09032		
464883.41	3807921.91	0.09062	464903.41
3807921.91	0.09076		
464923.41	3807921.91	0.09064	464943.41
3807921.91	0.08970		
464963.41	3807921.91	0.08891	464983.41
3807921.91	0.08835		
465003.41	3807921.91	0.08859	465023.41
3807921.91	0.08865		
465043.41	3807921.91	0.08848	465063.41
3807921.91	0.08769		
465083.41	3807921.91	0.08740	465103.41
3807921.91	0.08720		
465123.41	3807921.91	0.08636	465143.41
3807921.91	0.08604		
465163.41	3807921.91	0.08581	465183.41
3807921.91	0.08494		
465203.41	3807921.91	0.08390	465223.41
3807921.91	0.08293		
465243.41	3807921.91	0.08281	465263.41
3807921.91	0.08218		
465283.41	3807921.91	0.08139	465303.41
3807921.91	0.08024		
465323.41	3807921.91	0.08020	465343.41
3807921.91	0.08044		
465363.41	3807921.91	0.07930	465383.41
3807921.91	0.07835		
464723.41	3807941.91	0.09858	464743.41
3807941.91	0.09553		
464763.41	3807941.91	0.09379	464783.41
3807941.91	0.09337		
464803.41	3807941.91	0.09342	464823.41
3807941.91	0.09271		
464843.41	3807941.91	0.09259	464863.41
3807941.91	0.09277		
464883.41	3807941.91	0.09310	464903.41
3807941.91	0.09269		
464923.41	3807941.91	0.09187	464943.41
3807941.91	0.09092		
464963.41	3807941.91	0.09068	464983.41
3807941.91	0.09079		
465003.41	3807941.91	0.09105	465023.41
3807941.91	0.09056		

465043.41	3807941.91	0.08984	465063.41
3807941.91	0.08990		
465083.41	3807941.91	0.08930	465103.41
3807941.91	0.08854		
465123.41	3807941.91	0.08856	465143.41
3807941.91	0.08793		
465163.41	3807941.91	0.08713	465183.41
3807941.91	0.08713		
465203.41	3807941.91	0.08633	465223.41
3807941.91	0.08520		
465243.41	3807941.91	0.08420	465263.41
3807941.91	0.08416		
465283.41	3807941.91	0.08461	465303.41
3807941.91	0.08342		
465323.41	3807941.91	0.08251	465343.41
3807941.91	0.08147		
465363.41	3807941.91	0.08031	465383.41
3807941.91	0.07990		
465403.41	3807941.91	0.07971	465423.41
3807941.91	0.07879		
465443.41	3807941.91	0.07778	465463.41
3807941.91	0.07650		
465483.41	3807941.91	0.07567	465503.41
3807941.91	0.07474		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 146

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
465523.41	3807941.91	0.07409	465543.41
3807941.91	0.07419		
465563.41	3807941.91	0.07373	465583.41
3807941.91	0.07297		
465603.41	3807941.91	0.07208	465623.41
3807941.91	0.07192		
465643.41	3807941.91	0.07207	465663.41
3807941.91	0.07139		
465683.41	3807941.91	0.07133	465703.41
3807941.91	0.07142		
464723.41	3807961.91	0.10383	464743.41
3807961.91	0.09924		
464763.41	3807961.91	0.09642	464783.41
3807961.91	0.09531		
464803.41	3807961.91	0.09504	464823.41
3807961.91	0.09483		
464843.41	3807961.91	0.09452	464863.41
3807961.91	0.09430		
464883.41	3807961.91	0.09464	464903.41
3807961.91	0.09411		
464923.41	3807961.91	0.09326	464943.41
3807961.91	0.09297		
464963.41	3807961.91	0.09260	464983.41
3807961.91	0.09230		
465003.41	3807961.91	0.09257	465023.41
3807961.91	0.09196		
465043.41	3807961.91	0.09111	465063.41
3807961.91	0.09135		
465083.41	3807961.91	0.09116	465103.41
3807961.91	0.09072		
465123.41	3807961.91	0.09023	465143.41
3807961.91	0.08977		
465163.41	3807961.91	0.08930	465183.41
3807961.91	0.08878		
465203.41	3807961.91	0.08844	465223.41
3807961.91	0.08830		
465243.41	3807961.91	0.08708	465263.41
3807961.91	0.08658		
465283.41	3807961.91	0.08616	465303.41
3807961.91	0.08494		
465323.41	3807961.91	0.08419	465343.41
3807961.91	0.08355		
465363.41	3807961.91	0.08237	465383.41
3807961.91	0.08161		
465403.41	3807961.91	0.08110	465423.41
3807961.91	0.08080		
465443.41	3807961.91	0.07994	465463.41

3807961.91	0.07783		
465483.41	3807961.91	0.07760	465503.41
3807961.91	0.07680		
465523.41	3807961.91	0.07592	465543.41
3807961.91	0.07556		
465563.41	3807961.91	0.07481	465583.41
3807961.91	0.07399		
465603.41	3807961.91	0.07374	465623.41
3807961.91	0.07359		
465643.41	3807961.91	0.07331	465663.41
3807961.91	0.07311		
465683.41	3807961.91	0.07288	465703.41
3807961.91	0.07252		
464743.41	3807981.91	0.10359	464763.41
3807981.91	0.09976		
464783.41	3807981.91	0.09775	464803.41
3807981.91	0.09685		
464823.41	3807981.91	0.09725	464843.41
3807981.91	0.09674		
464863.41	3807981.91	0.09601	464883.41
3807981.91	0.09637		
464903.41	3807981.91	0.09583	464923.41
3807981.91	0.09503		
464943.41	3807981.91	0.09507	464963.41
3807981.91	0.09459		
464983.41	3807981.91	0.09396	465003.41
3807981.91	0.09397		
465023.41	3807981.91	0.09344	465043.41
3807981.91	0.09276		
465063.41	3807981.91	0.09272	465083.41
3807981.91	0.09288		
465103.41	3807981.91	0.09287	465123.41
3807981.91	0.09171		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 147

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518

, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807981.91	0.09147	465163.41
3807981.91	0.09148		
465183.41	3807981.91	0.09054	465203.41
3807981.91	0.09081		
465223.41	3807981.91	0.09109	465243.41
3807981.91	0.08983		
465263.41	3807981.91	0.08857	465283.41
3807981.91	0.08736		
465303.41	3807981.91	0.08637	465323.41
3807981.91	0.08595		
465343.41	3807981.91	0.08565	465363.41
3807981.91	0.08484		
465383.41	3807981.91	0.08375	465403.41
3807981.91	0.08276		
465423.41	3807981.91	0.08269	465443.41
3807981.91	0.08194		
465463.41	3807981.91	0.07942	465483.41
3807981.91	0.07943		
465503.41	3807981.91	0.07873	465523.41
3807981.91	0.07775		
465543.41	3807981.91	0.07702	465563.41
3807981.91	0.07613		
465583.41	3807981.91	0.07537	465603.41
3807981.91	0.07561		
465623.41	3807981.91	0.07519	465643.41
3807981.91	0.07467		
465663.41	3807981.91	0.07485	465683.41
3807981.91	0.07428		
465703.41	3807981.91	0.07341	464763.41
3808001.91	0.10424		
464783.41	3808001.91	0.10122	464803.41
3808001.91	0.09957		
464823.41	3808001.91	0.09999	464843.41
3808001.91	0.09946		
464863.41	3808001.91	0.09873	464883.41
3808001.91	0.09911		
464903.41	3808001.91	0.09855	464923.41
3808001.91	0.09758		

464943.41	3808001.91	0.09675	464963.41
3808001.91	0.09657		
464983.41	3808001.91	0.09652	465003.41
3808001.91	0.09563		
465023.41	3808001.91	0.09540	465043.41
3808001.91	0.09531		
465063.41	3808001.91	0.09436	465083.41
3808001.91	0.09422		
465103.41	3808001.91	0.09421	465123.41
3808001.91	0.09302		
465143.41	3808001.91	0.09277	465163.41
3808001.91	0.09296		
465183.41	3808001.91	0.09377	465203.41
3808001.91	0.09350		
465223.41	3808001.91	0.09236	465243.41
3808001.91	0.09108		
465263.41	3808001.91	0.08979	465283.41
3808001.91	0.08871		
465303.41	3808001.91	0.08863	465323.41
3808001.91	0.08788		
465343.41	3808001.91	0.08712	465363.41
3808001.91	0.08710		
465383.41	3808001.91	0.08626	465403.41
3808001.91	0.08510		
465423.41	3808001.91	0.08411	465443.41
3808001.91	0.08303		
465463.41	3808001.91	0.08164	465483.41
3808001.91	0.08076		
465503.41	3808001.91	0.07976	465523.41
3808001.91	0.07893		
465543.41	3808001.91	0.07920	465563.41
3808001.91	0.07859		
465583.41	3808001.91	0.07762	465603.41
3808001.91	0.07685		
465623.41	3808001.91	0.07675	465643.41
3808001.91	0.07680		
465663.41	3808001.91	0.07606	465683.41
3808001.91	0.07517		
465703.41	3808001.91	0.07445	464763.41
3808021.91	0.11061		
464783.41	3808021.91	0.10719	464803.41
3808021.91	0.10439		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³
**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3808021.91	0.10334	464843.41
3808021.91	0.10232		
464863.41	3808021.91	0.10145	464883.41
3808021.91	0.10110		
464903.41	3808021.91	0.10080	464923.41
3808021.91	0.10038		
464943.41	3808021.91	0.09934	464963.41
3808021.91	0.09872		
464983.41	3808021.91	0.09832	465003.41
3808021.91	0.09799		
465023.41	3808021.91	0.09755	465043.41
3808021.91	0.09709		
465063.41	3808021.91	0.09669	465083.41
3808021.91	0.09622		
465103.41	3808021.91	0.09572	465123.41
3808021.91	0.09526		
465143.41	3808021.91	0.09476	465163.41
3808021.91	0.09433		
465183.41	3808021.91	0.09549	465203.41
3808021.91	0.09498		
465223.41	3808021.91	0.09380	465243.41
3808021.91	0.09323		
465263.41	3808021.91	0.09216	465283.41
3808021.91	0.09095		
465303.41	3808021.91	0.09033	465323.41
3808021.91	0.08990		
465343.41	3808021.91	0.08935	465363.41
3808021.91	0.08878		
465383.41	3808021.91	0.08774	465403.41

3808021.91	0.08664		
465423.41	3808021.91	0.08621	465443.41
3808021.91	0.08530		
465463.41	3808021.91	0.08313	465483.41
3808021.91	0.08276		
465503.41	3808021.91	0.08191	465523.41
3808021.91	0.08097		
465543.41	3808021.91	0.08072	465563.41
3808021.91	0.08041		
465583.41	3808021.91	0.07999	465603.41
3808021.91	0.07898		
465623.41	3808021.91	0.07845	465643.41
3808021.91	0.07803		
465663.41	3808021.91	0.07705	465683.41
3808021.91	0.07671		
465703.41	3808021.91	0.07647	464783.41
3808041.91	0.11332		
464803.41	3808041.91	0.10973	464823.41
3808041.91	0.10724		
464843.41	3808041.91	0.10555	464863.41
3808041.91	0.10429		
464883.41	3808041.91	0.10327	464903.41
3808041.91	0.10301		
464923.41	3808041.91	0.10292	464943.41
3808041.91	0.10185		
464963.41	3808041.91	0.10076	464983.41
3808041.91	0.09990		
465003.41	3808041.91	0.10024	465023.41
3808041.91	0.09978		
465043.41	3808041.91	0.09905	465063.41
3808041.91	0.09904		
465083.41	3808041.91	0.09844	465103.41
3808041.91	0.09765		
465123.41	3808041.91	0.09760	465143.41
3808041.91	0.09695		
465163.41	3808041.91	0.09629	465183.41
3808041.91	0.09713		
465203.41	3808041.91	0.09655	465223.41
3808041.91	0.09565		
465243.41	3808041.91	0.09547	465263.41
3808041.91	0.09487		
465283.41	3808041.91	0.09376	465303.41
3808041.91	0.09241		
465323.41	3808041.91	0.09187	465343.41
3808041.91	0.09159		
465363.41	3808041.91	0.09058	465383.41
3808041.91	0.08941		
465403.41	3808041.91	0.08835	465423.41
3808041.91	0.08847		
465443.41	3808041.91	0.08767	465463.41

3808041.91 0.08476

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 149

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465483.41	3808041.91	0.08494	465503.41
3808041.91	0.08439		
465523.41	3808041.91	0.08350	465543.41
3808041.91	0.08242		
465563.41	3808041.91	0.08217	465583.41
3808041.91	0.08211		
465603.41	3808041.91	0.08105	465623.41
3808041.91	0.08002		
465643.41	3808041.91	0.07904	465663.41
3808041.91	0.07831		
465683.41	3808041.91	0.07833	465703.41
3808041.91	0.07832		
464803.41	3808061.91	0.11465	464823.41
3808061.91	0.11200		
464843.41	3808061.91	0.10953	464863.41
3808061.91	0.10738		
464883.41	3808061.91	0.10633	464903.41
3808061.91	0.10542		
464923.41	3808061.91	0.10451	464943.41
3808061.91	0.10341		

464963.41	3808061.91	0.10231	464983.41
3808061.91	0.10143		
465003.41	3808061.91	0.10178	465023.41
3808061.91	0.10199		
465043.41	3808061.91	0.10191	465063.41
3808061.91	0.10090		
465083.41	3808061.91	0.10062	465103.41
3808061.91	0.10050		
465123.41	3808061.91	0.09943	465143.41
3808061.91	0.09944		
465163.41	3808061.91	0.10006	465183.41
3808061.91	0.09907		
465203.41	3808061.91	0.09865	465223.41
3808061.91	0.09839		
465243.41	3808061.91	0.09721	465263.41
3808061.91	0.09694		
465283.41	3808061.91	0.09664	465303.41
3808061.91	0.09525		
465323.41	3808061.91	0.09404	465343.41
3808061.91	0.09308		
465363.41	3808061.91	0.09326	465383.41
3808061.91	0.09236		
465403.41	3808061.91	0.09111	465423.41
3808061.91	0.09005		
465443.41	3808061.91	0.08888	465463.41
3808061.91	0.08736		
465483.41	3808061.91	0.08641	465503.41
3808061.91	0.08622		
465523.41	3808061.91	0.08619	465543.41
3808061.91	0.08505		
465563.41	3808061.91	0.08408	465583.41
3808061.91	0.08317		
465603.41	3808061.91	0.08209	465623.41
3808061.91	0.08102		
465643.41	3808061.91	0.08019	465663.41
3808061.91	0.08056		
465683.41	3808061.91	0.08009	465703.41
3808061.91	0.07923		
464823.41	3808081.91	0.11576	464843.41
3808081.91	0.11363		
464863.41	3808081.91	0.11178	464883.41
3808081.91	0.10986		
464903.41	3808081.91	0.10792	464923.41
3808081.91	0.10614		
464943.41	3808081.91	0.10503	464963.41
3808081.91	0.10445		
464983.41	3808081.91	0.10408	465003.41
3808081.91	0.10364		
465023.41	3808081.91	0.10372	465043.41
3808081.91	0.10379		

465063.41	3808081.91	0.10253	465083.41
3808081.91	0.10232		
465103.41	3808081.91	0.10249	465123.41
3808081.91	0.10235		
465143.41	3808081.91	0.10246	465163.41
3808081.91	0.10215		
465183.41	3808081.91	0.10157	465203.41
3808081.91	0.10094		
465223.41	3808081.91	0.10028	465243.41
3808081.91	0.09984		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 150

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494

, L0006495	, L0006496	, L0006497	,			
	L0006498	, L0006499	, L0006500	, L0006501	, L0006502	
, L0006503	, L0006504	, L0006505	,			
	L0006506	, L0006507	, L0006508	, L0006509	, L0006510	
, L0006511	, L0006512	, L0006513	,			
	L0006514	, L0006515	, L0006516	, L0006517	, L0006518	
, L0006519	, L0006520	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465263.41	3808081.91	0.09920	465283.41
3808081.91	0.09840		
465303.41	3808081.91	0.09698	465323.41
3808081.91	0.09615		
465343.41	3808081.91	0.09558	465363.41
3808081.91	0.09514		
465383.41	3808081.91	0.09402	465403.41
3808081.91	0.09284		
465423.41	3808081.91	0.09240	465443.41
3808081.91	0.09142		
465463.41	3808081.91	0.08902	465483.41

3808081.91	0.08864		
465503.41	3808081.91	0.08824	465523.41
3808081.91	0.08784		
465543.41	3808081.91	0.08766	465563.41
3808081.91	0.08677		
465583.41	3808081.91	0.08562	465603.41
3808081.91	0.08449		
465623.41	3808081.91	0.08338	465643.41
3808081.91	0.08242		
465663.41	3808081.91	0.08208	465683.41
3808081.91	0.08123		
465703.41	3808081.91	0.08082	464843.41
3808101.91	0.11778		
464863.41	3808101.91	0.11583	464883.41
3808101.91	0.11303		
464903.41	3808101.91	0.11049	464923.41
3808101.91	0.10830		
464943.41	3808101.91	0.10717	464963.41
3808101.91	0.10686		
464983.41	3808101.91	0.10677	465003.41
3808101.91	0.10588		
465023.41	3808101.91	0.10563	465043.41
3808101.91	0.10548		
465063.41	3808101.91	0.10451	465083.41
3808101.91	0.10442		
465103.41	3808101.91	0.10485	465123.41
3808101.91	0.10579		
465143.41	3808101.91	0.10499	465163.41
3808101.91	0.10384		
465183.41	3808101.91	0.10402	465203.41
3808101.91	0.10349		
465223.41	3808101.91	0.10252	465243.41
3808101.91	0.10236		
465263.41	3808101.91	0.10134	465283.41
3808101.91	0.09992		
465303.41	3808101.91	0.09878	465323.41
3808101.91	0.09836		
465343.41	3808101.91	0.09825	465363.41
3808101.91	0.09716		
465383.41	3808101.91	0.09589	465403.41
3808101.91	0.09475		
465423.41	3808101.91	0.09477	465443.41
3808101.91	0.09392		
465463.41	3808101.91	0.09082	465483.41
3808101.91	0.09091		
465503.41	3808101.91	0.09033	465523.41
3808101.91	0.08974		
465543.41	3808101.91	0.08991	465563.41
3808101.91	0.08915		
465583.41	3808101.91	0.08795	465603.41

3808101.91	0.08677		
465623.41	3808101.91	0.08560	465643.41
3808101.91	0.08469		
465663.41	3808101.91	0.08460	465683.41
3808101.91	0.08355		
465703.41	3808101.91	0.08264	464863.41
3808121.91	0.11775		
464883.41	3808121.91	0.11489	464903.41
3808121.91	0.11304		
464923.41	3808121.91	0.11169	464943.41
3808121.91	0.11051		
464963.41	3808121.91	0.10950	464983.41
3808121.91	0.10870		
465003.41	3808121.91	0.10889	465023.41
3808121.91	0.10825		
465043.41	3808121.91	0.10738	465063.41
3808121.91	0.10751		
465083.41	3808121.91	0.10812	465103.41
3808121.91	0.10903		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 151

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465123.41	3808121.91	0.10801	465143.41
3808121.91	0.10664		

465163.41	3808121.91	0.10546	465183.41
3808121.91	0.10564		
465203.41	3808121.91	0.10585	465223.41
3808121.91	0.10560		
465243.41	3808121.91	0.10431	465263.41
3808121.91	0.10288		
465283.41	3808121.91	0.10163	465303.41
3808121.91	0.10178		
465323.41	3808121.91	0.10094	465343.41
3808121.91	0.09991		
465363.41	3808121.91	0.10001	465383.41
3808121.91	0.09905		
465403.41	3808121.91	0.09769	465423.41
3808121.91	0.09654		
465443.41	3808121.91	0.09526	465463.41
3808121.91	0.09358		
465483.41	3808121.91	0.09254	465503.41
3808121.91	0.09248		
465523.41	3808121.91	0.09249	465543.41
3808121.91	0.09149		
465563.41	3808121.91	0.09032	465583.41
3808121.91	0.08908		
465603.41	3808121.91	0.08787	465623.41
3808121.91	0.08667		
465643.41	3808121.91	0.08649	465663.41
3808121.91	0.08742		
465683.41	3808121.91	0.08686	465703.41
3808121.91	0.08567		
464883.41	3808141.91	0.11853	464903.41
3808141.91	0.11583		
464923.41	3808141.91	0.11390	464943.41
3808141.91	0.11270		
464963.41	3808141.91	0.11148	464983.41
3808141.91	0.11052		
465003.41	3808141.91	0.11095	465023.41
3808141.91	0.11021		
465043.41	3808141.91	0.10916	465063.41
3808141.91	0.10953		
465083.41	3808141.91	0.11043	465103.41
3808141.91	0.11128		
465123.41	3808141.91	0.10981	465143.41
3808141.91	0.10894		
465163.41	3808141.91	0.10831	465183.41
3808141.91	0.10762		
465203.41	3808141.91	0.10767	465223.41
3808141.91	0.10757		
465243.41	3808141.91	0.10601	465263.41
3808141.91	0.10510		
465283.41	3808141.91	0.10445	465303.41
3808141.91	0.10392		

465323.41	3808141.91	0.10331	465343.41
3808141.91	0.10272		
465363.41	3808141.91	0.10211	465383.41
3808141.91	0.10091		
465403.41	3808141.91	0.09961	465423.41
3808141.91	0.09930		
465443.41	3808141.91	0.09822	465463.41
3808141.91	0.09681		
465483.41	3808141.91	0.09544	465503.41
3808141.91	0.09471		
465523.41	3808141.91	0.09490	465543.41
3808141.91	0.09514		
465563.41	3808141.91	0.09431	465583.41
3808141.91	0.09299		
465603.41	3808141.91	0.09169	465623.41
3808141.91	0.09041		
465643.41	3808141.91	0.08929	465663.41
3808141.91	0.08939		
465683.41	3808141.91	0.08996	465703.41
3808141.91	0.08954		
464883.41	3808161.91	0.12280	464903.41
3808161.91	0.11904		
464923.41	3808161.91	0.11635	464943.41
3808161.91	0.11512		
464963.41	3808161.91	0.11387	464983.41
3808161.91	0.11283		
465003.41	3808161.91	0.11291	465023.41
3808161.91	0.11228		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 152

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

465043.41	3808161.91	0.11150	465063.41	
3808161.91	0.11189	465103.41		
465083.41	3808161.91	0.11272	465143.41	
3808161.91	0.11315	465183.41		
465123.41	3808161.91	0.11199	465223.41	
3808161.91	0.11154	465263.41		
465163.41	3808161.91	0.11121	465303.41	
3808161.91	0.11017	465343.41		
465203.41	3808161.91	0.10968	465383.41	
3808161.91	0.10933	465423.41		
465243.41	3808161.91	0.10809	465463.41	
3808161.91	0.10762	465503.41		
465283.41	3808161.91	0.10745	465543.41	
3808161.91	0.10622	465583.41		
465323.41	3808161.91	0.10580	465623.41	
3808161.91	0.10555	465663.41		
465363.41	3808161.91	0.10438	465703.41	
3808161.91	0.10313	464923.41		
465403.41	3808161.91	0.10189	464963.41	
3808161.91	0.10195	465003.41		
465443.41	3808161.91	0.10101	465043.41	
3808161.91	0.09985	465083.41		
465483.41	3808161.91	0.09968		
3808161.91	0.09837	0.09724		
465523.41	3808161.91	0.09765		
3808161.91	0.09817	465623.41		
465563.41	3808161.91	0.09489		
3808161.91	0.09626	465663.41		
465603.41	3808161.91	0.09334		
3808161.91	0.09413	465703.41		
465643.41	3808161.91	0.09214		
3808161.91	0.09200	464923.41		
465683.41	3808161.91	0.09214		
3808161.91	0.09313	464963.41		
464903.41	3808181.91	0.12299		
3808181.91	0.12017	465003.41		
464943.41	3808181.91	0.11890		
3808181.91	0.11761	465043.41		
464983.41	3808181.91	0.11634		
3808181.91	0.11524	465083.41		
465023.41	3808181.91	0.11501		
3808181.91	0.11522	465163.41		
465063.41	3808181.91	0.11634		

3808181.91	0.11632		
465103.41	3808181.91	0.11525	465123.41
3808181.91	0.11527		
465143.41	3808181.91	0.11438	465163.41
3808181.91	0.11343		
465183.41	3808181.91	0.11341	465203.41
3808181.91	0.11248		
465223.41	3808181.91	0.11132	465243.41
3808181.91	0.11148		
465263.41	3808181.91	0.11054	465283.41
3808181.91	0.10937		
465303.41	3808181.91	0.10942	465323.41
3808181.91	0.10853		
465343.41	3808181.91	0.10741	465363.41
3808181.91	0.10772		
465383.41	3808181.91	0.10668	465403.41
3808181.91	0.10517		
465423.41	3808181.91	0.10390	465443.41
3808181.91	0.10247		
465463.41	3808181.91	0.10218	465483.41
3808181.91	0.10322		
465503.41	3808181.91	0.10249	465523.41
3808181.91	0.10103		
465543.41	3808181.91	0.10005	465563.41
3808181.91	0.09890		
465583.41	3808181.91	0.09746	465603.41
3808181.91	0.09605		
465623.41	3808181.91	0.09673	465643.41
3808181.91	0.09695		
465663.41	3808181.91	0.09553	465683.41
3808181.91	0.09428		
465703.41	3808181.91	0.09472	464923.41
3808201.91	0.12559		
464943.41	3808201.91	0.12325	464963.41
3808201.91	0.12156		
464983.41	3808201.91	0.12020	465003.41
3808201.91	0.11881		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 153

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502

```

, L0006503      , L0006504      , L0006505      ,
                  L0006506      , L0006507      , L0006508      , L0006509      , L0006510
, L0006511      , L0006512      , L0006513      ,
                  L0006514      , L0006515      , L0006516      , L0006517      , L0006518
, L0006519      , L0006520      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
465023.41	3808201.91	0.11866	465043.41
3808201.91	0.11968		
465063.41	3808201.91	0.11957	465083.41
3808201.91	0.11915		
465103.41	3808201.91	0.11855	465123.41
3808201.91	0.11783		
465143.41	3808201.91	0.11734	465163.41
3808201.91	0.11666		
465183.41	3808201.91	0.11592	465203.41
3808201.91	0.11522		
465223.41	3808201.91	0.11453	465243.41
3808201.91	0.11393		
465263.41	3808201.91	0.11323	465283.41
3808201.91	0.11255		
465303.41	3808201.91	0.11183	465323.41
3808201.91	0.11134		
465343.41	3808201.91	0.11072	465363.41
3808201.91	0.11007		
465383.41	3808201.91	0.11071	465403.41
3808201.91	0.11043		
465423.41	3808201.91	0.10878	465443.41
3808201.91	0.10717		
465463.41	3808201.91	0.10573	465483.41
3808201.91	0.10577		
465503.41	3808201.91	0.10473	465523.41
3808201.91	0.10318		
465543.41	3808201.91	0.10166	465563.41
3808201.91	0.10173		
465583.41	3808201.91	0.10120	465603.41
3808201.91	0.09970		
465623.41	3808201.91	0.09901	465643.41
3808201.91	0.09928		
465663.41	3808201.91	0.09779	465683.41
3808201.91	0.09792		

465703.41	3808201.91	0.09749	464943.41
3808221.91	0.12851		
464963.41	3808221.91	0.12594	464983.41
3808221.91	0.12452		
465003.41	3808221.91	0.12307	465023.41
3808221.91	0.12321		
465043.41	3808221.91	0.12375	465063.41
3808221.91	0.12255		
465083.41	3808221.91	0.12239	465103.41
3808221.91	0.12255		
465123.41	3808221.91	0.12090	465143.41
3808221.91	0.12027		
465163.41	3808221.91	0.11994	465183.41
3808221.91	0.11861		
465203.41	3808221.91	0.11811	465223.41
3808221.91	0.11792		
465243.41	3808221.91	0.11656	465263.41
3808221.91	0.11607		
465283.41	3808221.91	0.11575	465303.41
3808221.91	0.11440		
465323.41	3808221.91	0.11412	465343.41
3808221.91	0.11415		
465363.41	3808221.91	0.11383	465383.41
3808221.91	0.11389		
465403.41	3808221.91	0.11452	465423.41
3808221.91	0.11278		
465443.41	3808221.91	0.11108	465463.41
3808221.91	0.10941		
465483.41	3808221.91	0.10776	465503.41
3808221.91	0.10682		
465523.41	3808221.91	0.10584	465543.41
3808221.91	0.10425		
465563.41	3808221.91	0.10434	465583.41
3808221.91	0.10511		
465603.41	3808221.91	0.10352	465623.41
3808221.91	0.10285		
465643.41	3808221.91	0.10172	465663.41
3808221.91	0.10017		
465683.41	3808221.91	0.10000	465703.41
3808221.91	0.10045		
464963.41	3808241.91	0.13144	464983.41
3808241.91	0.12995		
465003.41	3808241.91	0.12843	465023.41
3808241.91	0.12728		
465043.41	3808241.91	0.12619	465063.41
3808241.91	0.12629		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465083.41	3808241.91	0.12673	465103.41
3808241.91	0.12672		
465123.41	3808241.91	0.12500	465143.41
3808241.91	0.12348		
465163.41	3808241.91	0.12225	465183.41
3808241.91	0.12245		
465203.41	3808241.91	0.12143	465223.41
3808241.91	0.12016		
465243.41	3808241.91	0.12019	465263.41
3808241.91	0.11917		
465283.41	3808241.91	0.11790	465303.41
3808241.91	0.11816		
465323.41	3808241.91	0.11718	465343.41
3808241.91	0.11696		
465363.41	3808241.91	0.11806	465383.41
3808241.91	0.11754		
465403.41	3808241.91	0.11621	465423.41
3808241.91	0.11442		
465443.41	3808241.91	0.11267	465463.41
3808241.91	0.11094		
465483.41	3808241.91	0.10924	465503.41
3808241.91	0.10992		
465523.41	3808241.91	0.11008	465543.41
3808241.91	0.10839		
465563.41	3808241.91	0.10690	465583.41

3808241.91	0.10638		
465603.41	3808241.91	0.10474	465623.41
3808241.91	0.10523		
465643.41	3808241.91	0.10532	465663.41
3808241.91	0.10368		
465683.41	3808241.91	0.10223	465703.41
3808241.91	0.10213		
464983.41	3808261.91	0.13803	465003.41
3808261.91	0.13530		
465023.41	3808261.91	0.13309	465043.41
3808261.91	0.13182		
465063.41	3808261.91	0.13110	465083.41
3808261.91	0.13036		
465103.41	3808261.91	0.12964	465123.41
3808261.91	0.12902		
465143.41	3808261.91	0.12758	465163.41
3808261.91	0.12594		
465183.41	3808261.91	0.12528	465203.41
3808261.91	0.12453		
465223.41	3808261.91	0.12377	465243.41
3808261.91	0.12295		
465263.41	3808261.91	0.12139	465283.41
3808261.91	0.11987		
465303.41	3808261.91	0.12042	465323.41
3808261.91	0.12143		
465343.41	3808261.91	0.12119	465363.41
3808261.91	0.12112		
465383.41	3808261.91	0.12168	465403.41
3808261.91	0.12096		
465423.41	3808261.91	0.11907	465443.41
3808261.91	0.11721		
465463.41	3808261.91	0.11534	465483.41
3808261.91	0.11354		
465503.41	3808261.91	0.11267	465523.41
3808261.91	0.11288		
465543.41	3808261.91	0.11111	465563.41
3808261.91	0.11118		
465583.41	3808261.91	0.11046	465603.41
3808261.91	0.10872		
465623.41	3808261.91	0.10785	465643.41
3808261.91	0.10814		
465663.41	3808261.91	0.10760	465683.41
3808261.91	0.10642		
465703.41	3808261.91	0.10489	465003.41
3808281.91	0.14257		
465023.41	3808281.91	0.13996	465043.41
3808281.91	0.13791		
465063.41	3808281.91	0.13658	465083.41
3808281.91	0.13465		
465103.41	3808281.91	0.13276	465123.41

```

3808281.91      0.13289
      465143.41      3808281.91      0.13162      465163.41
3808281.91      0.12979
      465183.41      3808281.91      0.12831      465203.41
3808281.91      0.12778
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 155

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
      INCLUDING SOURCE(S):      L0006493      , L0006494
, L0006495      , L0006496      , L0006497      ,
      L0006498      , L0006499      , L0006500      , L0006501      , L0006502
, L0006503      , L0006504      , L0006505      ,
      L0006506      , L0006507      , L0006508      , L0006509      , L0006510
, L0006511      , L0006512      , L0006513      ,
      L0006514      , L0006515      , L0006516      , L0006517      , L0006518
, L0006519      , L0006520      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808281.91	0.12735	465243.41
3808281.91	0.12538		
465263.41	3808281.91	0.12373	465283.41
3808281.91	0.12270		
465303.41	3808281.91	0.12310	465323.41
3808281.91	0.12501		
465343.41	3808281.91	0.12566	465363.41
3808281.91	0.12497		
465383.41	3808281.91	0.12510	465403.41
3808281.91	0.12625		
465423.41	3808281.91	0.12540	465443.41
3808281.91	0.12383		
465463.41	3808281.91	0.11998	465483.41
3808281.91	0.11807		
465503.41	3808281.91	0.11618	465523.41
3808281.91	0.11463		

465543.41	3808281.91	0.11386	465563.41
3808281.91	0.11370		
465583.41	3808281.91	0.11384	465603.41
3808281.91	0.11202		
465623.41	3808281.91	0.11119	465643.41
3808281.91	0.11020		
465663.41	3808281.91	0.11059	465683.41
3808281.91	0.11144		
465703.41	3808281.91	0.10990	465003.41
3808301.91	0.15000		
465023.41	3808301.91	0.14660	465043.41
3808301.91	0.14337		
465063.41	3808301.91	0.14367	465083.41
3808301.91	0.14103		
465103.41	3808301.91	0.13746	465123.41
3808301.91	0.13586		
465143.41	3808301.91	0.13401	465163.41
3808301.91	0.13240		
465183.41	3808301.91	0.13246	465203.41
3808301.91	0.13134		
465223.41	3808301.91	0.12956	465243.41
3808301.91	0.12753		
465263.41	3808301.91	0.12705	465283.41
3808301.91	0.12716		
465303.41	3808301.91	0.12968	465323.41
3808301.91	0.12912		
465343.41	3808301.91	0.12855	465363.41
3808301.91	0.12948		
465383.41	3808301.91	0.12851	465403.41
3808301.91	0.12890		
465423.41	3808301.91	0.12946	465443.41
3808301.91	0.12822		
465463.41	3808301.91	0.12162	465483.41
3808301.91	0.11964		
465503.41	3808301.91	0.11770	465523.41
3808301.91	0.11682		
465543.41	3808301.91	0.11731	465563.41
3808301.91	0.11640		
465583.41	3808301.91	0.11518	465603.41
3808301.91	0.11331		
465623.41	3808301.91	0.11353	465643.41
3808301.91	0.11374		
465663.41	3808301.91	0.11218	465683.41
3808301.91	0.11380		
465703.41	3808301.91	0.11366	465043.41
3808321.91	0.15042		
465063.41	3808321.91	0.14828	465083.41
3808321.91	0.14544		
465103.41	3808321.91	0.14245	465123.41
3808321.91	0.14044		

465143.41	3808321.91	0.13841	465163.41
3808321.91	0.13658		
465183.41	3808321.91	0.13565	465203.41
3808321.91	0.13393		
465223.41	3808321.91	0.13204	465243.41
3808321.91	0.13143		
465263.41	3808321.91	0.13142	465283.41
3808321.91	0.13346		
465303.41	3808321.91	0.13326	465323.41
3808321.91	0.13374		
465343.41	3808321.91	0.13330	465363.41
3808321.91	0.13252		
465383.41	3808321.91	0.13396	465403.41
3808321.91	0.13317		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 156

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465423.41	3808321.91	0.13233	465443.41
3808321.91	0.13097		
465463.41	3808321.91	0.12647	465483.41
3808321.91	0.12437		
465503.41	3808321.91	0.12231	465523.41
3808321.91	0.12047		
465543.41	3808321.91	0.11972	465563.41

3808321.91	0.11849		
465583.41	3808321.91	0.11745	465603.41
3808321.91	0.11679		
465623.41	3808321.91	0.11633	465643.41
3808321.91	0.11728		
465663.41	3808321.91	0.11697	465683.41
3808321.91	0.11640		
465703.41	3808321.91	0.11640	465083.41
3808341.91	0.15011		
465103.41	3808341.91	0.14775	465123.41
3808341.91	0.14508		
465143.41	3808341.91	0.14280	465163.41
3808341.91	0.14065		
465183.41	3808341.91	0.13849	465203.41
3808341.91	0.13666		
465223.41	3808341.91	0.13541	465243.41
3808341.91	0.13525		
465263.41	3808341.91	0.13745	465283.41
3808341.91	0.13847		
465303.41	3808341.91	0.13759	465323.41
3808341.91	0.13794		
465343.41	3808341.91	0.14050	465363.41
3808341.91	0.13813		
465383.41	3808341.91	0.13734	465403.41
3808341.91	0.13773		
465423.41	3808341.91	0.13644	465443.41
3808341.91	0.13430		
465463.41	3808341.91	0.13054	465483.41
3808341.91	0.12834		
465503.41	3808341.91	0.12617	465523.41
3808341.91	0.12437		
465543.41	3808341.91	0.12320	465563.41
3808341.91	0.12125		
465583.41	3808341.91	0.11976	465603.41
3808341.91	0.12010		
465623.41	3808341.91	0.12093	465643.41
3808341.91	0.11962		
465663.41	3808341.91	0.11989	465683.41
3808341.91	0.11994		
465703.41	3808341.91	0.11850	465103.41
3808361.91	0.15330		
465123.41	3808361.91	0.14847	465143.41
3808361.91	0.14549		
465163.41	3808361.91	0.14326	465183.41
3808361.91	0.14102		
465203.41	3808361.91	0.14047	465223.41
3808361.91	0.14015		
465243.41	3808361.91	0.13820	465263.41
3808361.91	0.13978		
465283.41	3808361.91	0.14178	465303.41

3808361.91	0.14267		
465323.41	3808361.91	0.14554	465343.41
3808361.91	0.14568		
465363.41	3808361.91	0.14319	465383.41
3808361.91	0.14099		
465403.41	3808361.91	0.14060	465423.41
3808361.91	0.14081		
465443.41	3808361.91	0.13954	465463.41
3808361.91	0.13229		
465483.41	3808361.91	0.13002	465503.41
3808361.91	0.12779		
465523.41	3808361.91	0.12671	465543.41
3808361.91	0.12691		
465563.41	3808361.91	0.12582	465583.41
3808361.91	0.12370		
465603.41	3808361.91	0.12192	465623.41
3808361.91	0.12358		
465643.41	3808361.91	0.12338	465663.41
3808361.91	0.12185		
465683.41	3808361.91	0.12235	465703.41
3808361.91	0.12217		
465183.41	3808381.91	0.14772	465203.41
3808381.91	0.14819		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 157

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465223.41	3808381.91	0.14766		465243.41
3808381.91	0.14752			
465263.41	3808381.91	0.14910		465283.41
3808381.91	0.15202			
465303.41	3808381.91	0.15089		465323.41
3808381.91	0.15125			
465343.41	3808381.91	0.15260		465363.41
3808381.91	0.14996			
465383.41	3808381.91	0.14734		465403.41
3808381.91	0.14496			
465423.41	3808381.91	0.14412		465443.41
3808381.91	0.14319			
465463.41	3808381.91	0.13728		465483.41
3808381.91	0.13488			
465503.41	3808381.91	0.13253		465523.41
3808381.91	0.13042			
465543.41	3808381.91	0.12969		465563.41
3808381.91	0.13074			
465583.41	3808381.91	0.12979		465603.41
3808381.91	0.12755			
465623.41	3808381.91	0.12650		465643.41
3808381.91	0.12641			
465663.41	3808381.91	0.12586		465683.41
3808381.91	0.12518			
465703.41	3808381.91	0.12711		465303.41
3808401.91	0.15970			
465323.41	3808401.91	0.15898		465343.41
3808401.91	0.16087			
465363.41	3808401.91	0.15803		465383.41
3808401.91	0.15524			
465403.41	3808401.91	0.15249		465423.41
3808401.91	0.14978			
465443.41	3808401.91	0.14712		465463.41
3808401.91	0.14447			
465483.41	3808401.91	0.14190		465503.41
3808401.91	0.13938			
465523.41	3808401.91	0.13692		465543.41
3808401.91	0.13449			
465563.41	3808401.91	0.13378		465583.41
3808401.91	0.13365			
465603.41	3808401.91	0.13132		465623.41
3808401.91	0.13044			
465643.41	3808401.91	0.12880		465663.41
3808401.91	0.12904			
465683.41	3808401.91	0.13109		465703.41
3808401.91	0.12940			
465323.41	3808421.91	0.16975		465343.41
3808421.91	0.16701			

465363.41	3808421.91	0.16402	465383.41
3808421.91	0.16109		
465403.41	3808421.91	0.15819	465423.41
3808421.91	0.15535		
465443.41	3808421.91	0.15256	465463.41
3808421.91	0.14981		
465483.41	3808421.91	0.14712	465503.41
3808421.91	0.14448		
465523.41	3808421.91	0.14190	465543.41
3808421.91	0.13936		
465563.41	3808421.91	0.13738	465583.41
3808421.91	0.13522		
465603.41	3808421.91	0.13283	465623.41
3808421.91	0.13318		
465643.41	3808421.91	0.13291	465663.41
3808421.91	0.13120		
465683.41	3808421.91	0.13389	465703.41
3808421.91	0.13333		
465323.41	3808441.91	0.17795	465343.41
3808441.91	0.17427		
465363.41	3808441.91	0.16938	465383.41
3808441.91	0.16437		
465403.41	3808441.91	0.16137	465423.41
3808441.91	0.15841		
465443.41	3808441.91	0.15552	465463.41
3808441.91	0.15267		
465483.41	3808441.91	0.14989	465503.41
3808441.91	0.14716		
465523.41	3808441.91	0.14449	465543.41
3808441.91	0.14187		
465563.41	3808441.91	0.13931	465583.41
3808441.91	0.13681		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 158

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465603.41	3808441.91	0.13436	465623.41
3808441.91	0.13490		
465643.41	3808441.91	0.13839	465663.41
3808441.91	0.13784		
465683.41	3808441.91	0.13676	465703.41
3808441.91	0.13548		
465343.41	3808461.91	0.18520	465363.41
3808461.91	0.17437		
465383.41	3808461.91	0.16950	465403.41
3808461.91	0.16592		
465423.41	3808461.91	0.16283	465443.41
3808461.91	0.15980		
465463.41	3808461.91	0.15680	465483.41
3808461.91	0.15389		
465503.41	3808461.91	0.15072	465523.41
3808461.91	0.14630		
465543.41	3808461.91	0.14362	465563.41
3808461.91	0.14100		
465583.41	3808461.91	0.13843	465603.41
3808461.91	0.13592		
465623.41	3808461.91	0.13644	465643.41
3808461.91	0.14046		
465663.41	3808461.91	0.14094	465683.41
3808461.91	0.13944		
465703.41	3808461.91	0.13765	465343.41
3808481.91	0.19209		
465363.41	3808481.91	0.18820	465383.41
3808481.91	0.18204		
465403.41	3808481.91	0.17199	465423.41
3808481.91	0.16875		
465443.41	3808481.91	0.16558	465463.41
3808481.91	0.16248		
465483.41	3808481.91	0.15944	465503.41
3808481.91	0.15440		
465523.41	3808481.91	0.14815	465543.41
3808481.91	0.14540		
465563.41	3808481.91	0.14271	465583.41
3808481.91	0.14009		
465603.41	3808481.91	0.13752	465623.41

3808481.91	0.13802		
465643.41	3808481.91	0.14205	465663.41
3808481.91	0.14253		
465683.41	3808481.91	0.14099	465703.41
3808481.91	0.14007		
465463.41	3808501.91	0.16967	465483.41
3808501.91	0.16875		
465503.41	3808501.91	0.16333	465523.41
3808501.91	0.15386		
465543.41	3808501.91	0.15098	465563.41
3808501.91	0.14677		
465583.41	3808501.91	0.14290	465603.41
3808501.91	0.14212		
465623.41	3808501.91	0.14120	465643.41
3808501.91	0.14369		
465663.41	3808501.91	0.14417	465683.41
3808501.91	0.14259		
465703.41	3808501.91	0.14188	465523.41
3808521.91	0.16314		
465543.41	3808521.91	0.16004	465563.41
3808521.91	0.15119		
465583.41	3808521.91	0.14581	465603.41
3808521.91	0.14593		
465623.41	3808521.91	0.14801	465643.41
3808521.91	0.14596		
465663.41	3808521.91	0.14599	465683.41
3808521.91	0.14587		
465703.41	3808521.91	0.14407	464239.31
3809562.31	22.26524		
464277.31	3809562.31	22.28985	463745.31
3809591.37	13.23548		
463783.31	3809591.37	13.16814	463821.31
3809591.37	12.95055		
463859.31	3809591.37	12.93404	463897.31
3809591.37	13.31510		
463935.31	3809591.37	13.71329	464239.31
3809591.37	13.95362		
464277.31	3809591.37	13.92320	463745.31
3809620.43	9.37971		
463783.31	3809620.43	9.40971	463821.31
3809620.43	9.44247		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 159

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463859.31	3809620.43	9.45132	463897.31
3809620.43	9.63268		
463935.31	3809620.43	9.91186	463973.31
3809620.43	10.04872		
464011.31	3809620.43	10.12414	464049.31
3809620.43	10.12939		
464087.31	3809620.43	10.09982	464125.31
3809620.43	10.13262		
464163.31	3809620.43	10.14019	464201.31
3809620.43	10.10588		
464239.31	3809620.43	10.18348	464277.31
3809620.43	10.19007		
463745.31	3809649.49	7.23657	463783.31
3809649.49	7.37072		
463821.31	3809649.49	7.41648	463859.31
3809649.49	7.46860		
463897.31	3809649.49	7.58673	463935.31
3809649.49	7.77012		
463973.31	3809649.49	7.83260	464011.31
3809649.49	7.92700		
464049.31	3809649.49	7.98467	464087.31
3809649.49	7.97517		
464125.31	3809649.49	8.02375	464163.31
3809649.49	8.03258		
464201.31	3809649.49	8.05094	464239.31
3809649.49	8.09226		
464277.31	3809649.49	8.08233	464315.31
3809649.49	8.06434		
464353.31	3809649.49	8.09455	464391.31
3809649.49	8.11785		

464429.31	3809649.49	8.11450	464467.31
3809649.49	8.13866		
464505.31	3809649.49	8.16996	463745.31
3809678.55	5.84272		
463783.31	3809678.55	5.97566	463821.31
3809678.55	6.10921		
463859.31	3809678.55	6.14973	463897.31
3809678.55	6.25574		
463935.31	3809678.55	6.41061	463973.31
3809678.55	6.47620		
464011.31	3809678.55	6.53109	464049.31
3809678.55	6.61336		
464087.31	3809678.55	6.64827	464125.31
3809678.55	6.67632		
464163.31	3809678.55	6.68209	464201.31
3809678.55	6.72678		
464239.31	3809678.55	6.71333	464277.31
3809678.55	6.71717		
464315.31	3809678.55	6.71849	464353.31
3809678.55	6.74894		
464391.31	3809678.55	6.76038	464429.31
3809678.55	6.75549		
464467.31	3809678.55	6.79939	464505.31
3809678.55	6.78412		
463745.31	3809707.61	4.90741	463783.31
3809707.61	5.01987		
463821.31	3809707.61	5.13755	463859.31
3809707.61	5.23411		
463897.31	3809707.61	5.31909	463935.31
3809707.61	5.44284		
463973.31	3809707.61	5.52786	464011.31
3809707.61	5.57896		
464049.31	3809707.61	5.65491	464087.31
3809707.61	5.69061		
464125.31	3809707.61	5.71733	464163.31
3809707.61	5.74195		
464201.31	3809707.61	5.74893	464239.31
3809707.61	5.76018		
464277.31	3809707.61	5.75916	464315.31
3809707.61	5.78061		
464353.31	3809707.61	5.77348	464391.31
3809707.61	5.79320		
464429.31	3809707.61	5.80316	464467.31
3809707.61	5.81729		
464505.31	3809707.61	5.83928	463745.31
3809736.67	4.25268		
463783.31	3809736.67	4.31989	463821.31
3809736.67	4.39647		
463859.31	3809736.67	4.50075	463897.31
3809736.67	4.60472		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 160

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463935.31	3809736.67	4.69637	463973.31
3809736.67	4.80764		
464011.31	3809736.67	4.89458	464049.31
3809736.67	4.94123		
464087.31	3809736.67	4.98675	464125.31
3809736.67	5.01270		
464163.31	3809736.67	5.03565	464201.31
3809736.67	5.04301		
464239.31	3809736.67	5.05530	464277.31
3809736.67	5.05586		
464315.31	3809736.67	5.05896	464353.31
3809736.67	5.07833		
464391.31	3809736.67	5.08962	464429.31
3809736.67	5.08791		
464467.31	3809736.67	5.11193	464505.31
3809736.67	5.12965		
463745.31	3809765.73	3.75399	463783.31
3809765.73	3.80741		
463821.31	3809765.73	3.86233	463859.31
3809765.73	3.94406		
463897.31	3809765.73	4.04685	463935.31

3809765.73	4.11067		
463973.31	3809765.73	4.19204	464011.31
3809765.73	4.32953		
464049.31	3809765.73	4.40295	464087.31
3809765.73	4.43776		
464125.31	3809765.73	4.46411	464163.31
3809765.73	4.48315		
464201.31	3809765.73	4.49464	464239.31
3809765.73	4.50547		
464277.31	3809765.73	4.50820	464315.31
3809765.73	4.50683		
464353.31	3809765.73	4.52968	464391.31
3809765.73	4.52683		
464429.31	3809765.73	4.54587	464467.31
3809765.73	4.56261		
464505.31	3809765.73	4.56420	463745.31
3809794.79	3.35867		
463783.31	3809794.79	3.38859	463821.31
3809794.79	3.43883		
463859.31	3809794.79	3.49595	463897.31
3809794.79	3.58161		
463935.31	3809794.79	3.63805	463973.31
3809794.79	3.70411		
464011.31	3809794.79	3.83982	464049.31
3809794.79	3.95659		
464087.31	3809794.79	3.99345	464125.31
3809794.79	4.01931		
464163.31	3809794.79	4.03746	464201.31
3809794.79	4.05161		
464239.31	3809794.79	4.05517	464277.31
3809794.79	4.06047		
464315.31	3809794.79	4.06583	464353.31
3809794.79	4.07720		
464391.31	3809794.79	4.09116	464429.31
3809794.79	4.10583		
464467.31	3809794.79	4.11158	464505.31
3809794.79	4.12986		
463745.31	3809823.85	3.03723	463783.31
3809823.85	3.05079		
463821.31	3809823.85	3.07188	463859.31
3809823.85	3.12951		
463897.31	3809823.85	3.19360	463935.31
3809823.85	3.24555		
463973.31	3809823.85	3.31297	464011.31
3809823.85	3.41183		
464049.31	3809823.85	3.55304	464087.31
3809823.85	3.62134		
464125.31	3809823.85	3.65496	464163.31
3809823.85	3.67224		
464201.31	3809823.85	3.68007	464239.31

```

3809823.85      3.68993
      464277.31      3809823.85      3.69697      464315.31
3809823.85      3.70698
      464353.31      3809823.85      3.71655      464391.31
3809823.85      3.72788
      464429.31      3809823.85      3.73485      464467.31
3809823.85      3.74272
      464505.31      3809823.85      3.75881      463745.31
3809852.91      2.78135
^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***      16:42:19

```

PAGE 161

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
      INCLUDING SOURCE(S):      L0006493      , L0006494
, L0006495      , L0006496      , L0006497      ,
      L0006498      , L0006499      , L0006500      , L0006501      , L0006502
, L0006503      , L0006504      , L0006505      ,
      L0006506      , L0006507      , L0006508      , L0006509      , L0006510
, L0006511      , L0006512      , L0006513      ,
      L0006514      , L0006515      , L0006516      , L0006517      , L0006518
, L0006519      , L0006520      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	2.79326	463821.31
3809852.91	2.78924		
463859.31	3809852.91	2.83323	463897.31
3809852.91	2.87451		
463935.31	3809852.91	2.92180	463973.31
3809852.91	2.98666		
464011.31	3809852.91	3.06434	464049.31
3809852.91	3.18377		
464087.31	3809852.91	3.28171	464125.31
3809852.91	3.32704		
464163.31	3809852.91	3.34894	464201.31
3809852.91	3.36711		

464239.31	3809852.91	3.38227	464277.31
3809852.91	3.39257		
464315.31	3809852.91	3.39810	464353.31
3809852.91	3.40685		
464391.31	3809852.91	3.41655	464429.31
3809852.91	3.43426		
464467.31	3809852.91	3.44219	464505.31
3809852.91	3.45142		
463745.31	3809881.97	2.57218	463783.31
3809881.97	2.57361		
463821.31	3809881.97	2.56997	463859.31
3809881.97	2.59388		
463897.31	3809881.97	2.61741	463935.31
3809881.97	2.65037		
463973.31	3809881.97	2.71654	464011.31
3809881.97	2.78615		
464049.31	3809881.97	2.87873	464087.31
3809881.97	2.96243		
464125.31	3809881.97	3.03272	464163.31
3809881.97	3.06244		
464201.31	3809881.97	3.09073	464239.31
3809881.97	3.10718		
464277.31	3809881.97	3.12156	464315.31
3809881.97	3.13837		
464353.31	3809881.97	3.15060	464391.31
3809881.97	3.16345		
464429.31	3809881.97	3.17275	464467.31
3809881.97	3.17919		
464505.31	3809881.97	3.19259	463745.31
3809911.03	2.38356		
463783.31	3809911.03	2.37776	463821.31
3809911.03	2.38465		
463859.31	3809911.03	2.39693	463897.31
3809911.03	2.41411		
463935.31	3809911.03	2.43526	463973.31
3809911.03	2.48643		
464011.31	3809911.03	2.54755	464049.31
3809911.03	2.63028		
464087.31	3809911.03	2.70306	464125.31
3809911.03	2.76408		
464163.31	3809911.03	2.80625	464201.31
3809911.03	2.84753		
464239.31	3809911.03	2.86660	464277.31
3809911.03	2.89399		
464315.31	3809911.03	2.91069	464353.31
3809911.03	2.92362		
464391.31	3809911.03	2.93613	464429.31
3809911.03	2.94464		
464467.31	3809911.03	2.95644	464505.31
3809911.03	2.96158		

463745.31	3809940.09	2.21438	463783.31
3809940.09	2.20817		
463821.31	3809940.09	2.22039	463859.31
3809940.09	2.22792		
463897.31	3809940.09	2.24493	463935.31
3809940.09	2.26413		
463973.31	3809940.09	2.30070	464011.31
3809940.09	2.33890		
464049.31	3809940.09	2.40668	464087.31
3809940.09	2.47125		
464125.31	3809940.09	2.53209	464163.31
3809940.09	2.59198		
464201.31	3809940.09	2.64310	464239.31
3809940.09	2.66961		
464277.31	3809940.09	2.69023	464315.31
3809940.09	2.71068		
464353.31	3809940.09	2.72455	464391.31
3809940.09	2.73668		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 162

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464429.31	3809940.09	2.74891	464467.31
3809940.09	2.75500		
464505.31	3809940.09	2.76114	463745.31

3809969.15	2.09535		
463783.31	3809969.15	2.07137	463821.31
3809969.15	2.07416		
463859.31	3809969.15	2.08206	463897.31
3809969.15	2.09631		
463935.31	3809969.15	2.11482	463973.31
3809969.15	2.14620		
464011.31	3809969.15	2.17060	464049.31
3809969.15	2.21206		
464087.31	3809969.15	2.27112	464125.31
3809969.15	2.33760		
464163.31	3809969.15	2.39826	464201.31
3809969.15	2.45698		
464239.31	3809969.15	2.49635	464277.31
3809969.15	2.51440		
464315.31	3809969.15	2.53427	464353.31
3809969.15	2.55435		
464391.31	3809969.15	2.56575	464429.31
3809969.15	2.57306		
464467.31	3809969.15	2.57630	464505.31
3809969.15	2.58858		
463745.31	3809998.21	2.02005	463783.31
3809998.21	1.97228		
463821.31	3809998.21	1.95872	463859.31
3809998.21	1.95923		
463897.31	3809998.21	1.97032	463935.31
3809998.21	1.98251		
463973.31	3809998.21	2.00847	464011.31
3809998.21	2.03268		
464049.31	3809998.21	2.06521	464087.31
3809998.21	2.11188		
464125.31	3809998.21	2.17688	464163.31
3809998.21	2.23549		
464201.31	3809998.21	2.28974	464239.31
3809998.21	2.33188		
464277.31	3809998.21	2.36099	464315.31
3809998.21	2.37764		
464353.31	3809998.21	2.39682	464391.31
3809998.21	2.40775		
464429.31	3809998.21	2.41415	464467.31
3809998.21	2.42345		
464505.31	3809998.21	2.43065	463745.31
3810027.27	1.94959		
463783.31	3810027.27	1.89776	463821.31
3810027.27	1.86885		
463859.31	3810027.27	1.85922	463897.31
3810027.27	1.86545		
463935.31	3810027.27	1.86837	463973.31
3810027.27	1.89112		
464011.31	3810027.27	1.91316	464049.31

3810027.27	1.94205		
464087.31	3810027.27	1.97513	464125.31
3810027.27	2.02671		
464163.31	3810027.27	2.08936	464201.31
3810027.27	2.14315		
464239.31	3810027.27	2.17999	464277.31
3810027.27	2.21440		
464315.31	3810027.27	2.23805	464353.31
3810027.27	2.25401		
464391.31	3810027.27	2.26444	464429.31
3810027.27	2.27513		
464467.31	3810027.27	2.28255	464505.31
3810027.27	2.28743		
463745.31	3810056.33	1.88115	463783.31
3810056.33	1.83181		
463821.31	3810056.33	1.78907	463859.31
3810056.33	1.77420		
463897.31	3810056.33	1.77152	463935.31
3810056.33	1.77234		
463973.31	3810056.33	1.78928	464011.31
3810056.33	1.80655		
464049.31	3810056.33	1.82693	464087.31
3810056.33	1.85653		
464125.31	3810056.33	1.89386	464163.31
3810056.33	1.95119		
464201.31	3810056.33	2.00359	464239.31
3810056.33	2.04703		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 163

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494

, L0006495	, L0006496	, L0006497	,
	L0006498	, L0006499	, L0006500 , L0006501 , L0006502
, L0006503	, L0006504	, L0006505	,
	L0006506	, L0006507	, L0006508 , L0006509 , L0006510
, L0006511	, L0006512	, L0006513	,
	L0006514	, L0006515	, L0006516 , L0006517 , L0006518
, L0006519	, L0006520	, . . .	,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

	464277.31	3810056.33	2.07762	464315.31
3810056.33		2.10560		
	464353.31	3810056.33	2.12868	464391.31
3810056.33		2.14182		
	464429.31	3810056.33	2.14942	464467.31
3810056.33		2.15309		
	464505.31	3810056.33	2.15980	463745.31
3810085.39		1.82955		
	463783.31	3810085.39	1.76982	463821.31
3810085.39		1.72277		
	463859.31	3810085.39	1.69860	463897.31
3810085.39		1.68983		
	463935.31	3810085.39	1.68968	463973.31
3810085.39		1.69953		
	464011.31	3810085.39	1.70922	464049.31
3810085.39		1.71970		
	464087.31	3810085.39	1.74775	464125.31
3810085.39		1.78095		
	464163.31	3810085.39	1.82589	464201.31
3810085.39		1.87363		
	464239.31	3810085.39	1.91991	464277.31
3810085.39		1.95460		
	464315.31	3810085.39	1.98312	464353.31
3810085.39		2.00616		
	464391.31	3810085.39	2.02262	464429.31
3810085.39		2.02988		
	464467.31	3810085.39	2.03496	464505.31
3810085.39		2.03899		
	463745.31	3810114.45	1.75840	463783.31
3810114.45		1.71441		
	463821.31	3810114.45	1.66870	463859.31
3810114.45		1.64463		
	463897.31	3810114.45	1.62366	463935.31
3810114.45		1.61723		
	463973.31	3810114.45	1.61796	464011.31
3810114.45		1.62405		
	464049.31	3810114.45	1.62979	464087.31
3810114.45		1.65078		
	464125.31	3810114.45	1.67526	464163.31
3810114.45		1.70970		
	464201.31	3810114.45	1.75162	464239.31
3810114.45		1.80373		
	464277.31	3810114.45	1.84199	464315.31
3810114.45		1.86484		

464353.31	3810114.45	1.88356	464391.31
3810114.45	1.89814		
464429.31	3810114.45	1.91369	464467.31
3810114.45	1.91778		
464505.31	3810114.45	1.92803	463745.31
3810143.51	1.67733		
463783.31	3810143.51	1.64709	463821.31
3810143.51	1.62873		
463859.31	3810143.51	1.60131	463897.31
3810143.51	1.56321		
463935.31	3810143.51	1.54639	463973.31
3810143.51	1.53777		
464011.31	3810143.51	1.54736	464049.31
3810143.51	1.55040		
464087.31	3810143.51	1.55993	464125.31
3810143.51	1.58113		
464163.31	3810143.51	1.61115	464201.31
3810143.51	1.64626		
464239.31	3810143.51	1.68894	464277.31
3810143.51	1.73610		
464315.31	3810143.51	1.75923	464353.31
3810143.51	1.76981		
464391.31	3810143.51	1.78796	464429.31
3810143.51	1.80157		
464467.31	3810143.51	1.81550	464505.31
3810143.51	1.82678		
464383.78	3807479.29	0.06288	464355.03
3807405.24	0.05909		
464402.07	3807352.10	0.05686	464367.23
3807296.35	0.05419		
464358.52	3807237.99	0.05077	464385.52
3807161.33	0.04877		
463132.27	3810926.37	0.51385	463237.82
3811199.31	0.45532		
464944.35	3809244.89	1.29650	465700.32
3809255.46	0.40059		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 164

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,

, L0006511 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465716.18	3808536.49	0.14672	465544.37
3808533.85	0.16321		
465420.13	3808486.27	0.17234	465348.77
3808491.56	0.19619		
465317.05	3808443.98	0.17955	465327.62
3808406.97	0.16344		
465108.23	3808369.97	0.15453	464999.86
3808301.24	0.15014		
464722.31	3807973.48	0.10755	464717.03
3807836.03	0.08648		
464344.33	3807936.47	0.09282	464349.61
3807780.52	0.09760		
464386.62	3807785.81	0.09929	464521.43
3807859.82	0.10892		
464537.28	3807719.72	0.08021	464426.27
3807613.99	0.07274		
464368.43	3807532.62	0.06708	464324.60
3807121.91	0.04667		
464123.31	3807123.54	0.04639	463930.13
3806909.26	0.03657		
463831.11	3806906.01	0.03688	463821.36
3806720.95	0.03115		
463727.21	3806727.44	0.03082	463598.97
3806334.59	0.02316		
463001.06	3806361.54	0.01746	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 165

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
462160.55	3809377.75	0.20985	462051.48
3809270.62	0.18495		
462014.47	3809029.10	0.13803	462010.58
3808855.75	0.09473		
461936.56	3808886.92	0.08942	461936.56
3808997.94	0.11047		
461909.30	3808768.10	0.06406	461835.28
3808894.71	0.07290		
461845.02	3808995.99	0.09693	461833.33
3809114.80	0.11759		
461843.07	3809210.24	0.13127	461809.96
3809297.89	0.14011		
461856.71	3809385.54	0.15789	461841.13
3809482.92	0.15824		
462004.74	3809379.69	0.18043	461763.22
3808793.43	0.05418		
461753.48	3808699.93	0.05132	461835.28
3808686.30	0.05196		
461823.60	3808579.17	0.04401	461761.27
3808585.02	0.04150		
462301.19	3807807.15	0.05426	462304.78
3807868.16	0.05479		
462216.84	3807882.52	0.04900	462116.34
3807886.11	0.04379		
462114.55	3807789.20	0.04072	462012.25
3807887.90	0.03941		
462008.66	3807975.84	0.04378	461917.14
3807972.25	0.03988		
461922.52	3808187.60	0.04801	461908.17
3808288.10	0.04712		

461848.94	3808377.83	0.04420	461831.00
3808494.48	0.04344		
462421.43	3808393.98	0.09650	462459.11
3808501.66	0.10815		
462437.58	3808580.62	0.11395	462654.73
3809189.00	0.36773		
462559.49	3809194.32	0.32309	465763.86
3807935.19	0.20150		
465819.84	3807935.19	0.19236	465875.82
3807935.19	0.18383		
465931.80	3807935.19	0.17593	465987.78
3807935.19	0.16854		
466043.76	3807935.19	0.16163	466099.74
3807935.19	0.15516		
466155.72	3807935.19	0.14909	466211.70
3807935.19	0.14339		
466267.68	3807935.19	0.13804	466323.66
3807935.19	0.13291		
466379.64	3807935.19	0.12817	466435.62
3807935.19	0.12370		
466491.60	3807935.19	0.11947	466547.58
3807935.19	0.11526		
466603.56	3807935.19	0.11144	466659.54
3807935.19	0.10782		
466715.52	3807935.19	0.10438	466771.50
3807935.19	0.10110		
466827.48	3807935.19	0.09790	466883.46
3807935.19	0.09492		
465763.86	3808001.41	0.21099	465819.84
3808001.41	0.20125		
465875.82	3808001.41	0.19216	465931.80
3808001.41	0.18371		
465987.78	3808001.41	0.17597	466043.76
3808001.41	0.16847		
466099.74	3808001.41	0.16182	466155.72
3808001.41	0.15538		
466211.70	3808001.41	0.14936	466267.68
3808001.41	0.14368		
466323.66	3808001.41	0.13830	466379.64
3808001.41	0.13323		
466435.62	3808001.41	0.12846	466491.60
3808001.41	0.12394		
466547.58	3808001.41	0.11961	466603.56
3808001.41	0.11559		
466659.54	3808001.41	0.11179	466715.52
3808001.41	0.10797		
466771.50	3808001.41	0.10455	466827.48
3808001.41	0.10127		
466883.46	3808001.41	0.09808	465763.86
3808067.63	0.22161		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 166

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465819.84	3808067.63	0.21108	465875.82
3808067.63	0.20137		
465931.80	3808067.63	0.19234	465987.78
3808067.63	0.18395		
466043.76	3808067.63	0.17611	466099.74
3808067.63	0.16879		
466155.72	3808067.63	0.16195	466211.70
3808067.63	0.15551		
466267.68	3808067.63	0.14948	466323.66
3808067.63	0.14376		
466379.64	3808067.63	0.13838	466435.62
3808067.63	0.13346		
466491.60	3808067.63	0.12852	466547.58
3808067.63	0.12400		
466603.56	3808067.63	0.11972	466659.54
3808067.63	0.11568		
466715.52	3808067.63	0.11188	466771.50
3808067.63	0.10826		
466827.48	3808067.63	0.10474	466883.46
3808067.63	0.10134		
465763.86	3808133.85	0.23304	465819.84

3808133.85	0.22166		
465875.82	3808133.85	0.21117	465931.80
3808133.85	0.20143		
465987.78	3808133.85	0.19266	466043.76
3808133.85	0.18419		
466099.74	3808133.85	0.17630	466155.72
3808133.85	0.16892		
466211.70	3808133.85	0.16201	466267.68
3808133.85	0.15555		
466323.66	3808133.85	0.14950	466379.64
3808133.85	0.14384		
466435.62	3808133.85	0.13849	466491.60
3808133.85	0.13346		
466547.58	3808133.85	0.12864	466603.56
3808133.85	0.12414		
466659.54	3808133.85	0.11988	466715.52
3808133.85	0.11583		
466771.50	3808133.85	0.11184	466827.48
3808133.85	0.10823		
466883.46	3808133.85	0.10476	465763.86
3808200.07	0.24501		
465819.84	3808200.07	0.23271	465875.82
3808200.07	0.22135		
465931.80	3808200.07	0.21113	465987.78
3808200.07	0.20136		
466043.76	3808200.07	0.19229	466099.74
3808200.07	0.18384		
466155.72	3808200.07	0.17596	466211.70
3808200.07	0.16860		
466267.68	3808200.07	0.16171	466323.66
3808200.07	0.15546		
466379.64	3808200.07	0.14939	466435.62
3808200.07	0.14369		
466491.60	3808200.07	0.13832	466547.58
3808200.07	0.13325		
466603.56	3808200.07	0.12848	466659.54
3808200.07	0.12396		
466715.52	3808200.07	0.11970	466771.50
3808200.07	0.11562		
466827.48	3808200.07	0.11170	466883.46
3808200.07	0.10807		
465763.86	3808266.29	0.25669	465819.84
3808266.29	0.24383		
465875.82	3808266.29	0.23181	465931.80
3808266.29	0.22051		
465987.78	3808266.29	0.21006	466043.76
3808266.29	0.20036		
466099.74	3808266.29	0.19135	466155.72
3808266.29	0.18296		
466211.70	3808266.29	0.17515	466267.68

```

3808266.29      0.16797
      466323.66      3808266.29      0.16112      466379.64
3808266.29      0.15487
      466435.62      3808266.29      0.14886      466491.60
3808266.29      0.14310
      466547.58      3808266.29      0.13773      466603.56
3808266.29      0.13268
      466659.54      3808266.29      0.12801      466715.52
3808266.29      0.12344
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 167

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.11922	466827.48
3808266.29	0.11514		
466883.46	3808266.29	0.11132	465763.86
3808332.51	0.26823		
465819.84	3808332.51	0.25468	465875.82
3808332.51	0.24161		
465931.80	3808332.51	0.22956	465987.78
3808332.51	0.21844		
466043.76	3808332.51	0.20813	466099.74
3808332.51	0.19858		
466155.72	3808332.51	0.18978	466211.70
3808332.51	0.18150		

466267.68	3808332.51	0.17376	466323.66
3808332.51	0.16684		
466379.64	3808332.51	0.16004	466435.62
3808332.51	0.15366		
466491.60	3808332.51	0.14767	466547.58
3808332.51	0.14203		
466603.56	3808332.51	0.13699	466659.54
3808332.51	0.13202		
466715.52	3808332.51	0.12728	466771.50
3808332.51	0.12262		
466827.48	3808332.51	0.11843	466883.46
3808332.51	0.11445		
465763.86	3808398.73	0.27893	465819.84
3808398.73	0.26448		
465875.82	3808398.73	0.25064	465931.80
3808398.73	0.23795		
465987.78	3808398.73	0.22620	466043.76
3808398.73	0.21533		
466099.74	3808398.73	0.20547	466155.72
3808398.73	0.19605		
466211.70	3808398.73	0.18730	466267.68
3808398.73	0.17958		
466323.66	3808398.73	0.17195	466379.64
3808398.73	0.16484		
466435.62	3808398.73	0.15832	466491.60
3808398.73	0.15210		
466547.58	3808398.73	0.14624	466603.56
3808398.73	0.14076		
466659.54	3808398.73	0.13558	466715.52
3808398.73	0.13062		
466771.50	3808398.73	0.12599	466827.48
3808398.73	0.12157		
466883.46	3808398.73	0.11741	465763.86
3808464.95	0.28836		
465819.84	3808464.95	0.27305	465875.82
3808464.95	0.25849		
465931.80	3808464.95	0.24524	465987.78
3808464.95	0.23308		
466043.76	3808464.95	0.22201	466099.74
3808464.95	0.21145		
466155.72	3808464.95	0.20165	466211.70
3808464.95	0.19255		
466267.68	3808464.95	0.18442	466323.66
3808464.95	0.17650		
466379.64	3808464.95	0.16929	466435.62
3808464.95	0.16238		
466491.60	3808464.95	0.15608	466547.58
3808464.95	0.14997		
466603.56	3808464.95	0.14422	466659.54
3808464.95	0.13882		

466715.52	3808464.95	0.13375	466771.50
3808464.95	0.12896		
466827.48	3808464.95	0.12443	466883.46
3808464.95	0.12016		
465763.86	3808531.17	0.29647	465819.84
3808531.17	0.28007		
465875.82	3808531.17	0.26504	465931.80
3808531.17	0.25123		
465987.78	3808531.17	0.23886	466043.76
3808531.17	0.22726		
466099.74	3808531.17	0.21654	466155.72
3808531.17	0.20643		
466211.70	3808531.17	0.19707	466267.68
3808531.17	0.18858		
466323.66	3808531.17	0.18061	466379.64
3808531.17	0.17304		
466435.62	3808531.17	0.16612	466491.60
3808531.17	0.15942		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 168

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466547.58	3808531.17	0.15314	466603.56
3808531.17	0.14724		
466659.54	3808531.17	0.14169	466715.52

3808531.17	0.13648		
466771.50	3808531.17	0.13153	466827.48
3808531.17	0.12693		
466883.46	3808531.17	0.12255	465763.86
3808597.39	0.30213		
465819.84	3808597.39	0.28599	465875.82
3808597.39	0.27056		
465931.80	3808597.39	0.25598	465987.78
3808597.39	0.24332		
466043.76	3808597.39	0.23172	466099.74
3808597.39	0.22061		
466155.72	3808597.39	0.21039	466211.70
3808597.39	0.20091		
466267.68	3808597.39	0.19197	466323.66
3808597.39	0.18394		
466379.64	3808597.39	0.17636	466435.62
3808597.39	0.16907		
466491.60	3808597.39	0.16236	466547.58
3808597.39	0.15600		
466603.56	3808597.39	0.14995	466659.54
3808597.39	0.14426		
466715.52	3808597.39	0.13892	466771.50
3808597.39	0.13388		
466827.48	3808597.39	0.12912	466883.46
3808597.39	0.12472		
465763.86	3808663.61	0.30581	465819.84
3808663.61	0.28972		
465875.82	3808663.61	0.27426	465931.80
3808663.61	0.26005		
465987.78	3808663.61	0.24698	466043.76
3808663.61	0.23486		
466099.74	3808663.61	0.22383	466155.72
3808663.61	0.21337		
466211.70	3808663.61	0.20362	466267.68
3808663.61	0.19457		
466323.66	3808663.61	0.18655	466379.64
3808663.61	0.17864		
466435.62	3808663.61	0.17163	466491.60
3808663.61	0.16468		
466547.58	3808663.61	0.15813	466603.56
3808663.61	0.15198		
466659.54	3808663.61	0.14620	466715.52
3808663.61	0.14079		
466771.50	3808663.61	0.13568	466827.48
3808663.61	0.13104		
466883.46	3808663.61	0.12645	465763.86
3808729.83	0.30854		
465819.84	3808729.83	0.29265	465875.82
3808729.83	0.27716		
465931.80	3808729.83	0.26271	465987.78

3808729.83	0.24941		
466043.76	3808729.83	0.23717	466099.74
3808729.83	0.22584		
466155.72	3808729.83	0.21533	466211.70
3808729.83	0.20552		
466267.68	3808729.83	0.19643	466323.66
3808729.83	0.18836		
466379.64	3808729.83	0.18057	466435.62
3808729.83	0.17314		
466491.60	3808729.83	0.16636	466547.58
3808729.83	0.15977		
466603.56	3808729.83	0.15357	466659.54
3808729.83	0.14807		
466715.52	3808729.83	0.14256	466771.50
3808729.83	0.13739		
466827.48	3808729.83	0.13259	466883.46
3808729.83	0.12797		
465763.86	3808796.05	0.30855	465819.84
3808796.05	0.29372		
465875.82	3808796.05	0.27781	465931.80
3808796.05	0.26372		
465987.78	3808796.05	0.25057	466043.76
3808796.05	0.23846		
466099.74	3808796.05	0.22723	466155.72
3808796.05	0.21678		
466211.70	3808796.05	0.20705	466267.68
3808796.05	0.19796		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 169

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

	466323.66	3808796.05	0.18959	466379.64
3808796.05		0.18172		
	466435.62	3808796.05	0.17453	466491.60
3808796.05		0.16751		
	466547.58	3808796.05	0.16095	466603.56
3808796.05		0.15497		
	466659.54	3808796.05	0.14914	466715.52
3808796.05		0.14372		
	466771.50	3808796.05	0.13856	466827.48
3808796.05		0.13365		
	466883.46	3808796.05	0.12915	465763.86
3808862.27		0.30595		
	465819.84	3808862.27	0.29112	465875.82
3808862.27		0.27706		
	465931.80	3808862.27	0.26321	465987.78
3808862.27		0.25035		
	466043.76	3808862.27	0.23840	466099.74
3808862.27		0.22754		
	466155.72	3808862.27	0.21695	466211.70
3808862.27		0.20732		
	466267.68	3808862.27	0.19860	466323.66
3808862.27		0.19018		
	466379.64	3808862.27	0.18243	466435.62
3808862.27		0.17511		
	466491.60	3808862.27	0.16824	466547.58
3808862.27		0.16180		
	466603.56	3808862.27	0.15561	466659.54
3808862.27		0.15000		
	466715.52	3808862.27	0.14449	466771.50
3808862.27		0.13934		
	466827.48	3808862.27	0.13453	466883.46
3808862.27		0.12995		
	465763.86	3808928.49	0.30083	465819.84
3808928.49		0.28657		
	465875.82	3808928.49	0.27363	465931.80
3808928.49		0.26108		
	465987.78	3808928.49	0.24917	466043.76
3808928.49		0.23810		
	466099.74	3808928.49	0.22691	466155.72
3808928.49		0.21678		
	466211.70	3808928.49	0.20734	466267.68
3808928.49		0.19845		
	466323.66	3808928.49	0.19011	466379.64
3808928.49		0.18229		

466435.62	3808928.49	0.17518	466491.60
3808928.49	0.16843		
466547.58	3808928.49	0.16199	466603.56
3808928.49	0.15613		
466659.54	3808928.49	0.15034	466715.52
3808928.49	0.14498		
466771.50	3808928.49	0.13981	466827.48
3808928.49	0.13507		
466883.46	3808928.49	0.13045	465763.86
3808994.71	0.29754		
465819.84	3808994.71	0.28278	465875.82
3808994.71	0.26985		
465931.80	3808994.71	0.25833	465987.78
3808994.71	0.24764		
466043.76	3808994.71	0.23651	466099.74
3808994.71	0.22582		
466155.72	3808994.71	0.21569	466211.70
3808994.71	0.20647		
466267.68	3808994.71	0.19779	466323.66
3808994.71	0.18965		
466379.64	3808994.71	0.18200	466435.62
3808994.71	0.17481		
466491.60	3808994.71	0.16821	466547.58
3808994.71	0.16210		
466603.56	3808994.71	0.15611	466659.54
3808994.71	0.15037		
466715.52	3808994.71	0.14529	466771.50
3808994.71	0.14012		
466827.48	3808994.71	0.13523	466883.46
3808994.71	0.13077		
465763.86	3809060.93	0.29386	465819.84
3809060.93	0.27970		
465875.82	3809060.93	0.26710	465931.80
3809060.93	0.25544		
465987.78	3809060.93	0.24449	466043.76
3809060.93	0.23415		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 170

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,

```

          L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
          L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466099.74	3809060.93	0.22354	466155.72
3809060.93	0.21404		
466211.70	3809060.93	0.20495	466267.68
3809060.93	0.19654		
466323.66	3809060.93	0.18860	466379.64
3809060.93	0.18112		
466435.62	3809060.93	0.17433	466491.60
3809060.93	0.16785		
466547.58	3809060.93	0.16155	466603.56
3809060.93	0.15571		
466659.54	3809060.93	0.15038	466715.52
3809060.93	0.14500		
466771.50	3809060.93	0.13995	466827.48
3809060.93	0.13523		
466883.46	3809060.93	0.13080	465763.86
3809127.15	0.29003		
465819.84	3809127.15	0.27673	465875.82
3809127.15	0.26449		
465931.80	3809127.15	0.25276	465987.78
3809127.15	0.24178		
466043.76	3809127.15	0.23071	466099.74
3809127.15	0.22039		
466155.72	3809127.15	0.21106	466211.70
3809127.15	0.20315		
466267.68	3809127.15	0.19525	466323.66
3809127.15	0.18761		
466379.64	3809127.15	0.18022	466435.62
3809127.15	0.17341		
466491.60	3809127.15	0.16697	466547.58
3809127.15	0.16092		
466603.56	3809127.15	0.15527	466659.54
3809127.15	0.14971		
466715.52	3809127.15	0.14456	466771.50
3809127.15	0.13963		
466827.48	3809127.15	0.13491	466883.46

3809127.15	0.13057		
465763.86	3809193.37	0.28426	465819.84
3809193.37	0.27236		
465875.82	3809193.37	0.26059	465931.80
3809193.37	0.24926		
465987.78	3809193.37	0.23787	466043.76
3809193.37	0.22616		
466099.74	3809193.37	0.21713	466155.72
3809193.37	0.20828		
466211.70	3809193.37	0.20047	466267.68
3809193.37	0.19306		
466323.66	3809193.37	0.18585	466379.64
3809193.37	0.17896		
466435.62	3809193.37	0.17221	466491.60
3809193.37	0.16593		
466547.58	3809193.37	0.15998	466603.56
3809193.37	0.15448		
466659.54	3809193.37	0.14902	466715.52
3809193.37	0.14402		
466771.50	3809193.37	0.13911	466827.48
3809193.37	0.13456		
466883.46	3809193.37	0.13017	465763.86
3809259.59	0.27688		
465819.84	3809259.59	0.26569	465875.82
3809259.59	0.25456		
465931.80	3809259.59	0.24400	465987.78
3809259.59	0.23312		
466043.76	3809259.59	0.22285	466099.74
3809259.59	0.21345		
466155.72	3809259.59	0.20558	466211.70
3809259.59	0.19809		
466267.68	3809259.59	0.19098	466323.66
3809259.59	0.18369		
466379.64	3809259.59	0.17699	466435.62
3809259.59	0.17067		
466491.60	3809259.59	0.16448	466547.58
3809259.59	0.15886		
466603.56	3809259.59	0.15332	466659.54
3809259.59	0.14806		
466715.52	3809259.59	0.14327	466771.50
3809259.59	0.13845		
466827.48	3809259.59	0.13396	466883.46
3809259.59	0.12965		
464503.41	3807141.91	0.18242	464523.41
3807141.91	0.18237		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464543.41	3807141.91	0.18041	464563.41
3807141.91	0.17798		
464583.41	3807141.91	0.17793	464603.41
3807141.91	0.17628		
464623.41	3807141.91	0.17406	464643.41
3807141.91	0.17324		
464663.41	3807141.91	0.17115	464683.41
3807141.91	0.16861		
464703.41	3807141.91	0.16761	464723.41
3807141.91	0.16479		
464743.41	3807141.91	0.16106	464763.41
3807141.91	0.15781		
464783.41	3807141.91	0.15409	464803.41
3807141.91	0.15055		
464823.41	3807141.91	0.14950	464843.41
3807141.91	0.14657		
464863.41	3807141.91	0.14274	464883.41
3807141.91	0.13965		
464903.41	3807141.91	0.13847	464923.41
3807141.91	0.14736		
464503.41	3807161.91	0.18601	464523.41
3807161.91	0.18589		
464543.41	3807161.91	0.18382	464563.41
3807161.91	0.18125		
464583.41	3807161.91	0.18111	464603.41
3807161.91	0.18070		

464623.41	3807161.91	0.17972	464643.41
3807161.91	0.17671		
464663.41	3807161.91	0.17522	464683.41
3807161.91	0.17404		
464703.41	3807161.91	0.17069	464723.41
3807161.91	0.16691		
464743.41	3807161.91	0.16341	464763.41
3807161.91	0.16257		
464783.41	3807161.91	0.15949	464803.41
3807161.91	0.15545		
464823.41	3807161.91	0.15185	464843.41
3807161.91	0.14791		
464863.41	3807161.91	0.14449	464883.41
3807161.91	0.14433		
464903.41	3807161.91	0.14657	464923.41
3807161.91	0.14917		
464503.41	3807181.91	0.19181	464523.41
3807181.91	0.19005		
464543.41	3807181.91	0.18839	464563.41
3807181.91	0.18671		
464583.41	3807181.91	0.18490	464603.41
3807181.91	0.18411		
464623.41	3807181.91	0.18331	464643.41
3807181.91	0.17965		
464663.41	3807181.91	0.17817	464683.41
3807181.91	0.17721		
464703.41	3807181.91	0.17317	464723.41
3807181.91	0.17037		
464743.41	3807181.91	0.16811	464763.41
3807181.91	0.16577		
464783.41	3807181.91	0.16209	464803.41
3807181.91	0.15816		
464823.41	3807181.91	0.15617	464843.41
3807181.91	0.15277		
464863.41	3807181.91	0.14898	464883.41
3807181.91	0.14809		
464903.41	3807181.91	0.15630	464923.41
3807181.91	0.15539		
464503.41	3807201.91	0.19763	464523.41
3807201.91	0.19421		
464543.41	3807201.91	0.19296	464563.41
3807201.91	0.19228		
464583.41	3807201.91	0.18940	464603.41
3807201.91	0.18782		
464623.41	3807201.91	0.18644	464643.41
3807201.91	0.18324		
464663.41	3807201.91	0.18143	464683.41
3807201.91	0.17985		
464703.41	3807201.91	0.17634	464723.41
3807201.91	0.17443		

```

        464743.41    3807201.91          0.17277          464763.41
3807201.91          0.16831
        464783.41    3807201.91          0.16443          464803.41
3807201.91          0.16131
^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***                                     16:42:19

```

PAGE 172

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
        INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
        L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
        L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
        L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.16064	464843.41
3807201.91	0.16872		
464863.41	3807201.91	0.16600	464883.41
3807201.91	0.16172		
464903.41	3807201.91	0.16082	464923.41
3807201.91	0.16756		
464503.41	3807221.91	0.20158	464523.41
3807221.91	0.19800		
464543.41	3807221.91	0.19662	464563.41
3807221.91	0.19624		
464583.41	3807221.91	0.19551	464603.41
3807221.91	0.19299		
464623.41	3807221.91	0.18993	464643.41
3807221.91	0.18904		
464663.41	3807221.91	0.18623	464683.41
3807221.91	0.18286		
464703.41	3807221.91	0.18196	464723.41

3807221.91	0.17902		
464743.41	3807221.91	0.17487	464763.41
3807221.91	0.17023		
464783.41	3807221.91	0.16828	464803.41
3807221.91	0.16728		
464823.41	3807221.91	0.16925	464843.41
3807221.91	0.17342		
464863.41	3807221.91	0.17405	464883.41
3807221.91	0.16968		
464903.41	3807221.91	0.16992	464923.41
3807221.91	0.17086		
464503.41	3807241.91	0.20594	464523.41
3807241.91	0.20395		
464543.41	3807241.91	0.20185	464563.41
3807241.91	0.19991		
464583.41	3807241.91	0.19956	464603.41
3807241.91	0.19668		
464623.41	3807241.91	0.19307	464643.41
3807241.91	0.19259		
464663.41	3807241.91	0.19090	464683.41
3807241.91	0.18845		
464703.41	3807241.91	0.18587	464723.41
3807241.91	0.18178		
464743.41	3807241.91	0.17738	464763.41
3807241.91	0.17506		
464783.41	3807241.91	0.17274	464803.41
3807241.91	0.18160		
464823.41	3807241.91	0.18120	464843.41
3807241.91	0.17974		
464863.41	3807241.91	0.18429	464883.41
3807241.91	0.17973		
464903.41	3807241.91	0.17785	464923.41
3807241.91	0.17785		
464503.41	3807261.91	0.21035	464523.41
3807261.91	0.20995		
464543.41	3807261.91	0.20710	464563.41
3807261.91	0.20359		
464583.41	3807261.91	0.20311	464603.41
3807261.91	0.20055		
464623.41	3807261.91	0.19724	464643.41
3807261.91	0.19582		
464663.41	3807261.91	0.19511	464683.41
3807261.91	0.19401		
464703.41	3807261.91	0.18907	464723.41
3807261.91	0.18473		
464743.41	3807261.91	0.18118	464763.41
3807261.91	0.18025		
464783.41	3807261.91	0.18890	464803.41
3807261.91	0.18628		
464823.41	3807261.91	0.18716	464843.41

3807261.91	0.19288		
464863.41	3807261.91	0.18875	464883.41
3807261.91	0.18410		
464903.41	3807261.91	0.18470	464923.41
3807261.91	0.19707		
464503.41	3807281.91	0.21460	464523.41
3807281.91	0.21409		
464543.41	3807281.91	0.21105	464563.41
3807281.91	0.20732		
464583.41	3807281.91	0.20670	464603.41
3807281.91	0.20578		
464623.41	3807281.91	0.20411	464643.41
3807281.91	0.19980		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 173

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464663.41	3807281.91	0.19799	464683.41
3807281.91	0.19678		
464703.41	3807281.91	0.19160	464723.41
3807281.91	0.18933		
464743.41	3807281.91	0.18805	464763.41
3807281.91	0.19000		
464783.41	3807281.91	0.19433	464803.41
3807281.91	0.19487		

464823.41	3807281.91	0.19716	464843.41
3807281.91	0.19827		
464863.41	3807281.91	0.19880	464883.41
3807281.91	0.19404		
464903.41	3807281.91	0.20594	464923.41
3807281.91	0.20560		
464503.41	3807301.91	0.22164	464523.41
3807301.91	0.21902		
464543.41	3807301.91	0.21648	464563.41
3807301.91	0.21388		
464583.41	3807301.91	0.21108	464603.41
3807301.91	0.20965		
464623.41	3807301.91	0.20823	464643.41
3807301.91	0.20306		
464663.41	3807301.91	0.20089	464683.41
3807301.91	0.19955		
464703.41	3807301.91	0.19414	464723.41
3807301.91	0.19224		
464743.41	3807301.91	0.20415	464763.41
3807301.91	0.20344		
464783.41	3807301.91	0.20155	464803.41
3807301.91	0.20625		
464823.41	3807301.91	0.20092	464843.41
3807301.91	0.20111		
464863.41	3807301.91	0.21585	464883.41
3807301.91	0.21403		
464903.41	3807301.91	0.21231	464923.41
3807301.91	0.21901		
464503.41	3807321.91	0.22873	464523.41
3807321.91	0.22396		
464543.41	3807321.91	0.22192	464563.41
3807321.91	0.22048		
464583.41	3807321.91	0.21542	464603.41
3807321.91	0.21317		
464623.41	3807321.91	0.21159	464643.41
3807321.91	0.20613		
464663.41	3807321.91	0.20380	464683.41
3807321.91	0.20250		
464703.41	3807321.91	0.19789	464723.41
3807321.91	0.19561		
464743.41	3807321.91	0.20713	464763.41
3807321.91	0.21001		
464783.41	3807321.91	0.21446	464803.41
3807321.91	0.20898		
464823.41	3807321.91	0.20562	464843.41
3807321.91	0.20625		
464863.41	3807321.91	0.22006	464883.41
3807321.91	0.22060		
464903.41	3807321.91	0.22694	464923.41
3807321.91	0.22223		

464503.41	3807341.91	0.23343	464523.41
3807341.91	0.22839		
464543.41	3807341.91	0.22616	464563.41
3807341.91	0.22455		
464583.41	3807341.91	0.21919	464603.41
3807341.91	0.21673		
464623.41	3807341.91	0.21498	464643.41
3807341.91	0.20923		
464663.41	3807341.91	0.20672	464683.41
3807341.91	0.20597		
464703.41	3807341.91	0.20503	464723.41
3807341.91	0.20717		
464743.41	3807341.91	0.20980	464763.41
3807341.91	0.21274		
464783.41	3807341.91	0.21725	464803.41
3807341.91	0.21343		
464823.41	3807341.91	0.21453	464843.41
3807341.91	0.22991		
464863.41	3807341.91	0.23057	464883.41
3807341.91	0.23117		
464903.41	3807341.91	0.23024	464923.41
3807341.91	0.22585		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 174

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -				
464503.41	3807361.91	0.23863		464523.41
3807361.91	0.23563			
464543.41	3807361.91	0.23243		464563.41
3807361.91	0.22867			
464583.41	3807361.91	0.22299		464603.41
3807361.91	0.22032			
464623.41	3807361.91	0.21884		464643.41
3807361.91	0.21547			
464663.41	3807361.91	0.21198		464683.41
3807361.91	0.20892			
464703.41	3807361.91	0.20874		464723.41
3807361.91	0.22099			
464743.41	3807361.91	0.21874		464763.41
3807361.91	0.21651			
464783.41	3807361.91	0.22314		464803.41
3807361.91	0.22287			
464823.41	3807361.91	0.23888		464843.41
3807361.91	0.23718			
464863.41	3807361.91	0.24423		464883.41
3807361.91	0.23883			
464903.41	3807361.91	0.23625		464923.41
3807361.91	0.23437			
464503.41	3807381.91	0.24516		464523.41
3807381.91	0.24324			
464543.41	3807381.91	0.23875		464563.41
3807381.91	0.23299			
464583.41	3807381.91	0.22791		464603.41
3807381.91	0.22476			
464623.41	3807381.91	0.22269		464643.41
3807381.91	0.22178			
464663.41	3807381.91	0.21804		464683.41
3807381.91	0.21341			
464703.41	3807381.91	0.21199		464723.41
3807381.91	0.22702			
464743.41	3807381.91	0.23583		464763.41
3807381.91	0.23171			
464783.41	3807381.91	0.22994		464803.41
3807381.91	0.24572			
464823.41	3807381.91	0.24676		464843.41
3807381.91	0.25366			
464863.41	3807381.91	0.24804		464883.41
3807381.91	0.24323			
464903.41	3807381.91	0.24294		464923.41
3807381.91	0.24429			
464503.41	3807401.91	0.25464		464523.41
3807401.91	0.24925			
464543.41	3807401.91	0.24333		464563.41
3807401.91	0.23783			
464583.41	3807401.91	0.23589		464603.41

3807401.91	0.23135		
464623.41	3807401.91	0.22618	464643.41
3807401.91	0.22515		
464663.41	3807401.91	0.22400	464683.41
3807401.91	0.22210		
464703.41	3807401.91	0.22373	464723.41
3807401.91	0.23015		
464743.41	3807401.91	0.24115	464763.41
3807401.91	0.24190		
464783.41	3807401.91	0.23890	464803.41
3807401.91	0.24934		
464823.41	3807401.91	0.25047	464843.41
3807401.91	0.25761		
464863.41	3807401.91	0.25231	464883.41
3807401.91	0.25423		
464903.41	3807401.91	0.25294	464923.41
3807401.91	0.24995		
464503.41	3807421.91	0.26095	464523.41
3807421.91	0.25450		
464543.41	3807421.91	0.24988	464563.41
3807421.91	0.24595		
464583.41	3807421.91	0.24180	464603.41
3807421.91	0.23778		
464623.41	3807421.91	0.23378	464643.41
3807421.91	0.22967		
464663.41	3807421.91	0.22791	464683.41
3807421.91	0.24133		
464703.41	3807421.91	0.24001	464723.41
3807421.91	0.23732		
464743.41	3807421.91	0.24467	464763.41
3807421.91	0.24626		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 175

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464783.41	3807421.91	0.26051	464803.41
3807421.91	0.25776		
464823.41	3807421.91	0.25661	464843.41
3807421.91	0.26456		
464863.41	3807421.91	0.26202	464883.41
3807421.91	0.26098		
464903.41	3807421.91	0.26148	464923.41
3807421.91	0.26504		
464503.41	3807441.91	0.26661	464523.41
3807441.91	0.26085		
464543.41	3807441.91	0.25735	464563.41
3807441.91	0.25426		
464583.41	3807441.91	0.24821	464603.41
3807441.91	0.24463		
464623.41	3807441.91	0.24165	464643.41
3807441.91	0.23559		
464663.41	3807441.91	0.23243	464683.41
3807441.91	0.24533		
464703.41	3807441.91	0.24833	464723.41
3807441.91	0.25525		
464743.41	3807441.91	0.24973	464763.41
3807441.91	0.25025		
464783.41	3807441.91	0.26755	464803.41
3807441.91	0.27883		
464823.41	3807441.91	0.27221	464843.41
3807441.91	0.27166		
464863.41	3807441.91	0.27323	464883.41
3807441.91	0.26732		
464903.41	3807441.91	0.27194	464923.41
3807441.91	0.28075		
464503.41	3807461.91	0.27292	464523.41
3807461.91	0.27078		
464543.41	3807461.91	0.26565	464563.41
3807461.91	0.25970		
464583.41	3807461.91	0.25758	464603.41
3807461.91	0.25236		
464623.41	3807461.91	0.24637	464643.41
3807461.91	0.24480		
464663.41	3807461.91	0.24658	464683.41
3807461.91	0.24897		

464703.41	3807461.91	0.25203	464723.41
3807461.91	0.26321		
464743.41	3807461.91	0.26322	464763.41
3807461.91	0.26439		
464783.41	3807461.91	0.27177	464803.41
3807461.91	0.28345		
464823.41	3807461.91	0.27668	464843.41
3807461.91	0.27618		
464863.41	3807461.91	0.27785	464883.41
3807461.91	0.27183		
464903.41	3807461.91	0.27659	464923.41
3807461.91	0.28557		
464503.41	3807481.91	0.27879	464523.41
3807481.91	0.27725		
464543.41	3807481.91	0.27381	464563.41
3807481.91	0.26921		
464583.41	3807481.91	0.26442	464603.41
3807481.91	0.25992		
464623.41	3807481.91	0.25557	464643.41
3807481.91	0.25255		
464663.41	3807481.91	0.26348	464683.41
3807481.91	0.26024		
464703.41	3807481.91	0.25707	464723.41
3807481.91	0.26781		
464743.41	3807481.91	0.28441	464763.41
3807481.91	0.27678		
464783.41	3807481.91	0.27614	464803.41
3807481.91	0.28821		
464823.41	3807481.91	0.28131	464843.41
3807481.91	0.28086		
464863.41	3807481.91	0.28299	464883.41
3807481.91	0.28720		
464903.41	3807481.91	0.28801	464923.41
3807481.91	0.29216		
464503.41	3807501.91	0.28657	464523.41
3807501.91	0.28490		
464543.41	3807501.91	0.28250	464563.41
3807501.91	0.27898		
464583.41	3807501.91	0.27191	464603.41
3807501.91	0.26804		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 176

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464623.41	3807501.91	0.28116	464643.41
3807501.91	0.27528		
464663.41	3807501.91	0.27244	464683.41
3807501.91	0.28122		
464703.41	3807501.91	0.27565	464723.41
3807501.91	0.27308		
464743.41	3807501.91	0.28919	464763.41
3807501.91	0.28410		
464783.41	3807501.91	0.28155	464803.41
3807501.91	0.29327		
464823.41	3807501.91	0.28707	464843.41
3807501.91	0.28641		
464863.41	3807501.91	0.28986	464883.41
3807501.91	0.29955		
464903.41	3807501.91	0.30180	464923.41
3807501.91	0.29871		
464503.41	3807521.91	0.29951	464523.41
3807521.91	0.29797		
464543.41	3807521.91	0.29222	464563.41
3807521.91	0.28522		
464583.41	3807521.91	0.28313	464603.41
3807521.91	0.28470		
464623.41	3807521.91	0.28676	464643.41
3807521.91	0.28865		
464663.41	3807521.91	0.28883	464683.41
3807521.91	0.28818		
464703.41	3807521.91	0.28861	464723.41
3807521.91	0.28446		
464743.41	3807521.91	0.29639	464763.41
3807521.91	0.29665		
464783.41	3807521.91	0.29279	464803.41

3807521.91	0.29892		
464823.41	3807521.91	0.30092	464843.41
3807521.91	0.29898		
464863.41	3807521.91	0.29505	464883.41
3807521.91	0.30497		
464903.41	3807521.91	0.30723	464923.41
3807521.91	0.30405		
464503.41	3807541.91	0.31277	464523.41
3807541.91	0.30716		
464543.41	3807541.91	0.30182	464563.41
3807541.91	0.29657		
464583.41	3807541.91	0.29274	464603.41
3807541.91	0.30452		
464623.41	3807541.91	0.30028	464643.41
3807541.91	0.29605		
464663.41	3807541.91	0.30358	464683.41
3807541.91	0.30130		
464703.41	3807541.91	0.29746	464723.41
3807541.91	0.31117		
464743.41	3807541.91	0.30733	464763.41
3807541.91	0.30549		
464783.41	3807541.91	0.31124	464803.41
3807541.91	0.30432		
464823.41	3807541.91	0.30883	464843.41
3807541.91	0.30981		
464863.41	3807541.91	0.31350	464883.41
3807541.91	0.31242		
464903.41	3807541.91	0.31932	464923.41
3807541.91	0.32579		
464503.41	3807561.91	0.32513	464523.41
3807561.91	0.31680		
464543.41	3807561.91	0.31209	464563.41
3807561.91	0.32647		
464583.41	3807561.91	0.31928	464603.41
3807561.91	0.31545		
464623.41	3807561.91	0.32472	464643.41
3807561.91	0.31770		
464663.41	3807561.91	0.31402	464683.41
3807561.91	0.33155		
464703.41	3807561.91	0.32502	464723.41
3807561.91	0.32136		
464743.41	3807561.91	0.33383	464763.41
3807561.91	0.32516		
464783.41	3807561.91	0.31756	464803.41
3807561.91	0.31305		
464823.41	3807561.91	0.31483	464843.41
3807561.91	0.32289		
464863.41	3807561.91	0.33268	464883.41
3807561.91	0.32550		

▲ *** AERMOD - VERSION 19191 ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 177

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464903.41	3807561.91	0.33560	464923.41
3807561.91	0.33812		
464503.41	3807581.91	0.33348	464523.41
3807581.91	0.33079		
464543.41	3807581.91	0.33207	464563.41
3807581.91	0.33385		
464583.41	3807581.91	0.33536	464603.41
3807581.91	0.33485		
464623.41	3807581.91	0.33336	464643.41
3807581.91	0.33303		
464663.41	3807581.91	0.32750	464683.41
3807581.91	0.34028		
464703.41	3807581.91	0.33975	464723.41
3807581.91	0.33457		
464743.41	3807581.91	0.34009	464763.41
3807581.91	0.33122		
464783.41	3807581.91	0.32770	464803.41
3807581.91	0.32901		
464823.41	3807581.91	0.32370	464843.41
3807581.91	0.32906		
464863.41	3807581.91	0.33901	464883.41
3807581.91	0.33165		

464903.41	3807581.91	0.34190	464923.41
3807581.91	0.34590		
464503.41	3807601.91	0.34884	464523.41
3807601.91	0.36855		
464543.41	3807601.91	0.36141	464563.41
3807601.91	0.35027		
464583.41	3807601.91	0.34471	464603.41
3807601.91	0.35248		
464623.41	3807601.91	0.34903	464643.41
3807601.91	0.34376		
464663.41	3807601.91	0.35856	464683.41
3807601.91	0.35329		
464703.41	3807601.91	0.35034	464723.41
3807601.91	0.35614		
464743.41	3807601.91	0.34706	464763.41
3807601.91	0.34280		
464783.41	3807601.91	0.34073	464803.41
3807601.91	0.33863		
464823.41	3807601.91	0.34309	464843.41
3807601.91	0.34337		
464863.41	3807601.91	0.34751	464883.41
3807601.91	0.35589		
464903.41	3807601.91	0.35496	464923.41
3807601.91	0.35238		
464503.41	3807621.91	0.38905	464523.41
3807621.91	0.38764		
464543.41	3807621.91	0.39184	464563.41
3807621.91	0.37928		
464583.41	3807621.91	0.37038	464603.41
3807621.91	0.36526		
464623.41	3807621.91	0.38443	464643.41
3807621.91	0.37599		
464663.41	3807621.91	0.37084	464683.41
3807621.91	0.38424		
464703.41	3807621.91	0.37342	464723.41
3807621.91	0.36386		
464743.41	3807621.91	0.35789	464763.41
3807621.91	0.35915		
464783.41	3807621.91	0.35621	464803.41
3807621.91	0.35285		
464823.41	3807621.91	0.35886	464843.41
3807621.91	0.36259		
464863.41	3807621.91	0.36149	464883.41
3807621.91	0.36988		
464903.41	3807621.91	0.36681	464923.41
3807621.91	0.36366		
464503.41	3807641.91	0.41077	464523.41
3807641.91	0.41142		
464543.41	3807641.91	0.40031	464563.41
3807641.91	0.39030		

464583.41	3807641.91	0.38893	464603.41
3807641.91	0.38156		
464623.41	3807641.91	0.39528	464643.41
3807641.91	0.39360		
464663.41	3807641.91	0.38663	464683.41
3807641.91	0.39207		
464703.41	3807641.91	0.38094	464723.41
3807641.91	0.37600		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 178

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464743.41	3807641.91	0.37665	464763.41
3807641.91	0.36976		
464783.41	3807641.91	0.36974	464803.41
3807641.91	0.37536		
464823.41	3807641.91	0.37028	464843.41
3807641.91	0.38080		
464863.41	3807641.91	0.38579	464883.41
3807641.91	0.38053		
464903.41	3807641.91	0.37879	464923.41
3807641.91	0.37376		
464503.41	3807661.91	0.45015	464523.41
3807661.91	0.43527		
464543.41	3807661.91	0.42069	464563.41

3807661.91	0.40944		
464583.41	3807661.91	0.40227	464603.41
3807661.91	0.41828		
464623.41	3807661.91	0.41105	464643.41
3807661.91	0.40654		
464663.41	3807661.91	0.41692	464683.41
3807661.91	0.40988		
464703.41	3807661.91	0.39833	464723.41
3807661.91	0.39152		
464743.41	3807661.91	0.38822	464763.41
3807661.91	0.39241		
464783.41	3807661.91	0.39183	464803.41
3807661.91	0.39563		
464823.41	3807661.91	0.40425	464843.41
3807661.91	0.40242		
464863.41	3807661.91	0.39869	464883.41
3807661.91	0.39816		
464903.41	3807661.91	0.38940	464923.41
3807661.91	0.38090		
464503.41	3807681.91	0.50425	464523.41
3807681.91	0.48790		
464543.41	3807681.91	0.47189	464563.41
3807681.91	0.45630		
464583.41	3807681.91	0.44121	464603.41
3807681.91	0.43341		
464623.41	3807681.91	0.44801	464643.41
3807681.91	0.43553		
464663.41	3807681.91	0.43150	464683.41
3807681.91	0.43054		
464703.41	3807681.91	0.42196	464723.41
3807681.91	0.41316		
464743.41	3807681.91	0.40513	464763.41
3807681.91	0.41098		
464783.41	3807681.91	0.41423	464803.41
3807681.91	0.41208		
464823.41	3807681.91	0.42070	464843.41
3807681.91	0.41640		
464863.41	3807681.91	0.41205	464883.41
3807681.91	0.40614		
464903.41	3807681.91	0.39704	464923.41
3807681.91	0.38821		
464523.41	3807701.91	0.51361	464543.41
3807701.91	0.49665		
464563.41	3807701.91	0.48022	464583.41
3807701.91	0.46438		
464603.41	3807701.91	0.45272	464623.41
3807701.91	0.45886		
464643.41	3807701.91	0.45853	464663.41
3807701.91	0.45241		
464683.41	3807701.91	0.44336	464703.41

3807701.91	0.45009		
464723.41	3807701.91	0.44308	464743.41
3807701.91	0.43151		
464763.41	3807701.91	0.42468	464783.41
3807701.91	0.43561		
464803.41	3807701.91	0.44030	464823.41
3807701.91	0.43342		
464843.41	3807701.91	0.43058	464863.41
3807701.91	0.42407		
464883.41	3807701.91	0.41427	464903.41
3807701.91	0.40484		
464923.41	3807701.91	0.39569	464543.41
3807721.91	0.54055		
464563.41	3807721.91	0.51690	464583.41
3807721.91	0.49996		
464603.41	3807721.91	0.48375	464623.41
3807721.91	0.46943		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 179

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464643.41	3807721.91	0.47284	464663.41
3807721.91	0.47092		
464683.41	3807721.91	0.47285	464703.41
3807721.91	0.46789		

464723.41	3807721.91	0.46519	464743.41
3807721.91	0.45538		
464763.41	3807721.91	0.46408	464783.41
3807721.91	0.46094		
464803.41	3807721.91	0.45569	464823.41
3807721.91	0.45413		
464843.41	3807721.91	0.44327	464863.41
3807721.91	0.43277		
464883.41	3807721.91	0.42263	464903.41
3807721.91	0.41281		
464923.41	3807721.91	0.40331	464943.41
3807721.91	0.39411		
464963.41	3807721.91	0.38519	464983.41
3807721.91	0.37655		
465003.41	3807721.91	0.36817	465023.41
3807721.91	0.36004		
465043.41	3807721.91	0.35214	465063.41
3807721.91	0.34446		
465083.41	3807721.91	0.33701	465103.41
3807721.91	0.32979		
465123.41	3807721.91	0.32289	465143.41
3807721.91	0.31609		
465163.41	3807721.91	0.30948	465183.41
3807721.91	0.30316		
465203.41	3807721.91	0.29695	465223.41
3807721.91	0.29087		
465243.41	3807721.91	0.28495	465263.41
3807721.91	0.27921		
465283.41	3807721.91	0.27365	465303.41
3807721.91	0.26835		
465323.41	3807721.91	0.26311	465343.41
3807721.91	0.25800		
465363.41	3807721.91	0.25314	465383.41
3807721.91	0.24833		
464543.41	3807741.91	0.57518	464563.41
3807741.91	0.53692		
464583.41	3807741.91	0.51776	464603.41
3807741.91	0.50040		
464623.41	3807741.91	0.48550	464643.41
3807741.91	0.48881		
464663.41	3807741.91	0.49565	464683.41
3807741.91	0.50341		
464703.41	3807741.91	0.48931	464723.41
3807741.91	0.47875		
464743.41	3807741.91	0.47506	464763.41
3807741.91	0.48372		
464783.41	3807741.91	0.47770	464803.41
3807741.91	0.47167		
464823.41	3807741.91	0.46395	464843.41
3807741.91	0.45262		

464863.41	3807741.91	0.44168	464883.41
3807741.91	0.43117		
464903.41	3807741.91	0.42097	464923.41
3807741.91	0.41111		
464943.41	3807741.91	0.40154	464963.41
3807741.91	0.39230		
464983.41	3807741.91	0.38338	465003.41
3807741.91	0.37463		
465023.41	3807741.91	0.36621	465043.41
3807741.91	0.35807		
465063.41	3807741.91	0.35006	465083.41
3807741.91	0.34241		
465103.41	3807741.91	0.33506	465123.41
3807741.91	0.32789		
465143.41	3807741.91	0.32082	465163.41
3807741.91	0.31393		
465183.41	3807741.91	0.30739	465203.41
3807741.91	0.30107		
465223.41	3807741.91	0.29492	465243.41
3807741.91	0.28877		
465263.41	3807741.91	0.28293	465283.41
3807741.91	0.27734		
465303.41	3807741.91	0.27186	465323.41
3807741.91	0.26642		
465343.41	3807741.91	0.26112	465363.41
3807741.91	0.25610		
*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15 Industrial Park\I15 Industrial *** 05/09/22 *** AERMET - VERSION 14134 *** *** *** 16:42:19			

PAGE 180

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012

, L0006013	, L0006014	, L0006015	,
	L0006016	, L0006017	, L0006018
, L0006021	, L0006022	, L0006023	,
	L0006024	, L0006025	, L0006026
, L0006029	, L0006030	, L0006031	,
	L0006032	, L0006033	, L0006034
, L0006037	, L0006038	, . . .	,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
465383.41	3807741.91	0.25126	464543.41
3807761.91	0.67881		
464563.41	3807761.91	0.59781	464583.41
3807761.91	0.55229		
464603.41	3807761.91	0.52933	464623.41
3807761.91	0.51669		
464643.41	3807761.91	0.52678	464663.41
3807761.91	0.52237		
464683.41	3807761.91	0.51550	464703.41
3807761.91	0.50088		
464723.41	3807761.91	0.50426	464743.41
3807761.91	0.50831		
464763.41	3807761.91	0.49918	464783.41
3807761.91	0.49477		
464803.41	3807761.91	0.48622	464823.41
3807761.91	0.47397		
464843.41	3807761.91	0.46216	464863.41
3807761.91	0.45080		
464883.41	3807761.91	0.43989	464903.41
3807761.91	0.42931		
464923.41	3807761.91	0.41908	464943.41
3807761.91	0.40917		
464963.41	3807761.91	0.39960	464983.41
3807761.91	0.39036		
465003.41	3807761.91	0.38131	465023.41
3807761.91	0.37250		
465043.41	3807761.91	0.36396	465063.41
3807761.91	0.35585		
465083.41	3807761.91	0.34803	465103.41
3807761.91	0.34041		
465123.41	3807761.91	0.33283	465143.41
3807761.91	0.32561		
465163.41	3807761.91	0.31865	465183.41
3807761.91	0.31171		
465203.41	3807761.91	0.30516	465223.41
3807761.91	0.29889		
465243.41	3807761.91	0.29277	465263.41
3807761.91	0.28685		
465283.41	3807761.91	0.28109	465303.41
3807761.91	0.27528		
465323.41	3807761.91	0.26979	465343.41
3807761.91	0.26449		
465363.41	3807761.91	0.25916	465383.41
3807761.91	0.25416		
464543.41	3807781.91	0.72003	464563.41

3807781.91	0.69804		
464583.41	3807781.91	0.65691	464603.41
3807781.91	0.61658		
464623.41	3807781.91	0.58154	464643.41
3807781.91	0.56084		
464663.41	3807781.91	0.55495	464683.41
3807781.91	0.55571		
464703.41	3807781.91	0.53995	464723.41
3807781.91	0.53442		
464743.41	3807781.91	0.52700	464763.41
3807781.91	0.52390		
464783.41	3807781.91	0.51021	464803.41
3807781.91	0.49701		
464823.41	3807781.91	0.48425	464843.41
3807781.91	0.47201		
464863.41	3807781.91	0.46022	464883.41
3807781.91	0.44884		
464903.41	3807781.91	0.43785	464923.41
3807781.91	0.42722		
464943.41	3807781.91	0.41695	464963.41
3807781.91	0.40702		
464983.41	3807781.91	0.39741	465003.41
3807781.91	0.38810		
465023.41	3807781.91	0.37900	465043.41
3807781.91	0.37015		
465063.41	3807781.91	0.36182	465083.41
3807781.91	0.35365		
465103.41	3807781.91	0.34569	465123.41
3807781.91	0.33799		
465143.41	3807781.91	0.33052	465163.41
3807781.91	0.32328		
465183.41	3807781.91	0.31627	465203.41
3807781.91	0.30958		
465223.41	3807781.91	0.30313	465243.41
3807781.91	0.29672		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 181

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028

, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3807781.91	0.29063	465283.41
3807781.91	0.28475		
465303.41	3807781.91	0.27893	465323.41
3807781.91	0.27326		
465343.41	3807781.91	0.26777	465363.41
3807781.91	0.26245		
465383.41	3807781.91	0.25738	464543.41
3807801.91	0.74124		
464563.41	3807801.91	0.71900	464583.41
3807801.91	0.69714		
464603.41	3807801.91	0.67588	464623.41
3807801.91	0.64273		
464643.41	3807801.91	0.60435	464663.41
3807801.91	0.59174		
464683.41	3807801.91	0.58521	464703.41
3807801.91	0.56849		
464723.41	3807801.91	0.55489	464743.41
3807801.91	0.54648		
464763.41	3807801.91	0.53623	464783.41
3807801.91	0.52190		
464803.41	3807801.91	0.50809	464823.41
3807801.91	0.49484		
464843.41	3807801.91	0.48213	464863.41
3807801.91	0.46986		
464883.41	3807801.91	0.45802	464903.41
3807801.91	0.44659		
464923.41	3807801.91	0.43553	464943.41
3807801.91	0.42491		
464963.41	3807801.91	0.41459	464983.41
3807801.91	0.40458		
465003.41	3807801.91	0.39500	465023.41
3807801.91	0.38563		
465043.41	3807801.91	0.37653	465063.41
3807801.91	0.36787		
465083.41	3807801.91	0.35936	465103.41
3807801.91	0.35109		

465123.41	3807801.91	0.34326	465143.41
3807801.91	0.33553		
465163.41	3807801.91	0.32803	465183.41
3807801.91	0.32100		
465203.41	3807801.91	0.31414	465223.41
3807801.91	0.30745		
465243.41	3807801.91	0.30079	465263.41
3807801.91	0.29452		
465283.41	3807801.91	0.28853	465303.41
3807801.91	0.28266		
465323.41	3807801.91	0.27684	465343.41
3807801.91	0.27117		
465363.41	3807801.91	0.26590	465383.41
3807801.91	0.26074		
464543.41	3807821.91	0.76182	464563.41
3807821.91	0.73910		
464583.41	3807821.91	0.71710	464603.41
3807821.91	0.69526		
464623.41	3807821.91	0.67375	464643.41
3807821.91	0.64018		
464663.41	3807821.91	0.61821	464683.41
3807821.91	0.60011		
464703.41	3807821.91	0.58266	464723.41
3807821.91	0.57586		
464743.41	3807821.91	0.56445	464763.41
3807821.91	0.54885		
464783.41	3807821.91	0.53387	464803.41
3807821.91	0.51951		
464823.41	3807821.91	0.50578	464843.41
3807821.91	0.49251		
464863.41	3807821.91	0.47974	464883.41
3807821.91	0.46740		
464903.41	3807821.91	0.45553	464923.41
3807821.91	0.44410		
464943.41	3807821.91	0.43298	464963.41
3807821.91	0.42230		
464983.41	3807821.91	0.41203	465003.41
3807821.91	0.40193		
465023.41	3807821.91	0.39230	465043.41
3807821.91	0.38303		
465063.41	3807821.91	0.37386	465083.41
3807821.91	0.36517		
465103.41	3807821.91	0.35681	465123.41
3807821.91	0.34849		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807821.91	0.34063	465163.41
3807821.91	0.33313		
465183.41	3807821.91	0.32592	465203.41
3807821.91	0.31872		
465223.41	3807821.91	0.31170	465243.41
3807821.91	0.30512		
465263.41	3807821.91	0.29878	465283.41
3807821.91	0.29260		
465303.41	3807821.91	0.28637	465323.41
3807821.91	0.28050		
465343.41	3807821.91	0.27491	465363.41
3807821.91	0.26952		
465383.41	3807821.91	0.26410	464543.41
3807841.91	0.78035		
464563.41	3807841.91	0.75666	464583.41
3807841.91	0.73596		
464603.41	3807841.91	0.71469	464623.41
3807841.91	0.69286		
464643.41	3807841.91	0.67145	464663.41
3807841.91	0.65092		
464683.41	3807841.91	0.63134	464723.41
3807841.91	0.59507		
464743.41	3807841.91	0.57814	464763.41
3807841.91	0.56184		
464783.41	3807841.91	0.54628	464803.41
3807841.91	0.53135		
464823.41	3807841.91	0.51699	464843.41

3807841.91	0.50317		
464863.41	3807841.91	0.48987	464883.41
3807841.91	0.47706		
464903.41	3807841.91	0.46471	464923.41
3807841.91	0.45280		
464943.41	3807841.91	0.44131	464963.41
3807841.91	0.43022		
464983.41	3807841.91	0.41950	465003.41
3807841.91	0.40915		
465023.41	3807841.91	0.39915	465043.41
3807841.91	0.38949		
465063.41	3807841.91	0.38018	465083.41
3807841.91	0.37116		
465103.41	3807841.91	0.36245	465123.41
3807841.91	0.35405		
465143.41	3807841.91	0.34592	465163.41
3807841.91	0.33808		
465183.41	3807841.91	0.33069	465203.41
3807841.91	0.32341		
465223.41	3807841.91	0.31631	465243.41
3807841.91	0.30942		
465263.41	3807841.91	0.30288	465283.41
3807841.91	0.29660		
465303.41	3807841.91	0.29037	465323.41
3807841.91	0.28445		
465343.41	3807841.91	0.27875	465363.41
3807841.91	0.27307		
465383.41	3807841.91	0.26757	464503.41
3807861.91	0.85829		
464523.41	3807861.91	0.82705	464543.41
3807861.91	0.79881		
464563.41	3807861.91	0.77356	464583.41
3807861.91	0.75308		
464603.41	3807861.91	0.73287	464723.41
3807861.91	0.61004		
464743.41	3807861.91	0.59226	464763.41
3807861.91	0.57525		
464783.41	3807861.91	0.55908	464803.41
3807861.91	0.54351		
464823.41	3807861.91	0.52853	464843.41
3807861.91	0.51414		
464863.41	3807861.91	0.50027	464883.41
3807861.91	0.48698		
464903.41	3807861.91	0.47413	464923.41
3807861.91	0.46171		
464943.41	3807861.91	0.44987	464963.41
3807861.91	0.43833		
464983.41	3807861.91	0.42715	465003.41
3807861.91	0.41656		
465023.41	3807861.91	0.40619	465043.41

3807861.91 0.39614
 465063.41 3807861.91 0.38665 465083.41
 3807861.91 0.37732

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 183

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465103.41	3807861.91	0.36828	465123.41
3807861.91	0.35976		
465143.41	3807861.91	0.35135	465163.41
3807861.91	0.34320		
465183.41	3807861.91	0.33553	465203.41
3807861.91	0.32818		
465223.41	3807861.91	0.32105	465243.41
3807861.91	0.31388		
465263.41	3807861.91	0.30716	465283.41
3807861.91	0.30076		
465303.41	3807861.91	0.29450	465323.41
3807861.91	0.28849		
465343.41	3807861.91	0.28265	465363.41
3807861.91	0.27675		
465383.41	3807861.91	0.27118	464503.41
3807881.91	0.88432		
464523.41	3807881.91	0.85112	464543.41
3807881.91	0.82135		

464723.41	3807881.91	0.62544	464743.41
3807881.91	0.60687		
464763.41	3807881.91	0.58911	464783.41
3807881.91	0.57225		
464803.41	3807881.91	0.55604	464823.41
3807881.91	0.54041		
464843.41	3807881.91	0.52542	464863.41
3807881.91	0.51104		
464883.41	3807881.91	0.49711	464903.41
3807881.91	0.48380		
464923.41	3807881.91	0.47102	464943.41
3807881.91	0.45852		
464963.41	3807881.91	0.44664	464983.41
3807881.91	0.43525		
465003.41	3807881.91	0.42401	465023.41
3807881.91	0.41340		
465043.41	3807881.91	0.40323	465063.41
3807881.91	0.39314		
465083.41	3807881.91	0.38364	465103.41
3807881.91	0.37454		
465123.41	3807881.91	0.36547	465143.41
3807881.91	0.35694		
465163.41	3807881.91	0.34877	465183.41
3807881.91	0.34060		
465203.41	3807881.91	0.33298	465223.41
3807881.91	0.32573		
465243.41	3807881.91	0.31868	465263.41
3807881.91	0.31190		
465283.41	3807881.91	0.30531	465303.41
3807881.91	0.29863		
465323.41	3807881.91	0.29242	465343.41
3807881.91	0.28651		
465363.41	3807881.91	0.28074	465383.41
3807881.91	0.27497		
464723.41	3807901.91	0.64160	464743.41
3807901.91	0.62203		
464763.41	3807901.91	0.60361	464783.41
3807901.91	0.58594		
464803.41	3807901.91	0.56900	464823.41
3807901.91	0.55272		
464843.41	3807901.91	0.53713	464863.41
3807901.91	0.52220		
464883.41	3807901.91	0.50770	464903.41
3807901.91	0.49377		
464923.41	3807901.91	0.48043	464943.41
3807901.91	0.46760		
464963.41	3807901.91	0.45540	464983.41
3807901.91	0.44366		
465003.41	3807901.91	0.43200	465023.41
3807901.91	0.42089		

465043.41	3807901.91	0.41028	465063.41
3807901.91	0.40008		
465083.41	3807901.91	0.39023	465103.41
3807901.91	0.38074		
465123.41	3807901.91	0.37161	465143.41
3807901.91	0.36278		
465163.41	3807901.91	0.35427	465183.41
3807901.91	0.34608		
465203.41	3807901.91	0.33833	465223.41
3807901.91	0.33088		
465243.41	3807901.91	0.32348	465263.41
3807901.91	0.31650		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 184

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465283.41	3807901.91	0.30979	465303.41
3807901.91	0.30313		
465323.41	3807901.91	0.29668	465343.41
3807901.91	0.29047		
465363.41	3807901.91	0.28465	465383.41
3807901.91	0.27889		
464723.41	3807921.91	0.65824	464743.41
3807921.91	0.63789		
464763.41	3807921.91	0.61859	464783.41

3807921.91	0.60012		
464803.41	3807921.91	0.58244	464823.41
3807921.91	0.56548		
464843.41	3807921.91	0.54925	464863.41
3807921.91	0.53371		
464883.41	3807921.91	0.51862	464903.41
3807921.91	0.50407		
464923.41	3807921.91	0.49015	464943.41
3807921.91	0.47708		
464963.41	3807921.91	0.46447	464983.41
3807921.91	0.45227		
465003.41	3807921.91	0.44021	465023.41
3807921.91	0.42865		
465043.41	3807921.91	0.41761	465063.41
3807921.91	0.40726		
465083.41	3807921.91	0.39706	465103.41
3807921.91	0.38720		
465123.41	3807921.91	0.37797	465143.41
3807921.91	0.36885		
465163.41	3807921.91	0.36002	465183.41
3807921.91	0.35177		
465203.41	3807921.91	0.34387	465223.41
3807921.91	0.33622		
465243.41	3807921.91	0.32851	465263.41
3807921.91	0.32125		
465283.41	3807921.91	0.31436	465303.41
3807921.91	0.30778		
465323.41	3807921.91	0.30117	465343.41
3807921.91	0.29473		
465363.41	3807921.91	0.28879	465383.41
3807921.91	0.28299		
464723.41	3807941.91	0.67503	464743.41
3807941.91	0.65431		
464763.41	3807941.91	0.63412	464783.41
3807941.91	0.61482		
464803.41	3807941.91	0.59634	464823.41
3807941.91	0.57872		
464843.41	3807941.91	0.56179	464863.41
3807941.91	0.54545		
464883.41	3807941.91	0.52964	464903.41
3807941.91	0.51471		
464923.41	3807941.91	0.50055	464943.41
3807941.91	0.48702		
464963.41	3807941.91	0.47375	464983.41
3807941.91	0.46085		
465003.41	3807941.91	0.44836	465023.41
3807941.91	0.43668		
465043.41	3807941.91	0.42555	465063.41
3807941.91	0.41449		
465083.41	3807941.91	0.40414	465103.41

3807941.91	0.39425		
465123.41	3807941.91	0.38437	465143.41
3807941.91	0.37515		
465163.41	3807941.91	0.36633	465183.41
3807941.91	0.35748		
465203.41	3807941.91	0.34929	465223.41
3807941.91	0.34152		
465243.41	3807941.91	0.33396	465263.41
3807941.91	0.32642		
465283.41	3807941.91	0.31910	465303.41
3807941.91	0.31238		
465323.41	3807941.91	0.30584	465343.41
3807941.91	0.29951		
465363.41	3807941.91	0.29344	465383.41
3807941.91	0.28731		
465403.41	3807941.91	0.28131	465423.41
3807941.91	0.27577		
465443.41	3807941.91	0.27043	465463.41
3807941.91	0.26536		
465483.41	3807941.91	0.26031	465503.41
3807941.91	0.25545		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 185

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

465523.41	3807941.91	0.25070	465543.41
3807941.91	0.24584		
465563.41	3807941.91	0.24129	465583.41
3807941.91	0.23697		
465603.41	3807941.91	0.23281	465623.41
3807941.91	0.22857		
465643.41	3807941.91	0.22441	465663.41
3807941.91	0.22056		
465683.41	3807941.91	0.21665	465703.41
3807941.91	0.21283		
464723.41	3807961.91	0.69067	464743.41
3807961.91	0.67088		
464763.41	3807961.91	0.65022	464783.41
3807961.91	0.63011		
464803.41	3807961.91	0.61085	464823.41
3807961.91	0.59242		
464843.41	3807961.91	0.57480	464863.41
3807961.91	0.55789		
464883.41	3807961.91	0.54145	464903.41
3807961.91	0.52601		
464923.41	3807961.91	0.51134	464943.41
3807961.91	0.49705		
464963.41	3807961.91	0.48338	464983.41
3807961.91	0.47022		
465003.41	3807961.91	0.45731	465023.41
3807961.91	0.44532		
465043.41	3807961.91	0.43390	465063.41
3807961.91	0.42243		
465083.41	3807961.91	0.41158	465103.41
3807961.91	0.40125		
465123.41	3807961.91	0.39134	465143.41
3807961.91	0.38178		
465163.41	3807961.91	0.37257	465183.41
3807961.91	0.36373		
465203.41	3807961.91	0.35519	465223.41
3807961.91	0.34700		
465243.41	3807961.91	0.33935	465263.41
3807961.91	0.33179		
465283.41	3807961.91	0.32446	465303.41
3807961.91	0.31759		
465323.41	3807961.91	0.31077	465343.41
3807961.91	0.30414		
465363.41	3807961.91	0.29794	465383.41
3807961.91	0.29180		
465403.41	3807961.91	0.28579	465423.41
3807961.91	0.27994		
465443.41	3807961.91	0.27444	465463.41
3807961.91	0.26949		
465483.41	3807961.91	0.26418	465503.41
3807961.91	0.25918		

465523.41	3807961.91	0.25435	465543.41
3807961.91	0.24953		
465563.41	3807961.91	0.24497	465583.41
3807961.91	0.24057		
465603.41	3807961.91	0.23614	465623.41
3807961.91	0.23185		
465643.41	3807961.91	0.22769	465663.41
3807961.91	0.22363		
465683.41	3807961.91	0.21969	465703.41
3807961.91	0.21590		
464743.41	3807981.91	0.68708	464763.41
3807981.91	0.66669		
464783.41	3807981.91	0.64599	464803.41
3807981.91	0.62598		
464823.41	3807981.91	0.60660	464843.41
3807981.91	0.58827		
464863.41	3807981.91	0.57083	464883.41
3807981.91	0.55373		
464903.41	3807981.91	0.53770	464923.41
3807981.91	0.52248		
464943.41	3807981.91	0.50753	464963.41
3807981.91	0.49342		
464983.41	3807981.91	0.47997	465003.41
3807981.91	0.46678		
465023.41	3807981.91	0.45435	465043.41
3807981.91	0.44249		
465063.41	3807981.91	0.43080	465083.41
3807981.91	0.41947		
465103.41	3807981.91	0.40864	465123.41
3807981.91	0.39875		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 186

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807981.91	0.38882	465163.41
3807981.91	0.37915		
465183.41	3807981.91	0.37025	465203.41
3807981.91	0.36142		
465223.41	3807981.91	0.35288	465243.41
3807981.91	0.34505		
465263.41	3807981.91	0.33750	465283.41
3807981.91	0.33019		
465303.41	3807981.91	0.32304	465323.41
3807981.91	0.31592		
465343.41	3807981.91	0.30901	465363.41
3807981.91	0.30258		
465383.41	3807981.91	0.29642	465403.41
3807981.91	0.29043		
465423.41	3807981.91	0.28433	465443.41
3807981.91	0.27867		
465463.41	3807981.91	0.27378	465483.41
3807981.91	0.26823		
465503.41	3807981.91	0.26308	465523.41
3807981.91	0.25818		
465543.41	3807981.91	0.25337	465563.41
3807981.91	0.24875		
465583.41	3807981.91	0.24423	465603.41
3807981.91	0.23960		
465623.41	3807981.91	0.23526	465643.41
3807981.91	0.23108		
465663.41	3807981.91	0.22683	465683.41
3807981.91	0.22290		
465703.41	3807981.91	0.21915	464763.41
3808001.91	0.68278		
464783.41	3808001.91	0.66214	464803.41
3808001.91	0.64159		
464823.41	3808001.91	0.62120	464843.41
3808001.91	0.60211		
464863.41	3808001.91	0.58397	464883.41
3808001.91	0.56611		
464903.41	3808001.91	0.54949	464923.41
3808001.91	0.53381		
464943.41	3808001.91	0.51874	464963.41
3808001.91	0.50399		
464983.41	3808001.91	0.48980	465003.41

3808001.91	0.47660		
465023.41	3808001.91	0.46363	465043.41
3808001.91	0.45111		
465063.41	3808001.91	0.43949	465083.41
3808001.91	0.42796		
465103.41	3808001.91	0.41681	465123.41
3808001.91	0.40663		
465143.41	3808001.91	0.39642	465163.41
3808001.91	0.38640		
465183.41	3808001.91	0.37682	465203.41
3808001.91	0.36791		
465223.41	3808001.91	0.35950	465243.41
3808001.91	0.35146		
465263.41	3808001.91	0.34371	465283.41
3808001.91	0.33614		
465303.41	3808001.91	0.32844	465323.41
3808001.91	0.32128		
465343.41	3808001.91	0.31443	465363.41
3808001.91	0.30748		
465383.41	3808001.91	0.30109	465403.41
3808001.91	0.29502		
465423.41	3808001.91	0.28911	465443.41
3808001.91	0.28342		
465463.41	3808001.91	0.27802	465483.41
3808001.91	0.27263		
465503.41	3808001.91	0.26746	465523.41
3808001.91	0.26240		
465543.41	3808001.91	0.25720	465563.41
3808001.91	0.25240		
465583.41	3808001.91	0.24784	465603.41
3808001.91	0.24336		
465623.41	3808001.91	0.23883	465643.41
3808001.91	0.23440		
465663.41	3808001.91	0.23031	465683.41
3808001.91	0.22636		
465703.41	3808001.91	0.22249	464763.41
3808021.91	0.69732		
464783.41	3808021.91	0.67689	464803.41
3808021.91	0.65661		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 187

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012

```

, L0006013      , L0006014      , L0006015      ,
                  L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
                  L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
                  L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3808021.91	0.63607	464843.41
3808021.91	0.61647		
464863.41	3808021.91	0.59770	464883.41
3808021.91	0.57951		
464903.41	3808021.91	0.56212	464923.41
3808021.91	0.54557		
464943.41	3808021.91	0.53008	464963.41
3808021.91	0.51504		
464983.41	3808021.91	0.50054	465003.41
3808021.91	0.48661		
465023.41	3808021.91	0.47331	465043.41
3808021.91	0.46057		
465063.41	3808021.91	0.44832	465083.41
3808021.91	0.43659		
465103.41	3808021.91	0.42534	465123.41
3808021.91	0.41451		
465143.41	3808021.91	0.40412	465163.41
3808021.91	0.39409		
465183.41	3808021.91	0.38414	465203.41
3808021.91	0.37502		
465223.41	3808021.91	0.36639	465243.41
3808021.91	0.35780		
465263.41	3808021.91	0.34974	465283.41
3808021.91	0.34203		
465303.41	3808021.91	0.33435	465323.41
3808021.91	0.32693		
465343.41	3808021.91	0.31977	465363.41
3808021.91	0.31287		
465383.41	3808021.91	0.30638	465403.41
3808021.91	0.30013		
465423.41	3808021.91	0.29387	465443.41
3808021.91	0.28798		

465463.41	3808021.91	0.28271	465483.41
3808021.91	0.27702		
465503.41	3808021.91	0.27167	465523.41
3808021.91	0.26653		
465543.41	3808021.91	0.26137	465563.41
3808021.91	0.25636		
465583.41	3808021.91	0.25153	465603.41
3808021.91	0.24702		
465623.41	3808021.91	0.24251	465643.41
3808021.91	0.23810		
465663.41	3808021.91	0.23397	465683.41
3808021.91	0.22982		
465703.41	3808021.91	0.22574	464783.41
3808041.91	0.69134		
464803.41	3808041.91	0.67138	464823.41
3808041.91	0.65120		
464843.41	3808041.91	0.63132	464863.41
3808041.91	0.61206		
464883.41	3808041.91	0.59356	464903.41
3808041.91	0.57547		
464923.41	3808041.91	0.55811	464943.41
3808041.91	0.54208		
464963.41	3808041.91	0.52676	464983.41
3808041.91	0.51198		
465003.41	3808041.91	0.49723	465023.41
3808041.91	0.48350		
465043.41	3808041.91	0.47047	465063.41
3808041.91	0.45762		
465083.41	3808041.91	0.44559	465103.41
3808041.91	0.43413		
465123.41	3808041.91	0.42277	465143.41
3808041.91	0.41213		
465163.41	3808041.91	0.40199	465183.41
3808041.91	0.39190		
465203.41	3808041.91	0.38246	465223.41
3808041.91	0.37344		
465243.41	3808041.91	0.36444	465263.41
3808041.91	0.35602		
465283.41	3808041.91	0.34805	465303.41
3808041.91	0.34047		
465323.41	3808041.91	0.33284	465343.41
3808041.91	0.32538		
465363.41	3808041.91	0.31846	465383.41
3808041.91	0.31185		
465403.41	3808041.91	0.30542	465423.41
3808041.91	0.29885		
465443.41	3808041.91	0.29278	465463.41
3808041.91	0.28756		

▲ *** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 188

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465483.41	3808041.91	0.28159	465503.41
3808041.91	0.27601		
465523.41	3808041.91	0.27072	465543.41
3808041.91	0.26565		
465563.41	3808041.91	0.26050	465583.41
3808041.91	0.25546		
465603.41	3808041.91	0.25084	465623.41
3808041.91	0.24636		
465643.41	3808041.91	0.24199	465663.41
3808041.91	0.23769		
465683.41	3808041.91	0.23335	465703.41
3808041.91	0.22911		
464803.41	3808061.91	0.68698	464823.41
3808061.91	0.66634		
464843.41	3808061.91	0.64639	464863.41
3808061.91	0.62705		
464883.41	3808061.91	0.60785	464903.41
3808061.91	0.58947		
464923.41	3808061.91	0.57193	464943.41
3808061.91	0.55530		
464963.41	3808061.91	0.53941	464983.41
3808061.91	0.52410		
465003.41	3808061.91	0.50883	465023.41

3808061.91	0.49426		
465043.41	3808061.91	0.48046	465063.41
3808061.91	0.46771		
465083.41	3808061.91	0.45511	465103.41
3808061.91	0.44294		
465123.41	3808061.91	0.43173	465143.41
3808061.91	0.42060		
465163.41	3808061.91	0.40983	465183.41
3808061.91	0.39992		
465203.41	3808061.91	0.39004	465223.41
3808061.91	0.38046		
465243.41	3808061.91	0.37165	465263.41
3808061.91	0.36283		
465283.41	3808061.91	0.35429	465303.41
3808061.91	0.34652		
465323.41	3808061.91	0.33895	465343.41
3808061.91	0.33155		
465363.41	3808061.91	0.32404	465383.41
3808061.91	0.31715		
465403.41	3808061.91	0.31062	465423.41
3808061.91	0.30425		
465443.41	3808061.91	0.29813	465463.41
3808061.91	0.29233		
465483.41	3808061.91	0.28654	465503.41
3808061.91	0.28070		
465523.41	3808061.91	0.27501	465543.41
3808061.91	0.26983		
465563.41	3808061.91	0.26476	465583.41
3808061.91	0.25983		
465603.41	3808061.91	0.25510	465623.41
3808061.91	0.25050		
465643.41	3808061.91	0.24598	465663.41
3808061.91	0.24131		
465683.41	3808061.91	0.23696	465703.41
3808061.91	0.23283		
464823.41	3808081.91	0.68312	464843.41
3808081.91	0.66216		
464863.41	3808081.91	0.64191	464883.41
3808081.91	0.62264		
464903.41	3808081.91	0.60423	464923.41
3808081.91	0.58653		
464943.41	3808081.91	0.56924	464963.41
3808081.91	0.55245		
464983.41	3808081.91	0.53630	465003.41
3808081.91	0.52090		
465023.41	3808081.91	0.50590	465043.41
3808081.91	0.49153		
465063.41	3808081.91	0.47845	465083.41
3808081.91	0.46539		
465103.41	3808081.91	0.45268	465123.41

```

3808081.91      0.44080
      465143.41      3808081.91      0.42942      465163.41
3808081.91      0.41850
      465183.41      3808081.91      0.40799      465203.41
3808081.91      0.39791
      465223.41      3808081.91      0.38822      465243.41
3808081.91      0.37887
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 189

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3808081.91	0.36989	465283.41
3808081.91	0.36132		
465303.41	3808081.91	0.35332	465323.41
3808081.91	0.34537		
465343.41	3808081.91	0.33760	465363.41
3808081.91	0.33013		
465383.41	3808081.91	0.32311	465403.41
3808081.91	0.31637		
465423.41	3808081.91	0.30960	465443.41
3808081.91	0.30325		
465463.41	3808081.91	0.29757	465483.41
3808081.91	0.29143		
465503.41	3808081.91	0.28551	465523.41
3808081.91	0.27978		

465543.41	3808081.91	0.27421	465563.41
3808081.91	0.26899		
465583.41	3808081.91	0.26399	465603.41
3808081.91	0.25915		
465623.41	3808081.91	0.25444	465643.41
3808081.91	0.24983		
465663.41	3808081.91	0.24520	465683.41
3808081.91	0.24083		
465703.41	3808081.91	0.23661	464843.41
3808101.91	0.67878		
464863.41	3808101.91	0.65785	464883.41
3808101.91	0.63852		
464903.41	3808101.91	0.61980	464923.41
3808101.91	0.60164		
464943.41	3808101.91	0.58368	464963.41
3808101.91	0.56608		
464983.41	3808101.91	0.54916	465003.41
3808101.91	0.53344		
465023.41	3808101.91	0.51806	465043.41
3808101.91	0.50330		
465063.41	3808101.91	0.48959	465083.41
3808101.91	0.47601		
465103.41	3808101.91	0.46282	465123.41
3808101.91	0.45031		
465143.41	3808101.91	0.43874	465163.41
3808101.91	0.42773		
465183.41	3808101.91	0.41649	465203.41
3808101.91	0.40612		
465223.41	3808101.91	0.39627	465243.41
3808101.91	0.38643		
465263.41	3808101.91	0.37734	465283.41
3808101.91	0.36876		
465303.41	3808101.91	0.36038	465323.41
3808101.91	0.35202		
465343.41	3808101.91	0.34391	465363.41
3808101.91	0.33641		
465383.41	3808101.91	0.32924	465403.41
3808101.91	0.32227		
465423.41	3808101.91	0.31515	465443.41
3808101.91	0.30858		
465463.41	3808101.91	0.30295	465483.41
3808101.91	0.29650		
465503.41	3808101.91	0.29047	465523.41
3808101.91	0.28468		
465543.41	3808101.91	0.27882	465563.41
3808101.91	0.27341		
465583.41	3808101.91	0.26830	465603.41
3808101.91	0.26333		
465623.41	3808101.91	0.25851	465643.41
3808101.91	0.25381		

465663.41	3808101.91	0.24918	465683.41
3808101.91	0.24474		
465703.41	3808101.91	0.24039	464863.41
3808121.91	0.67655		
464883.41	3808121.91	0.65635	464903.41
3808121.91	0.63629		
464923.41	3808121.91	0.61685	464943.41
3808121.91	0.59820		
464963.41	3808121.91	0.58033	464983.41
3808121.91	0.56316		
465003.41	3808121.91	0.54621	465023.41
3808121.91	0.53047		
465043.41	3808121.91	0.51555	465063.41
3808121.91	0.50075		
465083.41	3808121.91	0.48650	465103.41
3808121.91	0.47294		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 190

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465123.41	3808121.91	0.46058	465143.41
3808121.91	0.44881		
465163.41	3808121.91	0.43741	465183.41
3808121.91	0.42580		
465203.41	3808121.91	0.41472	465223.41

3808121.91	0.40421		
465243.41	3808121.91	0.39457	465263.41
3808121.91	0.38536		
465283.41	3808121.91	0.37642	465303.41
3808121.91	0.36730		
465323.41	3808121.91	0.35886	465343.41
3808121.91	0.35080		
465363.41	3808121.91	0.34262	465383.41
3808121.91	0.33512		
465403.41	3808121.91	0.32803	465423.41
3808121.91	0.32112		
465443.41	3808121.91	0.31448	465463.41
3808121.91	0.30820		
465483.41	3808121.91	0.30193	465503.41
3808121.91	0.29561		
465523.41	3808121.91	0.28944	465543.41
3808121.91	0.28376		
465563.41	3808121.91	0.27831	465583.41
3808121.91	0.27305		
465603.41	3808121.91	0.26794	465623.41
3808121.91	0.26299		
465643.41	3808121.91	0.25811	465663.41
3808121.91	0.25308		
465683.41	3808121.91	0.24843	465703.41
3808121.91	0.24404		
464883.41	3808141.91	0.67381	464903.41
3808141.91	0.65355		
464923.41	3808141.91	0.63365	464943.41
3808141.91	0.61423		
464963.41	3808141.91	0.59573	464983.41
3808141.91	0.57794		
465003.41	3808141.91	0.56019	465023.41
3808141.91	0.54388		
465043.41	3808141.91	0.52847	465063.41
3808141.91	0.51298		
465083.41	3808141.91	0.49816	465103.41
3808141.91	0.48412		
465123.41	3808141.91	0.47144	465143.41
3808141.91	0.45897		
465163.41	3808141.91	0.44689	465183.41
3808141.91	0.43532		
465203.41	3808141.91	0.42394	465223.41
3808141.91	0.41300		
465243.41	3808141.91	0.40315	465263.41
3808141.91	0.39339		
465283.41	3808141.91	0.38390	465303.41
3808141.91	0.37478		
465323.41	3808141.91	0.36597	465343.41
3808141.91	0.35749		
465363.41	3808141.91	0.34933	465383.41

3808141.91	0.34169		
465403.41	3808141.91	0.33434	465423.41
3808141.91	0.32698		
465443.41	3808141.91	0.32007	465463.41
3808141.91	0.31352		
465483.41	3808141.91	0.30716	465503.41
3808141.91	0.30083		
465523.41	3808141.91	0.29462	465543.41
3808141.91	0.28858		
465563.41	3808141.91	0.28292	465583.41
3808141.91	0.27753		
465603.41	3808141.91	0.27229	465623.41
3808141.91	0.26721		
465643.41	3808141.91	0.26224	465663.41
3808141.91	0.25724		
465683.41	3808141.91	0.25238	465703.41
3808141.91	0.24769		
464883.41	3808161.91	0.69170	464903.41
3808161.91	0.67141		
464923.41	3808161.91	0.65117	464943.41
3808161.91	0.63091		
464963.41	3808161.91	0.61163	464983.41
3808161.91	0.59314		
465003.41	3808161.91	0.57487	465023.41
3808161.91	0.55784		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 191

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)

	465043.41	3808161.91	0.54166	465063.41
3808161.91		0.52557		
	465083.41	3808161.91	0.51031	465103.41
3808161.91		0.49589		
	465123.41	3808161.91	0.48255	465143.41
3808161.91		0.46939		
	465163.41	3808161.91	0.45672	465183.41
3808161.91		0.44501		
	465203.41	3808161.91	0.43341	465223.41
3808161.91		0.42221		
	465243.41	3808161.91	0.41186	465263.41
3808161.91		0.40158		
	465283.41	3808161.91	0.39163	465303.41
3808161.91		0.38244		
	465323.41	3808161.91	0.37327	465343.41
3808161.91		0.36439		
	465363.41	3808161.91	0.35619	465383.41
3808161.91		0.34836		
	465403.41	3808161.91	0.34076	465423.41
3808161.91		0.33300		
	465443.41	3808161.91	0.32584	465463.41
3808161.91		0.31907		
	465483.41	3808161.91	0.31242	465503.41
3808161.91		0.30607		
	465523.41	3808161.91	0.29987	465543.41
3808161.91		0.29351		
	465563.41	3808161.91	0.28765	465583.41
3808161.91		0.28211		
	465603.41	3808161.91	0.27673	465623.41
3808161.91		0.27146		
	465643.41	3808161.91	0.26633	465663.41
3808161.91		0.26143		
	465683.41	3808161.91	0.25642	465703.41
3808161.91		0.25149		
	464903.41	3808181.91	0.68959	464923.41
3808181.91		0.66858		
	464943.41	3808181.91	0.64748	464963.41
3808181.91		0.62742		
	464983.41	3808181.91	0.60830	465003.41
3808181.91		0.58998		
	465023.41	3808181.91	0.57201	465043.41
3808181.91		0.55462		
	465063.41	3808181.91	0.53789	465083.41
3808181.91		0.52251		
	465103.41	3808181.91	0.50797	465123.41
3808181.91		0.49347		

465143.41	3808181.91	0.48007	465163.41
3808181.91	0.46735		
465183.41	3808181.91	0.45460	465203.41
3808181.91	0.44281		
465223.41	3808181.91	0.43161	465243.41
3808181.91	0.42033		
465263.41	3808181.91	0.40990	465283.41
3808181.91	0.39998		
465303.41	3808181.91	0.38995	465323.41
3808181.91	0.38069		
465343.41	3808181.91	0.37185	465363.41
3808181.91	0.36289		
465383.41	3808181.91	0.35469	465403.41
3808181.91	0.34694		
465423.41	3808181.91	0.33939	465443.41
3808181.91	0.33216		
465463.41	3808181.91	0.32511	465483.41
3808181.91	0.31785		
465503.41	3808181.91	0.31119	465523.41
3808181.91	0.30491		
465543.41	3808181.91	0.29874	465563.41
3808181.91	0.29283		
465583.41	3808181.91	0.28713	465603.41
3808181.91	0.28160		
465623.41	3808181.91	0.27595	465643.41
3808181.91	0.27042		
465663.41	3808181.91	0.26539	465683.41
3808181.91	0.26047		
465703.41	3808181.91	0.25562	464923.41
3808201.91	0.68553		
464943.41	3808201.91	0.66433	464963.41
3808201.91	0.64369		
464983.41	3808201.91	0.62383	465003.41
3808201.91	0.60492		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 192

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,

L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465023.41	3808201.91	0.58617	465043.41
3808201.91	0.56803		
465063.41	3808201.91	0.55123	465083.41
3808201.91	0.53515		
465103.41	3808201.91	0.51978	465123.41
3808201.91	0.50515		
465143.41	3808201.91	0.49112	465163.41
3808201.91	0.47768		
465183.41	3808201.91	0.46485	465203.41
3808201.91	0.45252		
465223.41	3808201.91	0.44069	465243.41
3808201.91	0.42938		
465263.41	3808201.91	0.41848	465283.41
3808201.91	0.40802		
465303.41	3808201.91	0.39798	465323.41
3808201.91	0.38830		
465343.41	3808201.91	0.37899	465363.41
3808201.91	0.37005		
465383.41	3808201.91	0.36141	465403.41
3808201.91	0.35314		
465423.41	3808201.91	0.34547	465443.41
3808201.91	0.33806		
465463.41	3808201.91	0.33085	465483.41
3808201.91	0.32363		
465503.41	3808201.91	0.31686	465523.41
3808201.91	0.31039		
465543.41	3808201.91	0.30414	465563.41
3808201.91	0.29788		
465583.41	3808201.91	0.29179	465603.41
3808201.91	0.28612		
465623.41	3808201.91	0.28045	465643.41
3808201.91	0.27493		
465663.41	3808201.91	0.26977	465683.41
3808201.91	0.26459		
465703.41	3808201.91	0.25950	464943.41
3808221.91	0.68154		
464963.41	3808221.91	0.66036	464983.41

3808221.91	0.63969		
465003.41	3808221.91	0.62003	465023.41
3808221.91	0.60067		
465043.41	3808221.91	0.58206	465063.41
3808221.91	0.56491		
465083.41	3808221.91	0.54792	465103.41
3808221.91	0.53163		
465123.41	3808221.91	0.51696	465143.41
3808221.91	0.50237		
465163.41	3808221.91	0.48827	465183.41
3808221.91	0.47525		
465203.41	3808221.91	0.46238	465223.41
3808221.91	0.44998		
465243.41	3808221.91	0.43854	465263.41
3808221.91	0.42718		
465283.41	3808221.91	0.41621	465303.41
3808221.91	0.40609		
465323.41	3808221.91	0.39601	465343.41
3808221.91	0.38626		
465363.41	3808221.91	0.37726	465383.41
3808221.91	0.36828		
465403.41	3808221.91	0.35959	465423.41
3808221.91	0.35169		
465443.41	3808221.91	0.34407	465463.41
3808221.91	0.33670		
465483.41	3808221.91	0.32958	465503.41
3808221.91	0.32262		
465523.41	3808221.91	0.31587	465543.41
3808221.91	0.30944		
465563.41	3808221.91	0.30290	465583.41
3808221.91	0.29651		
465603.41	3808221.91	0.29069	465623.41
3808221.91	0.28498		
465643.41	3808221.91	0.27944	465663.41
3808221.91	0.27414		
465683.41	3808221.91	0.26873	465703.41
3808221.91	0.26342		
464963.41	3808241.91	0.67737	464983.41
3808241.91	0.65585		
465003.41	3808241.91	0.63541	465023.41
3808241.91	0.61582		
465043.41	3808241.91	0.59699	465063.41
3808241.91	0.57833		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 193

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
-----	-----	-----	-----
465083.41	3808241.91	0.56046	465103.41
3808241.91	0.54355		
465123.41	3808241.91	0.52836	465143.41
3808241.91	0.51371		
465163.41	3808241.91	0.49955	465183.41
3808241.91	0.48537		
465203.41	3808241.91	0.47230	465223.41
3808241.91	0.45989		
465243.41	3808241.91	0.44741	465263.41
3808241.91	0.43590		
465283.41	3808241.91	0.42496	465303.41
3808241.91	0.41391		
465323.41	3808241.91	0.40372	465343.41
3808241.91	0.39402		
465363.41	3808241.91	0.38420	465383.41
3808241.91	0.37513		
465403.41	3808241.91	0.36660	465423.41
3808241.91	0.35846		
465443.41	3808241.91	0.35059	465463.41
3808241.91	0.34300		
465483.41	3808241.91	0.33567	465503.41
3808241.91	0.32821		
465523.41	3808241.91	0.32093	465543.41
3808241.91	0.31433		
465563.41	3808241.91	0.30789	465583.41
3808241.91	0.30164		
465603.41	3808241.91	0.29566	465623.41
3808241.91	0.28955		

465643.41	3808241.91	0.28357	465663.41
3808241.91	0.27814		
465683.41	3808241.91	0.27284	465703.41
3808241.91	0.26760		
464983.41	3808261.91	0.66978	465003.41
3808261.91	0.64946		
465023.41	3808261.91	0.62959	465043.41
3808261.91	0.61030		
465063.41	3808261.91	0.59145	465083.41
3808261.91	0.57350		
465103.41	3808261.91	0.55638	465123.41
3808261.91	0.53998		
465143.41	3808261.91	0.52475	465163.41
3808261.91	0.51028		
465183.41	3808261.91	0.49603	465203.41
3808261.91	0.48236		
465223.41	3808261.91	0.46927	465243.41
3808261.91	0.45676		
465263.41	3808261.91	0.44508	465283.41
3808261.91	0.43385		
465303.41	3808261.91	0.42232	465323.41
3808261.91	0.41153		
465343.41	3808261.91	0.40131	465363.41
3808261.91	0.39151		
465383.41	3808261.91	0.38206	465403.41
3808261.91	0.37302		
465423.41	3808261.91	0.36464	465443.41
3808261.91	0.35656		
465463.41	3808261.91	0.34877	465483.41
3808261.91	0.34124		
465503.41	3808261.91	0.33375	465523.41
3808261.91	0.32647		
465543.41	3808261.91	0.31969	465563.41
3808261.91	0.31291		
465583.41	3808261.91	0.30632	465603.41
3808261.91	0.30019		
465623.41	3808261.91	0.29406	465643.41
3808261.91	0.28805		
465663.41	3808261.91	0.28221	465683.41
3808261.91	0.27674		
465703.41	3808261.91	0.27147	465003.41
3808281.91	0.66308		
465023.41	3808281.91	0.64291	465043.41
3808281.91	0.62330		
465063.41	3808281.91	0.60417	465083.41
3808281.91	0.58629		
465103.41	3808281.91	0.56920	465123.41
3808281.91	0.55188		
465143.41	3808281.91	0.53599	465163.41
3808281.91	0.52109		

465183.41 3808281.91 0.50666 465203.41
 3808281.91 0.49241
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 194

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808281.91	0.47872	465243.41
3808281.91	0.46629		
465263.41	3808281.91	0.45423	465283.41
3808281.91	0.44248		
465303.41	3808281.91	0.43059	465323.41
3808281.91	0.41930		
465343.41	3808281.91	0.40861	465363.41
3808281.91	0.39877		
465383.41	3808281.91	0.38895	465403.41
3808281.91	0.37944		
465423.41	3808281.91	0.37068	465443.41
3808281.91	0.36232		
465463.41	3808281.91	0.35454	465483.41
3808281.91	0.34681		
465503.41	3808281.91	0.33934	465523.41
3808281.91	0.33210		
465543.41	3808281.91	0.32501	465563.41
3808281.91	0.31789		
465583.41	3808281.91	0.31099	465603.41

3808281.91	0.30470		
465623.41	3808281.91	0.29854	465643.41
3808281.91	0.29249		
465663.41	3808281.91	0.28634	465683.41
3808281.91	0.28062		
465703.41	3808281.91	0.27521	465003.41
3808301.91	0.67683		
465023.41	3808301.91	0.65645	465043.41
3808301.91	0.63690		
465063.41	3808301.91	0.61607	465083.41
3808301.91	0.59799		
465103.41	3808301.91	0.58126	465123.41
3808301.91	0.56419		
465143.41	3808301.91	0.54801	465163.41
3808301.91	0.53243		
465183.41	3808301.91	0.51674	465203.41
3808301.91	0.50229		
465223.41	3808301.91	0.48876	465243.41
3808301.91	0.47591		
465263.41	3808301.91	0.46301	465283.41
3808301.91	0.45037		
465303.41	3808301.91	0.43812	465323.41
3808301.91	0.42692		
465343.41	3808301.91	0.41632	465363.41
3808301.91	0.40559		
465383.41	3808301.91	0.39570	465403.41
3808301.91	0.38629		
465423.41	3808301.91	0.37673	465443.41
3808301.91	0.36801		
465463.41	3808301.91	0.36077	465483.41
3808301.91	0.35282		
465503.41	3808301.91	0.34514	465523.41
3808301.91	0.33763		
465543.41	3808301.91	0.32992	465563.41
3808301.91	0.32278		
465583.41	3808301.91	0.31604	465603.41
3808301.91	0.30959		
465623.41	3808301.91	0.30301	465643.41
3808301.91	0.29657		
465663.41	3808301.91	0.29065	465683.41
3808301.91	0.28467		
465703.41	3808301.91	0.27883	465043.41
3808321.91	0.64931		
465063.41	3808321.91	0.62932	465083.41
3808321.91	0.61068		
465103.41	3808321.91	0.59297	465123.41
3808321.91	0.57554		
465143.41	3808321.91	0.55890	465163.41
3808321.91	0.54291		
465183.41	3808321.91	0.52720	465203.41

3808321.91	0.51254		
465223.41	3808321.91	0.49859	465243.41
3808321.91	0.48476		
465263.41	3808321.91	0.47122	465283.41
3808321.91	0.45819		
465303.41	3808321.91	0.44612	465323.41
3808321.91	0.43451		
465343.41	3808321.91	0.42337	465363.41
3808321.91	0.41270		
465383.41	3808321.91	0.40242	465403.41
3808321.91	0.39254		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 195

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465423.41	3808321.91	0.38306	465443.41
3808321.91	0.37420		
465463.41	3808321.91	0.36633	465483.41
3808321.91	0.35818		
465503.41	3808321.91	0.35032	465523.41
3808321.91	0.34267		
465543.41	3808321.91	0.33502	465563.41
3808321.91	0.32785		
465583.41	3808321.91	0.32096	465603.41
3808321.91	0.31403		

465623.41	3808321.91	0.30736	465643.41
3808321.91	0.30091		
465663.41	3808321.91	0.29464	465683.41
3808321.91	0.28860		
465703.41	3808321.91	0.28275	465083.41
3808341.91	0.62315		
465103.41	3808341.91	0.60436	465123.41
3808341.91	0.58669		
465143.41	3808341.91	0.56964	465163.41
3808341.91	0.55328		
465183.41	3808341.91	0.53765	465203.41
3808341.91	0.52256		
465223.41	3808341.91	0.50795	465243.41
3808341.91	0.49344		
465263.41	3808341.91	0.47940	465283.41
3808341.91	0.46606		
465303.41	3808341.91	0.45395	465323.41
3808341.91	0.44178		
465343.41	3808341.91	0.43005	465363.41
3808341.91	0.41955		
465383.41	3808341.91	0.40898	465403.41
3808341.91	0.39869		
465423.41	3808341.91	0.38921	465443.41
3808341.91	0.38019		
465463.41	3808341.91	0.37179	465483.41
3808341.91	0.36345		
465503.41	3808341.91	0.35541	465523.41
3808341.91	0.34762		
465543.41	3808341.91	0.33999	465563.41
3808341.91	0.33272		
465583.41	3808341.91	0.32563	465603.41
3808341.91	0.31836		
465623.41	3808341.91	0.31160	465643.41
3808341.91	0.30512		
465663.41	3808341.91	0.29856	465683.41
3808341.91	0.29244		
465703.41	3808341.91	0.28658	465103.41
3808361.91	0.61545		
465123.41	3808361.91	0.59824	465143.41
3808361.91	0.58097		
465163.41	3808361.91	0.56410	465183.41
3808361.91	0.54800		
465203.41	3808361.91	0.53193	465223.41
3808361.91	0.51642		
465243.41	3808361.91	0.50226	465263.41
3808361.91	0.48809		
465283.41	3808361.91	0.47425	465303.41
3808361.91	0.46111		
465323.41	3808361.91	0.44845	465343.41
3808361.91	0.43642		

465363.41	3808361.91	0.42569	465383.41
3808361.91	0.41528		
465403.41	3808361.91	0.40513	465423.41
3808361.91	0.39483		
465443.41	3808361.91	0.38544	465463.41
3808361.91	0.37766		
465483.41	3808361.91	0.36911	465503.41
3808361.91	0.36088		
465523.41	3808361.91	0.35282	465543.41
3808361.91	0.34455		
465563.41	3808361.91	0.33697	465583.41
3808361.91	0.32983		
465603.41	3808361.91	0.32284	465623.41
3808361.91	0.31578		
465643.41	3808361.91	0.30891	465663.41
3808361.91	0.30261		
465683.41	3808361.91	0.29623	465703.41
3808361.91	0.29000		
465183.41	3808381.91	0.55620	465203.41
3808381.91	0.53988		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 196

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	0.52430	465243.41

3808381.91	0.50934		
465263.41	3808381.91	0.49470	465283.41
3808381.91	0.48061		
465303.41	3808381.91	0.46762	465323.41
3808381.91	0.45480		
465343.41	3808381.91	0.44250	465363.41
3808381.91	0.43155		
465383.41	3808381.91	0.42101	465403.41
3808381.91	0.41081		
465423.41	3808381.91	0.40064	465443.41
3808381.91	0.39114		
465463.41	3808381.91	0.38272	465483.41
3808381.91	0.37400		
465503.41	3808381.91	0.36559	465523.41
3808381.91	0.35742		
465543.41	3808381.91	0.34926	465563.41
3808381.91	0.34136		
465583.41	3808381.91	0.33380	465603.41
3808381.91	0.32678		
465623.41	3808381.91	0.31978	465643.41
3808381.91	0.31292		
465663.41	3808381.91	0.30627	465683.41
3808381.91	0.29985		
465703.41	3808381.91	0.29364	465303.41
3808401.91	0.47339		
465323.41	3808401.91	0.46062	465343.41
3808401.91	0.44826		
465363.41	3808401.91	0.43709	465383.41
3808401.91	0.42636		
465403.41	3808401.91	0.41604	465423.41
3808401.91	0.40611		
465443.41	3808401.91	0.39655	465463.41
3808401.91	0.38735		
465483.41	3808401.91	0.37848	465503.41
3808401.91	0.36993		
465523.41	3808401.91	0.36167	465543.41
3808401.91	0.35371		
465563.41	3808401.91	0.34563	465583.41
3808401.91	0.33777		
465603.41	3808401.91	0.33062	465623.41
3808401.91	0.32362		
465643.41	3808401.91	0.31675	465663.41
3808401.91	0.30980		
465683.41	3808401.91	0.30333	465703.41
3808401.91	0.29713		
465323.41	3808421.91	0.46562	465343.41
3808421.91	0.45367		
465363.41	3808421.91	0.44231	465383.41
3808421.91	0.43139		
465403.41	3808421.91	0.42089	465423.41

3808421.91	0.41080		
465443.41	3808421.91	0.40108	465463.41
3808421.91	0.39172		
465483.41	3808421.91	0.38270	465503.41
3808421.91	0.37401		
465523.41	3808421.91	0.36563	465543.41
3808421.91	0.35754		
465563.41	3808421.91	0.34967	465583.41
3808421.91	0.34205		
465603.41	3808421.91	0.33477	465623.41
3808421.91	0.32734		
465643.41	3808421.91	0.32009	465663.41
3808421.91	0.31344		
465683.41	3808421.91	0.30671	465703.41
3808421.91	0.30015		
465323.41	3808441.91	0.47068	465343.41
3808441.91	0.45877		
465363.41	3808441.91	0.44780	465383.41
3808441.91	0.43688		
465403.41	3808441.91	0.42619	465423.41
3808441.91	0.41591		
465443.41	3808441.91	0.40602	465463.41
3808441.91	0.39650		
465483.41	3808441.91	0.38733	465503.41
3808441.91	0.37849		
465523.41	3808441.91	0.36996	465543.41
3808441.91	0.36174		
465563.41	3808441.91	0.35380	465583.41
3808441.91	0.34613		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 197

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
465603.41	3808441.91	0.33873	465623.41
3808441.91	0.33112		
465643.41	3808441.91	0.32362	465663.41
3808441.91	0.31662		
465683.41	3808441.91	0.30988	465703.41
3808441.91	0.30342		
465343.41	3808461.91	0.46339	465363.41
3808461.91	0.45260		
465383.41	3808461.91	0.44175	465403.41
3808461.91	0.43107		
465423.41	3808461.91	0.42063	465443.41
3808461.91	0.41059		
465463.41	3808461.91	0.40093	465483.41
3808461.91	0.39162		
465503.41	3808461.91	0.38275	465523.41
3808461.91	0.37421		
465543.41	3808461.91	0.36586	465563.41
3808461.91	0.35779		
465583.41	3808461.91	0.35001	465603.41
3808461.91	0.34248		
465623.41	3808461.91	0.33476	465643.41
3808461.91	0.32709		
465663.41	3808461.91	0.31968	465683.41
3808461.91	0.31296		
465703.41	3808461.91	0.30664	465343.41
3808481.91	0.46739		
465363.41	3808481.91	0.45573	465383.41
3808481.91	0.44507		
465403.41	3808481.91	0.43488	465423.41
3808481.91	0.42432		
465443.41	3808481.91	0.41417	465463.41
3808481.91	0.40440		
465483.41	3808481.91	0.39498	465503.41
3808481.91	0.38640		
465523.41	3808481.91	0.37821	465543.41
3808481.91	0.36973		
465563.41	3808481.91	0.36155	465583.41
3808481.91	0.35366		
465603.41	3808481.91	0.34603	465623.41
3808481.91	0.33820		
465643.41	3808481.91	0.33043	465663.41
3808481.91	0.32292		

465683.41	3808481.91	0.31611	465703.41
3808481.91	0.30962		
465463.41	3808501.91	0.40817	465483.41
3808501.91	0.39818		
465503.41	3808501.91	0.38946	465523.41
3808501.91	0.38130		
465543.41	3808501.91	0.37274	465563.41
3808501.91	0.36474		
465583.41	3808501.91	0.35701	465603.41
3808501.91	0.34892		
465623.41	3808501.91	0.34113	465643.41
3808501.91	0.33356		
465663.41	3808501.91	0.32596	465683.41
3808501.91	0.31907		
465703.41	3808501.91	0.31248	465523.41
3808521.91	0.38389		
465543.41	3808521.91	0.37527	465563.41
3808521.91	0.36747		
465583.41	3808521.91	0.35992	465603.41
3808521.91	0.35155		
465623.41	3808521.91	0.34376	465643.41
3808521.91	0.33630		
465663.41	3808521.91	0.32876	465683.41
3808521.91	0.32174		
465703.41	3808521.91	0.31502	464239.31
3809562.31	0.82110		
464277.31	3809562.31	0.78727	463745.31
3809591.37	0.97780		
463783.31	3809591.37	0.98225	463821.31
3809591.37	0.98485		
463859.31	3809591.37	0.99229	463897.31
3809591.37	0.99826		
463935.31	3809591.37	0.99592	464239.31
3809591.37	0.79156		
464277.31	3809591.37	0.75934	463745.31
3809620.43	0.93129		
463783.31	3809620.43	0.93623	463821.31
3809620.43	0.94179		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 198

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,

```

        L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
        L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
        L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463859.31	3809620.43	0.94552	463897.31
3809620.43	0.94981		
463935.31	3809620.43	0.94994	463973.31
3809620.43	0.93930		
464011.31	3809620.43	0.92232	464049.31
3809620.43	0.89955		
464087.31	3809620.43	0.87354	464125.31
3809620.43	0.84774		
464163.31	3809620.43	0.82026	464201.31
3809620.43	0.79016		
464239.31	3809620.43	0.76261	464277.31
3809620.43	0.73258		
463745.31	3809649.49	0.88721	463783.31
3809649.49	0.89560		
463821.31	3809649.49	0.89948	463859.31
3809649.49	0.90227		
463897.31	3809649.49	0.90470	463935.31
3809649.49	0.90461		
463973.31	3809649.49	0.89253	464011.31
3809649.49	0.87986		
464049.31	3809649.49	0.86236	464087.31
3809649.49	0.83818		
464125.31	3809649.49	0.81592	464163.31
3809649.49	0.78937		
464201.31	3809649.49	0.76292	464239.31
3809649.49	0.73622		
464277.31	3809649.49	0.70761	464315.31
3809649.49	0.67898		
464353.31	3809649.49	0.65309	464391.31
3809649.49	0.62797		
464429.31	3809649.49	0.60298	464467.31
3809649.49	0.58005		
464505.31	3809649.49	0.55816	463745.31

3809678.55	0.84407		
463783.31	3809678.55	0.85267	463821.31
3809678.55	0.86036		
463859.31	3809678.55	0.86072	463897.31
3809678.55	0.86267		
463935.31	3809678.55	0.86322	463973.31
3809678.55	0.85393		
464011.31	3809678.55	0.84048	464049.31
3809678.55	0.82748		
464087.31	3809678.55	0.80795	464125.31
3809678.55	0.78590		
464163.31	3809678.55	0.76149	464201.31
3809678.55	0.73772		
464239.31	3809678.55	0.71047	464277.31
3809678.55	0.68366		
464315.31	3809678.55	0.65734	464353.31
3809678.55	0.63314		
464391.31	3809678.55	0.60896	464429.31
3809678.55	0.58481		
464467.31	3809678.55	0.56348	464505.31
3809678.55	0.54138		
463745.31	3809707.61	0.80634	463783.31
3809707.61	0.81331		
463821.31	3809707.61	0.82014	463859.31
3809707.61	0.82362		
463897.31	3809707.61	0.82380	463935.31
3809707.61	0.82430		
463973.31	3809707.61	0.81790	464011.31
3809707.61	0.80626		
464049.31	3809707.61	0.79478	464087.31
3809707.61	0.77747		
464125.31	3809707.61	0.75764	464163.31
3809707.61	0.73622		
464201.31	3809707.61	0.71145	464239.31
3809707.61	0.68681		
464277.31	3809707.61	0.66127	464315.31
3809707.61	0.63761		
464353.31	3809707.61	0.61250	464391.31
3809707.61	0.59006		
464429.31	3809707.61	0.56704	464467.31
3809707.61	0.54627		
464505.31	3809707.61	0.52658	463745.31
3809736.67	0.77415		
463783.31	3809736.67	0.77732	463821.31
3809736.67	0.78058		
463859.31	3809736.67	0.78506	463897.31
3809736.67	0.78712		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 199

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463935.31	3809736.67	0.78554	463973.31
3809736.67	0.78358		
464011.31	3809736.67	0.77672	464049.31
3809736.67	0.76417		
464087.31	3809736.67	0.75039	464125.31
3809736.67	0.73219		
464163.31	3809736.67	0.71245	464201.31
3809736.67	0.68810		
464239.31	3809736.67	0.66537	464277.31
3809736.67	0.64105		
464315.31	3809736.67	0.61717	464353.31
3809736.67	0.59420		
464391.31	3809736.67	0.57240	464429.31
3809736.67	0.55048		
464467.31	3809736.67	0.53103	464505.31
3809736.67	0.51260		
463745.31	3809765.73	0.74470	463783.31
3809765.73	0.74635		
463821.31	3809765.73	0.74743	463859.31
3809765.73	0.75000		
463897.31	3809765.73	0.75288	463935.31
3809765.73	0.74969		
463973.31	3809765.73	0.74536	464011.31
3809765.73	0.74576		

464049.31	3809765.73	0.73768	464087.31
3809765.73	0.72403		
464125.31	3809765.73	0.70858	464163.31
3809765.73	0.68991		
464201.31	3809765.73	0.66683	464239.31
3809765.73	0.64527		
464277.31	3809765.73	0.62216	464315.31
3809765.73	0.59868		
464353.31	3809765.73	0.57736	464391.31
3809765.73	0.55530		
464429.31	3809765.73	0.53548	464467.31
3809765.73	0.51715		
464505.31	3809765.73	0.49803	463745.31
3809794.79	0.71725		
463783.31	3809794.79	0.71630	463821.31
3809794.79	0.71677		
463859.31	3809794.79	0.71700	463897.31
3809794.79	0.71883		
463935.31	3809794.79	0.71579	463973.31
3809794.79	0.71158		
464011.31	3809794.79	0.71149	464049.31
3809794.79	0.71136		
464087.31	3809794.79	0.69942	464125.31
3809794.79	0.68413		
464163.31	3809794.79	0.66650	464201.31
3809794.79	0.64651		
464239.31	3809794.79	0.62485	464277.31
3809794.79	0.60312		
464315.31	3809794.79	0.58151	464353.31
3809794.79	0.55983		
464391.31	3809794.79	0.53982	464429.31
3809794.79	0.52141		
464467.31	3809794.79	0.50245	464505.31
3809794.79	0.48484		
463745.31	3809823.85	0.69151	463783.31
3809823.85	0.68850		
463821.31	3809823.85	0.68559	463859.31
3809823.85	0.68611		
463897.31	3809823.85	0.68619	463935.31
3809823.85	0.68335		
463973.31	3809823.85	0.68040	464011.31
3809823.85	0.67859		
464049.31	3809823.85	0.67960	464087.31
3809823.85	0.67427		
464125.31	3809823.85	0.66180	464163.31
3809823.85	0.64512		
464201.31	3809823.85	0.62556	464239.31
3809823.85	0.60593		
464277.31	3809823.85	0.58538	464315.31
3809823.85	0.56389		

464353.31	3809823.85	0.54383	464391.31
3809823.85	0.52498		
464429.31	3809823.85	0.50647	464467.31
3809823.85	0.48883		
464505.31	3809823.85	0.47147	463745.31
3809852.91	0.66855		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 200

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	0.66518	463821.31
3809852.91	0.65909		
463859.31	3809852.91	0.65822	463897.31
3809852.91	0.65603		
463935.31	3809852.91	0.65332	463973.31
3809852.91	0.65111		
464011.31	3809852.91	0.64842	464049.31
3809852.91	0.64821		
464087.31	3809852.91	0.64471	464125.31
3809852.91	0.63586		
464163.31	3809852.91	0.62097	464201.31
3809852.91	0.60301		
464239.31	3809852.91	0.58554	464277.31
3809852.91	0.56693		
464315.31	3809852.91	0.54744	464353.31

3809852.91	0.52796		
464391.31	3809852.91	0.51013	464429.31
3809852.91	0.49266		
464467.31	3809852.91	0.47540	464505.31
3809852.91	0.45911		
463745.31	3809881.97	0.64772	463783.31
3809881.97	0.64293		
463821.31	3809881.97	0.63678	463859.31
3809881.97	0.63352		
463897.31	3809881.97	0.62934	463935.31
3809881.97	0.62536		
463973.31	3809881.97	0.62431	464011.31
3809881.97	0.62186		
464049.31	3809881.97	0.62012	464087.31
3809881.97	0.61560		
464125.31	3809881.97	0.60808	464163.31
3809881.97	0.59478		
464201.31	3809881.97	0.58053	464239.31
3809881.97	0.56405		
464277.31	3809881.97	0.54790	464315.31
3809881.97	0.53132		
464353.31	3809881.97	0.51314	464391.31
3809881.97	0.49647		
464429.31	3809881.97	0.47957	464467.31
3809881.97	0.46280		
464505.31	3809881.97	0.44789	463745.31
3809911.03	0.62673		
463783.31	3809911.03	0.62085	463821.31
3809911.03	0.61610		
463859.31	3809911.03	0.61142	463897.31
3809911.03	0.60663		
463935.31	3809911.03	0.60145	463973.31
3809911.03	0.59927		
464011.31	3809911.03	0.59682	464049.31
3809911.03	0.59522		
464087.31	3809911.03	0.59065	464125.31
3809911.03	0.58327		
464163.31	3809911.03	0.57248	464201.31
3809911.03	0.56059		
464239.31	3809911.03	0.54538	464277.31
3809911.03	0.53088		
464315.31	3809911.03	0.51507	464353.31
3809911.03	0.49882		
464391.31	3809911.03	0.48287	464429.31
3809911.03	0.46673		
464467.31	3809911.03	0.45155	464505.31
3809911.03	0.43628		
463745.31	3809940.09	0.60599	463783.31
3809940.09	0.59994		
463821.31	3809940.09	0.59603	463859.31

3809940.09	0.59083		
463897.31	3809940.09	0.58629	463935.31
3809940.09	0.58120		
463973.31	3809940.09	0.57759	464011.31
3809940.09	0.57292		
464049.31	3809940.09	0.57066	464087.31
3809940.09	0.56628		
464125.31	3809940.09	0.55996	464163.31
3809940.09	0.55236		
464201.31	3809940.09	0.54289	464239.31
3809940.09	0.52956		
464277.31	3809940.09	0.51512	464315.31
3809940.09	0.50049		
464353.31	3809940.09	0.48512	464391.31
3809940.09	0.46986		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 201

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464429.31	3809940.09	0.45504	464467.31
3809940.09	0.43995		
464505.31	3809940.09	0.42532	463745.31
3809969.15	0.59056		
463783.31	3809969.15	0.58182	463821.31
3809969.15	0.57664		

463859.31	3809969.15	0.57168	463897.31
3809969.15	0.56701		
463935.31	3809969.15	0.56219	463973.31
3809969.15	0.55834		
464011.31	3809969.15	0.55234	464049.31
3809969.15	0.54751		
464087.31	3809969.15	0.54356	464125.31
3809969.15	0.53905		
464163.31	3809969.15	0.53256	464201.31
3809969.15	0.52504		
464239.31	3809969.15	0.51453	464277.31
3809969.15	0.50060		
464315.31	3809969.15	0.48680	464353.31
3809969.15	0.47307		
464391.31	3809969.15	0.45842	464429.31
3809969.15	0.44362		
464467.31	3809969.15	0.42865	464505.31
3809969.15	0.41539		
463745.31	3809998.21	0.58078	463783.31
3809998.21	0.56799		
463821.31	3809998.21	0.56039	463859.31
3809998.21	0.55448		
463897.31	3809998.21	0.54960	463935.31
3809998.21	0.54415		
463973.31	3809998.21	0.53997	464011.31
3809998.21	0.53447		
464049.31	3809998.21	0.52906	464087.31
3809998.21	0.52434		
464125.31	3809998.21	0.52067	464163.31
3809998.21	0.51492		
464201.31	3809998.21	0.50775	464239.31
3809998.21	0.49849		
464277.31	3809998.21	0.48712	464315.31
3809998.21	0.47367		
464353.31	3809998.21	0.46067	464391.31
3809998.21	0.44662		
464429.31	3809998.21	0.43222	464467.31
3809998.21	0.41868		
464505.31	3809998.21	0.40521	463745.31
3810027.27	0.57171		
463783.31	3810027.27	0.55713	463821.31
3810027.27	0.54702		
463859.31	3810027.27	0.53965	463897.31
3810027.27	0.53426		
463935.31	3810027.27	0.52764	463973.31
3810027.27	0.52339		
464011.31	3810027.27	0.51806	464049.31
3810027.27	0.51270		
464087.31	3810027.27	0.50680	464125.31
3810027.27	0.50226		

464163.31	3810027.27	0.49800	464201.31
3810027.27	0.49168		
464239.31	3810027.27	0.48247	464277.31
3810027.27	0.47267		
464315.31	3810027.27	0.46117	464353.31
3810027.27	0.44842		
464391.31	3810027.27	0.43495	464429.31
3810027.27	0.42183		
464467.31	3810027.27	0.40855	464505.31
3810027.27	0.39520		
463745.31	3810056.33	0.56369	463783.31
3810056.33	0.54728		
463821.31	3810056.33	0.53445	463859.31
3810056.33	0.52630		
463897.31	3810056.33	0.51968	463935.31
3810056.33	0.51300		
463973.31	3810056.33	0.50820	464011.31
3810056.33	0.50256		
464049.31	3810056.33	0.49646	464087.31
3810056.33	0.49071		
464125.31	3810056.33	0.48497	464163.31
3810056.33	0.48091		
464201.31	3810056.33	0.47524	464239.31
3810056.33	0.46775		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 202

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
464277.31	3810056.33	0.45809	464315.31
3810056.33	0.44797		
464353.31	3810056.33	0.43721	464391.31
3810056.33	0.42485		
464429.31	3810056.33	0.41181	464467.31
3810056.33	0.39837		
464505.31	3810056.33	0.38585	463745.31
3810085.39	0.55584		
463783.31	3810085.39	0.53805	463821.31
3810085.39	0.52355		
463859.31	3810085.39	0.51378	463897.31
3810085.39	0.50631		
463935.31	3810085.39	0.49972	463973.31
3810085.39	0.49410		
464011.31	3810085.39	0.48765	464049.31
3810085.39	0.48048		
464087.31	3810085.39	0.47513	464125.31
3810085.39	0.46951		
464163.31	3810085.39	0.46454	464201.31
3810085.39	0.45903		
464239.31	3810085.39	0.45268	464277.31
3810085.39	0.44431		
464315.31	3810085.39	0.43492	464353.31
3810085.39	0.42475		
464391.31	3810085.39	0.41365	464429.31
3810085.39	0.40109		
464467.31	3810085.39	0.38848	464505.31
3810085.39	0.37610		
463745.31	3810114.45	0.54536	463783.31
3810114.45	0.53074		
463821.31	3810114.45	0.51453	463859.31
3810114.45	0.50447		
463897.31	3810114.45	0.49494	463935.31
3810114.45	0.48749		
463973.31	3810114.45	0.48064	464011.31
3810114.45	0.47396		
464049.31	3810114.45	0.46644	464087.31
3810114.45	0.46054		
464125.31	3810114.45	0.45425	464163.31
3810114.45	0.44852		
464201.31	3810114.45	0.44298	464239.31
3810114.45	0.43820		
464277.31	3810114.45	0.43104	464315.31
3810114.45	0.42137		
464353.31	3810114.45	0.41102	464391.31
3810114.45	0.40011		
464429.31	3810114.45	0.38957	464467.31

3810114.45	0.37744		
464505.31	3810114.45	0.36665	463745.31
3810143.51	0.53206		
463783.31	3810143.51	0.52061	463821.31
3810143.51	0.50862		
463859.31	3810143.51	0.49697	463897.31
3810143.51	0.48411		
463935.31	3810143.51	0.47500	463973.31
3810143.51	0.46680		
464011.31	3810143.51	0.46107	464049.31
3810143.51	0.45348		
464087.31	3810143.51	0.44621	464125.31
3810143.51	0.44001		
464163.31	3810143.51	0.43430	464201.31
3810143.51	0.42851		
464239.31	3810143.51	0.42309	464277.31
3810143.51	0.41787		
464315.31	3810143.51	0.40887	464353.31
3810143.51	0.39786		
464391.31	3810143.51	0.38806	464429.31
3810143.51	0.37774		
464467.31	3810143.51	0.36775	464505.31
3810143.51	0.35768		
464383.78	3807479.29	0.32305	464355.03
3807405.24	0.29567		
464402.07	3807352.10	0.25745	464367.23
3807296.35	0.24499		
464358.52	3807237.99	0.22007	464385.52
3807161.33	0.19682		
463132.27	3810926.37	0.29061	463237.82
3811199.31	0.24031		
464944.35	3809244.89	0.53675	465700.32
3809255.46	0.29130		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 203

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036

, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465716.18	3808536.49	0.31224	465544.37
3808533.85	0.37623		
465420.13	3808486.27	0.42678	465348.77
3808491.56	0.46606		
465317.05	3808443.98	0.47512	465327.62
3808406.97	0.45928		
465108.23	3808369.97	0.61544	464999.86
3808301.24	0.68025		
464722.31	3807973.48	0.70016	464717.03
3807836.03	0.59620		
464344.33	3807936.47	1.12024	464349.61
3807780.52	0.96136		
464386.62	3807785.81	0.91688	464521.43
3807859.82	0.82760		
464537.28	3807719.72	0.54515	464426.27
3807613.99	0.44604		
464368.43	3807532.62	0.37871	464324.60
3807121.91	0.19426		
464123.31	3807123.54	0.22898	463930.13
3806909.26	0.15693		
463831.11	3806906.01	0.15856	463821.36
3806720.95	0.11699		
463727.21	3806727.44	0.11476	463598.97
3806334.59	0.06972		
463001.06	3806361.54	0.03664	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 204

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,

```

        L0006361      , L0006362      , L0006363      , L0006364      , L0006365
, L0006366      , L0006367      , L0006368      ,
        L0006369      , L0006370      , L0006371      , L0006372      , L0006373
, L0006374      , L0006375      , L0006376      ,
        L0006377      , L0006378      , L0006379      , L0006380      , L0006381
, L0006382      , L0006383      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
462160.55	3809377.75	0.29277	462051.48
3809270.62	0.21614		
462014.47	3809029.10	0.15476	462010.58
3808855.75	0.12295		
461936.56	3808886.92	0.11158	461936.56
3808997.94	0.12646		
461909.30	3808768.10	0.09040	461835.28
3808894.71	0.09585		
461845.02	3808995.99	0.10847	461833.33
3809114.80	0.12545		
461843.07	3809210.24	0.14240	461809.96
3809297.89	0.14857		
461856.71	3809385.54	0.17325	461841.13
3809482.92	0.18762		
462004.74	3809379.69	0.21975	461763.22
3808793.43	0.07294		
461753.48	3808699.93	0.07216	461835.28
3808686.30	0.07623		
461823.60	3808579.17	0.06831	461761.27
3808585.02	0.06346		
462301.19	3807807.15	0.08199	462304.78
3807868.16	0.08704		
462216.84	3807882.52	0.07935	462116.34
3807886.11	0.07113		
462114.55	3807789.20	0.06496	462012.25
3807887.90	0.06345		
462008.66	3807975.84	0.06669	461917.14
3807972.25	0.05905		
461922.52	3808187.60	0.06585	461908.17
3808288.10	0.06771		
461848.94	3808377.83	0.06622	461831.00
3808494.48	0.06762		
462421.43	3808393.98	0.17292	462459.11

3808501.66	0.21007		
462437.58	3808580.62	0.21799	462654.73
3809189.00	0.80835		
462559.49	3809194.32	0.61482	465763.86
3807935.19	0.08321		
465819.84	3807935.19	0.08159	465875.82
3807935.19	0.07989		
465931.80	3807935.19	0.07828	465987.78
3807935.19	0.07715		
466043.76	3807935.19	0.07568	466099.74
3807935.19	0.07450		
466155.72	3807935.19	0.07340	466211.70
3807935.19	0.07250		
466267.68	3807935.19	0.07161	466323.66
3807935.19	0.07158		
466379.64	3807935.19	0.07118	466435.62
3807935.19	0.07035		
466491.60	3807935.19	0.06858	466547.58
3807935.19	0.06682		
466603.56	3807935.19	0.06517	466659.54
3807935.19	0.06358		
466715.52	3807935.19	0.06206	466771.50
3807935.19	0.06058		
466827.48	3807935.19	0.05914	466883.46
3807935.19	0.05777		
465763.86	3808001.41	0.08624	465819.84
3808001.41	0.08433		
465875.82	3808001.41	0.08285	465931.80
3808001.41	0.08140		
465987.78	3808001.41	0.07966	466043.76
3808001.41	0.07853		
466099.74	3808001.41	0.07686	466155.72
3808001.41	0.07568		
466211.70	3808001.41	0.07470	466267.68
3808001.41	0.07376		
466323.66	3808001.41	0.07360	466379.64
3808001.41	0.07382		
466435.62	3808001.41	0.07190	466491.60
3808001.41	0.07006		
466547.58	3808001.41	0.06828	466603.56
3808001.41	0.06659		
466659.54	3808001.41	0.06497	466715.52
3808001.41	0.06334		
466771.50	3808001.41	0.06184	466827.48
3808001.41	0.06039		
466883.46	3808001.41	0.05896	465763.86
3808067.63	0.08932		

▲ *** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial ***
 *** AERMET - VERSION 14134 ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** 16:42:19

PAGE 205

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465819.84	3808067.63	0.08769	465875.82
3808067.63	0.08603		
465931.80	3808067.63	0.08425	465987.78
3808067.63	0.08259		
466043.76	3808067.63	0.08120	466099.74
3808067.63	0.08007		
466155.72	3808067.63	0.07894	466211.70
3808067.63	0.07786		
466267.68	3808067.63	0.07741	466323.66
3808067.63	0.07757		
466379.64	3808067.63	0.07550	466435.62
3808067.63	0.07356		
466491.60	3808067.63	0.07163	466547.58
3808067.63	0.06981		
466603.56	3808067.63	0.06806	466659.54
3808067.63	0.06638		
466715.52	3808067.63	0.06477	466771.50
3808067.63	0.06323		
466827.48	3808067.63	0.06171	466883.46
3808067.63	0.06023		
465763.86	3808133.85	0.09312	465819.84
3808133.85	0.09133		
465875.82	3808133.85	0.08961	465931.80
3808133.85	0.08775		

465987.78	3808133.85	0.08553	466043.76
3808133.85	0.08432		
466099.74	3808133.85	0.08332	466155.72
3808133.85	0.08212		
466211.70	3808133.85	0.08159	466267.68
3808133.85	0.08112		
466323.66	3808133.85	0.07945	466379.64
3808133.85	0.07734		
466435.62	3808133.85	0.07530	466491.60
3808133.85	0.07335		
466547.58	3808133.85	0.07146	466603.56
3808133.85	0.06967		
466659.54	3808133.85	0.06794	466715.52
3808133.85	0.06627		
466771.50	3808133.85	0.06462	466827.48
3808133.85	0.06309		
466883.46	3808133.85	0.06161	465763.86
3808200.07	0.09722		
465819.84	3808200.07	0.09530	465875.82
3808200.07	0.09349		
465931.80	3808200.07	0.09107	465987.78
3808200.07	0.08965		
466043.76	3808200.07	0.08825	466099.74
3808200.07	0.08688		
466155.72	3808200.07	0.08659	466211.70
3808200.07	0.08616		
466267.68	3808200.07	0.08375	466323.66
3808200.07	0.08149		
466379.64	3808200.07	0.07928	466435.62
3808200.07	0.07717		
466491.60	3808200.07	0.07514	466547.58
3808200.07	0.07320		
466603.56	3808200.07	0.07134	466659.54
3808200.07	0.06954		
466715.52	3808200.07	0.06783	466771.50
3808200.07	0.06616		
466827.48	3808200.07	0.06454	466883.46
3808200.07	0.06301		
465763.86	3808266.29	0.10246	465819.84
3808266.29	0.09959		
465875.82	3808266.29	0.09699	465931.80
3808266.29	0.09534		
465987.78	3808266.29	0.09394	466043.76
3808266.29	0.09275		
466099.74	3808266.29	0.09167	466155.72
3808266.29	0.09107		
466211.70	3808266.29	0.08845	466267.68
3808266.29	0.08598		
466323.66	3808266.29	0.08358	466379.64
3808266.29	0.08134		

466435.62	3808266.29	0.07915	466491.60
3808266.29	0.07703		
466547.58	3808266.29	0.07501	466603.56
3808266.29	0.07307		
466659.54	3808266.29	0.07124	466715.52
3808266.29	0.06943		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 206

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.06773	466827.48
3808266.29	0.06607		
466883.46	3808266.29	0.06448	465763.86
3808332.51	0.10755		
465819.84	3808332.51	0.10407	465875.82
3808332.51	0.10189		
465931.80	3808332.51	0.10000	465987.78
3808332.51	0.09900		
466043.76	3808332.51	0.09767	466099.74
3808332.51	0.09644		
466155.72	3808332.51	0.09360	466211.70
3808332.51	0.09087		
466267.68	3808332.51	0.08826	466323.66
3808332.51	0.08585		
466379.64	3808332.51	0.08346	466435.62

3808332.51	0.08118		
466491.60	3808332.51	0.07899	466547.58
3808332.51	0.07689		
466603.56	3808332.51	0.07496	466659.54
3808332.51	0.07304		
466715.52	3808332.51	0.07119	466771.50
3808332.51	0.06935		
466827.48	3808332.51	0.06765	466883.46
3808332.51	0.06601		
465763.86	3808398.73	0.11305	465819.84
3808398.73	0.10962		
465875.82	3808398.73	0.10717	465931.80
3808398.73	0.10562		
465987.78	3808398.73	0.10401	466043.76
3808398.73	0.10230		
466099.74	3808398.73	0.09921	466155.72
3808398.73	0.09622		
466211.70	3808398.73	0.09336	466267.68
3808398.73	0.09074		
466323.66	3808398.73	0.08814	466379.64
3808398.73	0.08566		
466435.62	3808398.73	0.08333	466491.60
3808398.73	0.08107		
466547.58	3808398.73	0.07890	466603.56
3808398.73	0.07683		
466659.54	3808398.73	0.07484	466715.52
3808398.73	0.07291		
466771.50	3808398.73	0.07107	466827.48
3808398.73	0.06929		
466883.46	3808398.73	0.06759	465763.86
3808464.95	0.11838		
465819.84	3808464.95	0.11552	465875.82
3808464.95	0.11361		
465931.80	3808464.95	0.11230	465987.78
3808464.95	0.10870		
466043.76	3808464.95	0.10532	466099.74
3808464.95	0.10204		
466155.72	3808464.95	0.09891	466211.70
3808464.95	0.09594		
466267.68	3808464.95	0.09319	466323.66
3808464.95	0.09048		
466379.64	3808464.95	0.08795	466435.62
3808464.95	0.08549		
466491.60	3808464.95	0.08318	466547.58
3808464.95	0.08092		
466603.56	3808464.95	0.07875	466659.54
3808464.95	0.07668		
466715.52	3808464.95	0.07469	466771.50
3808464.95	0.07279		
466827.48	3808464.95	0.07096	466883.46

3808464.95	0.06920		
465763.86	3808531.17	0.12436	465819.84
3808531.17	0.12203		
465875.82	3808531.17	0.11959	465931.80
3808531.17	0.11559		
465987.78	3808531.17	0.11187	466043.76
3808531.17	0.10830		
466099.74	3808531.17	0.10492	466155.72
3808531.17	0.10167		
466211.70	3808531.17	0.09857	466267.68
3808531.17	0.09569		
466323.66	3808531.17	0.09292	466379.64
3808531.17	0.09025		
466435.62	3808531.17	0.08774	466491.60
3808531.17	0.08529		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 207

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466547.58	3808531.17	0.08294	466603.56
3808531.17	0.08070		
466659.54	3808531.17	0.07854	466715.52
3808531.17	0.07649		
466771.50	3808531.17	0.07450	466827.48
3808531.17	0.07263		

466883.46	3808531.17	0.07081	465763.86
3808597.39	0.13091		
465819.84	3808597.39	0.12765	465875.82
3808597.39	0.12322		
465931.80	3808597.39	0.11895	465987.78
3808597.39	0.11506		
466043.76	3808597.39	0.11140	466099.74
3808597.39	0.10784		
466155.72	3808597.39	0.10447	466211.70
3808597.39	0.10127		
466267.68	3808597.39	0.09820	466323.66
3808597.39	0.09535		
466379.64	3808597.39	0.09262	466435.62
3808597.39	0.08996		
466491.60	3808597.39	0.08745	466547.58
3808597.39	0.08503		
466603.56	3808597.39	0.08270	466659.54
3808597.39	0.08046		
466715.52	3808597.39	0.07832	466771.50
3808597.39	0.07628		
466827.48	3808597.39	0.07431	466883.46
3808597.39	0.07247		
465763.86	3808663.61	0.13614	465819.84
3808663.61	0.13141		
465875.82	3808663.61	0.12682	465931.80
3808663.61	0.12247		
465987.78	3808663.61	0.11836	466043.76
3808663.61	0.11446		
466099.74	3808663.61	0.11080	466155.72
3808663.61	0.10726		
466211.70	3808663.61	0.10390	466267.68
3808663.61	0.10070		
466323.66	3808663.61	0.09778	466379.64
3808663.61	0.09488		
466435.62	3808663.61	0.09223	466491.60
3808663.61	0.08958		
466547.58	3808663.61	0.08705	466603.56
3808663.61	0.08463		
466659.54	3808663.61	0.08231	466715.52
3808663.61	0.08010		
466771.50	3808663.61	0.07798	466827.48
3808663.61	0.07602		
466883.46	3808663.61	0.07407	465763.86
3808729.83	0.14021		
465819.84	3808729.83	0.13532	465875.82
3808729.83	0.13052		
465931.80	3808729.83	0.12595	465987.78
3808729.83	0.12163		
466043.76	3808729.83	0.11755	466099.74
3808729.83	0.11368		

466155.72	3808729.83	0.11001	466211.70
3808729.83	0.10651		
466267.68	3808729.83	0.10319	466323.66
3808729.83	0.10016		
466379.64	3808729.83	0.09720	466435.62
3808729.83	0.09434		
466491.60	3808729.83	0.09167	466547.58
3808729.83	0.08905		
466603.56	3808729.83	0.08654	466659.54
3808729.83	0.08426		
466715.52	3808729.83	0.08196	466771.50
3808729.83	0.07977		
466827.48	3808729.83	0.07771	466883.46
3808729.83	0.07569		
465763.86	3808796.05	0.14400	465819.84
3808796.05	0.13908		
465875.82	3808796.05	0.13399	465931.80
3808796.05	0.12929		
465987.78	3808796.05	0.12481	466043.76
3808796.05	0.12059		
466099.74	3808796.05	0.11659	466155.72
3808796.05	0.11279		
466211.70	3808796.05	0.10918	466267.68
3808796.05	0.10575		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 208

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
466323.66	3808796.05	0.10252	466379.64
3808796.05	0.09943		
466435.62	3808796.05	0.09655	466491.60
3808796.05	0.09371		
466547.58	3808796.05	0.09102	466603.56
3808796.05	0.08851		
466659.54	3808796.05	0.08604	466715.52
3808796.05	0.08371		
466771.50	3808796.05	0.08146	466827.48
3808796.05	0.07930		
466883.46	3808796.05	0.07728	465763.86
3808862.27	0.14741		
465819.84	3808862.27	0.14224	465875.82
3808862.27	0.13729		
465931.80	3808862.27	0.13242	465987.78
3808862.27	0.12780		
466043.76	3808862.27	0.12343	466099.74
3808862.27	0.11935		
466155.72	3808862.27	0.11535	466211.70
3808862.27	0.11162		
466267.68	3808862.27	0.10817	466323.66
3808862.27	0.10480		
466379.64	3808862.27	0.10164	466435.62
3808862.27	0.09860		
466491.60	3808862.27	0.09572	466547.58
3808862.27	0.09297		
466603.56	3808862.27	0.09031	466659.54
3808862.27	0.08784		
466715.52	3808862.27	0.08540	466771.50
3808862.27	0.08309		
466827.48	3808862.27	0.08090	466883.46
3808862.27	0.07879		
465763.86	3808928.49	0.15026	465819.84
3808928.49	0.14495		
465875.82	3808928.49	0.14002	465931.80
3808928.49	0.13523		
465987.78	3808928.49	0.13063	466043.76
3808928.49	0.12630		
466099.74	3808928.49	0.12195	466155.72
3808928.49	0.11791		
466211.70	3808928.49	0.11408	466267.68
3808928.49	0.11043		
466323.66	3808928.49	0.10695	466379.64
3808928.49	0.10363		
466435.62	3808928.49	0.10056	466491.60
3808928.49	0.09761		
466547.58	3808928.49	0.09476	466603.56

3808928.49	0.09213		
466659.54	3808928.49	0.08951	466715.52
3808928.49	0.08705		
466771.50	3808928.49	0.08466	466827.48
3808928.49	0.08243		
466883.46	3808928.49	0.08024	465763.86
3808994.71	0.15362		
465819.84	3808994.71	0.14786	465875.82
3808994.71	0.14265		
465931.80	3808994.71	0.13790	465987.78
3808994.71	0.13342		
466043.76	3808994.71	0.12886	466099.74
3808994.71	0.12445		
466155.72	3808994.71	0.12023	466211.70
3808994.71	0.11631		
466267.68	3808994.71	0.11257	466323.66
3808994.71	0.10901		
466379.64	3808994.71	0.10563	466435.62
3808994.71	0.10241		
466491.60	3808994.71	0.09940	466547.58
3808994.71	0.09657		
466603.56	3808994.71	0.09379	466659.54
3808994.71	0.09110		
466715.52	3808994.71	0.08867	466771.50
3808994.71	0.08620		
466827.48	3808994.71	0.08384	466883.46
3808994.71	0.08165		
465763.86	3809060.93	0.15688	465819.84
3809060.93	0.15097		
465875.82	3809060.93	0.14558	465931.80
3809060.93	0.14052		
465987.78	3809060.93	0.13574	466043.76
3809060.93	0.13119		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 209

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381

, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466099.74	3809060.93	0.12660	466155.72
3809060.93	0.12239		
466211.70	3809060.93	0.11833	466267.68
3809060.93	0.11452		
466323.66	3809060.93	0.11089	466379.64
3809060.93	0.10743		
466435.62	3809060.93	0.10423	466491.60
3809060.93	0.10115		
466547.58	3809060.93	0.09815	466603.56
3809060.93	0.09533		
466659.54	3809060.93	0.09270	466715.52
3809060.93	0.09007		
466771.50	3809060.93	0.08757	466827.48
3809060.93	0.08520		
466883.46	3809060.93	0.08296	465763.86
3809127.15	0.16009		
465819.84	3809127.15	0.15410	465875.82
3809127.15	0.14852		
465931.80	3809127.15	0.14318	465987.78
3809127.15	0.13814		
466043.76	3809127.15	0.13314	466099.74
3809127.15	0.12842		
466155.72	3809127.15	0.12407	466211.70
3809127.15	0.12023		
466267.68	3809127.15	0.11644	466323.66
3809127.15	0.11276		
466379.64	3809127.15	0.10920	466435.62
3809127.15	0.10587		
466491.60	3809127.15	0.10269	466547.58
3809127.15	0.09968		
466603.56	3809127.15	0.09683	466659.54
3809127.15	0.09403		
466715.52	3809127.15	0.09140	466771.50
3809127.15	0.08887		
466827.48	3809127.15	0.08643	466883.46
3809127.15	0.08415		
465763.86	3809193.37	0.16270	465819.84
3809193.37	0.15677		

465875.82	3809193.37	0.15102	465931.80
3809193.37	0.14553		
465987.78	3809193.37	0.14012	466043.76
3809193.37	0.13464		
466099.74	3809193.37	0.13013	466155.72
3809193.37	0.12574		
466211.70	3809193.37	0.12177	466267.68
3809193.37	0.11799		
466323.66	3809193.37	0.11433	466379.64
3809193.37	0.11081		
466435.62	3809193.37	0.10738	466491.60
3809193.37	0.10414		
466547.58	3809193.37	0.10106	466603.56
3809193.37	0.09818		
466659.54	3809193.37	0.09532	466715.52
3809193.37	0.09267		
466771.50	3809193.37	0.09007	466827.48
3809193.37	0.08762		
466883.46	3809193.37	0.08526	465763.86
3809259.59	0.16472		
465819.84	3809259.59	0.15867	465875.82
3809259.59	0.15280		
465931.80	3809259.59	0.14726	465987.78
3809259.59	0.14172		
466043.76	3809259.59	0.13648	466099.74
3809259.59	0.13161		
466155.72	3809259.59	0.12737	466211.70
3809259.59	0.12335		
466267.68	3809259.59	0.11952	466323.66
3809259.59	0.11567		
466379.64	3809259.59	0.11209	466435.62
3809259.59	0.10870		
466491.60	3809259.59	0.10539	466547.58
3809259.59	0.10233		
466603.56	3809259.59	0.09933	466659.54
3809259.59	0.09646		
466715.52	3809259.59	0.09382	466771.50
3809259.59	0.09117		
466827.48	3809259.59	0.08868	466883.46
3809259.59	0.08628		
464503.41	3807141.91	0.05232	464523.41
3807141.91	0.05197		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***
INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464543.41	3807141.91	0.05094	464563.41
3807141.91	0.04980		
464583.41	3807141.91	0.04971	464603.41
3807141.91	0.04907		
464623.41	3807141.91	0.04830	464643.41
3807141.91	0.04820		
464663.41	3807141.91	0.04769	464683.41
3807141.91	0.04712		
464703.41	3807141.91	0.04724	464723.41
3807141.91	0.04808		
464743.41	3807141.91	0.04730	464763.41
3807141.91	0.04719		
464783.41	3807141.91	0.04657	464803.41
3807141.91	0.04606		
464823.41	3807141.91	0.04710	464843.41
3807141.91	0.04719		
464863.41	3807141.91	0.04666	464883.41
3807141.91	0.04634		
464903.41	3807141.91	0.04721	464923.41
3807141.91	0.04778		
464503.41	3807161.91	0.05230	464523.41
3807161.91	0.05199		
464543.41	3807161.91	0.05099	464563.41
3807161.91	0.04988		
464583.41	3807161.91	0.04983	464603.41
3807161.91	0.04977		
464623.41	3807161.91	0.04958	464643.41
3807161.91	0.04870		
464663.41	3807161.91	0.04852	464683.41

3807161.91	0.04855		
464703.41	3807161.91	0.04785	464723.41
3807161.91	0.04843		
464743.41	3807161.91	0.04826	464763.41
3807161.91	0.04936		
464783.41	3807161.91	0.04895	464803.41
3807161.91	0.04831		
464823.41	3807161.91	0.04823	464843.41
3807161.91	0.04769		
464863.41	3807161.91	0.04731	464883.41
3807161.91	0.04845		
464903.41	3807161.91	0.04870	464923.41
3807161.91	0.04885		
464503.41	3807181.91	0.05313	464523.41
3807181.91	0.05226		
464543.41	3807181.91	0.05150	464563.41
3807181.91	0.05083		
464583.41	3807181.91	0.05020	464603.41
3807181.91	0.05008		
464623.41	3807181.91	0.05005	464643.41
3807181.91	0.04902		
464663.41	3807181.91	0.04893	464683.41
3807181.91	0.05053		
464703.41	3807181.91	0.04964	464723.41
3807181.91	0.04970		
464743.41	3807181.91	0.04995	464763.41
3807181.91	0.05020		
464783.41	3807181.91	0.05008	464803.41
3807181.91	0.04952		
464823.41	3807181.91	0.04987	464843.41
3807181.91	0.04987		
464863.41	3807181.91	0.04940	464883.41
3807181.91	0.04975		
464903.41	3807181.91	0.05015	464923.41
3807181.91	0.05055		
464503.41	3807201.91	0.05394	464523.41
3807201.91	0.05252		
464543.41	3807201.91	0.05201	464563.41
3807201.91	0.05181		
464583.41	3807201.91	0.05086	464603.41
3807201.91	0.05052		
464623.41	3807201.91	0.05035	464643.41
3807201.91	0.04961		
464663.41	3807201.91	0.04949	464683.41
3807201.91	0.05094		
464703.41	3807201.91	0.05078	464723.41
3807201.91	0.05116		
464743.41	3807201.91	0.05203	464763.41
3807201.91	0.05129		
464783.41	3807201.91	0.05075	464803.41

3807201.91 0.05085

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 211

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.05191	464843.41
3807201.91	0.05215		
464863.41	3807201.91	0.05175	464883.41
3807201.91	0.05122		
464903.41	3807201.91	0.05165	464923.41
3807201.91	0.05260		
464503.41	3807221.91	0.05404	464523.41
3807221.91	0.05265		
464543.41	3807221.91	0.05217	464563.41
3807221.91	0.05217		
464583.41	3807221.91	0.05213	464603.41
3807221.91	0.05152		
464623.41	3807221.91	0.05082	464643.41
3807221.91	0.05103		
464663.41	3807221.91	0.05062	464683.41
3807221.91	0.05198		
464703.41	3807221.91	0.05312	464723.41
3807221.91	0.05320		
464743.41	3807221.91	0.05255	464763.41
3807221.91	0.05182		

464783.41	3807221.91	0.05224	464803.41
3807221.91	0.05324		
464823.41	3807221.91	0.05277	464843.41
3807221.91	0.05366		
464863.41	3807221.91	0.05423	464883.41
3807221.91	0.05367		
464903.41	3807221.91	0.05364	464923.41
3807221.91	0.05341		
464503.41	3807241.91	0.05428	464523.41
3807241.91	0.05358		
464543.41	3807241.91	0.05292	464563.41
3807241.91	0.05243		
464583.41	3807241.91	0.05262	464603.41
3807241.91	0.05199		
464623.41	3807241.91	0.05120	464643.41
3807241.91	0.05163		
464663.41	3807241.91	0.05359	464683.41
3807241.91	0.05382		
464703.41	3807241.91	0.05403	464723.41
3807241.91	0.05385		
464743.41	3807241.91	0.05320	464763.41
3807241.91	0.05354		
464783.41	3807241.91	0.05386	464803.41
3807241.91	0.05418		
464823.41	3807241.91	0.05495	464843.41
3807241.91	0.05529		
464863.41	3807241.91	0.05552	464883.41
3807241.91	0.05497		
464903.41	3807241.91	0.05520	464923.41
3807241.91	0.05559		
464503.41	3807261.91	0.05454	464523.41
3807261.91	0.05451		
464543.41	3807261.91	0.05368	464563.41
3807261.91	0.05272		
464583.41	3807261.91	0.05295	464603.41
3807261.91	0.05254		
464623.41	3807261.91	0.05196	464643.41
3807261.91	0.05215		
464663.41	3807261.91	0.05496	464683.41
3807261.91	0.05607		
464703.41	3807261.91	0.05521	464723.41
3807261.91	0.05459		
464743.41	3807261.91	0.05465	464763.41
3807261.91	0.05575		
464783.41	3807261.91	0.05596	464803.41
3807261.91	0.05565		
464823.41	3807261.91	0.05673	464843.41
3807261.91	0.05697		
464863.41	3807261.91	0.05657	464883.41
3807261.91	0.05603		

464903.41	3807261.91	0.05696	464923.41
3807261.91	0.05840		
464503.41	3807281.91	0.05475	464523.41
3807281.91	0.05477		
464543.41	3807281.91	0.05398	464563.41
3807281.91	0.05305		
464583.41	3807281.91	0.05333	464603.41
3807281.91	0.05358		
464623.41	3807281.91	0.05367	464643.41
3807281.91	0.05296		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 212

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM ₁₀	IN MICROGRAMS/M**3
		**	
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464663.41	3807281.91	0.05549	464683.41
3807281.91	0.05663		
464703.41	3807281.91	0.05580	464723.41
3807281.91	0.05620		
464743.41	3807281.91	0.05724	464763.41
3807281.91	0.05668		
464783.41	3807281.91	0.05759	464803.41
3807281.91	0.05819		
464823.41	3807281.91	0.05812	464843.41
3807281.91	0.05861		
464863.41	3807281.91	0.05957	464883.41

3807281.91	0.05899		
464903.41	3807281.91	0.06027	464923.41
3807281.91	0.06162		
464503.41	3807301.91	0.05595	464523.41
3807301.91	0.05532		
464543.41	3807301.91	0.05482	464563.41
3807301.91	0.05439		
464583.41	3807301.91	0.05400	464603.41
3807301.91	0.05417		
464623.41	3807301.91	0.05598	464643.41
3807301.91	0.05506		
464663.41	3807301.91	0.05606	464683.41
3807301.91	0.05724		
464703.41	3807301.91	0.05644	464723.41
3807301.91	0.05698		
464743.41	3807301.91	0.05826	464763.41
3807301.91	0.05904		
464783.41	3807301.91	0.05936	464803.41
3807301.91	0.05956		
464823.41	3807301.91	0.05893	464843.41
3807301.91	0.05949		
464863.41	3807301.91	0.06109	464883.41
3807301.91	0.06219		
464903.41	3807301.91	0.06285	464923.41
3807301.91	0.06301		
464503.41	3807321.91	0.05714	464523.41
3807321.91	0.05588		
464543.41	3807321.91	0.05565	464563.41
3807321.91	0.05572		
464583.41	3807321.91	0.05469	464603.41
3807321.91	0.05469		
464623.41	3807321.91	0.05653	464643.41
3807321.91	0.05565		
464663.41	3807321.91	0.05669	464683.41
3807321.91	0.05794		
464703.41	3807321.91	0.05740	464723.41
3807321.91	0.05834		
464743.41	3807321.91	0.05952	464763.41
3807321.91	0.06090		
464783.41	3807321.91	0.06102	464803.41
3807321.91	0.06039		
464823.41	3807321.91	0.05999	464843.41
3807321.91	0.06104		
464863.41	3807321.91	0.06307	464883.41
3807321.91	0.06442		
464903.41	3807321.91	0.06445	464923.41
3807321.91	0.06390		
464503.41	3807341.91	0.05751	464523.41
3807341.91	0.05630		
464543.41	3807341.91	0.05611	464563.41

3807341.91	0.05622		
464583.41	3807341.91	0.05522	464603.41
3807341.91	0.05526		
464623.41	3807341.91	0.05714	464643.41
3807341.91	0.05629		
464663.41	3807341.91	0.05736	464683.41
3807341.91	0.05879		
464703.41	3807341.91	0.06007	464723.41
3807341.91	0.06024		
464743.41	3807341.91	0.06030	464763.41
3807341.91	0.06170		
464783.41	3807341.91	0.06184	464803.41
3807341.91	0.06136		
464823.41	3807341.91	0.06256	464843.41
3807341.91	0.06460		
464863.41	3807341.91	0.06603	464883.41
3807341.91	0.06591		
464903.41	3807341.91	0.06534	464923.41
3807341.91	0.06527		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 213

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464503.41	3807361.91	0.05807	464523.41
3807361.91	0.05764		

464543.41	3807361.91	0.05724	464563.41
3807361.91	0.05677		
464583.41	3807361.91	0.05581	464603.41
3807361.91	0.05588		
464623.41	3807361.91	0.05845	464643.41
3807361.91	0.05881		
464663.41	3807361.91	0.05914	464683.41
3807361.91	0.05957		
464703.41	3807361.91	0.06151	464723.41
3807361.91	0.06208		
464743.41	3807361.91	0.06243	464763.41
3807361.91	0.06276		
464783.41	3807361.91	0.06355	464803.41
3807361.91	0.06403		
464823.41	3807361.91	0.06615	464843.41
3807361.91	0.06738		
464863.41	3807361.91	0.06751	464883.41
3807361.91	0.06687		
464903.41	3807361.91	0.06735	464923.41
3807361.91	0.06795		
464503.41	3807381.91	0.05906	464523.41
3807381.91	0.05908		
464543.41	3807381.91	0.05839	464563.41
3807381.91	0.05743		
464583.41	3807381.91	0.05678	464603.41
3807381.91	0.05680		
464623.41	3807381.91	0.05927	464643.41
3807381.91	0.06081		
464663.41	3807381.91	0.06111	464683.41
3807381.91	0.06120		
464703.41	3807381.91	0.06241	464723.41
3807381.91	0.06378		
464743.41	3807381.91	0.06501	464763.41
3807381.91	0.06454		
464783.41	3807381.91	0.06545	464803.41
3807381.91	0.06659		
464823.41	3807381.91	0.06907	464843.41
3807381.91	0.06912		
464863.41	3807381.91	0.06849	464883.41
3807381.91	0.06842		
464903.41	3807381.91	0.06950	464923.41
3807381.91	0.07202		
464503.41	3807401.91	0.06095	464523.41
3807401.91	0.06002		
464543.41	3807401.91	0.05902	464563.41
3807401.91	0.05827		
464583.41	3807401.91	0.05866	464603.41
3807401.91	0.05837		
464623.41	3807401.91	0.06004	464643.41
3807401.91	0.06161		

464663.41	3807401.91	0.06303	464683.41
3807401.91	0.06417		
464703.41	3807401.91	0.06358	464723.41
3807401.91	0.06468		
464743.41	3807401.91	0.06608	464763.41
3807401.91	0.06732		
464783.41	3807401.91	0.06749	464803.41
3807401.91	0.06755		
464823.41	3807401.91	0.07004	464843.41
3807401.91	0.07010		
464863.41	3807401.91	0.06998	464883.41
3807401.91	0.07168		
464903.41	3807401.91	0.07210	464923.41
3807401.91	0.07311		
464503.41	3807421.91	0.06186	464523.41
3807421.91	0.06074		
464543.41	3807421.91	0.06026	464563.41
3807421.91	0.06009		
464583.41	3807421.91	0.05993	464603.41
3807421.91	0.06198		
464623.41	3807421.91	0.06236	464643.41
3807421.91	0.06272		
464663.41	3807421.91	0.06403	464683.41
3807421.91	0.06543		
464703.41	3807421.91	0.06630	464723.41
3807421.91	0.06664		
464743.41	3807421.91	0.06706	464763.41
3807421.91	0.06848		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 214

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

464783.41	3807421.91	0.07102	0.06990	464803.41
3807421.91	0.07102			
464823.41	3807421.91	0.07228	0.07166	464843.41
3807421.91	0.07228			
464863.41	3807421.91	0.07377	0.07287	464883.41
3807421.91	0.07377			
464903.41	3807421.91	0.07610	0.07535	464923.41
3807421.91	0.07610			
464503.41	3807441.91	0.06181	0.06259	464523.41
3807441.91	0.06181			
464543.41	3807441.91	0.06363	0.06177	464563.41
3807441.91	0.06363			
464583.41	3807441.91	0.06406	0.06353	464603.41
3807441.91	0.06406			
464623.41	3807441.91	0.06465	0.06521	464643.41
3807441.91	0.06465			
464663.41	3807441.91	0.06698	0.06569	464683.41
3807441.91	0.06698			
464703.41	3807441.91	0.06876	0.06846	464723.41
3807441.91	0.06876			
464743.41	3807441.91	0.07001	0.06886	464763.41
3807441.91	0.07001			
464783.41	3807441.91	0.07359	0.07215	464803.41
3807441.91	0.07359			
464823.41	3807441.91	0.07445	0.07286	464843.41
3807441.91	0.07445			
464863.41	3807441.91	0.07648	0.07723	464883.41
3807441.91	0.07648			
464903.41	3807441.91	0.07866	0.07738	464923.41
3807441.91	0.07866			
464503.41	3807461.91	0.06388	0.06353	464523.41
3807461.91	0.06388			
464543.41	3807461.91	0.06524	0.06350	464563.41
3807461.91	0.06524			
464583.41	3807461.91	0.06685	0.06668	464603.41
3807461.91	0.06685			
464623.41	3807461.91	0.06773	0.06633	464643.41
3807461.91	0.06773			
464663.41	3807461.91	0.06799	0.06792	464683.41
3807461.91	0.06799			
464703.41	3807461.91	0.07084	0.06949	464723.41
3807461.91	0.07084			
464743.41	3807461.91		0.07193	464763.41

3807461.91	0.07135		
464783.41	3807461.91	0.07323	464803.41
3807461.91	0.07468		
464823.41	3807461.91	0.07395	464843.41
3807461.91	0.07554		
464863.41	3807461.91	0.07833	464883.41
3807461.91	0.07758		
464903.41	3807461.91	0.07848	464923.41
3807461.91	0.07976		
464503.41	3807481.91	0.06437	464523.41
3807481.91	0.06499		
464543.41	3807481.91	0.06746	464563.41
3807481.91	0.06781		
464583.41	3807481.91	0.06813	464603.41
3807481.91	0.06903		
464623.41	3807481.91	0.06939	464643.41
3807481.91	0.06972		
464663.41	3807481.91	0.07009	464683.41
3807481.91	0.07046		
464703.41	3807481.91	0.07080	464723.41
3807481.91	0.07205		
464743.41	3807481.91	0.07325	464763.41
3807481.91	0.07251		
464783.41	3807481.91	0.07434	464803.41
3807481.91	0.07580		
464823.41	3807481.91	0.07507	464843.41
3807481.91	0.07666		
464863.41	3807481.91	0.07953	464883.41
3807481.91	0.08032		
464903.41	3807481.91	0.08066	464923.41
3807481.91	0.08094		
464503.41	3807501.91	0.06574	464523.41
3807501.91	0.06642		
464543.41	3807501.91	0.06975	464563.41
3807501.91	0.07094		
464583.41	3807501.91	0.07025	464603.41
3807501.91	0.07131		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 215

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365

```

, L0006366      , L0006367      , L0006368      ,
                  L0006369      , L0006370      , L0006371      , L0006372      , L0006373
, L0006374      , L0006375      , L0006376      ,
                  L0006377      , L0006378      , L0006379      , L0006380      , L0006381
, L0006382      , L0006383      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
464623.41	3807501.91	0.07192	464643.41
3807501.91	0.07183		
464663.41	3807501.91	0.07234	464683.41
3807501.91	0.07344		
464703.41	3807501.91	0.07289	464723.41
3807501.91	0.07386		
464743.41	3807501.91	0.07443	464763.41
3807501.91	0.07437		
464783.41	3807501.91	0.07612	464803.41
3807501.91	0.07699		
464823.41	3807501.91	0.07687	464843.41
3807501.91	0.07799		
464863.41	3807501.91	0.08076	464883.41
3807501.91	0.08264		
464903.41	3807501.91	0.08282	464923.41
3807501.91	0.08215		
464503.41	3807521.91	0.06842	464523.41
3807521.91	0.07265		
464543.41	3807521.91	0.07282	464563.41
3807521.91	0.07218		
464583.41	3807521.91	0.07362	464603.41
3807521.91	0.07376		
464623.41	3807521.91	0.07374	464643.41
3807521.91	0.07511		
464663.41	3807521.91	0.07526	464683.41
3807521.91	0.07476		
464703.41	3807521.91	0.07607	464723.41
3807521.91	0.07622		
464743.41	3807521.91	0.07622	464763.41
3807521.91	0.07829		
464783.41	3807521.91	0.07881	464803.41
3807521.91	0.07874		
464823.41	3807521.91	0.08053	464843.41
3807521.91	0.08092		

464863.41	3807521.91	0.08196	464883.41
3807521.91	0.08384		
464903.41	3807521.91	0.08401	464923.41
3807521.91	0.08333		
464503.41	3807541.91	0.07405	464523.41
3807541.91	0.07432		
464543.41	3807541.91	0.07523	464563.41
3807541.91	0.07554		
464583.41	3807541.91	0.07582	464603.41
3807541.91	0.07614		
464623.41	3807541.91	0.07648	464643.41
3807541.91	0.07677		
464663.41	3807541.91	0.07761	464683.41
3807541.91	0.07793		
464703.41	3807541.91	0.07821	464723.41
3807541.91	0.07898		
464743.41	3807541.91	0.08017	464763.41
3807541.91	0.08080		
464783.41	3807541.91	0.08016	464803.41
3807541.91	0.07999		
464823.41	3807541.91	0.08233	464843.41
3807541.91	0.08456		
464863.41	3807541.91	0.08530	464883.41
3807541.91	0.08558		
464903.41	3807541.91	0.08547	464923.41
3807541.91	0.08535		
464503.41	3807561.91	0.07750	464523.41
3807561.91	0.07667		
464543.41	3807561.91	0.07774	464563.41
3807561.91	0.07832		
464583.41	3807561.91	0.07815	464603.41
3807561.91	0.07862		
464623.41	3807561.91	0.07973	464643.41
3807561.91	0.07906		
464663.41	3807561.91	0.08004	464683.41
3807561.91	0.08059		
464703.41	3807561.91	0.08045	464723.41
3807561.91	0.08227		
464743.41	3807561.91	0.08311	464763.41
3807561.91	0.08225		
464783.41	3807561.91	0.08202	464803.41
3807561.91	0.08197		
464823.41	3807561.91	0.08366	464843.41
3807561.91	0.08688		
464863.41	3807561.91	0.08819	464883.41
3807561.91	0.08732		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464903.41	3807561.91	0.08692	464923.41
3807561.91	0.08701		
464503.41	3807581.91	0.07889	464523.41
3807581.91	0.08038		
464543.41	3807581.91	0.08044	464563.41
3807581.91	0.08034		
464583.41	3807581.91	0.08175	464603.41
3807581.91	0.08182		
464623.41	3807581.91	0.08120	464643.41
3807581.91	0.08254		
464663.41	3807581.91	0.08263	464683.41
3807581.91	0.08256		
464703.41	3807581.91	0.08472	464723.41
3807581.91	0.08521		
464743.41	3807581.91	0.08443	464763.41
3807581.91	0.08356		
464783.41	3807581.91	0.08470	464803.41
3807581.91	0.08589		
464823.41	3807581.91	0.08560	464843.41
3807581.91	0.08820		
464863.41	3807581.91	0.08949	464883.41
3807581.91	0.08862		
464903.41	3807581.91	0.08820	464923.41
3807581.91	0.08872		
464503.41	3807601.91	0.08278	464523.41

3807601.91	0.08443		
464543.41	3807601.91	0.08437	464563.41
3807601.91	0.08335		
464583.41	3807601.91	0.08358	464603.41
3807601.91	0.08441		
464623.41	3807601.91	0.08468	464643.41
3807601.91	0.08490		
464663.41	3807601.91	0.08566	464683.41
3807601.91	0.08686		
464703.41	3807601.91	0.08747	464723.41
3807601.91	0.08670		
464743.41	3807601.91	0.08636	464763.41
3807601.91	0.08696		
464783.41	3807601.91	0.08748	464803.41
3807601.91	0.08963		
464823.41	3807601.91	0.09040	464843.41
3807601.91	0.09067		
464863.41	3807601.91	0.09089	464883.41
3807601.91	0.09034		
464903.41	3807601.91	0.09017	464923.41
3807601.91	0.09002		
464503.41	3807621.91	0.08700	464523.41
3807621.91	0.08828		
464543.41	3807621.91	0.08808	464563.41
3807621.91	0.08694		
464583.41	3807621.91	0.08612	464603.41
3807621.91	0.08709		
464623.41	3807621.91	0.08760	464643.41
3807621.91	0.08737		
464663.41	3807621.91	0.08926	464683.41
3807621.91	0.09008		
464703.41	3807621.91	0.08908	464723.41
3807621.91	0.08875		
464743.41	3807621.91	0.08862	464763.41
3807621.91	0.09037		
464783.41	3807621.91	0.09202	464803.41
3807621.91	0.09217		
464823.41	3807621.91	0.09309	464843.41
3807621.91	0.09323		
464863.41	3807621.91	0.09249	464883.41
3807621.91	0.09249		
464903.41	3807621.91	0.09184	464923.41
3807621.91	0.09151		
464503.41	3807641.91	0.09118	464523.41
3807641.91	0.09071		
464543.41	3807641.91	0.08953	464563.41
3807641.91	0.08858		
464583.41	3807641.91	0.08994	464603.41
3807641.91	0.08995		
464623.41	3807641.91	0.08978	464643.41

```

3807641.91      0.09205
      464663.41      3807641.91      0.09248      464683.41
3807641.91      0.09156
      464703.41      3807641.91      0.09054      464723.41
3807641.91      0.09168
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 217

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***
      INCLUDING SOURCE(S):      L0006356      , L0006357
, L0006358      , L0006359      , L0006360      ,
      L0006361      , L0006362      , L0006363      , L0006364      , L0006365
, L0006366      , L0006367      , L0006368      ,
      L0006369      , L0006370      , L0006371      , L0006372      , L0006373
, L0006374      , L0006375      , L0006376      ,
      L0006377      , L0006378      , L0006379      , L0006380      , L0006381
, L0006382      , L0006383      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464743.41	3807641.91	0.09290	464763.41
3807641.91	0.09251		
464783.41	3807641.91	0.09472	464803.41
3807641.91	0.09600		
464823.41	3807641.91	0.09509	464843.41
3807641.91	0.09495		
464863.41	3807641.91	0.09488	464883.41
3807641.91	0.09401		
464903.41	3807641.91	0.09387	464923.41
3807641.91	0.09378		
464503.41	3807661.91	0.09626	464523.41
3807661.91	0.09486		
464543.41	3807661.91	0.09354	464563.41
3807661.91	0.09241		
464583.41	3807661.91	0.09255	464603.41
3807661.91	0.09329		

464623.41	3807661.91	0.09451	464643.41
3807661.91	0.09507		
464663.41	3807661.91	0.09563	464683.41
3807661.91	0.09605		
464703.41	3807661.91	0.09495	464723.41
3807661.91	0.09474		
464743.41	3807661.91	0.09698	464763.41
3807661.91	0.09773		
464783.41	3807661.91	0.09794	464803.41
3807661.91	0.09810		
464823.41	3807661.91	0.09743	464843.41
3807661.91	0.09717		
464863.41	3807661.91	0.09649	464883.41
3807661.91	0.09624		
464903.41	3807661.91	0.09559	464923.41
3807661.91	0.09531		
464503.41	3807681.91	0.10148	464523.41
3807681.91	0.09999		
464543.41	3807681.91	0.09858	464563.41
3807681.91	0.09725		
464583.41	3807681.91	0.09598	464603.41
3807681.91	0.09725		
464623.41	3807681.91	0.09809	464643.41
3807681.91	0.09769		
464663.41	3807681.91	0.09884	464683.41
3807681.91	0.10194		
464703.41	3807681.91	0.10141	464723.41
3807681.91	0.10031		
464743.41	3807681.91	0.09977	464763.41
3807681.91	0.10067		
464783.41	3807681.91	0.10074	464803.41
3807681.91	0.09986		
464823.41	3807681.91	0.09978	464843.41
3807681.91	0.09901		
464863.41	3807681.91	0.09857	464883.41
3807681.91	0.09848		
464903.41	3807681.91	0.09772	464923.41
3807681.91	0.09691		
464523.41	3807701.91	0.10572	464543.41
3807701.91	0.10421		
464563.41	3807701.91	0.10277	464583.41
3807701.91	0.10141		
464603.41	3807701.91	0.10081	464623.41
3807701.91	0.10045		
464643.41	3807701.91	0.10245	464663.41
3807701.91	0.10268		
464683.41	3807701.91	0.10371	464703.41
3807701.91	0.10569		
464723.41	3807701.91	0.10514	464743.41
3807701.91	0.10395		

464763.41	3807701.91	0.10288	464783.41
3807701.91	0.10265		
464803.41	3807701.91	0.10248	464823.41
3807701.91	0.10147		
464843.41	3807701.91	0.10123	464863.41
3807701.91	0.10106		
464883.41	3807701.91	0.10008	464903.41
3807701.91	0.09944		
464923.41	3807701.91	0.09927	464543.41
3807721.91	0.10872		
464563.41	3807721.91	0.10541	464583.41
3807721.91	0.10401		
464603.41	3807721.91	0.10268	464623.41
3807721.91	0.10217		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 218

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464643.41	3807721.91	0.10487	464663.41
3807721.91	0.10741		
464683.41	3807721.91	0.10807	464703.41
3807721.91	0.10814		
464723.41	3807721.91	0.10745	464743.41
3807721.91	0.10627		
464763.41	3807721.91	0.10546	464783.41

3807721.91	0.10508		
464803.41	3807721.91	0.10427	464823.41
3807721.91	0.10391		
464843.41	3807721.91	0.10313	464863.41
3807721.91	0.10275		
464883.41	3807721.91	0.10200	464903.41
3807721.91	0.10163		
464923.41	3807721.91	0.10124	464943.41
3807721.91	0.10050		
464963.41	3807721.91	0.10011	464983.41
3807721.91	0.09970		
465003.41	3807721.91	0.09930	465023.41
3807721.91	0.09853		
465043.41	3807721.91	0.09811	465063.41
3807721.91	0.09736		
465083.41	3807721.91	0.09694	465103.41
3807721.91	0.09613		
465123.41	3807721.91	0.09510	465143.41
3807721.91	0.09429		
465163.41	3807721.91	0.09383	465183.41
3807721.91	0.09282		
465203.41	3807721.91	0.09199	465223.41
3807721.91	0.09155		
465243.41	3807721.91	0.09113	465263.41
3807721.91	0.09040		
465283.41	3807721.91	0.08991	465303.41
3807721.91	0.08893		
465323.41	3807721.91	0.08813	465343.41
3807721.91	0.08766		
465363.41	3807721.91	0.08669	465383.41
3807721.91	0.08643		
464543.41	3807741.91	0.11747	464563.41
3807741.91	0.10978		
464583.41	3807741.91	0.10747	464603.41
3807741.91	0.10599		
464623.41	3807741.91	0.10543	464643.41
3807741.91	0.10753		
464663.41	3807741.91	0.11117	464683.41
3807741.91	0.11185		
464703.41	3807741.91	0.11049	464723.41
3807741.91	0.10928		
464743.41	3807741.91	0.10823	464763.41
3807741.91	0.10805		
464783.41	3807741.91	0.10712	464803.41
3807741.91	0.10656		
464823.41	3807741.91	0.10637	464843.41
3807741.91	0.10537		
464863.41	3807741.91	0.10432	464883.41
3807741.91	0.10427		
464903.41	3807741.91	0.10335	464923.41

3807741.91	0.10272		
464943.41	3807741.91	0.10263	464963.41
3807741.91	0.10209		
464983.41	3807741.91	0.10108	465003.41
3807741.91	0.10094		
465023.41	3807741.91	0.10047	465043.41
3807741.91	0.09955		
465063.41	3807741.91	0.09927	465083.41
3807741.91	0.09834		
465103.41	3807741.91	0.09729	465123.41
3807741.91	0.09634		
465143.41	3807741.91	0.09595	465163.41
3807741.91	0.09559		
465183.41	3807741.91	0.09465	465203.41
3807741.91	0.09365		
465223.41	3807741.91	0.09299	465243.41
3807741.91	0.09239		
465263.41	3807741.91	0.09180	465283.41
3807741.91	0.09079		
465303.41	3807741.91	0.08987	465323.41
3807741.91	0.08976		
465343.41	3807741.91	0.08965	465363.41
3807741.91	0.08872		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 219

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465383.41	3807741.91	0.08775	464543.41
3807761.91	0.12670		
464563.41	3807761.91	0.12093	464583.41
3807761.91	0.11607		
464603.41	3807761.91	0.11140	464623.41
3807761.91	0.11074		
464643.41	3807761.91	0.11457	464663.41
3807761.91	0.11451		
464683.41	3807761.91	0.11367	464703.41
3807761.91	0.11228		
464723.41	3807761.91	0.11140	464743.41
3807761.91	0.11112		
464763.41	3807761.91	0.10992	464783.41
3807761.91	0.10957		
464803.41	3807761.91	0.10929	464823.41
3807761.91	0.10814		
464843.41	3807761.91	0.10695	464863.41
3807761.91	0.10586		
464883.41	3807761.91	0.10578	464903.41
3807761.91	0.10482		
464923.41	3807761.91	0.10416	464943.41
3807761.91	0.10404		
464963.41	3807761.91	0.10346	464983.41
3807761.91	0.10242		
465003.41	3807761.91	0.10225	465023.41
3807761.91	0.10202		
465043.41	3807761.91	0.10167	465063.41
3807761.91	0.10061		
465083.41	3807761.91	0.09952	465103.41
3807761.91	0.09850		
465123.41	3807761.91	0.09823	465143.41
3807761.91	0.09766		
465163.41	3807761.91	0.09671	465183.41
3807761.91	0.09642		
465203.41	3807761.91	0.09549	465223.41
3807761.91	0.09473		
465243.41	3807761.91	0.09373	465263.41
3807761.91	0.09269		
465283.41	3807761.91	0.09171	465303.41
3807761.91	0.09171		
465323.41	3807761.91	0.09141	465343.41
3807761.91	0.09048		
465363.41	3807761.91	0.09014	465383.41
3807761.91	0.08950		
464543.41	3807781.91	0.13336	464563.41
3807781.91	0.12847		
464583.41	3807781.91	0.12512	464603.41
3807781.91	0.12222		

464623.41	3807781.91	0.12017	464643.41
3807781.91	0.11853		
464663.41	3807781.91	0.11731	464683.41
3807781.91	0.11669		
464703.41	3807781.91	0.11525	464723.41
3807781.91	0.11409		
464743.41	3807781.91	0.11310	464763.41
3807781.91	0.11262		
464783.41	3807781.91	0.11167	464803.41
3807781.91	0.11109		
464823.41	3807781.91	0.10980	464843.41
3807781.91	0.10880		
464863.41	3807781.91	0.10833	464883.41
3807781.91	0.10743		
464903.41	3807781.91	0.10695	464923.41
3807781.91	0.10647		
464943.41	3807781.91	0.10596	464963.41
3807781.91	0.10507		
464983.41	3807781.91	0.10457	465003.41
3807781.91	0.10367		
465023.41	3807781.91	0.10335	465043.41
3807781.91	0.10303		
465063.41	3807781.91	0.10186	465083.41
3807781.91	0.10091		
465103.41	3807781.91	0.10040	465123.41
3807781.91	0.09986		
465143.41	3807781.91	0.09901	465163.41
3807781.91	0.09849		
465183.41	3807781.91	0.09795	465203.41
3807781.91	0.09690		
465223.41	3807781.91	0.09583	465243.41
3807781.91	0.09532		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 220

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3807781.91	0.09431	465283.41
3807781.91	0.09355		
465303.41	3807781.91	0.09299	465323.41
3807781.91	0.09245		
465343.41	3807781.91	0.09189	465363.41
3807781.91	0.09133		
465383.41	3807781.91	0.09032	464543.41
3807801.91	0.14056		
464563.41	3807801.91	0.13516	464583.41
3807801.91	0.13148		
464603.41	3807801.91	0.12796	464623.41
3807801.91	0.12409		
464643.41	3807801.91	0.12105	464663.41
3807801.91	0.12017		
464683.41	3807801.91	0.11920	464703.41
3807801.91	0.11770		
464723.41	3807801.91	0.11636	464743.41
3807801.91	0.11565		
464763.41	3807801.91	0.11533	464783.41
3807801.91	0.11415		
464803.41	3807801.91	0.11281	464823.41
3807801.91	0.11162		
464843.41	3807801.91	0.11119	464863.41
3807801.91	0.11038		
464883.41	3807801.91	0.10964	464903.41
3807801.91	0.10919		
464923.41	3807801.91	0.10877	464943.41
3807801.91	0.10763		
464963.41	3807801.91	0.10715	464983.41
3807801.91	0.10671		
465003.41	3807801.91	0.10559	465023.41
3807801.91	0.10474		
465043.41	3807801.91	0.10430	465063.41
3807801.91	0.10321		
465083.41	3807801.91	0.10272	465103.41
3807801.91	0.10227		
465123.41	3807801.91	0.10119	465143.41
3807801.91	0.10070		
465163.41	3807801.91	0.10023	465183.41

3807801.91	0.09905		
465203.41	3807801.91	0.09795	465223.41
3807801.91	0.09697		
465243.41	3807801.91	0.09719	465263.41
3807801.91	0.09648		
465283.41	3807801.91	0.09534	465303.41
3807801.91	0.09430		
465323.41	3807801.91	0.09377	465343.41
3807801.91	0.09326		
465363.41	3807801.91	0.09214	465383.41
3807801.91	0.09109		
464543.41	3807821.91	0.14632	464563.41
3807821.91	0.14230		
464583.41	3807821.91	0.13738	464603.41
3807821.91	0.13208		
464623.41	3807821.91	0.12761	464643.41
3807821.91	0.12447		
464663.41	3807821.91	0.12264	464683.41
3807821.91	0.12115		
464703.41	3807821.91	0.11962	464723.41
3807821.91	0.11908		
464743.41	3807821.91	0.11866	464763.41
3807821.91	0.11731		
464783.41	3807821.91	0.11591	464803.41
3807821.91	0.11462		
464823.41	3807821.91	0.11433	464843.41
3807821.91	0.11323		
464863.41	3807821.91	0.11248	464883.41
3807821.91	0.11216		
464903.41	3807821.91	0.11149	464923.41
3807821.91	0.11033		
464943.41	3807821.91	0.10997	464963.41
3807821.91	0.10891		
464983.41	3807821.91	0.10816	465003.41
3807821.91	0.10779		
465023.41	3807821.91	0.10674	465043.41
3807821.91	0.10563		
465063.41	3807821.91	0.10526	465083.41
3807821.91	0.10459		
465103.41	3807821.91	0.10349	465123.41
3807821.91	0.10311		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 221

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807821.91	0.10244	465163.41
3807821.91	0.10127		
465183.41	3807821.91	0.10005	465203.41
3807821.91	0.09951		
465223.41	3807821.91	0.09935	465243.41
3807821.91	0.09853		
465263.41	3807821.91	0.09736	465283.41
3807821.91	0.09625		
465303.41	3807821.91	0.09582	465323.41
3807821.91	0.09514		
465343.41	3807821.91	0.09402	465363.41
3807821.91	0.09287		
465383.41	3807821.91	0.09230	464543.41
3807841.91	0.15471		
464563.41	3807841.91	0.15039	464583.41
3807841.91	0.14406		
464603.41	3807841.91	0.13856	464623.41
3807841.91	0.13245		
464643.41	3807841.91	0.12921	464663.41
3807841.91	0.12689		
464683.41	3807841.91	0.12433	464723.41
3807841.91	0.12143		
464743.41	3807841.91	0.12068	464763.41
3807841.91	0.11917		
464783.41	3807841.91	0.11797	464803.41
3807841.91	0.11736		
464823.41	3807841.91	0.11627	464843.41
3807841.91	0.11566		
464863.41	3807841.91	0.11504	464883.41
3807841.91	0.11439		

464903.41	3807841.91	0.11334	464923.41
3807841.91	0.11270		
464943.41	3807841.91	0.11164	464963.41
3807841.91	0.11101		
464983.41	3807841.91	0.10999	465003.41
3807841.91	0.10934		
465023.41	3807841.91	0.10833	465043.41
3807841.91	0.10770		
465063.41	3807841.91	0.10705	465083.41
3807841.91	0.10606		
465103.41	3807841.91	0.10542	465123.41
3807841.91	0.10478		
465143.41	3807841.91	0.10380	465163.41
3807841.91	0.10313		
465183.41	3807841.91	0.10186	465203.41
3807841.91	0.10143		
465223.41	3807841.91	0.10076	465243.41
3807841.91	0.10011		
465263.41	3807841.91	0.09897	465283.41
3807841.91	0.09778		
465303.41	3807841.91	0.09711	465323.41
3807841.91	0.09598		
465343.41	3807841.91	0.09482	465363.41
3807841.91	0.09420		
465383.41	3807841.91	0.09327	464503.41
3807861.91	0.16605		
464523.41	3807861.91	0.16488	464543.41
3807861.91	0.16255		
464563.41	3807861.91	0.15957	464583.41
3807861.91	0.15168		
464603.41	3807861.91	0.14516	464723.41
3807861.91	0.12418		
464743.41	3807861.91	0.12259	464763.41
3807861.91	0.12102		
464783.41	3807861.91	0.12002	464803.41
3807861.91	0.11963		
464823.41	3807861.91	0.11872	464843.41
3807861.91	0.11812		
464863.41	3807861.91	0.11757	464883.41
3807861.91	0.11624		
464903.41	3807861.91	0.11562	464923.41
3807861.91	0.11506		
464943.41	3807861.91	0.11375	464963.41
3807861.91	0.11275		
464983.41	3807861.91	0.11219	465003.41
3807861.91	0.11092		
465023.41	3807861.91	0.11031	465043.41
3807861.91	0.10975		
465063.41	3807861.91	0.10851	465083.41
3807861.91	0.10790		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 222

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465103.41	3807861.91	0.10734	465123.41
3807861.91	0.10612		
465143.41	3807861.91	0.10586	465163.41
3807861.91	0.10560		
465183.41	3807861.91	0.10439	465203.41
3807861.91	0.10312		
465223.41	3807861.91	0.10190	465243.41
3807861.91	0.10136		
465263.41	3807861.91	0.10054	465283.41
3807861.91	0.09928		
465303.41	3807861.91	0.09812	465323.41
3807861.91	0.09691		
465343.41	3807861.91	0.09575	465363.41
3807861.91	0.09524		
465383.41	3807861.91	0.09452	464503.41
3807881.91	0.17026		
464523.41	3807881.91	0.16903	464543.41
3807881.91	0.16662		
464723.41	3807881.91	0.12616	464743.41
3807881.91	0.12451		
464763.41	3807881.91	0.12289	464783.41

3807881.91	0.12184		
464803.41	3807881.91	0.12196	464823.41
3807881.91	0.12151		
464843.41	3807881.91	0.12067	464863.41
3807881.91	0.11931		
464883.41	3807881.91	0.11882	464903.41
3807881.91	0.11757		
464923.41	3807881.91	0.11666	464943.41
3807881.91	0.11617		
464963.41	3807881.91	0.11494	464983.41
3807881.91	0.11365		
465003.41	3807881.91	0.11318	465023.41
3807881.91	0.11236		
465043.41	3807881.91	0.11110	465063.41
3807881.91	0.11061		
465083.41	3807881.91	0.10981	465103.41
3807881.91	0.10857		
465123.41	3807881.91	0.10844	465143.41
3807881.91	0.10796		
465163.41	3807881.91	0.10673	465183.41
3807881.91	0.10619		
465203.41	3807881.91	0.10531	465223.41
3807881.91	0.10397		
465243.41	3807881.91	0.10271	465263.41
3807881.91	0.10141		
465283.41	3807881.91	0.10018	465303.41
3807881.91	0.09967		
465323.41	3807881.91	0.09853	465343.41
3807881.91	0.09756		
465363.41	3807881.91	0.09637	465383.41
3807881.91	0.09546		
464723.41	3807901.91	0.12943	464743.41
3807901.91	0.12654		
464763.41	3807901.91	0.12530	464783.41
3807901.91	0.12451		
464803.41	3807901.91	0.12378	464823.41
3807901.91	0.12338		
464843.41	3807901.91	0.12246	464863.41
3807901.91	0.12098		
464883.41	3807901.91	0.12055	464903.41
3807901.91	0.11989		
464923.41	3807901.91	0.11868	464943.41
3807901.91	0.11788		
464963.41	3807901.91	0.11645	464983.41
3807901.91	0.11505		
465003.41	3807901.91	0.11502	465023.41
3807901.91	0.11399		
465043.41	3807901.91	0.11322	465063.41
3807901.91	0.11244		
465083.41	3807901.91	0.11131	465103.41

3807901.91	0.11091		
465123.41	3807901.91	0.11011	465143.41
3807901.91	0.10933		
465163.41	3807901.91	0.10854	465183.41
3807901.91	0.10773		
465203.41	3807901.91	0.10641	465223.41
3807901.91	0.10507		
465243.41	3807901.91	0.10431	465263.41
3807901.91	0.10304		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 223

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465283.41	3807901.91	0.10173	465303.41
3807901.91	0.10097		
465323.41	3807901.91	0.09992	465343.41
3807901.91	0.09938		
465363.41	3807901.91	0.09808	465383.41
3807901.91	0.09718		
464723.41	3807921.91	0.13314	464743.41
3807921.91	0.12903		
464763.41	3807921.91	0.12827	464783.41
3807921.91	0.12729		
464803.41	3807921.91	0.12581	464823.41
3807921.91	0.12520		

464843.41	3807921.91	0.12428	464863.41
3807921.91	0.12287		
464883.41	3807921.91	0.12239	464903.41
3807921.91	0.12182		
464923.41	3807921.91	0.12109	464943.41
3807921.91	0.11948		
464963.41	3807921.91	0.11799	464983.41
3807921.91	0.11705		
465003.41	3807921.91	0.11658	465023.41
3807921.91	0.11601		
465043.41	3807921.91	0.11532	465063.41
3807921.91	0.11392		
465083.41	3807921.91	0.11356	465103.41
3807921.91	0.11321		
465123.41	3807921.91	0.11182	465143.41
3807921.91	0.11105		
465163.41	3807921.91	0.11033	465183.41
3807921.91	0.10897		
465203.41	3807921.91	0.10756	465223.41
3807921.91	0.10621		
465243.41	3807921.91	0.10557	465263.41
3807921.91	0.10472		
465283.41	3807921.91	0.10341	465303.41
3807921.91	0.10203		
465323.41	3807921.91	0.10152	465343.41
3807921.91	0.10243		
465363.41	3807921.91	0.10106	465383.41
3807921.91	0.10022		
464723.41	3807941.91	0.13841	464743.41
3807941.91	0.13404		
464763.41	3807941.91	0.13107	464783.41
3807941.91	0.12954		
464803.41	3807941.91	0.12883	464823.41
3807941.91	0.12763		
464843.41	3807941.91	0.12682	464863.41
3807941.91	0.12575		
464883.41	3807941.91	0.12566	464903.41
3807941.91	0.12425		
464923.41	3807941.91	0.12264	464943.41
3807941.91	0.12097		
464963.41	3807941.91	0.12016	464983.41
3807941.91	0.11956		
465003.41	3807941.91	0.11904	465023.41
3807941.91	0.11812		
465043.41	3807941.91	0.11669	465063.41
3807941.91	0.11646		
465083.41	3807941.91	0.11586	465103.41
3807941.91	0.11445		
465123.41	3807941.91	0.11379	465143.41
3807941.91	0.11283		

465163.41	3807941.91	0.11146	465183.41
3807941.91	0.11081		
465203.41	3807941.91	0.10947	465223.41
3807941.91	0.10833		
465243.41	3807941.91	0.10694	465263.41
3807941.91	0.10586		
465283.41	3807941.91	0.10588	465303.41
3807941.91	0.10444		
465323.41	3807941.91	0.10355	465343.41
3807941.91	0.10320		
465363.41	3807941.91	0.10180	465383.41
3807941.91	0.10141		
465403.41	3807941.91	0.10086	465423.41
3807941.91	0.09956		
465443.41	3807941.91	0.09825	465463.41
3807941.91	0.09687		
465483.41	3807941.91	0.09564	465503.41
3807941.91	0.09439		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 224

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465523.41	3807941.91	0.09320	465543.41
3807941.91	0.09258		
465563.41	3807941.91	0.09179	465583.41

3807941.91	0.09066		
465603.41	3807941.91	0.08949	465623.41
3807941.91	0.08877		
465643.41	3807941.91	0.08817	465663.41
3807941.91	0.08712		
465683.41	3807941.91	0.08671	465703.41
3807941.91	0.08639		
464723.41	3807961.91	0.14452	464743.41
3807961.91	0.13864		
464763.41	3807961.91	0.13444	464783.41
3807961.91	0.13238		
464803.41	3807961.91	0.13138	464823.41
3807961.91	0.13044		
464843.41	3807961.91	0.12897	464863.41
3807961.91	0.12805		
464883.41	3807961.91	0.12747	464903.41
3807961.91	0.12594		
464923.41	3807961.91	0.12426	464943.41
3807961.91	0.12336		
464963.41	3807961.91	0.12200	464983.41
3807961.91	0.12112		
465003.41	3807961.91	0.12056	465023.41
3807961.91	0.11952		
465043.41	3807961.91	0.11798	465063.41
3807961.91	0.11820		
465083.41	3807961.91	0.11738	465103.41
3807961.91	0.11644		
465123.41	3807961.91	0.11550	465143.41
3807961.91	0.11422		
465163.41	3807961.91	0.11331	465183.41
3807961.91	0.11238		
465203.41	3807961.91	0.11114	465223.41
3807961.91	0.11047		
465243.41	3807961.91	0.10894	465263.41
3807961.91	0.10787		
465283.41	3807961.91	0.10837	465303.41
3807961.91	0.10688		
465323.41	3807961.91	0.10603	465343.41
3807961.91	0.10507		
465363.41	3807961.91	0.10364	465383.41
3807961.91	0.10266		
465403.41	3807961.91	0.10167	465423.41
3807961.91	0.10080		
465443.41	3807961.91	0.09951	465463.41
3807961.91	0.09762		
465483.41	3807961.91	0.09681	465503.41
3807961.91	0.09559		
465523.41	3807961.91	0.09436	465543.41
3807961.91	0.09358		
465563.41	3807961.91	0.09242	465583.41

3807961.91	0.09146		
465603.41	3807961.91	0.09048	465623.41
3807961.91	0.08978		
465643.41	3807961.91	0.08909	465663.41
3807961.91	0.08836		
465683.41	3807961.91	0.08769	465703.41
3807961.91	0.08700		
464743.41	3807981.91	0.14409	464763.41
3807981.91	0.13871		
464783.41	3807981.91	0.13552	464803.41
3807981.91	0.13357		
464823.41	3807981.91	0.13293	464843.41
3807981.91	0.13176		
464863.41	3807981.91	0.13000	464883.41
3807981.91	0.12938		
464903.41	3807981.91	0.12779	464923.41
3807981.91	0.12652		
464943.41	3807981.91	0.12575	464963.41
3807981.91	0.12427		
464983.41	3807981.91	0.12315	465003.41
3807981.91	0.12198		
465023.41	3807981.91	0.12095	465043.41
3807981.91	0.11946		
465063.41	3807981.91	0.11949	465083.41
3807981.91	0.11918		
465103.41	3807981.91	0.11840	465123.41
3807981.91	0.11673		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 225

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)		Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)		CONC		

	465143.41	3807981.91	0.11587	465163.41
3807981.91		0.11514		
	465183.41	3807981.91	0.11364	465203.41
3807981.91		0.11304		
	465223.41	3807981.91	0.11396	465243.41
3807981.91		0.11236		
	465263.41	3807981.91	0.11079	465283.41
3807981.91		0.10949		
	465303.41	3807981.91	0.10829	465323.41
3807981.91		0.10736		
	465343.41	3807981.91	0.10671	465363.41
3807981.91		0.10532		
	465383.41	3807981.91	0.10390	465403.41
3807981.91		0.10284		
	465423.41	3807981.91	0.10175	465443.41
3807981.91		0.10078		
	465463.41	3807981.91	0.09871	465483.41
3807981.91		0.09771		
	465503.41	3807981.91	0.09679	465523.41
3807981.91		0.09552		
	465543.41	3807981.91	0.09455	465563.41
3807981.91		0.09334		
	465583.41	3807981.91	0.09219	465603.41
3807981.91		0.09158		
	465623.41	3807981.91	0.09083	465643.41
3807981.91		0.08999		
	465663.41	3807981.91	0.08968	465683.41
3807981.91		0.08866		
	465703.41	3807981.91	0.08758	464763.41
3808001.91		0.14416		
	464783.41	3808001.91	0.13977	464803.41
3808001.91		0.13679		
	464823.41	3808001.91	0.13657	464843.41
3808001.91		0.13482		
	464863.41	3808001.91	0.13300	464883.41
3808001.91		0.13232		
	464903.41	3808001.91	0.13110	464923.41
3808001.91		0.12922		
	464943.41	3808001.91	0.12745	464963.41
3808001.91		0.12651		
	464983.41	3808001.91	0.12566	465003.41
3808001.91		0.12394		
	465023.41	3808001.91	0.12303	465043.41
3808001.91		0.12257		

465063.41	3808001.91	0.12129	465083.41
3808001.91	0.12040		
465103.41	3808001.91	0.11958	465123.41
3808001.91	0.11787		
465143.41	3808001.91	0.11698	465163.41
3808001.91	0.11629		
465183.41	3808001.91	0.11580	465203.41
3808001.91	0.11542		
465223.41	3808001.91	0.11493	465243.41
3808001.91	0.11330		
465263.41	3808001.91	0.11169	465283.41
3808001.91	0.11066		
465303.41	3808001.91	0.10981	465323.41
3808001.91	0.10898		
465343.41	3808001.91	0.10756	465363.41
3808001.91	0.10673		
465383.41	3808001.91	0.10537	465403.41
3808001.91	0.10424		
465423.41	3808001.91	0.10287	465443.41
3808001.91	0.10149		
465463.41	3808001.91	0.09975	465483.41
3808001.91	0.09875		
465503.41	3808001.91	0.09745	465523.41
3808001.91	0.09643		
465543.41	3808001.91	0.09577	465563.41
3808001.91	0.09464		
465583.41	3808001.91	0.09342	465603.41
3808001.91	0.09228		
465623.41	3808001.91	0.09181	465643.41
3808001.91	0.09145		
465663.41	3808001.91	0.09036	465683.41
3808001.91	0.08926		
465703.41	3808001.91	0.08822	464763.41
3808021.91	0.15162		
464783.41	3808021.91	0.14647	464803.41
3808021.91	0.14224		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 226

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,

```

, L0006374      , L0006375      , L0006376      ,
      L0006377      , L0006378      , L0006379      , L0006380      , L0006381
, L0006382      , L0006383      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3808021.91	0.14007	464843.41
3808021.91	0.13796		
464863.41	3808021.91	0.13598	464883.41
3808021.91	0.13480		
464903.41	3808021.91	0.13321	464923.41
3808021.91	0.13203		
464943.41	3808021.91	0.13008	464963.41
3808021.91	0.12840		
464983.41	3808021.91	0.12731	465003.41
3808021.91	0.12626		
465023.41	3808021.91	0.12558	465043.41
3808021.91	0.12447		
465063.41	3808021.91	0.12339	465083.41
3808021.91	0.12191		
465103.41	3808021.91	0.12083	465123.41
3808021.91	0.11979		
465143.41	3808021.91	0.11837	465163.41
3808021.91	0.11737		
465183.41	3808021.91	0.11721	465203.41
3808021.91	0.11761		
465223.41	3808021.91	0.11646	465243.41
3808021.91	0.11537		
465263.41	3808021.91	0.11379	465283.41
3808021.91	0.11220		
465303.41	3808021.91	0.11138	465323.41
3808021.91	0.11002		
465343.41	3808021.91	0.10900	465363.41
3808021.91	0.10800		
465383.41	3808021.91	0.10656	465403.41
3808021.91	0.10535		
465423.41	3808021.91	0.10412	465443.41
3808021.91	0.10307		
465463.41	3808021.91	0.10109	465483.41
3808021.91	0.09994		
465503.41	3808021.91	0.09896	465523.41

3808021.91	0.09768		
465543.41	3808021.91	0.09658	465563.41
3808021.91	0.09580		
465583.41	3808021.91	0.09521	465603.41
3808021.91	0.09399		
465623.41	3808021.91	0.09292	465643.41
3808021.91	0.09216		
465663.41	3808021.91	0.09101	465683.41
3808021.91	0.09028		
465703.41	3808021.91	0.08956	464783.41
3808041.91	0.15401		
464803.41	3808041.91	0.14792	464823.41
3808041.91	0.14434		
464843.41	3808041.91	0.14177	464863.41
3808041.91	0.13901		
464883.41	3808041.91	0.13691	464903.41
3808041.91	0.13573		
464923.41	3808041.91	0.13467	464943.41
3808041.91	0.13265		
464963.41	3808041.91	0.13065	464983.41
3808041.91	0.12881		
465003.41	3808041.91	0.12891	465023.41
3808041.91	0.12773		
465043.41	3808041.91	0.12603	465063.41
3808041.91	0.12509		
465083.41	3808041.91	0.12389	465103.41
3808041.91	0.12225		
465123.41	3808041.91	0.12136	465143.41
3808041.91	0.12020		
465163.41	3808041.91	0.11863	465183.41
3808041.91	0.11830		
465203.41	3808041.91	0.11922	465223.41
3808041.91	0.11762		
465243.41	3808041.91	0.11721	465263.41
3808041.91	0.11569		
465283.41	3808041.91	0.11410	465303.41
3808041.91	0.11246		
465323.41	3808041.91	0.11141	465343.41
3808041.91	0.11045		
465363.41	3808041.91	0.10922	465383.41
3808041.91	0.10772		
465403.41	3808041.91	0.10628	465423.41
3808041.91	0.10545		
465443.41	3808041.91	0.10413	465463.41
3808041.91	0.10197		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 , L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 , L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 , L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465483.41	3808041.91	0.10122	465503.41
3808041.91	0.10032		
465523.41	3808041.91	0.09905	465543.41
3808041.91	0.09774		
465563.41	3808041.91	0.09718	465583.41
3808041.91	0.09645		
465603.41	3808041.91	0.09522	465623.41
3808041.91	0.09401		
465643.41	3808041.91	0.09284	465663.41
3808041.91	0.09176		
465683.41	3808041.91	0.09132	465703.41
3808041.91	0.09069		
464803.41	3808061.91	0.15412	464823.41
3808061.91	0.15046		
464843.41	3808061.91	0.14549	464863.41
3808061.91	0.14216		
464883.41	3808061.91	0.13997	464903.41
3808061.91	0.13836		
464923.41	3808061.91	0.13632	464943.41
3808061.91	0.13422		
464963.41	3808061.91	0.13216	464983.41
3808061.91	0.13027		
465003.41	3808061.91	0.13034	465023.41
3808061.91	0.12984		
465043.41	3808061.91	0.12880	465063.41
3808061.91	0.12693		

465083.41	3808061.91	0.12585	465103.41
3808061.91	0.12484		
465123.41	3808061.91	0.12305	465143.41
3808061.91	0.12164		
465163.41	3808061.91	0.12176	465183.41
3808061.91	0.12118		
465203.41	3808061.91	0.12083	465223.41
3808061.91	0.12000		
465243.41	3808061.91	0.11830	465263.41
3808061.91	0.11719		
465283.41	3808061.91	0.11581	465303.41
3808061.91	0.11414		
465323.41	3808061.91	0.11288	465343.41
3808061.91	0.11162		
465363.41	3808061.91	0.11073	465383.41
3808061.91	0.10930		
465403.41	3808061.91	0.10779	465423.41
3808061.91	0.10636		
465443.41	3808061.91	0.10492	465463.41
3808061.91	0.10341		
465483.41	3808061.91	0.10207	465503.41
3808061.91	0.10148		
465523.41	3808061.91	0.10099	465543.41
3808061.91	0.09966		
465563.41	3808061.91	0.09840	465583.41
3808061.91	0.09718		
465603.41	3808061.91	0.09593	465623.41
3808061.91	0.09472		
465643.41	3808061.91	0.09359	465663.41
3808061.91	0.09322		
465683.41	3808061.91	0.09247	465703.41
3808061.91	0.09138		
464823.41	3808081.91	0.15401	464843.41
3808081.91	0.15107		
464863.41	3808081.91	0.14786	464883.41
3808081.91	0.14419		
464903.41	3808081.91	0.14054	464923.41
3808081.91	0.13797		
464943.41	3808081.91	0.13581	464963.41
3808081.91	0.13398		
464983.41	3808081.91	0.13318	465003.41
3808081.91	0.13191		
465023.41	3808081.91	0.13130	465043.41
3808081.91	0.13028		
465063.41	3808081.91	0.12827	465083.41
3808081.91	0.12717		
465103.41	3808081.91	0.12626	465123.41
3808081.91	0.12470		
465143.41	3808081.91	0.12407	465163.41
3808081.91	0.12502		

465183.41	3808081.91	0.12376	465203.41
3808081.91	0.12251		
465223.41	3808081.91	0.12117	465243.41
3808081.91	0.11996		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 228

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465263.41	3808081.91	0.11842	465283.41
3808081.91	0.11721		
465303.41	3808081.91	0.11551	465323.41
3808081.91	0.11425		
465343.41	3808081.91	0.11316	465363.41
3808081.91	0.11177		
465383.41	3808081.91	0.11026	465403.41
3808081.91	0.10908		
465423.41	3808081.91	0.10802	465443.41
3808081.91	0.10692		
465463.41	3808081.91	0.10464	465483.41
3808081.91	0.10367		
465503.41	3808081.91	0.10278	465523.41
3808081.91	0.10190		
465543.41	3808081.91	0.10105	465563.41
3808081.91	0.10002		
465583.41	3808081.91	0.09874	465603.41

3808081.91	0.09748		
465623.41	3808081.91	0.09625	465643.41
3808081.91	0.09507		
465663.41	3808081.91	0.09434	465683.41
3808081.91	0.09324		
465703.41	3808081.91	0.09213	464843.41
3808101.91	0.15470		
464863.41	3808101.91	0.15183	464883.41
3808101.91	0.14767		
464903.41	3808101.91	0.14368	464923.41
3808101.91	0.13989		
464943.41	3808101.91	0.13766	464963.41
3808101.91	0.13682		
464983.41	3808101.91	0.13607	465003.41
3808101.91	0.13406		
465023.41	3808101.91	0.13283	465043.41
3808101.91	0.13166		
465063.41	3808101.91	0.12974	465083.41
3808101.91	0.12866		
465103.41	3808101.91	0.12775	465123.41
3808101.91	0.12728		
465143.41	3808101.91	0.12753	465163.41
3808101.91	0.12620		
465183.41	3808101.91	0.12579	465203.41
3808101.91	0.12411		
465223.41	3808101.91	0.12275	465243.41
3808101.91	0.12129		
465263.41	3808101.91	0.11997	465283.41
3808101.91	0.11822		
465303.41	3808101.91	0.11683	465323.41
3808101.91	0.11575		
465343.41	3808101.91	0.11473	465363.41
3808101.91	0.11318		
465383.41	3808101.91	0.11162	465403.41
3808101.91	0.11035		
465423.41	3808101.91	0.10978	465443.41
3808101.91	0.10838		
465463.41	3808101.91	0.10586	465483.41
3808101.91	0.10537		
465503.41	3808101.91	0.10412	465523.41
3808101.91	0.10315		
465543.41	3808101.91	0.10263	465563.41
3808101.91	0.10139		
465583.41	3808101.91	0.10009	465603.41
3808101.91	0.09882		
465623.41	3808101.91	0.09757	465643.41
3808101.91	0.09637		
465663.41	3808101.91	0.09525	465683.41
3808101.91	0.09410		
465703.41	3808101.91	0.09302	464863.41

3808121.91	0.15382		
464883.41	3808121.91	0.14955	464903.41
3808121.91	0.14678		
464923.41	3808121.91	0.14383	464943.41
3808121.91	0.14150		
464963.41	3808121.91	0.13975	464983.41
3808121.91	0.13769		
465003.41	3808121.91	0.13657	465023.41
3808121.91	0.13509		
465043.41	3808121.91	0.13313	465063.41
3808121.91	0.13207		
465083.41	3808121.91	0.13109	465103.41
3808121.91	0.13119		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 229

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465123.41	3808121.91	0.13046	465143.41
3808121.91	0.12873		
465163.41	3808121.91	0.12736	465183.41
3808121.91	0.12694		
465203.41	3808121.91	0.12582	465223.41
3808121.91	0.12463		
465243.41	3808121.91	0.12283	465263.41
3808121.91	0.12102		

465283.41	3808121.91	0.11955	465303.41
3808121.91	0.11854		
465323.41	3808121.91	0.11700	465343.41
3808121.91	0.11576		
465363.41	3808121.91	0.11506	465383.41
3808121.91	0.11387		
465403.41	3808121.91	0.11230	465423.41
3808121.91	0.11080		
465443.41	3808121.91	0.10929	465463.41
3808121.91	0.10772		
465483.41	3808121.91	0.10633	465503.41
3808121.91	0.10546		
465523.41	3808121.91	0.10488	465543.41
3808121.91	0.10357		
465563.41	3808121.91	0.10224	465583.41
3808121.91	0.10093		
465603.41	3808121.91	0.09965	465623.41
3808121.91	0.09839		
465643.41	3808121.91	0.09722	465663.41
3808121.91	0.09662		
465683.41	3808121.91	0.09577	465703.41
3808121.91	0.09461		
464883.41	3808141.91	0.15321	464903.41
3808141.91	0.14902		
464923.41	3808141.91	0.14620	464943.41
3808141.91	0.14379		
464963.41	3808141.91	0.14143	464983.41
3808141.91	0.13923		
465003.41	3808141.91	0.13818	465023.41
3808141.91	0.13662		
465043.41	3808141.91	0.13453	465063.41
3808141.91	0.13354		
465083.41	3808141.91	0.13298	465103.41
3808141.91	0.13415		
465123.41	3808141.91	0.13202	465143.41
3808141.91	0.13070		
465163.41	3808141.91	0.12931	465183.41
3808141.91	0.12820		
465203.41	3808141.91	0.12701	465223.41
3808141.91	0.12585		
465243.41	3808141.91	0.12395	465263.41
3808141.91	0.12253		
465283.41	3808141.91	0.12130	465303.41
3808141.91	0.11975		
465323.41	3808141.91	0.11858	465343.41
3808141.91	0.11768		
465363.41	3808141.91	0.11654	465383.41
3808141.91	0.11496		
465403.41	3808141.91	0.11339	465423.41
3808141.91	0.11235		

465443.41	3808141.91	0.11112	465463.41
3808141.91	0.10961		
465483.41	3808141.91	0.10813	465503.41
3808141.91	0.10683		
465523.41	3808141.91	0.10590	465543.41
3808141.91	0.10473		
465563.41	3808141.91	0.10373	465583.41
3808141.91	0.10240		
465603.41	3808141.91	0.10110	465623.41
3808141.91	0.09983		
465643.41	3808141.91	0.09862	465663.41
3808141.91	0.09781		
465683.41	3808141.91	0.09708	465703.41
3808141.91	0.09607		
464883.41	3808161.91	0.15667	464903.41
3808161.91	0.15191		
464923.41	3808161.91	0.14820	464943.41
3808161.91	0.14572		
464963.41	3808161.91	0.14328	464983.41
3808161.91	0.14101		
465003.41	3808161.91	0.13974	465023.41
3808161.91	0.13819		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 230

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 , L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 , L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 , L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -	465043.41	3808161.91	0.13618	465063.41
3808161.91	0.13557			
	465083.41	3808161.91	0.13475	465103.41
3808161.91	0.13578			
	465123.41	3808161.91	0.13400	465143.41
3808161.91	0.13261			
	465163.41	3808161.91	0.13155	465183.41
3808161.91	0.12960			
	465203.41	3808161.91	0.12828	465223.41
3808161.91	0.12704			
	465243.41	3808161.91	0.12547	465263.41
3808161.91	0.12424			
	465283.41	3808161.91	0.12308	465303.41
3808161.91	0.12136			
	465323.41	3808161.91	0.12046	465343.41
3808161.91	0.11937			
	465363.41	3808161.91	0.11775	465383.41
3808161.91	0.11644			
	465403.41	3808161.91	0.11487	465423.41
3808161.91	0.11418			
	465443.41	3808161.91	0.11272	465463.41
3808161.91	0.11121			
	465483.41	3808161.91	0.10979	465503.41
3808161.91	0.10835			
	465523.41	3808161.91	0.10699	465543.41
3808161.91	0.10645			
	465563.41	3808161.91	0.10518	465583.41
3808161.91	0.10384			
	465603.41	3808161.91	0.10252	465623.41
3808161.91	0.10157			
	465643.41	3808161.91	0.10036	465663.41
3808161.91	0.09913			
	465683.41	3808161.91	0.09813	465703.41
3808161.91	0.09773			
	464903.41	3808181.91	0.15560	464923.41
3808181.91	0.15177			
	464943.41	3808181.91	0.14919	464963.41
3808181.91	0.14667			
	464983.41	3808181.91	0.14422	465003.41
3808181.91	0.14190			
	465023.41	3808181.91	0.14048	465043.41
3808181.91	0.13928			
	465063.41	3808181.91	0.13850	465083.41
3808181.91	0.13773			
	465103.41	3808181.91	0.13750	465123.41
3808181.91	0.13618			
	465143.41	3808181.91	0.13489	465163.41
3808181.91	0.13289			
	465183.41	3808181.91	0.13164	465203.41

3808181.91	0.13017		
465223.41	3808181.91	0.12857	465243.41
3808181.91	0.12741		
465263.41	3808181.91	0.12568	465283.41
3808181.91	0.12428		
465303.41	3808181.91	0.12347	465323.41
3808181.91	0.12218		
465343.41	3808181.91	0.12053	465363.41
3808181.91	0.11978		
465383.41	3808181.91	0.11853	465403.41
3808181.91	0.11688		
465423.41	3808181.91	0.11532	465443.41
3808181.91	0.11376		
465463.41	3808181.91	0.11228	465483.41
3808181.91	0.11144		
465503.41	3808181.91	0.11032	465523.41
3808181.91	0.10887		
465543.41	3808181.91	0.10752	465563.41
3808181.91	0.10615		
465583.41	3808181.91	0.10479	465603.41
3808181.91	0.10347		
465623.41	3808181.91	0.10268	465643.41
3808181.91	0.10195		
465663.41	3808181.91	0.10070	465683.41
3808181.91	0.09951		
465703.41	3808181.91	0.09867	464923.41
3808201.91	0.15602		
464943.41	3808201.91	0.15242	464963.41
3808201.91	0.14966		
464983.41	3808201.91	0.14711	465003.41
3808201.91	0.14461		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 231

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465023.41	3808201.91	0.14316	465043.41
3808201.91	0.14225		
465063.41	3808201.91	0.14115	465083.41
3808201.91	0.14132		
465103.41	3808201.91	0.13973	465123.41
3808201.91	0.13842		
465143.41	3808201.91	0.13648	465163.41
3808201.91	0.13498		
465183.41	3808201.91	0.13350	465203.41
3808201.91	0.13196		
465223.41	3808201.91	0.13056	465243.41
3808201.91	0.12881		
465263.41	3808201.91	0.12749	465283.41
3808201.91	0.12645		
465303.41	3808201.91	0.12515	465323.41
3808201.91	0.12390		
465343.41	3808201.91	0.12261	465363.41
3808201.91	0.12140		
465383.41	3808201.91	0.11991	465403.41
3808201.91	0.11875		
465423.41	3808201.91	0.11710	465443.41
3808201.91	0.11550		
465463.41	3808201.91	0.11397	465483.41
3808201.91	0.11289		
465503.41	3808201.91	0.11145	465523.41
3808201.91	0.10999		
465543.41	3808201.91	0.10855	465563.41
3808201.91	0.10759		
465583.41	3808201.91	0.10639	465603.41
3808201.91	0.10504		
465623.41	3808201.91	0.10413	465643.41
3808201.91	0.10327		
465663.41	3808201.91	0.10200	465683.41
3808201.91	0.10112		
465703.41	3808201.91	0.10035	464943.41
3808221.91	0.15623		
464963.41	3808221.91	0.15272	464983.41
3808221.91	0.15009		
465003.41	3808221.91	0.14752	465023.41
3808221.91	0.14622		

465043.41	3808221.91	0.14717	465063.41
3808221.91	0.14513		
465083.41	3808221.91	0.14359	465103.41
3808221.91	0.14241		
465123.41	3808221.91	0.14010	465143.41
3808221.91	0.13854		
465163.41	3808221.91	0.13710	465183.41
3808221.91	0.13532		
465203.41	3808221.91	0.13391	465223.41
3808221.91	0.13258		
465243.41	3808221.91	0.13065	465263.41
3808221.91	0.12962		
465283.41	3808221.91	0.12837	465303.41
3808221.91	0.12657		
465323.41	3808221.91	0.12561	465343.41
3808221.91	0.12445		
465363.41	3808221.91	0.12276	465383.41
3808221.91	0.12163		
465403.41	3808221.91	0.12048	465423.41
3808221.91	0.11882		
465443.41	3808221.91	0.11719	465463.41
3808221.91	0.11561		
465483.41	3808221.91	0.11405	465503.41
3808221.91	0.11290		
465523.41	3808221.91	0.11147	465543.41
3808221.91	0.11002		
465563.41	3808221.91	0.10883	465583.41
3808221.91	0.10828		
465603.41	3808221.91	0.10691	465623.41
3808221.91	0.10563		
465643.41	3808221.91	0.10461	465663.41
3808221.91	0.10332		
465683.41	3808221.91	0.10254	465703.41
3808221.91	0.10181		
464963.41	3808241.91	0.15682	464983.41
3808241.91	0.15410		
465003.41	3808241.91	0.15144	465023.41
3808241.91	0.14955		
465043.41	3808241.91	0.14915	465063.41
3808241.91	0.14761		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 232

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465083.41	3808241.91	0.14684	465103.41
3808241.91	0.14490		
465123.41	3808241.91	0.14254	465143.41
3808241.91	0.14069		
465163.41	3808241.91	0.13887	465183.41
3808241.91	0.13753		
465203.41	3808241.91	0.13559	465223.41
3808241.91	0.13400		
465243.41	3808241.91	0.13304	465263.41
3808241.91	0.13157		
465283.41	3808241.91	0.12973	465303.41
3808241.91	0.12885		
465323.41	3808241.91	0.12748	465343.41
3808241.91	0.12576		
465363.41	3808241.91	0.12469	465383.41
3808241.91	0.12337		
465403.41	3808241.91	0.12169	465423.41
3808241.91	0.12001		
465443.41	3808241.91	0.11837	465463.41
3808241.91	0.11676		
465483.41	3808241.91	0.11519	465503.41
3808241.91	0.11421		
465523.41	3808241.91	0.11331	465543.41
3808241.91	0.11183		
465563.41	3808241.91	0.11043	465583.41
3808241.91	0.10935		
465603.41	3808241.91	0.10797	465623.41
3808241.91	0.10736		
465643.41	3808241.91	0.10656	465663.41
3808241.91	0.10525		
465683.41	3808241.91	0.10400	465703.41

3808241.91	0.10285		
464983.41	3808261.91	0.16192	465003.41
3808261.91	0.15836		
465023.41	3808261.91	0.15553	465043.41
3808261.91	0.15294		
465063.41	3808261.91	0.15107	465083.41
3808261.91	0.14882		
465103.41	3808261.91	0.14735	465123.41
3808261.91	0.14525		
465143.41	3808261.91	0.14340	465163.41
3808261.91	0.14115		
465183.41	3808261.91	0.13917	465203.41
3808261.91	0.13765		
465223.41	3808261.91	0.13644	465243.41
3808261.91	0.13496		
465263.41	3808261.91	0.13300	465283.41
3808261.91	0.13109		
465303.41	3808261.91	0.13026	465323.41
3808261.91	0.12902		
465343.41	3808261.91	0.12774	465363.41
3808261.91	0.12641		
465383.41	3808261.91	0.12518	465403.41
3808261.91	0.12363		
465423.41	3808261.91	0.12192	465443.41
3808261.91	0.12025		
465463.41	3808261.91	0.11861	465483.41
3808261.91	0.11702		
465503.41	3808261.91	0.11591	465523.41
3808261.91	0.11485		
465543.41	3808261.91	0.11335	465563.41
3808261.91	0.11228		
465583.41	3808261.91	0.11130	465603.41
3808261.91	0.10989		
465623.41	3808261.91	0.10891	465643.41
3808261.91	0.10774		
465663.41	3808261.91	0.10688	465683.41
3808261.91	0.10588		
465703.41	3808261.91	0.10463	465003.41
3808281.91	0.16313		
465023.41	3808281.91	0.15966	465043.41
3808281.91	0.15686		
465063.41	3808281.91	0.15432	465083.41
3808281.91	0.15171		
465103.41	3808281.91	0.14918	465123.41
3808281.91	0.14760		
465143.41	3808281.91	0.14536	465163.41
3808281.91	0.14344		
465183.41	3808281.91	0.14128	465203.41
3808281.91	0.14006		

▲ *** AERMOD - VERSION 19191 ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 233

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 , L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 , L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 , L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808281.91	0.13861	465243.41
3808281.91	0.13649		
465263.41	3808281.91	0.13449	465283.41
3808281.91	0.13299		
465303.41	3808281.91	0.13214	465323.41
3808281.91	0.13097		
465343.41	3808281.91	0.12968	465363.41
3808281.91	0.12825		
465383.41	3808281.91	0.12672	465403.41
3808281.91	0.12591		
465423.41	3808281.91	0.12453	465443.41
3808281.91	0.12285		
465463.41	3808281.91	0.12079	465483.41
3808281.91	0.11917		
465503.41	3808281.91	0.11759	465523.41
3808281.91	0.11605		
465543.41	3808281.91	0.11487	465563.41
3808281.91	0.11392		
465583.41	3808281.91	0.11300	465603.41
3808281.91	0.11157		
465623.41	3808281.91	0.11022	465643.41
3808281.91	0.10924		

465663.41	3808281.91	0.10844	465683.41
3808281.91	0.10753		
465703.41	3808281.91	0.10628	465003.41
3808301.91	0.16732		
465023.41	3808301.91	0.16365	465043.41
3808301.91	0.15977		
465063.41	3808301.91	0.15874	465083.41
3808301.91	0.15550		
465103.41	3808301.91	0.15180	465123.41
3808301.91	0.14939		
465143.41	3808301.91	0.14699	465163.41
3808301.91	0.14510		
465183.41	3808301.91	0.14396	465203.41
3808301.91	0.14229		
465223.41	3808301.91	0.14013	465243.41
3808301.91	0.13798		
465263.41	3808301.91	0.13655	465283.41
3808301.91	0.13558		
465303.41	3808301.91	0.13442	465323.41
3808301.91	0.13294		
465343.41	3808301.91	0.13148	465363.41
3808301.91	0.13035		
465383.41	3808301.91	0.12901	465403.41
3808301.91	0.12731		
465423.41	3808301.91	0.12683	465443.41
3808301.91	0.12521		
465463.41	3808301.91	0.12208	465483.41
3808301.91	0.12043		
465503.41	3808301.91	0.11883	465523.41
3808301.91	0.11732		
465543.41	3808301.91	0.11698	465563.41
3808301.91	0.11561		
465583.41	3808301.91	0.11418	465603.41
3808301.91	0.11273		
465623.41	3808301.91	0.11182	465643.41
3808301.91	0.11122		
465663.41	3808301.91	0.10990	465683.41
3808301.91	0.10879		
465703.41	3808301.91	0.10824	465043.41
3808321.91	0.16424		
465063.41	3808321.91	0.16142	465083.41
3808321.91	0.15812		
465103.41	3808321.91	0.15527	465123.41
3808321.91	0.15272		
465143.41	3808321.91	0.15024	465163.41
3808321.91	0.14787		
465183.41	3808321.91	0.14616	465203.41
3808321.91	0.14395		
465223.41	3808321.91	0.14176	465243.41
3808321.91	0.14023		

465263.41	3808321.91	0.13918	465283.41
3808321.91	0.13791		
465303.41	3808321.91	0.13639	465323.41
3808321.91	0.13499		
465343.41	3808321.91	0.13362	465363.41
3808321.91	0.13193		
465383.41	3808321.91	0.13091	465403.41
3808321.91	0.12962		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 234

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465423.41	3808321.91	0.12834	465443.41
3808321.91	0.12665		
465463.41	3808321.91	0.12431	465483.41
3808321.91	0.12264		
465503.41	3808321.91	0.12100	465523.41
3808321.91	0.11944		
465543.41	3808321.91	0.11836	465563.41
3808321.91	0.11689		
465583.41	3808321.91	0.11542	465603.41
3808321.91	0.11444		
465623.41	3808321.91	0.11344	465643.41
3808321.91	0.11248		
465663.41	3808321.91	0.11156	465683.41

3808321.91	0.11062		
465703.41	3808321.91	0.10972	465083.41
3808341.91	0.16118		
465103.41	3808341.91	0.15848	465123.41
3808341.91	0.15535		
465143.41	3808341.91	0.15279	465163.41
3808341.91	0.15033		
465183.41	3808341.91	0.14793	465203.41
3808341.91	0.14568		
465223.41	3808341.91	0.14395	465243.41
3808341.91	0.14282		
465263.41	3808341.91	0.14150	465283.41
3808341.91	0.14010		
465303.41	3808341.91	0.13847	465323.41
3808341.91	0.13716		
465343.41	3808341.91	0.13619	465363.41
3808341.91	0.13424		
465383.41	3808341.91	0.13290	465403.41
3808341.91	0.13166		
465423.41	3808341.91	0.12992	465443.41
3808341.91	0.12817		
465463.41	3808341.91	0.12629	465483.41
3808341.91	0.12458		
465503.41	3808341.91	0.12292	465523.41
3808341.91	0.12130		
465543.41	3808341.91	0.11979	465563.41
3808341.91	0.11826		
465583.41	3808341.91	0.11708	465603.41
3808341.91	0.11616		
465623.41	3808341.91	0.11512	465643.41
3808341.91	0.11380		
465663.41	3808341.91	0.11322	465683.41
3808341.91	0.11224		
465703.41	3808341.91	0.11124	465103.41
3808361.91	0.16119		
465123.41	3808361.91	0.15774	465143.41
3808361.91	0.15460		
465163.41	3808361.91	0.15210	465183.41
3808361.91	0.14967		
465203.41	3808361.91	0.14802	465223.41
3808361.91	0.14679		
465243.41	3808361.91	0.14459	465263.41
3808361.91	0.14314		
465283.41	3808361.91	0.14214	465303.41
3808361.91	0.14081		
465323.41	3808361.91	0.14019	465343.41
3808361.91	0.13886		
465363.41	3808361.91	0.13687	465383.41
3808361.91	0.13497		
465403.41	3808361.91	0.13319	465423.41

3808361.91	0.13232		
465443.41	3808361.91	0.13092	465463.41
3808361.91	0.12769		
465483.41	3808361.91	0.12596	465503.41
3808361.91	0.12427		
465523.41	3808361.91	0.12268	465543.41
3808361.91	0.12198		
465563.41	3808361.91	0.12079	465583.41
3808361.91	0.11924		
465603.41	3808361.91	0.11777	465623.41
3808361.91	0.11653		
465643.41	3808361.91	0.11587	465663.41
3808361.91	0.11476		
465683.41	3808361.91	0.11384	465703.41
3808361.91	0.11323		
465183.41	3808381.91	0.15335	465203.41

3808381.91 0.15119
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 235

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	0.14947	465243.41
3808381.91	0.14777		
465263.41	3808381.91	0.14631	465283.41
3808381.91	0.14529		

465303.41	3808381.91	0.14401	465323.41
3808381.91	0.14261		
465343.41	3808381.91	0.14155	465363.41
3808381.91	0.13952		
465383.41	3808381.91	0.13754	465403.41
3808381.91	0.13563		
465423.41	3808381.91	0.13427	465443.41
3808381.91	0.13247		
465463.41	3808381.91	0.13005	465483.41
3808381.91	0.12828		
465503.41	3808381.91	0.12656	465523.41
3808381.91	0.12491		
465543.41	3808381.91	0.12375	465563.41
3808381.91	0.12234		
465583.41	3808381.91	0.12121	465603.41
3808381.91	0.11966		
465623.41	3808381.91	0.11852	465643.41
3808381.91	0.11749		
465663.41	3808381.91	0.11649	465683.41
3808381.91	0.11550		
465703.41	3808381.91	0.11477	465303.41
3808401.91	0.14708		
465323.41	3808401.91	0.14546	465343.41
3808401.91	0.14399		
465363.41	3808401.91	0.14191	465383.41
3808401.91	0.13989		
465403.41	3808401.91	0.13791	465423.41
3808401.91	0.13598		
465443.41	3808401.91	0.13410	465463.41
3808401.91	0.13225		
465483.41	3808401.91	0.13045	465503.41
3808401.91	0.12869		
465523.41	3808401.91	0.12697	465543.41
3808401.91	0.12529		
465563.41	3808401.91	0.12417	465583.41
3808401.91	0.12338		
465603.41	3808401.91	0.12179	465623.41
3808401.91	0.12028		
465643.41	3808401.91	0.11915	465663.41
3808401.91	0.11850		
465683.41	3808401.91	0.11743	465703.41
3808401.91	0.11635		
465323.41	3808421.91	0.14889	465343.41
3808421.91	0.14677		
465363.41	3808421.91	0.14465	465383.41
3808421.91	0.14258		
465403.41	3808421.91	0.14056	465423.41
3808421.91	0.13859		
465443.41	3808421.91	0.13666	465463.41
3808421.91	0.13478		

465483.41	3808421.91	0.13294	465503.41
3808421.91	0.13115		
465523.41	3808421.91	0.12939	465543.41
3808421.91	0.12767		
465563.41	3808421.91	0.12603	465583.41
3808421.91	0.12472		
465603.41	3808421.91	0.12311	465623.41
3808421.91	0.12204		
465643.41	3808421.91	0.12130	465663.41
3808421.91	0.12010		
465683.41	3808421.91	0.11909	465703.41
3808421.91	0.11839		
465323.41	3808441.91	0.15183	465343.41
3808441.91	0.14957		
465363.41	3808441.91	0.14684	465383.41
3808441.91	0.14465		
465403.41	3808441.91	0.14259	465423.41
3808441.91	0.14059		
465443.41	3808441.91	0.13862	465463.41
3808441.91	0.13671		
465483.41	3808441.91	0.13484	465503.41
3808441.91	0.13301		
465523.41	3808441.91	0.13122	465543.41
3808441.91	0.12947		
465563.41	3808441.91	0.12776	465583.41
3808441.91	0.12609		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 236

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)

465603.41	3808441.91	0.12445	465623.41
3808441.91	0.12339		
465643.41	3808441.91	0.12298	465663.41
3808441.91	0.12188		
465683.41	3808441.91	0.12079	465703.41
3808441.91	0.11994		
465343.41	3808461.91	0.15274	465363.41
3808461.91	0.14918		
465383.41	3808461.91	0.14686	465403.41
3808461.91	0.14437		
465423.41	3808461.91	0.14232	465443.41
3808461.91	0.14033		
465463.41	3808461.91	0.13838	465483.41
3808461.91	0.13648		
465503.41	3808461.91	0.13456	465523.41
3808461.91	0.13268		
465543.41	3808461.91	0.13091	465563.41
3808461.91	0.12917		
465583.41	3808461.91	0.12747	465603.41
3808461.91	0.12581		
465623.41	3808461.91	0.12473	465643.41
3808461.91	0.12432		
465663.41	3808461.91	0.12364	465683.41
3808461.91	0.12272		
465703.41	3808461.91	0.12120	465343.41
3808481.91	0.15600		
465363.41	3808481.91	0.15333	465383.41
3808481.91	0.15053		
465403.41	3808481.91	0.14743	465423.41
3808481.91	0.14534		
465443.41	3808481.91	0.14329	465463.41
3808481.91	0.14130		
465483.41	3808481.91	0.13935	465503.41
3808481.91	0.13661		
465523.41	3808481.91	0.13416	465543.41
3808481.91	0.13236		
465563.41	3808481.91	0.13060	465583.41
3808481.91	0.12887		
465603.41	3808481.91	0.12719	465623.41
3808481.91	0.12608		
465643.41	3808481.91	0.12565	465663.41
3808481.91	0.12495		
465683.41	3808481.91	0.12401	465703.41
3808481.91	0.12276		
465463.41	3808501.91	0.14332	465483.41

3808501.91	0.14186		
465503.41	3808501.91	0.13941	465523.41
3808501.91	0.13629		
465543.41	3808501.91	0.13445	465563.41
3808501.91	0.13251		
465583.41	3808501.91	0.13033	465603.41
3808501.91	0.12911		
465623.41	3808501.91	0.12790	465643.41
3808501.91	0.12700		
465663.41	3808501.91	0.12627	465683.41
3808501.91	0.12531		
465703.41	3808501.91	0.12405	465523.41
3808521.91	0.13910		
465543.41	3808521.91	0.13721	465563.41
3808521.91	0.13454		
465583.41	3808521.91	0.13219	465603.41
3808521.91	0.13132		
465623.41	3808521.91	0.13003	465643.41
3808521.91	0.12872		
465663.41	3808521.91	0.12790	465683.41
3808521.91	0.12693		
465703.41	3808521.91	0.12541	464239.31
3809562.31	0.66432		
464277.31	3809562.31	0.63195	463745.31
3809591.37	1.41364		
463783.31	3809591.37	1.31785	463821.31
3809591.37	1.23200		
463859.31	3809591.37	1.15916	463897.31
3809591.37	1.09813		
463935.31	3809591.37	1.03470	464239.31
3809591.37	0.65379		
464277.31	3809591.37	0.62232	463745.31
3809620.43	1.34962		
463783.31	3809620.43	1.26434	463821.31
3809620.43	1.18952		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 237

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373

, L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463859.31	3809620.43	1.12029	463897.31
3809620.43	1.05920		
463935.31	3809620.43	1.00518	463973.31
3809620.43	0.94791		
464011.31	3809620.43	0.89346	464049.31
3809620.43	0.84150		
464087.31	3809620.43	0.79281	464125.31
3809620.43	0.74997		
464163.31	3809620.43	0.71065	464201.31
3809620.43	0.67433		
464239.31	3809620.43	0.64240	464277.31
3809620.43	0.61204		
463745.31	3809649.49	1.28363	463783.31
3809649.49	1.21287		
463821.31	3809649.49	1.14358	463859.31
3809649.49	1.08020		
463897.31	3809649.49	1.02216	463935.31
3809649.49	0.96952		
463973.31	3809649.49	0.91500	464011.31
3809649.49	0.86648		
464049.31	3809649.49	0.82006	464087.31
3809649.49	0.77334		
464125.31	3809649.49	0.73396	464163.31
3809649.49	0.69580		
464201.31	3809649.49	0.66198	464239.31
3809649.49	0.63090		
464277.31	3809649.49	0.60146	464315.31
3809649.49	0.57399		
464353.31	3809649.49	0.54926	464391.31
3809649.49	0.52615		
464429.31	3809649.49	0.50416	464467.31
3809649.49	0.48387		
464505.31	3809649.49	0.46475	463745.31
3809678.55	1.21445		
463783.31	3809678.55	1.15409	463821.31
3809678.55	1.09758		

463859.31	3809678.55	1.03784	463897.31
3809678.55	0.98537		
463935.31	3809678.55	0.93596	463973.31
3809678.55	0.88544		
464011.31	3809678.55	0.83805	464049.31
3809678.55	0.79696		
464087.31	3809678.55	0.75480	464125.31
3809678.55	0.71682		
464163.31	3809678.55	0.68143	464201.31
3809678.55	0.64943		
464239.31	3809678.55	0.61867	464277.31
3809678.55	0.59037		
464315.31	3809678.55	0.56417	464353.31
3809678.55	0.54042		
464391.31	3809678.55	0.51792	464429.31
3809678.55	0.49644		
464467.31	3809678.55	0.47698	464505.31
3809678.55	0.45788		
463745.31	3809707.61	1.15151	463783.31
3809707.61	1.09693		
463821.31	3809707.61	1.04698	463859.31
3809707.61	0.99693		
463897.31	3809707.61	0.94793	463935.31
3809707.61	0.90338		
463973.31	3809707.61	0.85788	464011.31
3809707.61	0.81391		
464049.31	3809707.61	0.77444	464087.31
3809707.61	0.73608		
464125.31	3809707.61	0.70031	464163.31
3809707.61	0.66716		
464201.31	3809707.61	0.63549	464239.31
3809707.61	0.60641		
464277.31	3809707.61	0.57910	464315.31
3809707.61	0.55442		
464353.31	3809707.61	0.53055	464391.31
3809707.61	0.50905		
464429.31	3809707.61	0.48824	464467.31
3809707.61	0.46922		
464505.31	3809707.61	0.45131	463745.31
3809736.67	1.09682		
463783.31	3809736.67	1.04248	463821.31
3809736.67	0.99400		
463859.31	3809736.67	0.95163	463897.31
3809736.67	0.90983		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463935.31	3809736.67	0.86807	463973.31
3809736.67	0.82959		
464011.31	3809736.67	0.79101	464049.31
3809736.67	0.75292		
464087.31	3809736.67	0.71788	464125.31
3809736.67	0.68409		
464163.31	3809736.67	0.65268	464201.31
3809736.67	0.62195		
464239.31	3809736.67	0.59435	464277.31
3809736.67	0.56806		
464315.31	3809736.67	0.54365	464353.31
3809736.67	0.52106		
464391.31	3809736.67	0.50012	464429.31
3809736.67	0.48000		
464467.31	3809736.67	0.46178	464505.31
3809736.67	0.44462		
463745.31	3809765.73	1.04615	463783.31
3809765.73	0.99474		
463821.31	3809765.73	0.94801	463859.31
3809765.73	0.90813		
463897.31	3809765.73	0.87206	463935.31
3809765.73	0.83259		
463973.31	3809765.73	0.79598	464011.31
3809765.73	0.76609		
464049.31	3809765.73	0.73257	464087.31
3809765.73	0.69914		
464125.31	3809765.73	0.66791	464163.31

3809765.73	0.63800		
464201.31	3809765.73	0.60864	464239.31
3809765.73	0.58221		
464277.31	3809765.73	0.55698	464315.31
3809765.73	0.53315		
464353.31	3809765.73	0.51166	464391.31
3809765.73	0.49086		
464429.31	3809765.73	0.47199	464467.31
3809765.73	0.45450		
464505.31	3809765.73	0.43719	463745.31
3809794.79	0.99869		
463783.31	3809794.79	0.94753	463821.31
3809794.79	0.90439		
463859.31	3809794.79	0.86546	463897.31
3809794.79	0.83246		
463935.31	3809794.79	0.79681	463973.31
3809794.79	0.76359		
464011.31	3809794.79	0.73705	464049.31
3809794.79	0.71151		
464087.31	3809794.79	0.68054	464125.31
3809794.79	0.65065		
464163.31	3809794.79	0.62227	464201.31
3809794.79	0.59515		
464239.31	3809794.79	0.56932	464277.31
3809794.79	0.54525		
464315.31	3809794.79	0.52273	464353.31
3809794.79	0.50139		
464391.31	3809794.79	0.48188	464429.31
3809794.79	0.46396		
464467.31	3809794.79	0.44638	464505.31
3809794.79	0.42999		
463745.31	3809823.85	0.95425	463783.31
3809823.85	0.90360		
463821.31	3809823.85	0.85884	463859.31
3809823.85	0.82430		
463897.31	3809823.85	0.79271	463935.31
3809823.85	0.76067		
463973.31	3809823.85	0.73183	464011.31
3809823.85	0.70687		
464049.31	3809823.85	0.68582	464087.31
3809823.85	0.66096		
464125.31	3809823.85	0.63383	464163.31
3809823.85	0.60692		
464201.31	3809823.85	0.58079	464239.31
3809823.85	0.55660		
464277.31	3809823.85	0.53363	464315.31
3809823.85	0.51157		
464353.31	3809823.85	0.49139	464391.31
3809823.85	0.47277		
464429.31	3809823.85	0.45506	464467.31

3809823.85 0.43837
464505.31 3809823.85 0.42230 463745.31
3809852.91 0.91507

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 239

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	0.86721	463821.31
3809852.91	0.82019		
463859.31	3809852.91	0.78658	463897.31
3809852.91	0.75475		
463935.31	3809852.91	0.72577	463973.31
3809852.91	0.70054		
464011.31	3809852.91	0.67730	464049.31
3809852.91	0.65832		
464087.31	3809852.91	0.63752	464125.31
3809852.91	0.61437		
464163.31	3809852.91	0.58950	464201.31
3809852.91	0.56497		
464239.31	3809852.91	0.54259	464277.31
3809852.91	0.52115		
464315.31	3809852.91	0.50054	464353.31
3809852.91	0.48100		
464391.31	3809852.91	0.46324	464429.31
3809852.91	0.44633		

464467.31	3809852.91	0.43008	464505.31
3809852.91	0.41477		
463745.31	3809881.97	0.88004	463783.31
3809881.97	0.83263		
463821.31	3809881.97	0.78815	463859.31
3809881.97	0.75312		
463897.31	3809881.97	0.72068	463935.31
3809881.97	0.69227		
463973.31	3809881.97	0.67088	464011.31
3809881.97	0.65008		
464049.31	3809881.97	0.63194	464087.31
3809881.97	0.61260		
464125.31	3809881.97	0.59236	464163.31
3809881.97	0.56970		
464201.31	3809881.97	0.54834	464239.31
3809881.97	0.52722		
464277.31	3809881.97	0.50777	464315.31
3809881.97	0.48925		
464353.31	3809881.97	0.47078	464391.31
3809881.97	0.45397		
464429.31	3809881.97	0.43765	464467.31
3809881.97	0.42188		
464505.31	3809881.97	0.40754	463745.31
3809911.03	0.84503		
463783.31	3809911.03	0.79840	463821.31
3809911.03	0.75864		
463859.31	3809911.03	0.72335	463897.31
3809911.03	0.69186		
463935.31	3809911.03	0.66347	463973.31
3809911.03	0.64244		
464011.31	3809911.03	0.62349	464049.31
3809911.03	0.60742		
464087.31	3809911.03	0.58977	464125.31
3809911.03	0.57118		
464163.31	3809911.03	0.55149	464201.31
3809911.03	0.53264		
464239.31	3809911.03	0.51295	464277.31
3809911.03	0.49509		
464315.31	3809911.03	0.47747	464353.31
3809911.03	0.46049		
464391.31	3809911.03	0.44440	464429.31
3809911.03	0.42877		
464467.31	3809911.03	0.41413	464505.31
3809911.03	0.39979		
463745.31	3809940.09	0.81084	463783.31
3809940.09	0.76634		
463821.31	3809940.09	0.73006	463859.31
3809940.09	0.69572		
463897.31	3809940.09	0.66621	463935.31
3809940.09	0.63934		

463973.31	3809940.09	0.61769	464011.31
3809940.09	0.59736		
464049.31	3809940.09	0.58225	464087.31
3809940.09	0.56641		
464125.31	3809940.09	0.55018	464163.31
3809940.09	0.53423		
464201.31	3809940.09	0.51800	464239.31
3809940.09	0.50017		
464277.31	3809940.09	0.48281	464315.31
3809940.09	0.46634		
464353.31	3809940.09	0.45024	464391.31
3809940.09	0.43486		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 240

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464429.31	3809940.09	0.42027	464467.31
3809940.09	0.40591		
464505.31	3809940.09	0.39214	463745.31
3809969.15	0.78647		
463783.31	3809969.15	0.73928	463821.31
3809969.15	0.70263		
463859.31	3809969.15	0.67025	463897.31
3809969.15	0.64191		
463935.31	3809969.15	0.61665	463973.31

3809969.15	0.59577		
464011.31	3809969.15	0.57474	464049.31
3809969.15	0.55773		
464087.31	3809969.15	0.54374	464125.31
3809969.15	0.53056		
464163.31	3809969.15	0.51663	464201.31
3809969.15	0.50283		
464239.31	3809969.15	0.48763	464277.31
3809969.15	0.47104		
464315.31	3809969.15	0.45549	464353.31
3809969.15	0.44074		
464391.31	3809969.15	0.42601	464429.31
3809969.15	0.41168		
464467.31	3809969.15	0.39761	464505.31
3809969.15	0.38487		
463745.31	3809998.21	0.77185	463783.31
3809998.21	0.71959		
463821.31	3809998.21	0.68038	463859.31
3809998.21	0.64778		
463897.31	3809998.21	0.62028	463935.31
3809998.21	0.59512		
463973.31	3809998.21	0.57472	464011.31
3809998.21	0.55521		
464049.31	3809998.21	0.53826	464087.31
3809998.21	0.52423		
464125.31	3809998.21	0.51286	464163.31
3809998.21	0.50043		
464201.31	3809998.21	0.48768	464239.31
3809998.21	0.47406		
464277.31	3809998.21	0.45972	464315.31
3809998.21	0.44475		
464353.31	3809998.21	0.43079	464391.31
3809998.21	0.41672		
464429.31	3809998.21	0.40287	464467.31
3809998.21	0.38990		
464505.31	3809998.21	0.37723	463745.31
3810027.27	0.75780		
463783.31	3810027.27	0.70470	463821.31
3810027.27	0.66277		
463859.31	3810027.27	0.62898	463897.31
3810027.27	0.60164		
463935.31	3810027.27	0.57563	463973.31
3810027.27	0.55592		
464011.31	3810027.27	0.53730	464049.31
3810027.27	0.52104		
464087.31	3810027.27	0.50622	464125.31
3810027.27	0.49467		
464163.31	3810027.27	0.48452	464201.31
3810027.27	0.47317		
464239.31	3810027.27	0.46016	464277.31

3810027.27	0.44748		
464315.31	3810027.27	0.43423	464353.31
3810027.27	0.42074		
464391.31	3810027.27	0.40731	464429.31
3810027.27	0.39450		
464467.31	3810027.27	0.38191	464505.31
3810027.27	0.36949		
463745.31	3810056.33	0.74452	463783.31
3810056.33	0.69110		
463821.31	3810056.33	0.64635	463859.31
3810056.33	0.61240		
463897.31	3810056.33	0.58407	463935.31
3810056.33	0.55872		
463973.31	3810056.33	0.53887	464011.31
3810056.33	0.52042		
464049.31	3810056.33	0.50374	464087.31
3810056.33	0.48962		
464125.31	3810056.33	0.47728	464163.31
3810056.33	0.46806		
464201.31	3810056.33	0.45800	464239.31
3810056.33	0.44699		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 241

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

464277.31	3810056.33	0.43487	464315.31
3810056.33	0.42302		
464353.31	3810056.33	0.41121	464391.31
3810056.33	0.39874		
464429.31	3810056.33	0.38621	464467.31
3810056.33	0.37370		
464505.31	3810056.33	0.36200	463745.31
3810085.39	0.73046		
463783.31	3810085.39	0.67804	463821.31
3810085.39	0.63240		
463859.31	3810085.39	0.59701	463897.31
3810085.39	0.56822		
463935.31	3810085.39	0.54366	463973.31
3810085.39	0.52321		
464011.31	3810085.39	0.50416	464049.31
3810085.39	0.48655		
464087.31	3810085.39	0.47339	464125.31
3810085.39	0.46162		
464163.31	3810085.39	0.45196	464201.31
3810085.39	0.44267		
464239.31	3810085.39	0.43325	464277.31
3810085.39	0.42263		
464315.31	3810085.39	0.41171	464353.31
3810085.39	0.40066		
464391.31	3810085.39	0.38932	464429.31
3810085.39	0.37731		
464467.31	3810085.39	0.36553	464505.31
3810085.39	0.35409		
463745.31	3810114.45	0.71249	463783.31
3810114.45	0.66705		
463821.31	3810114.45	0.62101	463859.31
3810114.45	0.58624		
463897.31	3810114.45	0.55520	463935.31
3810114.45	0.53002		
463973.31	3810114.45	0.50834	464011.31
3810114.45	0.48941		
464049.31	3810114.45	0.47170	464087.31
3810114.45	0.45819		
464125.31	3810114.45	0.44598	464163.31
3810114.45	0.43590		
464201.31	3810114.45	0.42712	464239.31
3810114.45	0.41975		
464277.31	3810114.45	0.41058	464315.31
3810114.45	0.39978		
464353.31	3810114.45	0.38892	464391.31
3810114.45	0.37802		
464429.31	3810114.45	0.36768	464467.31
3810114.45	0.35639		
464505.31	3810114.45	0.34621	463745.31
3810143.51	0.69146		

463783.31	3810143.51	0.65189	463821.31
3810143.51	0.61341		
463859.31	3810143.51	0.57768	463897.31
3810143.51	0.54285		
463935.31	3810143.51	0.51592	463973.31
3810143.51	0.49289		
464011.31	3810143.51	0.47564	464049.31
3810143.51	0.45814		
464087.31	3810143.51	0.44316	464125.31
3810143.51	0.43134		
464163.31	3810143.51	0.42159	464201.31
3810143.51	0.41287		
464239.31	3810143.51	0.40534	464277.31
3810143.51	0.39844		
464315.31	3810143.51	0.38846	464353.31
3810143.51	0.37729		
464391.31	3810143.51	0.36751	464429.31
3810143.51	0.35757		
464467.31	3810143.51	0.34803	464505.31
3810143.51	0.33853		
464383.78	3807479.29	0.07217	464355.03
3807405.24	0.07051		
464402.07	3807352.10	0.06353	464367.23
3807296.35	0.06466		
464358.52	3807237.99	0.06172	464385.52
3807161.33	0.05932		
463132.27	3810926.37	0.47363	463237.82
3811199.31	0.36456		
464944.35	3809244.89	0.31912	465700.32
3809255.46	0.17207		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 242

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465716.18	3808536.49	0.12612	465544.37
3808533.85	0.13884		
465420.13	3808486.27	0.14645	465348.77
3808491.56	0.15707		
465317.05	3808443.98	0.15313	465327.62
3808406.97	0.14602		
465108.23	3808369.97	0.16185	464999.86
3808301.24	0.16776		
464722.31	3807973.48	0.14913	464717.03
3807836.03	0.12104		
464344.33	3807936.47	0.15240	464349.61
3807780.52	0.16992		
464386.62	3807785.81	0.16616	464521.43
3807859.82	0.16467		
464537.28	3807719.72	0.10973	464426.27
3807613.99	0.09503		
464368.43	3807532.62	0.08672	464324.60
3807121.91	0.06408		
464123.31	3807123.54	0.08484	463930.13
3806909.26	0.06336		
463831.11	3806906.01	0.06850	463821.36
3806720.95	0.05405		
463727.21	3806727.44	0.06039	463598.97
3806334.59	0.04846		
463001.06	3806361.54	0.04422	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 243

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746

, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

462160.55	3809377.75	0.09050	462051.48
3809270.62	0.07454		
462014.47	3809029.10	0.06114	462010.58
3808855.75	0.05273		
461936.56	3808886.92	0.05104	461936.56
3808997.94	0.05523		
461909.30	3808768.10	0.04535	461835.28
3808894.71	0.04761		
461845.02	3808995.99	0.05099	461833.33
3809114.80	0.05412		
461843.07	3809210.24	0.05676	461809.96
3809297.89	0.05751		
461856.71	3809385.54	0.06398	461841.13
3809482.92	0.06768		
462004.74	3809379.69	0.07516	461763.22
3808793.43	0.04150		
461753.48	3808699.93	0.03966	461835.28
3808686.30	0.04044		
461823.60	3808579.17	0.03646	461761.27
3808585.02	0.03515		
462301.19	3807807.15	0.02776	462304.78
3807868.16	0.02885		
462216.84	3807882.52	0.02714	462116.34
3807886.11	0.02549		
462114.55	3807789.20	0.02371	462012.25
3807887.90	0.02416		
462008.66	3807975.84	0.02594	461917.14
3807972.25	0.02492		
461922.52	3808187.60	0.02992	461908.17
3808288.10	0.03201		
461848.94	3808377.83	0.03309	461831.00
3808494.48	0.03505		
462421.43	3808393.98	0.04866	462459.11
3808501.66	0.05498		
462437.58	3808580.62	0.05811	462654.73
3809189.00	0.15290		

462559.49	3809194.32	0.13406	465763.86
3807935.19	0.03257		
465819.84	3807935.19	0.03371	465875.82
3807935.19	0.03408		
465931.80	3807935.19	0.03470	465987.78
3807935.19	0.03540		
466043.76	3807935.19	0.03577	466099.74
3807935.19	0.03638		
466155.72	3807935.19	0.03671	466211.70
3807935.19	0.03727		
466267.68	3807935.19	0.03768	466323.66
3807935.19	0.03858		
466379.64	3807935.19	0.03893	466435.62
3807935.19	0.03937		
466491.60	3807935.19	0.03961	466547.58
3807935.19	0.04045		
466603.56	3807935.19	0.04091	466659.54
3807935.19	0.04103		
466715.52	3807935.19	0.04144	466771.50
3807935.19	0.04166		
466827.48	3807935.19	0.04190	466883.46
3807935.19	0.04171		
465763.86	3808001.41	0.03533	465819.84
3808001.41	0.03562		
465875.82	3808001.41	0.03639	465931.80
3808001.41	0.03710		
465987.78	3808001.41	0.03707	466043.76
3808001.41	0.03799		
466099.74	3808001.41	0.03779	466155.72
3808001.41	0.03833		
466211.70	3808001.41	0.03871	466267.68
3808001.41	0.03885		
466323.66	3808001.41	0.03986	466379.64
3808001.41	0.04046		
466435.62	3808001.41	0.04075	466491.60
3808001.41	0.04100		
466547.58	3808001.41	0.04136	466603.56
3808001.41	0.04169		
466659.54	3808001.41	0.04222	466715.52
3808001.41	0.04273		
466771.50	3808001.41	0.04261	466827.48
3808001.41	0.04262		
466883.46	3808001.41	0.04253	465763.86
3808067.63	0.03727		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465819.84	3808067.63	0.03805	465875.82
3808067.63	0.03858		
465931.80	3808067.63	0.03888	465987.78
3808067.63	0.03934		
466043.76	3808067.63	0.03959	466099.74
3808067.63	0.04000		
466155.72	3808067.63	0.04035	466211.70
3808067.63	0.04105		
466267.68	3808067.63	0.04141	466323.66
3808067.63	0.04200		
466379.64	3808067.63	0.04227	466435.62
3808067.63	0.04194		
466491.60	3808067.63	0.04269	466547.58
3808067.63	0.04313		
466603.56	3808067.63	0.04368	466659.54
3808067.63	0.04364		
466715.52	3808067.63	0.04352	466771.50
3808067.63	0.04329		
466827.48	3808067.63	0.04361	466883.46
3808067.63	0.04362		
465763.86	3808133.85	0.03984	465819.84
3808133.85	0.04053		
465875.82	3808133.85	0.04072	465931.80
3808133.85	0.04128		
465987.78	3808133.85	0.04089	466043.76
3808133.85	0.04145		
466099.74	3808133.85	0.04196	466155.72

3808133.85	0.04269		
466211.70	3808133.85	0.04306	466267.68
3808133.85	0.04328		
466323.66	3808133.85	0.04350	466379.64
3808133.85	0.04365		
466435.62	3808133.85	0.04378	466491.60
3808133.85	0.04379		
466547.58	3808133.85	0.04419	466603.56
3808133.85	0.04459		
466659.54	3808133.85	0.04469	466715.52
3808133.85	0.04454		
466771.50	3808133.85	0.04477	466827.48
3808133.85	0.04441		
466883.46	3808133.85	0.04424	465763.86
3808200.07	0.04247		
465819.84	3808200.07	0.04309	465875.82
3808200.07	0.04322		
465931.80	3808200.07	0.04292	465987.78
3808200.07	0.04344		
466043.76	3808200.07	0.04381	466099.74
3808200.07	0.04460		
466155.72	3808200.07	0.04485	466211.70
3808200.07	0.04547		
466267.68	3808200.07	0.04534	466323.66
3808200.07	0.04512		
466379.64	3808200.07	0.04526	466435.62
3808200.07	0.04528		
466491.60	3808200.07	0.04564	466547.58
3808200.07	0.04605		
466603.56	3808200.07	0.04621	466659.54
3808200.07	0.04596		
466715.52	3808200.07	0.04561	466771.50
3808200.07	0.04572		
466827.48	3808200.07	0.04563	466883.46
3808200.07	0.04490		
465763.86	3808266.29	0.04579	465819.84
3808266.29	0.04536		
465875.82	3808266.29	0.04523	465931.80
3808266.29	0.04560		
465987.78	3808266.29	0.04592	466043.76
3808266.29	0.04658		
466099.74	3808266.29	0.04687	466155.72
3808266.29	0.04737		
466211.70	3808266.29	0.04743	466267.68
3808266.29	0.04709		
466323.66	3808266.29	0.04718	466379.64
3808266.29	0.04683		
466435.62	3808266.29	0.04668	466491.60
3808266.29	0.04769		
466547.58	3808266.29	0.04778	466603.56

3808266.29 0.04758
466659.54 3808266.29 0.04701 466715.52
3808266.29 0.04700

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 245

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.04663	466827.48
3808266.29	0.04639		
466883.46	3808266.29	0.04551	465763.86
3808332.51	0.04870		
465819.84	3808332.51	0.04775	465875.82
3808332.51	0.04805		
465931.80	3808332.51	0.04822	465987.78
3808332.51	0.04882		
466043.76	3808332.51	0.04907	466099.74
3808332.51	0.04942		
466155.72	3808332.51	0.04937	466211.70
3808332.51	0.04919		
466267.68	3808332.51	0.04933	466323.66
3808332.51	0.04865		
466379.64	3808332.51	0.04866	466435.62
3808332.51	0.04885		
466491.60	3808332.51	0.04914	466547.58
3808332.51	0.04913		

466603.56	3808332.51	0.04845	466659.54
3808332.51	0.04835		
466715.52	3808332.51	0.04799	466771.50
3808332.51	0.04795		
466827.48	3808332.51	0.04703	466883.46
3808332.51	0.04612		
465763.86	3808398.73	0.05182	465819.84
3808398.73	0.05083		
465875.82	3808398.73	0.05073	465931.80
3808398.73	0.05125		
465987.78	3808398.73	0.05143	466043.76
3808398.73	0.05174		
466099.74	3808398.73	0.05155	466155.72
3808398.73	0.05163		
466211.70	3808398.73	0.05158	466267.68
3808398.73	0.05069		
466323.66	3808398.73	0.05092	466379.64
3808398.73	0.05136		
466435.62	3808398.73	0.05067	466491.60
3808398.73	0.05062		
466547.58	3808398.73	0.05031	466603.56
3808398.73	0.05008		
466659.54	3808398.73	0.04967	466715.52
3808398.73	0.04942		
466771.50	3808398.73	0.04863	466827.48
3808398.73	0.04767		
466883.46	3808398.73	0.04673	465763.86
3808464.95	0.05505		
465819.84	3808464.95	0.05419	465875.82
3808464.95	0.05442		
465931.80	3808464.95	0.05477	465987.78
3808464.95	0.05422		
466043.76	3808464.95	0.05382	466099.74
3808464.95	0.05385		
466155.72	3808464.95	0.05383	466211.70
3808464.95	0.05401		
466267.68	3808464.95	0.05311	466323.66
3808464.95	0.05351		
466379.64	3808464.95	0.05274	466435.62
3808464.95	0.05265		
466491.60	3808464.95	0.05206	466547.58
3808464.95	0.05190		
466603.56	3808464.95	0.05145	466659.54
3808464.95	0.05089		
466715.52	3808464.95	0.05032	466771.50
3808464.95	0.04931		
466827.48	3808464.95	0.04832	466883.46
3808464.95	0.04736		
465763.86	3808531.17	0.05709	465819.84
3808531.17	0.05723		

465875.82	3808531.17	0.05762	465931.80
3808531.17	0.05762		
465987.78	3808531.17	0.05673	466043.76
3808531.17	0.05656		
466099.74	3808531.17	0.05616	466155.72
3808531.17	0.05630		
466211.70	3808531.17	0.05668	466267.68
3808531.17	0.05581		
466323.66	3808531.17	0.05545	466379.64
3808531.17	0.05481		
466435.62	3808531.17	0.05407	466491.60
3808531.17	0.05393		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 246

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466547.58	3808531.17	0.05335	466603.56
3808531.17	0.05300		
466659.54	3808531.17	0.05211	466715.52
3808531.17	0.05104		
466771.50	3808531.17	0.04999	466827.48
3808531.17	0.04897		
466883.46	3808531.17	0.04799	465763.86
3808597.39	0.06038		
465819.84	3808597.39	0.05987	465875.82

3808597.39	0.05987		
465931.80	3808597.39	0.06039	465987.78
3808597.39	0.05972		
466043.76	3808597.39	0.05878	466099.74
3808597.39	0.05885		
466155.72	3808597.39	0.05905	466211.70
3808597.39	0.05827		
466267.68	3808597.39	0.05809	466323.66
3808597.39	0.05726		
466379.64	3808597.39	0.05630	466435.62
3808597.39	0.05601		
466491.60	3808597.39	0.05535	466547.58
3808597.39	0.05446		
466603.56	3808597.39	0.05402	466659.54
3808597.39	0.05288		
466715.52	3808597.39	0.05177	466771.50
3808597.39	0.05069		
466827.48	3808597.39	0.04964	466883.46
3808597.39	0.04864		
465763.86	3808663.61	0.06378	465819.84
3808663.61	0.06272		
465875.82	3808663.61	0.06212	465931.80
3808663.61	0.06200		
465987.78	3808663.61	0.06163	466043.76
3808663.61	0.06161		
466099.74	3808663.61	0.06159	466155.72
3808663.61	0.06097		
466211.70	3808663.61	0.06082	466267.68
3808663.61	0.06009		
466323.66	3808663.61	0.05905	466379.64
3808663.61	0.05851		
466435.62	3808663.61	0.05749	466491.60
3808663.61	0.05669		
466547.58	3808663.61	0.05603	466603.56
3808663.61	0.05482		
466659.54	3808663.61	0.05364	466715.52
3808663.61	0.05250		
466771.50	3808663.61	0.05139	466827.48
3808663.61	0.05034		
466883.46	3808663.61	0.04929	465763.86
3808729.83	0.06597		
465819.84	3808729.83	0.06429	465875.82
3808729.83	0.06374		
465931.80	3808729.83	0.06390	465987.78
3808729.83	0.06405		
466043.76	3808729.83	0.06434	466099.74
3808729.83	0.06411		
466155.72	3808729.83	0.06352	466211.70
3808729.83	0.06323		
466267.68	3808729.83	0.06234	466323.66

3808729.83	0.06113		
466379.64	3808729.83	0.05998	466435.62
3808729.83	0.05942		
466491.60	3808729.83	0.05819	466547.58
3808729.83	0.05690		
466603.56	3808729.83	0.05564	466659.54
3808729.83	0.05447		
466715.52	3808729.83	0.05329	466771.50
3808729.83	0.05214		
466827.48	3808729.83	0.05105	466883.46
3808729.83	0.04997		
465763.86	3808796.05	0.06927	465819.84
3808796.05	0.06633		
465875.82	3808796.05	0.06668	465931.80
3808796.05	0.06617		
465987.78	3808796.05	0.06608	466043.76
3808796.05	0.06620		
466099.74	3808796.05	0.06584	466155.72
3808796.05	0.06506		
466211.70	3808796.05	0.06458	466267.68
3808796.05	0.06378		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 247

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

466323.66	3808796.05	0.06309	466379.64
3808796.05	0.06189		
466435.62	3808796.05	0.06049	466491.60
3808796.05	0.05912		
466547.58	3808796.05	0.05779	466603.56
3808796.05	0.05652		
466659.54	3808796.05	0.05527	466715.52
3808796.05	0.05407		
466771.50	3808796.05	0.05290	466827.48
3808796.05	0.05176		
466883.46	3808796.05	0.05068	465763.86
3808862.27	0.07430		
465819.84	3808862.27	0.07205	465875.82
3808862.27	0.07027		
465931.80	3808862.27	0.06949	465987.78
3808862.27	0.06934		
466043.76	3808862.27	0.06889	466099.74
3808862.27	0.06794		
466155.72	3808862.27	0.06753	466211.70
3808862.27	0.06662		
466267.68	3808862.27	0.06576	466323.66
3808862.27	0.06445		
466379.64	3808862.27	0.06295	466435.62
3808862.27	0.06150		
466491.60	3808862.27	0.06009	466547.58
3808862.27	0.05873		
466603.56	3808862.27	0.05740	466659.54
3808862.27	0.05614		
466715.52	3808862.27	0.05489	466771.50
3808862.27	0.05369		
466827.48	3808862.27	0.05253	466883.46
3808862.27	0.05141		
465763.86	3808928.49	0.08092	465819.84
3808928.49	0.07866		
465875.82	3808928.49	0.07598	465931.80
3808928.49	0.07396		
465987.78	3808928.49	0.07237	466043.76
3808928.49	0.07082		
466099.74	3808928.49	0.07046	466155.72
3808928.49	0.06939		
466211.70	3808928.49	0.06863	466267.68
3808928.49	0.06722		
466323.66	3808928.49	0.06559	466379.64
3808928.49	0.06402		
466435.62	3808928.49	0.06253	466491.60
3808928.49	0.06109		
466547.58	3808928.49	0.05968	466603.56
3808928.49	0.05834		
466659.54	3808928.49	0.05702	466715.52
3808928.49	0.05575		

466771.50	3808928.49	0.05451	466827.48
3808928.49	0.05333		
466883.46	3808928.49	0.05217	465763.86
3808994.71	0.08387		
465819.84	3808994.71	0.08253	465875.82
3808994.71	0.08027		
465931.80	3808994.71	0.07761	465987.78
3808994.71	0.07451		
466043.76	3808994.71	0.07325	466099.74
3808994.71	0.07248		
466155.72	3808994.71	0.07182	466211.70
3808994.71	0.07021		
466267.68	3808994.71	0.06847	466323.66
3808994.71	0.06680		
466379.64	3808994.71	0.06518	466435.62
3808994.71	0.06361		
466491.60	3808994.71	0.06213	466547.58
3808994.71	0.06071		
466603.56	3808994.71	0.05931	466659.54
3808994.71	0.05794		
466715.52	3808994.71	0.05667	466771.50
3808994.71	0.05539		
466827.48	3808994.71	0.05415	466883.46
3808994.71	0.05298		
465763.86	3809060.93	0.08590	465819.84
3809060.93	0.08404		
465875.82	3809060.93	0.08225	465931.80
3809060.93	0.08010		
465987.78	3809060.93	0.07804	466043.76
3809060.93	0.07606		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 248

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466099.74	3809060.93	0.07527	466155.72
3809060.93	0.07343		
466211.70	3809060.93	0.07156	466267.68
3809060.93	0.06977		
466323.66	3809060.93	0.06803	466379.64
3809060.93	0.06636		
466435.62	3809060.93	0.06478	466491.60
3809060.93	0.06325		
466547.58	3809060.93	0.06174	466603.56
3809060.93	0.06031		
466659.54	3809060.93	0.05895	466715.52
3809060.93	0.05759		
466771.50	3809060.93	0.05628	466827.48
3809060.93	0.05503		
466883.46	3809060.93	0.05383	465763.86
3809127.15	0.08657		
465819.84	3809127.15	0.08471	465875.82
3809127.15	0.08336		
465931.80	3809127.15	0.08144	465987.78
3809127.15	0.07995		
466043.76	3809127.15	0.07900	466099.74
3809127.15	0.07686		
466155.72	3809127.15	0.07484	466211.70
3809127.15	0.07300		
466267.68	3809127.15	0.07117	466323.66
3809127.15	0.06939		
466379.64	3809127.15	0.06765	466435.62
3809127.15	0.06599		
466491.60	3809127.15	0.06440	466547.58
3809127.15	0.06286		
466603.56	3809127.15	0.06140	466659.54
3809127.15	0.05995		
466715.52	3809127.15	0.05857	466771.50
3809127.15	0.05723		
466827.48	3809127.15	0.05593	466883.46
3809127.15	0.05471		
465763.86	3809193.37	0.08887	465819.84
3809193.37	0.08642		
465875.82	3809193.37	0.08451	465931.80
3809193.37	0.08329		
465987.78	3809193.37	0.08284	466043.76

3809193.37	0.08060		
466099.74	3809193.37	0.07847	466155.72
3809193.37	0.07638		
466211.70	3809193.37	0.07444	466267.68
3809193.37	0.07258		
466323.66	3809193.37	0.07076	466379.64
3809193.37	0.06900		
466435.62	3809193.37	0.06727	466491.60
3809193.37	0.06562		
466547.58	3809193.37	0.06403	466603.56
3809193.37	0.06253		
466659.54	3809193.37	0.06103	466715.52
3809193.37	0.05963		
466771.50	3809193.37	0.05824	466827.48
3809193.37	0.05692		
466883.46	3809193.37	0.05564	465763.86
3809259.59	0.09182		
465819.84	3809259.59	0.09015	465875.82
3809259.59	0.08805		
465931.80	3809259.59	0.08629	465987.78
3809259.59	0.08493		
466043.76	3809259.59	0.08248	466099.74
3809259.59	0.08015		
466155.72	3809259.59	0.07806	466211.70
3809259.59	0.07605		
466267.68	3809259.59	0.07412	466323.66
3809259.59	0.07219		
466379.64	3809259.59	0.07036	466435.62
3809259.59	0.06861		
466491.60	3809259.59	0.06689	466547.58
3809259.59	0.06528		
466603.56	3809259.59	0.06369	466659.54
3809259.59	0.06217		
466715.52	3809259.59	0.06074	466771.50
3809259.59	0.05931		
466827.48	3809259.59	0.05795	466883.46
3809259.59	0.05663		
464503.41	3807141.91	0.02838	464523.41
3807141.91	0.02873		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

PAGE 249

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730


```

, L0006731      , L0006732      , L0006733      ,
                  L0006734      , L0006735      , L0006736      , L0006737      , L0006738
, L0006739      , L0006740      , L0006741      ,
                  L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006747      , L0006748      , L0006749      ,
                  L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
464543.41	3807141.91	0.02890	464563.41
3807141.91	0.02901		
464583.41	3807141.91	0.02931	464603.41
3807141.91	0.02946		
464623.41	3807141.91	0.02955	464643.41
3807141.91	0.02974		
464663.41	3807141.91	0.02982	464683.41
3807141.91	0.02984		
464703.41	3807141.91	0.02997	464723.41
3807141.91	0.02994		
464743.41	3807141.91	0.02982	464763.41
3807141.91	0.02973		
464783.41	3807141.91	0.02958	464803.41
3807141.91	0.02942		
464823.41	3807141.91	0.02941	464843.41
3807141.91	0.02924		
464863.41	3807141.91	0.02899	464883.41
3807141.91	0.02876		
464903.41	3807141.91	0.02861	464923.41
3807141.91	0.02847		
464503.41	3807161.91	0.02868	464523.41
3807161.91	0.02903		
464543.41	3807161.91	0.02918	464563.41
3807161.91	0.02929		
464583.41	3807161.91	0.02958	464603.41
3807161.91	0.02984		
464623.41	3807161.91	0.03003	464643.41
3807161.91	0.03004		
464663.41	3807161.91	0.03016	464683.41
3807161.91	0.03028		
464703.41	3807161.91	0.03023	464723.41
3807161.91	0.03013		

464743.41	3807161.91	0.03003	464763.41
3807161.91	0.03009		
464783.41	3807161.91	0.02998	464803.41
3807161.91	0.02978		
464823.41	3807161.91	0.02959	464843.41
3807161.91	0.02934		
464863.41	3807161.91	0.02911	464883.41
3807161.91	0.02904		
464903.41	3807161.91	0.02883	464923.41
3807161.91	0.02856		
464503.41	3807181.91	0.02917	464523.41
3807181.91	0.02937		
464543.41	3807181.91	0.02957	464563.41
3807181.91	0.02975		
464583.41	3807181.91	0.02990	464603.41
3807181.91	0.03012		
464623.41	3807181.91	0.03032	464643.41
3807181.91	0.03029		
464663.41	3807181.91	0.03041	464683.41
3807181.91	0.03055		
464703.41	3807181.91	0.03044	464723.41
3807181.91	0.03041		
464743.41	3807181.91	0.03039	464763.41
3807181.91	0.03034		
464783.41	3807181.91	0.03018	464803.41
3807181.91	0.02998		
464823.41	3807181.91	0.02987	464843.41
3807181.91	0.02965		
464863.41	3807181.91	0.02939	464883.41
3807181.91	0.02920		
464903.41	3807181.91	0.02901	464923.41
3807181.91	0.02880		
464503.41	3807201.91	0.02963	464523.41
3807201.91	0.02970		
464543.41	3807201.91	0.02994	464563.41
3807201.91	0.03020		
464583.41	3807201.91	0.03027	464603.41
3807201.91	0.03042		
464623.41	3807201.91	0.03058	464643.41
3807201.91	0.03059		
464663.41	3807201.91	0.03068	464683.41
3807201.91	0.03077		
464703.41	3807201.91	0.03070	464723.41
3807201.91	0.03072		
464743.41	3807201.91	0.03073	464763.41
3807201.91	0.03054		
464783.41	3807201.91	0.03036	464803.41
3807201.91	0.03020		

▲ *** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 250

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.03015	464843.41
3807201.91	0.02998		
464863.41	3807201.91	0.02972	464883.41
3807201.91	0.02940		
464903.41	3807201.91	0.02920	464923.41
3807201.91	0.02903		
464503.41	3807221.91	0.02994	464523.41
3807221.91	0.03000		
464543.41	3807221.91	0.03022	464563.41
3807221.91	0.03051		
464583.41	3807221.91	0.03074	464603.41
3807221.91	0.03083		
464623.41	3807221.91	0.03086	464643.41
3807221.91	0.03103		
464663.41	3807221.91	0.03105	464683.41
3807221.91	0.03100		
464703.41	3807221.91	0.03110	464723.41
3807221.91	0.03105		
464743.41	3807221.91	0.03089	464763.41
3807221.91	0.03069		
464783.41	3807221.91	0.03061	464803.41
3807221.91	0.03056		
464823.41	3807221.91	0.03032	464843.41

3807221.91	0.03019		
464863.41	3807221.91	0.03007	464883.41
3807221.91	0.02973		
464903.41	3807221.91	0.02940	464923.41
3807221.91	0.02910		
464503.41	3807241.91	0.03027	464523.41
3807241.91	0.03046		
464543.41	3807241.91	0.03062	464563.41
3807241.91	0.03079		
464583.41	3807241.91	0.03105	464603.41
3807241.91	0.03111		
464623.41	3807241.91	0.03110	464643.41
3807241.91	0.03130		
464663.41	3807241.91	0.03139	464683.41
3807241.91	0.03140		
464703.41	3807241.91	0.03138	464723.41
3807241.91	0.03125		
464743.41	3807241.91	0.03108	464763.41
3807241.91	0.03100		
464783.41	3807241.91	0.03089	464803.41
3807241.91	0.03075		
464823.41	3807241.91	0.03060	464843.41
3807241.91	0.03043		
464863.41	3807241.91	0.03020	464883.41
3807241.91	0.02985		
464903.41	3807241.91	0.02958	464923.41
3807241.91	0.02934		
464503.41	3807261.91	0.03059	464523.41
3807261.91	0.03090		
464543.41	3807261.91	0.03101	464563.41
3807261.91	0.03106		
464583.41	3807261.91	0.03132	464603.41
3807261.91	0.03140		
464623.41	3807261.91	0.03142	464643.41
3807261.91	0.03154		
464663.41	3807261.91	0.03169	464683.41
3807261.91	0.03177		
464703.41	3807261.91	0.03161	464723.41
3807261.91	0.03146		
464743.41	3807261.91	0.03133	464763.41
3807261.91	0.03131		
464783.41	3807261.91	0.03116	464803.41
3807261.91	0.03096		
464823.41	3807261.91	0.03087	464843.41
3807261.91	0.03066		
464863.41	3807261.91	0.03036	464883.41
3807261.91	0.02999		
464903.41	3807261.91	0.02980	464923.41
3807261.91	0.02964		
464503.41	3807281.91	0.03089	464523.41

```

3807281.91      0.03120
      464543.41      3807281.91      0.03130      464563.41
3807281.91      0.03133
      464583.41      3807281.91      0.03158      464603.41
3807281.91      0.03177
      464623.41      3807281.91      0.03190      464643.41
3807281.91      0.03183
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 251

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***
      INCLUDING SOURCE(S):      L0006729      , L0006730
, L0006731      , L0006732      , L0006733      ,
      L0006734      , L0006735      , L0006736      , L0006737      , L0006738
, L0006739      , L0006740      , L0006741      ,
      L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006747      , L0006748      , L0006749      ,
      L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464663.41	3807281.91	0.03190	464683.41
3807281.91	0.03197		
464703.41	3807281.91	0.03179	464723.41
3807281.91	0.03175		
464743.41	3807281.91	0.03172	464763.41
3807281.91	0.03151		
464783.41	3807281.91	0.03141	464803.41
3807281.91	0.03132		
464823.41	3807281.91	0.03103	464843.41
3807281.91	0.03087		
464863.41	3807281.91	0.03071	464883.41
3807281.91	0.03033		
464903.41	3807281.91	0.03013	464923.41
3807281.91	0.02995		

464503.41	3807301.91	0.03139	464523.41
3807301.91	0.03154		
464543.41	3807301.91	0.03168	464563.41
3807301.91	0.03180		
464583.41	3807301.91	0.03188	464603.41
3807301.91	0.03204		
464623.41	3807301.91	0.03218	464643.41
3807301.91	0.03206		
464663.41	3807301.91	0.03210	464683.41
3807301.91	0.03216		
464703.41	3807301.91	0.03196	464723.41
3807301.91	0.03193		
464743.41	3807301.91	0.03195	464763.41
3807301.91	0.03183		
464783.41	3807301.91	0.03168	464803.41
3807301.91	0.03147		
464823.41	3807301.91	0.03114	464843.41
3807301.91	0.03097		
464863.41	3807301.91	0.03086	464883.41
3807301.91	0.03062		
464903.41	3807301.91	0.03036	464923.41
3807301.91	0.03004		
464503.41	3807321.91	0.03187	464523.41
3807321.91	0.03187		
464543.41	3807321.91	0.03205	464563.41
3807321.91	0.03224		
464583.41	3807321.91	0.03218	464603.41
3807321.91	0.03228		
464623.41	3807321.91	0.03241	464643.41
3807321.91	0.03227		
464663.41	3807321.91	0.03230	464683.41
3807321.91	0.03236		
464703.41	3807321.91	0.03220	464723.41
3807321.91	0.03214		
464743.41	3807321.91	0.03211	464763.41
3807321.91	0.03212		
464783.41	3807321.91	0.03190	464803.41
3807321.91	0.03158		
464823.41	3807321.91	0.03128	464843.41
3807321.91	0.03113		
464863.41	3807321.91	0.03102	464883.41
3807321.91	0.03085		
464903.41	3807321.91	0.03051	464923.41
3807321.91	0.03008		
464503.41	3807341.91	0.03217	464523.41
3807341.91	0.03216		
464543.41	3807341.91	0.03232	464563.41
3807341.91	0.03251		
464583.41	3807341.91	0.03243	464603.41
3807341.91	0.03252		

464623.41	3807341.91	0.03263	464643.41
3807341.91	0.03247		
464663.41	3807341.91	0.03249	464683.41
3807341.91	0.03257		
464703.41	3807341.91	0.03259	464723.41
3807341.91	0.03245		
464743.41	3807341.91	0.03225	464763.41
3807341.91	0.03224		
464783.41	3807341.91	0.03201	464803.41
3807341.91	0.03171		
464823.41	3807341.91	0.03160	464843.41
3807341.91	0.03149		
464863.41	3807341.91	0.03135	464883.41
3807341.91	0.03096		
464903.41	3807341.91	0.03054	464923.41
3807341.91	0.03013		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 252

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464503.41	3807361.91	0.03249	464523.41
3807361.91	0.03262		
464543.41	3807361.91	0.03272	464563.41
3807361.91	0.03277		
464583.41	3807361.91	0.03267	464603.41

3807361.91	0.03275		
464623.41	3807361.91	0.03287	464643.41
3807361.91	0.03286		
464663.41	3807361.91	0.03280	464683.41
3807361.91	0.03275		
464703.41	3807361.91	0.03280	464723.41
3807361.91	0.03273		
464743.41	3807361.91	0.03258	464763.41
3807361.91	0.03241		
464783.41	3807361.91	0.03222	464803.41
3807361.91	0.03204		
464823.41	3807361.91	0.03196	464843.41
3807361.91	0.03175		
464863.41	3807361.91	0.03145	464883.41
3807361.91	0.03101		
464903.41	3807361.91	0.03067	464923.41
3807361.91	0.03036		
464503.41	3807381.91	0.03289	464523.41
3807381.91	0.03309		
464543.41	3807381.91	0.03311	464563.41
3807381.91	0.03303		
464583.41	3807381.91	0.03298	464603.41
3807381.91	0.03302		
464623.41	3807381.91	0.03311	464643.41
3807381.91	0.03322		
464663.41	3807381.91	0.03314	464683.41
3807381.91	0.03299		
464703.41	3807381.91	0.03297	464723.41
3807381.91	0.03296		
464743.41	3807381.91	0.03291	464763.41
3807381.91	0.03263		
464783.41	3807381.91	0.03246	464803.41
3807381.91	0.03234		
464823.41	3807381.91	0.03225	464843.41
3807381.91	0.03193		
464863.41	3807381.91	0.03151	464883.41
3807381.91	0.03112		
464903.41	3807381.91	0.03084	464923.41
3807381.91	0.03058		
464503.41	3807401.91	0.03345	464523.41
3807401.91	0.03344		
464543.41	3807401.91	0.03337	464563.41
3807401.91	0.03332		
464583.41	3807401.91	0.03345	464603.41
3807401.91	0.03341		
464623.41	3807401.91	0.03331	464643.41
3807401.91	0.03341		
464663.41	3807401.91	0.03346	464683.41
3807401.91	0.03343		
464703.41	3807401.91	0.03318	464723.41

3807401.91	0.03310		
464743.41	3807401.91	0.03307	464763.41
3807401.91	0.03298		
464783.41	3807401.91	0.03272	464803.41
3807401.91	0.03241		
464823.41	3807401.91	0.03232	464843.41
3807401.91	0.03199		
464863.41	3807401.91	0.03158	464883.41
3807401.91	0.03140		
464903.41	3807401.91	0.03104	464923.41
3807401.91	0.03063		
464503.41	3807421.91	0.03380	464523.41
3807421.91	0.03373		
464543.41	3807421.91	0.03375	464563.41
3807421.91	0.03378		
464583.41	3807421.91	0.03379	464603.41
3807421.91	0.03377		
464623.41	3807421.91	0.03373	464643.41
3807421.91	0.03365		
464663.41	3807421.91	0.03366	464683.41
3807421.91	0.03367		
464703.41	3807421.91	0.03353	464723.41
3807421.91	0.03336		
464743.41	3807421.91	0.03318	464763.41
3807421.91	0.03313		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 253

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464783.41	3807421.91	0.03296	464803.41
3807421.91	0.03271		
464823.41	3807421.91	0.03243	464843.41
3807421.91	0.03215		
464863.41	3807421.91	0.03185	464883.41
3807421.91	0.03153		
464903.41	3807421.91	0.03120	464923.41
3807421.91	0.03087		
464503.41	3807441.91	0.03410	464523.41
3807441.91	0.03407		
464543.41	3807441.91	0.03416	464563.41
3807441.91	0.03423		
464583.41	3807441.91	0.03413	464603.41
3807441.91	0.03413		
464623.41	3807441.91	0.03413	464643.41
3807441.91	0.03395		
464663.41	3807441.91	0.03388	464683.41
3807441.91	0.03384		
464703.41	3807441.91	0.03384	464723.41
3807441.91	0.03365		
464743.41	3807441.91	0.03338	464763.41
3807441.91	0.03324		
464783.41	3807441.91	0.03314	464803.41
3807441.91	0.03298		
464823.41	3807441.91	0.03254	464843.41
3807441.91	0.03230		
464863.41	3807441.91	0.03209	464883.41
3807441.91	0.03160		
464903.41	3807441.91	0.03132	464923.41
3807441.91	0.03108		
464503.41	3807461.91	0.03443	464523.41
3807461.91	0.03460		
464543.41	3807461.91	0.03459	464563.41
3807461.91	0.03451		
464583.41	3807461.91	0.03461	464603.41
3807461.91	0.03452		
464623.41	3807461.91	0.03436	464643.41
3807461.91	0.03438		
464663.41	3807461.91	0.03421	464683.41
3807461.91	0.03399		
464703.41	3807461.91	0.03397	464723.41
3807461.91	0.03391		
464743.41	3807461.91	0.03377	464763.41
3807461.91	0.03340		
464783.41	3807461.91	0.03322	464803.41
3807461.91	0.03305		

464823.41	3807461.91	0.03258	464843.41
3807461.91	0.03233		
464863.41	3807461.91	0.03212	464883.41
3807461.91	0.03161		
464903.41	3807461.91	0.03132	464923.41
3807461.91	0.03107		
464503.41	3807481.91	0.03471	464523.41
3807481.91	0.03491		
464543.41	3807481.91	0.03499	464563.41
3807481.91	0.03498		
464583.41	3807481.91	0.03494	464603.41
3807481.91	0.03487		
464623.41	3807481.91	0.03478	464643.41
3807481.91	0.03466		
464663.41	3807481.91	0.03452	464683.41
3807481.91	0.03435		
464703.41	3807481.91	0.03416	464723.41
3807481.91	0.03405		
464743.41	3807481.91	0.03392	464763.41
3807481.91	0.03350		
464783.41	3807481.91	0.03328	464803.41
3807481.91	0.03310		
464823.41	3807481.91	0.03263	464843.41
3807481.91	0.03236		
464863.41	3807481.91	0.03217	464883.41
3807481.91	0.03183		
464903.41	3807481.91	0.03147	464923.41
3807481.91	0.03110		
464503.41	3807501.91	0.03509	464523.41
3807501.91	0.03528		
464543.41	3807501.91	0.03540	464563.41
3807501.91	0.03543		
464583.41	3807501.91	0.03527	464603.41
3807501.91	0.03523		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 254

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,

L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464623.41	3807501.91	0.03519	464643.41
3807501.91	0.03495		
464663.41	3807501.91	0.03483	464683.41
3807501.91	0.03471		
464703.41	3807501.91	0.03440	464723.41
3807501.91	0.03421		
464743.41	3807501.91	0.03402	464763.41
3807501.91	0.03365		
464783.41	3807501.91	0.03340	464803.41
3807501.91	0.03316		
464823.41	3807501.91	0.03274	464843.41
3807501.91	0.03244		
464863.41	3807501.91	0.03221	464883.41
3807501.91	0.03203		
464903.41	3807501.91	0.03160	464923.41
3807501.91	0.03111		
464503.41	3807521.91	0.03569	464523.41
3807521.91	0.03587		
464543.41	3807521.91	0.03583	464563.41
3807521.91	0.03570		
464583.41	3807521.91	0.03575	464603.41
3807521.91	0.03561		
464623.41	3807521.91	0.03540	464643.41
3807521.91	0.03538		
464663.41	3807521.91	0.03516	464683.41
3807521.91	0.03488		
464703.41	3807521.91	0.03478	464723.41
3807521.91	0.03449		
464743.41	3807521.91	0.03415	464763.41
3807521.91	0.03399		
464783.41	3807521.91	0.03365	464803.41
3807521.91	0.03325		
464823.41	3807521.91	0.03305	464843.41
3807521.91	0.03266		
464863.41	3807521.91	0.03222	464883.41
3807521.91	0.03203		
464903.41	3807521.91	0.03160	464923.41

3807521.91	0.03109		
464503.41	3807541.91	0.03627	464523.41
3807541.91	0.03626		
464543.41	3807541.91	0.03623	464563.41
3807541.91	0.03617		
464583.41	3807541.91	0.03607	464603.41
3807541.91	0.03596		
464623.41	3807541.91	0.03582	464643.41
3807541.91	0.03565		
464663.41	3807541.91	0.03546	464683.41
3807541.91	0.03525		
464703.41	3807541.91	0.03500	464723.41
3807541.91	0.03475		
464743.41	3807541.91	0.03448	464763.41
3807541.91	0.03417		
464783.41	3807541.91	0.03374	464803.41
3807541.91	0.03329		
464823.41	3807541.91	0.03313	464843.41
3807541.91	0.03284		
464863.41	3807541.91	0.03248	464883.41
3807541.91	0.03210		
464903.41	3807541.91	0.03172	464923.41
3807541.91	0.03133		
464503.41	3807561.91	0.03677	464523.41
3807561.91	0.03664		
464543.41	3807561.91	0.03663	464563.41
3807561.91	0.03662		
464583.41	3807561.91	0.03640	464603.41
3807561.91	0.03631		
464623.41	3807561.91	0.03622	464643.41
3807561.91	0.03593		
464663.41	3807561.91	0.03576	464683.41
3807561.91	0.03560		
464703.41	3807561.91	0.03524	464723.41
3807561.91	0.03501		
464743.41	3807561.91	0.03477	464763.41
3807561.91	0.03429		
464783.41	3807561.91	0.03383	464803.41
3807561.91	0.03342		
464823.41	3807561.91	0.03317	464843.41
3807561.91	0.03297		
464863.41	3807561.91	0.03271	464883.41
3807561.91	0.03215		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***
INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464903.41	3807561.91	0.03182	464923.41
3807561.91	0.03156		
464503.41	3807581.91	0.03708	464523.41
3807581.91	0.03717		
464543.41	3807581.91	0.03706	464563.41
3807581.91	0.03687		
464583.41	3807581.91	0.03688	464603.41
3807581.91	0.03669		
464623.41	3807581.91	0.03642	464643.41
3807581.91	0.03636		
464663.41	3807581.91	0.03609	464683.41
3807581.91	0.03576		
464703.41	3807581.91	0.03562	464723.41
3807581.91	0.03529		
464743.41	3807581.91	0.03484	464763.41
3807581.91	0.03434		
464783.41	3807581.91	0.03403	464803.41
3807581.91	0.03377		
464823.41	3807581.91	0.03327	464843.41
3807581.91	0.03298		
464863.41	3807581.91	0.03271	464883.41
3807581.91	0.03213		
464903.41	3807581.91	0.03180	464923.41
3807581.91	0.03158		
464503.41	3807601.91	0.03764	464523.41
3807601.91	0.03776		
464543.41	3807601.91	0.03761	464563.41
3807601.91	0.03734		

464583.41	3807601.91	0.03719	464603.41
3807601.91	0.03703		
464623.41	3807601.91	0.03684	464643.41
3807601.91	0.03662		
464663.41	3807601.91	0.03638	464683.41
3807601.91	0.03613		
464703.41	3807601.91	0.03584	464723.41
3807601.91	0.03541		
464743.41	3807601.91	0.03494	464763.41
3807601.91	0.03461		
464783.41	3807601.91	0.03426	464803.41
3807601.91	0.03389		
464823.41	3807601.91	0.03353	464843.41
3807601.91	0.03314		
464863.41	3807601.91	0.03274	464883.41
3807601.91	0.03235		
464903.41	3807601.91	0.03195	464923.41
3807601.91	0.03156		
464503.41	3807621.91	0.03825	464523.41
3807621.91	0.03828		
464543.41	3807621.91	0.03810	464563.41
3807621.91	0.03779		
464583.41	3807621.91	0.03752	464603.41
3807621.91	0.03738		
464623.41	3807621.91	0.03724	464643.41
3807621.91	0.03689		
464663.41	3807621.91	0.03668	464683.41
3807621.91	0.03647		
464703.41	3807621.91	0.03598	464723.41
3807621.91	0.03553		
464743.41	3807621.91	0.03512	464763.41
3807621.91	0.03489		
464783.41	3807621.91	0.03449	464803.41
3807621.91	0.03405		
464823.41	3807621.91	0.03378	464843.41
3807621.91	0.03335		
464863.41	3807621.91	0.03287	464883.41
3807621.91	0.03258		
464903.41	3807621.91	0.03213	464923.41
3807621.91	0.03164		
464503.41	3807641.91	0.03884	464523.41
3807641.91	0.03861		
464543.41	3807641.91	0.03832	464563.41
3807641.91	0.03803		
464583.41	3807641.91	0.03800	464603.41
3807641.91	0.03775		
464623.41	3807641.91	0.03743	464643.41
3807641.91	0.03732		
464663.41	3807641.91	0.03701	464683.41
3807641.91	0.03656		

464703.41 3807641.91 0.03606 464723.41
 3807641.91 0.03577
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 256

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464743.41	3807641.91	0.03552	464763.41
3807641.91	0.03502		
464783.41	3807641.91	0.03470	464803.41
3807641.91	0.03441		
464823.41	3807641.91	0.03387	464843.41
3807641.91	0.03352		
464863.41	3807641.91	0.03321	464883.41
3807641.91	0.03265		
464903.41	3807641.91	0.03229	464923.41
3807641.91	0.03196		
464503.41	3807661.91	0.03947	464523.41
3807661.91	0.03917		
464543.41	3807661.91	0.03883	464563.41
3807661.91	0.03850		
464583.41	3807661.91	0.03830	464603.41
3807661.91	0.03809		
464623.41	3807661.91	0.03785	464643.41
3807661.91	0.03758		
464663.41	3807661.91	0.03730	464683.41

3807661.91	0.03697		
464703.41	3807661.91	0.03645	464723.41
3807661.91	0.03603		
464743.41	3807661.91	0.03567	464763.41
3807661.91	0.03531		
464783.41	3807661.91	0.03493	464803.41
3807661.91	0.03453		
464823.41	3807661.91	0.03414	464843.41
3807661.91	0.03373		
464863.41	3807661.91	0.03331	464883.41
3807661.91	0.03290		
464903.41	3807661.91	0.03248	464923.41
3807661.91	0.03205		
464503.41	3807681.91	0.04012	464523.41
3807681.91	0.03979		
464543.41	3807681.91	0.03944	464563.41
3807681.91	0.03905		
464583.41	3807681.91	0.03865	464603.41
3807681.91	0.03843		
464623.41	3807681.91	0.03825	464643.41
3807681.91	0.03784		
464663.41	3807681.91	0.03759	464683.41
3807681.91	0.03735		
464703.41	3807681.91	0.03689	464723.41
3807681.91	0.03637		
464743.41	3807681.91	0.03586	464763.41
3807681.91	0.03560		
464783.41	3807681.91	0.03517	464803.41
3807681.91	0.03469		
464823.41	3807681.91	0.03440	464843.41
3807681.91	0.03394		
464863.41	3807681.91	0.03344	464883.41
3807681.91	0.03314		
464903.41	3807681.91	0.03268	464923.41
3807681.91	0.03217		
464523.41	3807701.91	0.04042	464543.41
3807701.91	0.04004		
464563.41	3807701.91	0.03964	464583.41
3807701.91	0.03921		
464603.41	3807701.91	0.03880	464623.41
3807701.91	0.03843		
464643.41	3807701.91	0.03828	464663.41
3807701.91	0.03792		
464683.41	3807701.91	0.03748	464703.41
3807701.91	0.03729		
464723.41	3807701.91	0.03683	464743.41
3807701.91	0.03626		
464763.41	3807701.91	0.03572	464783.41
3807701.91	0.03537		
464803.41	3807701.91	0.03506	464823.41

3807701.91	0.03450		
464843.41	3807701.91	0.03413	464863.41
3807701.91	0.03380		
464883.41	3807701.91	0.03322	464903.41
3807701.91	0.03285		
464923.41	3807701.91	0.03252	464543.41
3807721.91	0.04051		
464563.41	3807721.91	0.03991	464583.41
3807721.91	0.03946		
464603.41	3807721.91	0.03898	464623.41
3807721.91	0.03856		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 257

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464643.41	3807721.91	0.03845	464663.41
3807721.91	0.03821		
464683.41	3807721.91	0.03786	464703.41
3807721.91	0.03750		
464723.41	3807721.91	0.03697	464743.41
3807721.91	0.03641		
464763.41	3807721.91	0.03603	464783.41
3807721.91	0.03562		
464803.41	3807721.91	0.03519	464823.41
3807721.91	0.03478		

464843.41	3807721.91	0.03435	464863.41
3807721.91	0.03391		
464883.41	3807721.91	0.03349	464903.41
3807721.91	0.03306		
464923.41	3807721.91	0.03262	464943.41
3807721.91	0.03221		
464963.41	3807721.91	0.03178	464983.41
3807721.91	0.03136		
465003.41	3807721.91	0.03097	465023.41
3807721.91	0.03058		
465043.41	3807721.91	0.03019	465063.41
3807721.91	0.02984		
465083.41	3807721.91	0.02949	465103.41
3807721.91	0.02911		
465123.41	3807721.91	0.02855	465143.41
3807721.91	0.02818		
465163.41	3807721.91	0.02787	465183.41
3807721.91	0.02736		
465203.41	3807721.91	0.02703	465223.41
3807721.91	0.02679		
465243.41	3807721.91	0.02660	465263.41
3807721.91	0.02642		
465283.41	3807721.91	0.02620	465303.41
3807721.91	0.02580		
465323.41	3807721.91	0.02560	465343.41
3807721.91	0.02545		
465363.41	3807721.91	0.02510	465383.41
3807721.91	0.02492		
464543.41	3807741.91	0.04120	464563.41
3807741.91	0.04032		
464583.41	3807741.91	0.03976	464603.41
3807741.91	0.03924		
464623.41	3807741.91	0.03880	464643.41
3807741.91	0.03869		
464663.41	3807741.91	0.03850	464683.41
3807741.91	0.03821		
464703.41	3807741.91	0.03763	464723.41
3807741.91	0.03708		
464743.41	3807741.91	0.03660	464763.41
3807741.91	0.03632		
464783.41	3807741.91	0.03586	464803.41
3807741.91	0.03535		
464823.41	3807741.91	0.03505	464843.41
3807741.91	0.03452		
464863.41	3807741.91	0.03393	464883.41
3807741.91	0.03372		
464903.41	3807741.91	0.03321	464923.41
3807741.91	0.03263		
464943.41	3807741.91	0.03244	464963.41
3807741.91	0.03194		

464983.41	3807741.91	0.03137	465003.41
3807741.91	0.03121		
465023.41	3807741.91	0.03081	465043.41
3807741.91	0.03034		
465063.41	3807741.91	0.03013	465083.41
3807741.91	0.02967		
465103.41	3807741.91	0.02911	465123.41
3807741.91	0.02866		
465143.41	3807741.91	0.02842	465163.41
3807741.91	0.02825		
465183.41	3807741.91	0.02785	465203.41
3807741.91	0.02740		
465223.41	3807741.91	0.02700	465243.41
3807741.91	0.02697		
465263.41	3807741.91	0.02667	465283.41
3807741.91	0.02627		
465303.41	3807741.91	0.02598	465323.41
3807741.91	0.02592		
465343.41	3807741.91	0.02593	465363.41
3807741.91	0.02568		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 258

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465383.41	3807741.91	0.02539	464543.41

3807761.91	0.04251		
464563.41	3807761.91	0.04130	464583.41
3807761.91	0.04043		
464603.41	3807761.91	0.03980	464623.41
3807761.91	0.03934		
464643.41	3807761.91	0.03922	464663.41
3807761.91	0.03883		
464683.41	3807761.91	0.03829	464703.41
3807761.91	0.03769		
464723.41	3807761.91	0.03733	464743.41
3807761.91	0.03702		
464763.41	3807761.91	0.03644	464783.41
3807761.91	0.03608		
464803.41	3807761.91	0.03575	464823.41
3807761.91	0.03515		
464843.41	3807761.91	0.03451	464863.41
3807761.91	0.03392		
464883.41	3807761.91	0.03371	464903.41
3807761.91	0.03320		
464923.41	3807761.91	0.03261	464943.41
3807761.91	0.03242		
464963.41	3807761.91	0.03192	464983.41
3807761.91	0.03135		
465003.41	3807761.91	0.03119	465023.41
3807761.91	0.03102		
465043.41	3807761.91	0.03077	465063.41
3807761.91	0.03023		
465083.41	3807761.91	0.02967	465103.41
3807761.91	0.02918		
465123.41	3807761.91	0.02907	465143.41
3807761.91	0.02872		
465163.41	3807761.91	0.02834	465183.41
3807761.91	0.02830		
465203.41	3807761.91	0.02796	465223.41
3807761.91	0.02751		
465243.41	3807761.91	0.02714	465263.41
3807761.91	0.02673		
465283.41	3807761.91	0.02640	465303.41
3807761.91	0.02648		
465323.41	3807761.91	0.02631	465343.41
3807761.91	0.02609		
465363.41	3807761.91	0.02623	465383.41
3807761.91	0.02605		
464543.41	3807781.91	0.04406	464563.41
3807781.91	0.04273		
464583.41	3807781.91	0.04176	464603.41
3807781.91	0.04092		
464623.41	3807781.91	0.04017	464643.41
3807781.91	0.03956		
464663.41	3807781.91	0.03912	464683.41

3807781.91	0.03871		
464703.41	3807781.91	0.03809	464723.41
3807781.91	0.03760		
464743.41	3807781.91	0.03718	464763.41
3807781.91	0.03676		
464783.41	3807781.91	0.03633	464803.41
3807781.91	0.03585		
464823.41	3807781.91	0.03518	464843.41
3807781.91	0.03467		
464863.41	3807781.91	0.03423	464883.41
3807781.91	0.03378		
464903.41	3807781.91	0.03334	464923.41
3807781.91	0.03292		
464943.41	3807781.91	0.03248	464963.41
3807781.91	0.03207		
464983.41	3807781.91	0.03167	465003.41
3807781.91	0.03127		
465023.41	3807781.91	0.03105	465043.41
3807781.91	0.03086		
465063.41	3807781.91	0.03025	465083.41
3807781.91	0.02986		
465103.41	3807781.91	0.02955	465123.41
3807781.91	0.02925		
465143.41	3807781.91	0.02899	465163.41
3807781.91	0.02875		
465183.41	3807781.91	0.02852	465203.41
3807781.91	0.02812		
465223.41	3807781.91	0.02771	465243.41
3807781.91	0.02756		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 259

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3807781.91	0.02724	465283.41
3807781.91	0.02687		
465303.41	3807781.91	0.02675	465323.41
3807781.91	0.02667		
465343.41	3807781.91	0.02660	465363.41
3807781.91	0.02654		
465383.41	3807781.91	0.02629	464543.41
3807801.91	0.04568		
464563.41	3807801.91	0.04434	464583.41
3807801.91	0.04323		
464603.41	3807801.91	0.04210	464623.41
3807801.91	0.04098		
464643.41	3807801.91	0.03993	464663.41
3807801.91	0.03942		
464683.41	3807801.91	0.03910	464703.41
3807801.91	0.03847		
464723.41	3807801.91	0.03789	464743.41
3807801.91	0.03737		
464763.41	3807801.91	0.03707	464783.41
3807801.91	0.03653		
464803.41	3807801.91	0.03587	464823.41
3807801.91	0.03528		
464843.41	3807801.91	0.03489	464863.41
3807801.91	0.03453		
464883.41	3807801.91	0.03394	464903.41
3807801.91	0.03356		
464923.41	3807801.91	0.03322	464943.41
3807801.91	0.03265		
464963.41	3807801.91	0.03229	464983.41
3807801.91	0.03198		
465003.41	3807801.91	0.03144	465023.41
3807801.91	0.03113		
465043.41	3807801.91	0.03087	465063.41
3807801.91	0.03038		
465083.41	3807801.91	0.03012	465103.41
3807801.91	0.02992		
465123.41	3807801.91	0.02948	465143.41
3807801.91	0.02929		
465163.41	3807801.91	0.02915	465183.41
3807801.91	0.02865		
465203.41	3807801.91	0.02825	465223.41
3807801.91	0.02797		

465243.41	3807801.91	0.02799	465263.41
3807801.91	0.02772		
465283.41	3807801.91	0.02733	465303.41
3807801.91	0.02706		
465323.41	3807801.91	0.02705	465343.41
3807801.91	0.02709		
465363.41	3807801.91	0.02674	465383.41
3807801.91	0.02649		
464543.41	3807821.91	0.04724	464563.41
3807821.91	0.04603		
464583.41	3807821.91	0.04452	464603.41
3807821.91	0.04301		
464623.41	3807821.91	0.04158	464643.41
3807821.91	0.04049		
464663.41	3807821.91	0.03976	464683.41
3807821.91	0.03917		
464703.41	3807821.91	0.03852	464723.41
3807821.91	0.03814		
464743.41	3807821.91	0.03782	464763.41
3807821.91	0.03721		
464783.41	3807821.91	0.03654	464803.41
3807821.91	0.03593		
464823.41	3807821.91	0.03566	464843.41
3807821.91	0.03515		
464863.41	3807821.91	0.03458	464883.41
3807821.91	0.03432		
464903.41	3807821.91	0.03382	464923.41
3807821.91	0.03327		
464943.41	3807821.91	0.03303	464963.41
3807821.91	0.03256		
464983.41	3807821.91	0.03204	465003.41
3807821.91	0.03185		
465023.41	3807821.91	0.03142	465043.41
3807821.91	0.03094		
465063.41	3807821.91	0.03081	465083.41
3807821.91	0.03044		
465103.41	3807821.91	0.03001	465123.41
3807821.91	0.02996		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 260

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,


```

, L0006739      L0006734      , L0006735      , L0006736      , L0006737      , L0006738
, L0006740      , L0006740      , L0006741      ,
, L0006747      , L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006748      , L0006748      , L0006749      ,
, L0006750      , L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807821.91	0.02965	465163.41
3807821.91	0.02920		
465183.41	3807821.91	0.02871	465203.41
3807821.91	0.02858		
465223.41	3807821.91	0.02856	465243.41
3807821.91	0.02820		
465263.41	3807821.91	0.02781	465283.41
3807821.91	0.02750		
465303.41	3807821.91	0.02764	465323.41
3807821.91	0.02750		
465343.41	3807821.91	0.02721	465363.41
3807821.91	0.02687		
465383.41	3807821.91	0.02690	464543.41
3807841.91	0.04946		
464563.41	3807841.91	0.04841	464583.41
3807841.91	0.04635		
464603.41	3807841.91	0.04438	464623.41
3807841.91	0.04260		
464643.41	3807841.91	0.04147	464663.41
3807841.91	0.04049		
464683.41	3807841.91	0.03962	464723.41
3807841.91	0.03843		
464743.41	3807841.91	0.03794	464763.41
3807841.91	0.03725		
464783.41	3807841.91	0.03673	464803.41
3807841.91	0.03628		
464823.41	3807841.91	0.03582	464843.41
3807841.91	0.03537		
464863.41	3807841.91	0.03493	464883.41
3807841.91	0.03448		
464903.41	3807841.91	0.03404	464923.41
3807841.91	0.03362		
464943.41	3807841.91	0.03319	464963.41

3807841.91	0.03280		
464983.41	3807841.91	0.03241	465003.41
3807841.91	0.03203		
465023.41	3807841.91	0.03168	465043.41
3807841.91	0.03134		
465063.41	3807841.91	0.03101	465083.41
3807841.91	0.03072		
465103.41	3807841.91	0.03046	465123.41
3807841.91	0.03019		
465143.41	3807841.91	0.02997	465163.41
3807841.91	0.02973		
465183.41	3807841.91	0.02924	465203.41
3807841.91	0.02896		
465223.41	3807841.91	0.02881	465243.41
3807841.91	0.02870		
465263.41	3807841.91	0.02839	465283.41
3807841.91	0.02804		
465303.41	3807841.91	0.02796	465323.41
3807841.91	0.02769		
465343.41	3807841.91	0.02739	465363.41
3807841.91	0.02739		
465383.41	3807841.91	0.02738	464503.41
3807861.91	0.05174		
464523.41	3807861.91	0.05197	464543.41
3807861.91	0.05170		
464563.41	3807861.91	0.05084	464583.41
3807861.91	0.04858		
464603.41	3807861.91	0.04623	464723.41
3807861.91	0.03866		
464743.41	3807861.91	0.03797	464763.41
3807861.91	0.03727		
464783.41	3807861.91	0.03690	464803.41
3807861.91	0.03662		
464823.41	3807861.91	0.03601	464843.41
3807861.91	0.03561		
464863.41	3807861.91	0.03526	464883.41
3807861.91	0.03466		
464903.41	3807861.91	0.03429	464923.41
3807861.91	0.03397		
464943.41	3807861.91	0.03339	464963.41
3807861.91	0.03305		
464983.41	3807861.91	0.03277	465003.41
3807861.91	0.03224		
465023.41	3807861.91	0.03196	465043.41
3807861.91	0.03174		
465063.41	3807861.91	0.03126	465083.41
3807861.91	0.03104		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 261

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465103.41	3807861.91	0.03089	465123.41
3807861.91	0.03047		
465143.41	3807861.91	0.03033	465163.41
3807861.91	0.03025		
465183.41	3807861.91	0.02989	465203.41
3807861.91	0.02947		
465223.41	3807861.91	0.02911	465243.41
3807861.91	0.02919		
465263.41	3807861.91	0.02896	465283.41
3807861.91	0.02858		
465303.41	3807861.91	0.02832	465323.41
3807861.91	0.02801		
465343.41	3807861.91	0.02775	465363.41
3807861.91	0.02793		
465383.41	3807861.91	0.02859	464503.41
3807881.91	0.05286		
464523.41	3807881.91	0.05314	464543.41
3807881.91	0.05286		
464723.41	3807881.91	0.03870	464743.41
3807881.91	0.03800		
464763.41	3807881.91	0.03729	464783.41
3807881.91	0.03691		
464803.41	3807881.91	0.03669	464823.41
3807881.91	0.03643		

464843.41	3807881.91	0.03591	464863.41
3807881.91	0.03533		
464883.41	3807881.91	0.03508	464903.41
3807881.91	0.03459		
464923.41	3807881.91	0.03403	464943.41
3807881.91	0.03383		
464963.41	3807881.91	0.03337	464983.41
3807881.91	0.03286		
465003.41	3807881.91	0.03271	465023.41
3807881.91	0.03230		
465043.41	3807881.91	0.03184	465063.41
3807881.91	0.03176		
465083.41	3807881.91	0.03142	465103.41
3807881.91	0.03102		
465123.41	3807881.91	0.03103	465143.41
3807881.91	0.03075		
465163.41	3807881.91	0.03041	465183.41
3807881.91	0.03050		
465203.41	3807881.91	0.03022	465223.41
3807881.91	0.02979		
465243.41	3807881.91	0.02946	465263.41
3807881.91	0.02908		
465283.41	3807881.91	0.02878	465303.41
3807881.91	0.02899		
465323.41	3807881.91	0.02881	465343.41
3807881.91	0.02848		
465363.41	3807881.91	0.02824	465383.41
3807881.91	0.02918		
464723.41	3807901.91	0.03920	464743.41
3807901.91	0.03807		
464763.41	3807901.91	0.03762	464783.41
3807901.91	0.03715		
464803.41	3807901.91	0.03671	464823.41
3807901.91	0.03652		
464843.41	3807901.91	0.03597	464863.41
3807901.91	0.03534		
464883.41	3807901.91	0.03517	464903.41
3807901.91	0.03485		
464923.41	3807901.91	0.03444	464943.41
3807901.91	0.03403		
464963.41	3807901.91	0.03344	464983.41
3807901.91	0.03289		
465003.41	3807901.91	0.03282	465023.41
3807901.91	0.03261		
465043.41	3807901.91	0.03231	465063.41
3807901.91	0.03202		
465083.41	3807901.91	0.03177	465103.41
3807901.91	0.03154		
465123.41	3807901.91	0.03132	465143.41
3807901.91	0.03114		

465163.41	3807901.91	0.03098	465183.41
3807901.91	0.03083		
465203.41	3807901.91	0.03047	465223.41
3807901.91	0.03009		
465243.41	3807901.91	0.03003	465263.41
3807901.91	0.02975		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 262

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730

, L0006731	, L0006732	, L0006733	,			
	L0006734	, L0006735	, L0006736	, L0006737	, L0006738	
, L0006739	, L0006740	, L0006741	,			
	L0006742	, L0006743	, L0006744	, L0006745	, L0006746	
, L0006747	, L0006748	, L0006749	,			
	L0006750	, L0006751	, L0006752	, L0006753	, L0006754	
, L0006755	, L0006756	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465283.41	3807901.91	0.02941	465303.41
3807901.91	0.02937		
465323.41	3807901.91	0.03010	465343.41
3807901.91	0.03018		
465363.41	3807901.91	0.02982	465383.41
3807901.91	0.02983		
464723.41	3807921.91	0.03997	464743.41
3807921.91	0.03841		
464763.41	3807921.91	0.03800	464783.41
3807921.91	0.03744		
464803.41	3807921.91	0.03687	464823.41
3807921.91	0.03656		
464843.41	3807921.91	0.03605	464863.41
3807921.91	0.03551		
464883.41	3807921.91	0.03535	464903.41

3807921.91	0.03513		
464923.41	3807921.91	0.03482	464943.41
3807921.91	0.03413		
464963.41	3807921.91	0.03355	464983.41
3807921.91	0.03308		
465003.41	3807921.91	0.03304	465023.41
3807921.91	0.03295		
465043.41	3807921.91	0.03277	465063.41
3807921.91	0.03231		
465083.41	3807921.91	0.03214	465103.41
3807921.91	0.03205		
465123.41	3807921.91	0.03165	465143.41
3807921.91	0.03156		
465163.41	3807921.91	0.03155	465183.41
3807921.91	0.03121		
465203.41	3807921.91	0.03080	465223.41
3807921.91	0.03046		
465243.41	3807921.91	0.03061	465263.41
3807921.91	0.03129		
465283.41	3807921.91	0.03099	465303.41
3807921.91	0.03060		
465323.41	3807921.91	0.03089	465343.41
3807921.91	0.03111		
465363.41	3807921.91	0.03075	465383.41
3807921.91	0.03064		
464723.41	3807941.91	0.04116	464743.41
3807941.91	0.03940		
464763.41	3807941.91	0.03825	464783.41
3807941.91	0.03770		
464803.41	3807941.91	0.03736	464823.41
3807941.91	0.03670		
464843.41	3807941.91	0.03631	464863.41
3807941.91	0.03608		
464883.41	3807941.91	0.03594	464903.41
3807941.91	0.03548		
464923.41	3807941.91	0.03484	464943.41
3807941.91	0.03416		
464963.41	3807941.91	0.03384	464983.41
3807941.91	0.03372		
465003.41	3807941.91	0.03370	465023.41
3807941.91	0.03335		
465043.41	3807941.91	0.03292	465063.41
3807941.91	0.03291		
465083.41	3807941.91	0.03259	465103.41
3807941.91	0.03222		
465123.41	3807941.91	0.03230	465143.41
3807941.91	0.03206		
465163.41	3807941.91	0.03175	465183.41
3807941.91	0.03192		
465203.41	3807941.91	0.03166	465223.41

3807941.91	0.03124		
465243.41	3807941.91	0.03092	465263.41
3807941.91	0.03191		
465283.41	3807941.91	0.03230	465303.41
3807941.91	0.03190		
465323.41	3807941.91	0.03159	465343.41
3807941.91	0.03129		
465363.41	3807941.91	0.03094	465383.41
3807941.91	0.03142		
465403.41	3807941.91	0.03199	465423.41
3807941.91	0.03188		
465443.41	3807941.91	0.03214	465463.41
3807941.91	0.03101		
465483.41	3807941.91	0.03095	465503.41
3807941.91	0.03122		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 263

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465523.41	3807941.91	0.03102	465543.41
3807941.91	0.03149		
465563.41	3807941.91	0.03156	465583.41
3807941.91	0.03136		
465603.41	3807941.91	0.03111	465623.41
3807941.91	0.03143		

465643.41	3807941.91	0.03171	465663.41
3807941.91	0.03180		
465683.41	3807941.91	0.03271	465703.41
3807941.91	0.03307		
464723.41	3807961.91	0.04303	464743.41
3807961.91	0.04051		
464763.41	3807961.91	0.03887	464783.41
3807961.91	0.03801		
464803.41	3807961.91	0.03753	464823.41
3807961.91	0.03710		
464843.41	3807961.91	0.03663	464863.41
3807961.91	0.03622		
464883.41	3807961.91	0.03609	464903.41
3807961.91	0.03557		
464923.41	3807961.91	0.03493	464943.41
3807961.91	0.03457		
464963.41	3807961.91	0.03420	464983.41
3807961.91	0.03389		
465003.41	3807961.91	0.03389	465023.41
3807961.91	0.03349		
465043.41	3807961.91	0.03300	465063.41
3807961.91	0.03309		
465083.41	3807961.91	0.03301	465103.41
3807961.91	0.03283		
465123.41	3807961.91	0.03265	465143.41
3807961.91	0.03252		
465163.41	3807961.91	0.03241	465183.41
3807961.91	0.03230		
465203.41	3807961.91	0.03306	465223.41
3807961.91	0.03308		
465243.41	3807961.91	0.03264	465263.41
3807961.91	0.03260		
465283.41	3807961.91	0.03262	465303.41
3807961.91	0.03223		
465323.41	3807961.91	0.03240	465343.41
3807961.91	0.03262		
465363.41	3807961.91	0.03225	465383.41
3807961.91	0.03225		
465403.41	3807961.91	0.03308	465423.41
3807961.91	0.03319		
465443.41	3807961.91	0.03297	465463.41
3807961.91	0.03209		
465483.41	3807961.91	0.03223	465503.41
3807961.91	0.03202		
465523.41	3807961.91	0.03192	465543.41
3807961.91	0.03205		
465563.41	3807961.91	0.03186	465583.41
3807961.91	0.03165		
465603.41	3807961.91	0.03195	465623.41
3807961.91	0.03210		

465643.41	3807961.91	0.03285	465663.41
3807961.91	0.03323		
465683.41	3807961.91	0.03336	465703.41
3807961.91	0.03343		
464743.41	3807981.91	0.04193	464763.41
3807981.91	0.03979		
464783.41	3807981.91	0.03853	464803.41
3807981.91	0.03777		
464823.41	3807981.91	0.03761	464843.41
3807981.91	0.03706		
464863.41	3807981.91	0.03642	464883.41
3807981.91	0.03630		
464903.41	3807981.91	0.03579	464923.41
3807981.91	0.03518		
464943.41	3807981.91	0.03498	464963.41
3807981.91	0.03457		
464983.41	3807981.91	0.03412	465003.41
3807981.91	0.03400		
465023.41	3807981.91	0.03365	465043.41
3807981.91	0.03326		
465063.41	3807981.91	0.03323	465083.41
3807981.91	0.03334		
465103.41	3807981.91	0.03340	465123.41
3807981.91	0.03288		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 264

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
465143.41	3807981.91	0.03288	465163.41
3807981.91	0.03376		
465183.41	3807981.91	0.03359	465203.41
3807981.91	0.03390		
465223.41	3807981.91	0.03409	465243.41
3807981.91	0.03365		
465263.41	3807981.91	0.03322	465283.41
3807981.91	0.03283		
465303.41	3807981.91	0.03273	465323.41
3807981.91	0.03322		
465343.41	3807981.91	0.03437	465363.41
3807981.91	0.03410		
465383.41	3807981.91	0.03378	465403.41
3807981.91	0.03365		
465423.41	3807981.91	0.03393	465443.41
3807981.91	0.03390		
465463.41	3807981.91	0.03266	465483.41
3807981.91	0.03310		
465503.41	3807981.91	0.03295	465523.41
3807981.91	0.03267		
465543.41	3807981.91	0.03264	465563.41
3807981.91	0.03240		
465583.41	3807981.91	0.03222	465603.41
3807981.91	0.03268		
465623.41	3807981.91	0.03351	465643.41
3807981.91	0.03353		
465663.41	3807981.91	0.03394	465683.41
3807981.91	0.03394		
465703.41	3807981.91	0.03371	464763.41
3808001.91	0.04124		
464783.41	3808001.91	0.03949	464803.41
3808001.91	0.03840		
464823.41	3808001.91	0.03825	464843.41
3808001.91	0.03770		
464863.41	3808001.91	0.03707	464883.41
3808001.91	0.03697		
464903.41	3808001.91	0.03646	464923.41
3808001.91	0.03578		
464943.41	3808001.91	0.03518	464963.41
3808001.91	0.03492		
464983.41	3808001.91	0.03476	465003.41
3808001.91	0.03423		
465023.41	3808001.91	0.03404	465043.41
3808001.91	0.03396		
465063.41	3808001.91	0.03349	465083.41
3808001.91	0.03345		
465103.41	3808001.91	0.03353	465123.41

3808001.91	0.03301		
465143.41	3808001.91	0.03303	465163.41
3808001.91	0.03417		
465183.41	3808001.91	0.03468	465203.41
3808001.91	0.03465		
465223.41	3808001.91	0.03427	465243.41
3808001.91	0.03383		
465263.41	3808001.91	0.03340	465283.41
3808001.91	0.03326		
465303.41	3808001.91	0.03410	465323.41
3808001.91	0.03427		
465343.41	3808001.91	0.03465	465363.41
3808001.91	0.03512		
465383.41	3808001.91	0.03506	465403.41
3808001.91	0.03471		
465423.41	3808001.91	0.03444	465443.41
3808001.91	0.03413		
465463.41	3808001.91	0.03369	465483.41
3808001.91	0.03347		
465503.41	3808001.91	0.03319	465523.41
3808001.91	0.03313		
465543.41	3808001.91	0.03361	465563.41
3808001.91	0.03350		
465583.41	3808001.91	0.03324	465603.41
3808001.91	0.03332		
465623.41	3808001.91	0.03426	465643.41
3808001.91	0.03462		
465663.41	3808001.91	0.03444	465683.41
3808001.91	0.03421		
465703.41	3808001.91	0.03417	464763.41
3808021.91	0.04367		
464783.41	3808021.91	0.04163	464803.41
3808021.91	0.03997		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 265

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754

, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3808021.91	0.03916	464843.41
3808021.91	0.03839		
464863.41	3808021.91	0.03770	464883.41
3808021.91	0.03727		
464903.41	3808021.91	0.03689	464923.41
3808021.91	0.03648		
464943.41	3808021.91	0.03580	464963.41
3808021.91	0.03535		
464983.41	3808021.91	0.03503	465003.41
3808021.91	0.03478		
465023.41	3808021.91	0.03451	465043.41
3808021.91	0.03427		
465063.41	3808021.91	0.03408	465083.41
3808021.91	0.03390		
465103.41	3808021.91	0.03373	465123.41
3808021.91	0.03363		
465143.41	3808021.91	0.03352	465163.41
3808021.91	0.03435		
465183.41	3808021.91	0.03496	465203.41
3808021.91	0.03491		
465223.41	3808021.91	0.03469	465243.41
3808021.91	0.03496		
465263.41	3808021.91	0.03482	465283.41
3808021.91	0.03445		
465303.41	3808021.91	0.03470	465323.41
3808021.91	0.03540		
465343.41	3808021.91	0.03564	465363.41
3808021.91	0.03571		
465383.41	3808021.91	0.03543	465403.41
3808021.91	0.03512		
465423.41	3808021.91	0.03539	465443.41
3808021.91	0.03515		
465463.41	3808021.91	0.03411	465483.41
3808021.91	0.03439		
465503.41	3808021.91	0.03418	465523.41
3808021.91	0.03394		
465543.41	3808021.91	0.03421	465563.41
3808021.91	0.03511		

465583.41	3808021.91	0.03518	465603.41
3808021.91	0.03490		
465623.41	3808021.91	0.03493	465643.41
3808021.91	0.03500		
465663.41	3808021.91	0.03474	465683.41
3808021.91	0.03503		
465703.41	3808021.91	0.03528	464783.41
3808041.91	0.04400		
464803.41	3808041.91	0.04185	464823.41
3808041.91	0.04034		
464843.41	3808041.91	0.03924	464863.41
3808041.91	0.03837		
464883.41	3808041.91	0.03764	464903.41
3808041.91	0.03729		
464923.41	3808041.91	0.03705	464943.41
3808041.91	0.03636		
464963.41	3808041.91	0.03570	464983.41
3808041.91	0.03518		
465003.41	3808041.91	0.03527	465023.41
3808041.91	0.03500		
465043.41	3808041.91	0.03464	465063.41
3808041.91	0.03467		
465083.41	3808041.91	0.03444	465103.41
3808041.91	0.03415		
465123.41	3808041.91	0.03427	465143.41
3808041.91	0.03499		
465163.41	3808041.91	0.03490	465183.41
3808041.91	0.03519		
465203.41	3808041.91	0.03537	465223.41
3808041.91	0.03531		
465243.41	3808041.91	0.03610	465263.41
3808041.91	0.03675		
465283.41	3808041.91	0.03642	465303.41
3808041.91	0.03600		
465323.41	3808041.91	0.03625	465343.41
3808041.91	0.03646		
465363.41	3808041.91	0.03634	465383.41
3808041.91	0.03601		
465403.41	3808041.91	0.03573	465423.41
3808041.91	0.03617		
465443.41	3808041.91	0.03670	465463.41
3808041.91	0.03472		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***
INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3
**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
465483.41	3808041.91	0.03518	465503.41
3808041.91	0.03604		
465523.41	3808041.91	0.03594	465543.41
3808041.91	0.03564		
465563.41	3808041.91	0.03578	465583.41
3808041.91	0.03610		
465603.41	3808041.91	0.03582	465623.41
3808041.91	0.03555		
465643.41	3808041.91	0.03530	465663.41
3808041.91	0.03539		
465683.41	3808041.91	0.03580	465703.41
3808041.91	0.03659		
464803.41	3808061.91	0.04359	464823.41
3808061.91	0.04195		
464843.41	3808061.91	0.04045	464863.41
3808061.91	0.03915		
464883.41	3808061.91	0.03841	464903.41
3808061.91	0.03776		
464923.41	3808061.91	0.03714	464943.41
3808061.91	0.03646		
464963.41	3808061.91	0.03580	464983.41
3808061.91	0.03528		
465003.41	3808061.91	0.03538	465023.41
3808061.91	0.03546		
465043.41	3808061.91	0.03545	465063.41
3808061.91	0.03499		
465083.41	3808061.91	0.03495	465103.41
3808061.91	0.03503		
465123.41	3808061.91	0.03463	465143.41

3808061.91	0.03569		
465163.41	3808061.91	0.03611	465183.41
3808061.91	0.03573		
465203.41	3808061.91	0.03625	465223.41
3808061.91	0.03684		
465243.41	3808061.91	0.03665	465263.41
3808061.91	0.03744		
465283.41	3808061.91	0.03780	465303.41
3808061.91	0.03736		
465323.41	3808061.91	0.03701	465343.41
3808061.91	0.03693		
465363.41	3808061.91	0.03742	465383.41
3808061.91	0.03721		
465403.41	3808061.91	0.03686	465423.41
3808061.91	0.03687		
465443.41	3808061.91	0.03697	465463.41
3808061.91	0.03580		
465483.41	3808061.91	0.03585	465503.41
3808061.91	0.03684		
465523.41	3808061.91	0.03719	465543.41
3808061.91	0.03687		
465563.41	3808061.91	0.03662	465583.41
3808061.91	0.03639		
465603.41	3808061.91	0.03611	465623.41
3808061.91	0.03584		
465643.41	3808061.91	0.03578	465663.41
3808061.91	0.03644		
465683.41	3808061.91	0.03661	465703.41
3808061.91	0.03689		
464823.41	3808081.91	0.04307	464843.41
3808081.91	0.04173		
464863.41	3808081.91	0.04056	464883.41
3808081.91	0.03939		
464903.41	3808081.91	0.03826	464923.41
3808081.91	0.03724		
464943.41	3808081.91	0.03656	464963.41
3808081.91	0.03617		
464983.41	3808081.91	0.03590	465003.41
3808081.91	0.03565		
465023.41	3808081.91	0.03567	465043.41
3808081.91	0.03574		
465063.41	3808081.91	0.03519	465083.41
3808081.91	0.03519		
465103.41	3808081.91	0.03634	465123.41
3808081.91	0.03641		
465143.41	3808081.91	0.03647	465163.41
3808081.91	0.03670		
465183.41	3808081.91	0.03696	465203.41
3808081.91	0.03720		
465223.41	3808081.91	0.03809	465243.41

3808081.91 0.03815

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 267

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3808081.91	0.03820	465283.41
3808081.91	0.03818		
465303.41	3808081.91	0.03775	465323.41
3808081.91	0.03773		
465343.41	3808081.91	0.03782	465363.41
3808081.91	0.03805		
465383.41	3808081.91	0.03835	465403.41
3808081.91	0.03817		
465423.41	3808081.91	0.03854	465443.41
3808081.91	0.03827		
465463.41	3808081.91	0.03709	465483.41
3808081.91	0.03747		
465503.41	3808081.91	0.03756	465523.41
3808081.91	0.03778		
465543.41	3808081.91	0.03815	465563.41
3808081.91	0.03792		
465583.41	3808081.91	0.03762	465603.41
3808081.91	0.03732		
465623.41	3808081.91	0.03704	465643.41
3808081.91	0.03694		

465663.41	3808081.91	0.03716	465683.41
3808081.91	0.03745		
465703.41	3808081.91	0.03724	464843.41
3808101.91	0.04304		
464863.41	3808101.91	0.04181	464883.41
3808101.91	0.04019		
464903.41	3808101.91	0.03876	464923.41
3808101.91	0.03757		
464943.41	3808101.91	0.03690	464963.41
3808101.91	0.03664		
464983.41	3808101.91	0.03653	465003.41
3808101.91	0.03607		
465023.41	3808101.91	0.03595	465043.41
3808101.91	0.03593		
465063.41	3808101.91	0.03554	465083.41
3808101.91	0.03562		
465103.41	3808101.91	0.03699	465123.41
3808101.91	0.03728		
465143.41	3808101.91	0.03716	465163.41
3808101.91	0.03697		
465183.41	3808101.91	0.03796	465203.41
3808101.91	0.03884		
465223.41	3808101.91	0.03874	465243.41
3808101.91	0.03899		
465263.41	3808101.91	0.03888	465283.41
3808101.91	0.03846		
465303.41	3808101.91	0.03832	465323.41
3808101.91	0.03848		
465343.41	3808101.91	0.03946	465363.41
3808101.91	0.03961		
465383.41	3808101.91	0.03925	465403.41
3808101.91	0.03895		
465423.41	3808101.91	0.03933	465443.41
3808101.91	0.03926		
465463.41	3808101.91	0.03786	465483.41
3808101.91	0.03826		
465503.41	3808101.91	0.03843	465523.41
3808101.91	0.03854		
465543.41	3808101.91	0.03906	465563.41
3808101.91	0.03953		
465583.41	3808101.91	0.03921	465603.41
3808101.91	0.03890		
465623.41	3808101.91	0.03860	465643.41
3808101.91	0.03833		
465663.41	3808101.91	0.03814	465683.41
3808101.91	0.03790		
465703.41	3808101.91	0.03783	464863.41
3808121.91	0.04193		
464883.41	3808121.91	0.04031	464903.41
3808121.91	0.03924		

464923.41	3808121.91	0.03845	464943.41
3808121.91	0.03777		
464963.41	3808121.91	0.03720	464983.41
3808121.91	0.03677		
465003.41	3808121.91	0.03685	465023.41
3808121.91	0.03656		
465043.41	3808121.91	0.03620	465063.41
3808121.91	0.03638		
465083.41	3808121.91	0.03776	465103.41
3808121.91	0.03828		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 268

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730

, L0006731	, L0006732	, L0006733	,			
	L0006734	, L0006735	, L0006736	, L0006737	, L0006738	
, L0006739	, L0006740	, L0006741	,			
	L0006742	, L0006743	, L0006744	, L0006745	, L0006746	
, L0006747	, L0006748	, L0006749	,			
	L0006750	, L0006751	, L0006752	, L0006753	, L0006754	
, L0006755	, L0006756	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465123.41	3808121.91	0.03786	465143.41
3808121.91	0.03738		
465163.41	3808121.91	0.03720	465183.41
3808121.91	0.03819		
465203.41	3808121.91	0.03957	465223.41
3808121.91	0.03995		
465243.41	3808121.91	0.03957	465263.41
3808121.91	0.03914		
465283.41	3808121.91	0.03896	465303.41
3808121.91	0.03945		
465323.41	3808121.91	0.03945	465343.41

3808121.91	0.04011		
465363.41	3808121.91	0.04069	465383.41
3808121.91	0.04060		
465403.41	3808121.91	0.04021	465423.41
3808121.91	0.03991		
465443.41	3808121.91	0.03956	465463.41
3808121.91	0.03908		
465483.41	3808121.91	0.03883	465503.41
3808121.91	0.03939		
465523.41	3808121.91	0.03973	465543.41
3808121.91	0.03962		
465563.41	3808121.91	0.03984	465583.41
3808121.91	0.03952		
465603.41	3808121.91	0.03921	465623.41
3808121.91	0.03892		
465643.41	3808121.91	0.03870	465663.41
3808121.91	0.03909		
465683.41	3808121.91	0.03907	465703.41
3808121.91	0.03880		
464883.41	3808141.91	0.04129	464903.41
3808141.91	0.03981		
464923.41	3808141.91	0.03875	464943.41
3808141.91	0.03808		
464963.41	3808141.91	0.03744	464983.41
3808141.91	0.03694		
465003.41	3808141.91	0.03714	465023.41
3808141.91	0.03683		
465043.41	3808141.91	0.03640	465063.41
3808141.91	0.03670		
465083.41	3808141.91	0.03814	465103.41
3808141.91	0.03864		
465123.41	3808141.91	0.03812	465143.41
3808141.91	0.03826		
465163.41	3808141.91	0.03852	465183.41
3808141.91	0.03875		
465203.41	3808141.91	0.03989	465223.41
3808141.91	0.04034		
465243.41	3808141.91	0.03987	465263.41
3808141.91	0.03983		
465283.41	3808141.91	0.03990	465303.41
3808141.91	0.04013		
465323.41	3808141.91	0.04112	465343.41
3808141.91	0.04117		
465363.41	3808141.91	0.04135	465383.41
3808141.91	0.04103		
465403.41	3808141.91	0.04083	465423.41
3808141.91	0.04118		
465443.41	3808141.91	0.04105	465463.41
3808141.91	0.04052		
465483.41	3808141.91	0.04016	465503.41

3808141.91	0.04028		
465523.41	3808141.91	0.04087	465543.41
3808141.91	0.04094		
465563.41	3808141.91	0.04082	465583.41
3808141.91	0.04050		
465603.41	3808141.91	0.04018	465623.41
3808141.91	0.03988		
465643.41	3808141.91	0.03963	465663.41
3808141.91	0.03970		
465683.41	3808141.91	0.03992	465703.41
3808141.91	0.03996		
464883.41	3808161.91	0.04257	464903.41
3808161.91	0.04055		
464923.41	3808161.91	0.03915	464943.41
3808161.91	0.03848		
464963.41	3808161.91	0.03784	464983.41
3808161.91	0.03733		
465003.41	3808161.91	0.03738	465023.41
3808161.91	0.03713		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 269

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465043.41	3808161.91	0.03685	465063.41
3808161.91	0.03718		

465083.41	3808161.91	0.03868	465103.41
3808161.91	0.03890		
465123.41	3808161.91	0.03872	465143.41
3808161.91	0.03924		
465163.41	3808161.91	0.04052	465183.41
3808161.91	0.04015		
465203.41	3808161.91	0.04045	465223.41
3808161.91	0.04063		
465243.41	3808161.91	0.04047	465263.41
3808161.91	0.04062		
465283.41	3808161.91	0.04163	465303.41
3808161.91	0.04178		
465323.41	3808161.91	0.04188	465343.41
3808161.91	0.04220		
465363.41	3808161.91	0.04219	465383.41
3808161.91	0.04182		
465403.41	3808161.91	0.04164	465423.41
3808161.91	0.04216		
465443.41	3808161.91	0.04264	465463.41
3808161.91	0.04226		
465483.41	3808161.91	0.04199	465503.41
3808161.91	0.04166		
465523.41	3808161.91	0.04152	465543.41
3808161.91	0.04187		
465563.41	3808161.91	0.04166	465583.41
3808161.91	0.04133		
465603.41	3808161.91	0.04101	465623.41
3808161.91	0.04090		
465643.41	3808161.91	0.04067	465663.41
3808161.91	0.04038		
465683.41	3808161.91	0.04061	465703.41
3808161.91	0.04113		
464903.41	3808181.91	0.04163	464923.41
3808181.91	0.04016		
464943.41	3808181.91	0.03949	464963.41
3808181.91	0.03884		
464983.41	3808181.91	0.03825	465003.41
3808181.91	0.03776		
465023.41	3808181.91	0.03772	465043.41
3808181.91	0.03794		
465063.41	3808181.91	0.03958	465083.41
3808181.91	0.03957		
465103.41	3808181.91	0.03943	465123.41
3808181.91	0.04035		
465143.41	3808181.91	0.04049	465163.41
3808181.91	0.04087		
465183.41	3808181.91	0.04136	465203.41
3808181.91	0.04130		
465223.41	3808181.91	0.04118	465243.41
3808181.91	0.04167		

465263.41	3808181.91	0.04164	465283.41
3808181.91	0.04233		
465303.41	3808181.91	0.04292	465323.41
3808181.91	0.04286		
465343.41	3808181.91	0.04274	465363.41
3808181.91	0.04346		
465383.41	3808181.91	0.04334	465403.41
3808181.91	0.04294		
465423.41	3808181.91	0.04276	465443.41
3808181.91	0.04296		
465463.41	3808181.91	0.04266	465483.41
3808181.91	0.04303		
465503.41	3808181.91	0.04295	465523.41
3808181.91	0.04259		
465543.41	3808181.91	0.04232	465563.41
3808181.91	0.04200		
465583.41	3808181.91	0.04167	465603.41
3808181.91	0.04135		
465623.41	3808181.91	0.04160	465643.41
3808181.91	0.04214		
465663.41	3808181.91	0.04183	465683.41
3808181.91	0.04158		
465703.41	3808181.91	0.04165	464923.41
3808201.91	0.04282		
464943.41	3808201.91	0.04075	464963.41
3808201.91	0.03993		
464983.41	3808201.91	0.03930	465003.41
3808201.91	0.03870		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 270

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

465023.41	3808201.91	0.04032	0.03873	465043.41
3808201.91	0.04034	0.04059	0.04085	465083.41
465063.41	3808201.91	0.04107	0.04183	465123.41
3808201.91	0.04204	0.04206	0.04218	465163.41
465103.41	3808201.91	0.04211	0.04239	465203.41
3808201.91	0.04239	0.04341	0.04361	465243.41
465143.41	3808201.91	0.04344	0.04414	465283.41
3808201.91	0.04396	0.04430	0.04491	465323.41
465183.41	3808201.91	0.04487	0.04445	465363.41
3808201.91	0.04403	0.04368	0.04445	465403.41
465223.41	3808201.91	0.04370	0.04341	465443.41
3808201.91	0.04304	0.04269	0.04282	465483.41
465263.41	3808201.91	0.04272	0.04259	465523.41
3808201.91	0.04240	0.04241	0.04258	465563.41
465303.41	3808201.91	0.04258	0.04214	465603.41
3808201.91	0.04148	0.04086	0.04133	465643.41
465343.41	3808201.91	0.04112	0.04195	465683.41
3808201.91	0.04111	0.04195	0.04195	464943.41
465383.41	3808201.91	0.04195	0.04195	464983.41
3808201.91	0.04195	0.04195	0.04195	465023.41
465423.41	3808201.91	0.04195	0.04195	465063.41
3808201.91	0.04195	0.04195	0.04195	465103.41
465463.41	3808201.91	0.04195	0.04195	465103.41
3808201.91	0.04195	0.04195	0.04195	465103.41
465503.41	3808201.91	0.04195	0.04195	465103.41
3808201.91	0.04195	0.04195	0.04195	465103.41
465543.41	3808201.91	0.04195	0.04195	465103.41
3808201.91	0.04195	0.04195	0.04195	465103.41
465583.41	3808201.91	0.04195	0.04195	465103.41
3808201.91	0.04195	0.04195	0.04195	465103.41
465623.41	3808201.91	0.04195	0.04195	465103.41
3808201.91	0.04195	0.04195	0.04195	465103.41
465663.41	3808201.91	0.04195	0.04195	465103.41
3808201.91	0.04195	0.04195	0.04195	465103.41
465703.41	3808201.91	0.04195	0.04195	465103.41
3808221.91	0.04195	0.04195	0.04195	465103.41
464963.41	3808221.91	0.04195	0.04195	465103.41
3808221.91	0.04195	0.04195	0.04195	465103.41
465003.41	3808221.91	0.04195	0.04195	465103.41
3808221.91	0.04195	0.04195	0.04195	465103.41
465043.41	3808221.91	0.04195	0.04195	465103.41
3808221.91	0.04195	0.04195	0.04195	465103.41
465083.41	3808221.91	0.04195	0.04195	465103.41

3808221.91	0.04317		
465123.41	3808221.91	0.04261	465143.41
3808221.91	0.04284		
465163.41	3808221.91	0.04302	465183.41
3808221.91	0.04282		
465203.41	3808221.91	0.04295	465223.41
3808221.91	0.04400		
465243.41	3808221.91	0.04413	465263.41
3808221.91	0.04422		
465283.41	3808221.91	0.04453	465303.41
3808221.91	0.04451		
465323.41	3808221.91	0.04491	465343.41
3808221.91	0.04582		
465363.41	3808221.91	0.04547	465383.41
3808221.91	0.04568		
465403.41	3808221.91	0.04578	465423.41
3808221.91	0.04535		
465443.41	3808221.91	0.04493	465463.41
3808221.91	0.04453		
465483.41	3808221.91	0.04414	465503.41
3808221.91	0.04397		
465523.41	3808221.91	0.04369	465543.41
3808221.91	0.04333		
465563.41	3808221.91	0.04355	465583.41
3808221.91	0.04407		
465603.41	3808221.91	0.04373	465623.41
3808221.91	0.04359		
465643.41	3808221.91	0.04334	465663.41
3808221.91	0.04303		
465683.41	3808221.91	0.04323	465703.41
3808221.91	0.04373		
464963.41	3808241.91	0.04391	464983.41
3808241.91	0.04324		
465003.41	3808241.91	0.04259	465023.41
3808241.91	0.04207		
465043.41	3808241.91	0.04190	465063.41
3808241.91	0.04284		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 271

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738


```

, L0006739      , L0006740      , L0006741      ,
                  L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006747      , L0006748      , L0006749      ,
                  L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
465083.41	3808241.91	0.04437	465103.41
3808241.91	0.04481		
465123.41	3808241.91	0.04423	465143.41
3808241.91	0.04376		
465163.41	3808241.91	0.04360	465183.41
3808241.91	0.04410		
465203.41	3808241.91	0.04404	465223.41
3808241.91	0.04474		
465243.41	3808241.91	0.04534	465263.41
3808241.91	0.04526		
465283.41	3808241.91	0.04511	465303.41
3808241.91	0.04584		
465323.41	3808241.91	0.04593	465343.41
3808241.91	0.04623		
465363.41	3808241.91	0.04660	465383.41
3808241.91	0.04652		
465403.41	3808241.91	0.04614	465423.41
3808241.91	0.04570		
465443.41	3808241.91	0.04529	465463.41
3808241.91	0.04488		
465483.41	3808241.91	0.04450	465503.41
3808241.91	0.04472		
465523.41	3808241.91	0.04528	465543.41
3808241.91	0.04491		
465563.41	3808241.91	0.04459	465583.41
3808241.91	0.04443		
465603.41	3808241.91	0.04409	465623.41
3808241.91	0.04431		
465643.41	3808241.91	0.04483	465663.41
3808241.91	0.04450		
465683.41	3808241.91	0.04422	465703.41
3808241.91	0.04415		
464983.41	3808261.91	0.04825	465003.41
3808261.91	0.04688		

465023.41	3808261.91	0.04605	465043.41
3808261.91	0.04547		
465063.41	3808261.91	0.04542	465083.41
3808261.91	0.04538		
465103.41	3808261.91	0.04536	465123.41
3808261.91	0.04558		
465143.41	3808261.91	0.04515	465163.41
3808261.91	0.04467		
465183.41	3808261.91	0.04486	465203.41
3808261.91	0.04592		
465223.41	3808261.91	0.04592	465243.41
3808261.91	0.04608		
465263.41	3808261.91	0.04568	465283.41
3808261.91	0.04563		
465303.41	3808261.91	0.04645	465323.41
3808261.91	0.04735		
465343.41	3808261.91	0.04734	465363.41
3808261.91	0.04731		
465383.41	3808261.91	0.04746	465403.41
3808261.91	0.04742		
465423.41	3808261.91	0.04698	465443.41
3808261.91	0.04655		
465463.41	3808261.91	0.04613	465483.41
3808261.91	0.04572		
465503.41	3808261.91	0.04580	465523.41
3808261.91	0.04590		
465543.41	3808261.91	0.04552	465563.41
3808261.91	0.04548		
465583.41	3808261.91	0.04560	465603.41
3808261.91	0.04525		
465623.41	3808261.91	0.04532	465643.41
3808261.91	0.04547		
465663.41	3808261.91	0.04563	465683.41
3808261.91	0.04538		
465703.41	3808261.91	0.04510	465003.41
3808281.91	0.05001		
465023.41	3808281.91	0.04875	465043.41
3808281.91	0.04795		
465063.41	3808281.91	0.04766	465083.41
3808281.91	0.04678		
465103.41	3808281.91	0.04615	465123.41
3808281.91	0.04659		
465143.41	3808281.91	0.04714	465163.41
3808281.91	0.04659		
465183.41	3808281.91	0.04671	465203.41
3808281.91	0.04678		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808281.91	0.04706	465243.41
3808281.91	0.04654		
465263.41	3808281.91	0.04629	465283.41
3808281.91	0.04635		
465303.41	3808281.91	0.04718	465323.41
3808281.91	0.04817		
465343.41	3808281.91	0.04827	465363.41
3808281.91	0.04807		
465383.41	3808281.91	0.04828	465403.41
3808281.91	0.04882		
465423.41	3808281.91	0.04862	465443.41
3808281.91	0.04822		
465463.41	3808281.91	0.04748	465483.41
3808281.91	0.04707		
465503.41	3808281.91	0.04667	465523.41
3808281.91	0.04629		
465543.41	3808281.91	0.04616	465563.41
3808281.91	0.04638		
465583.41	3808281.91	0.04687	465603.41
3808281.91	0.04650		
465623.41	3808281.91	0.04622	465643.41
3808281.91	0.04614		
465663.41	3808281.91	0.04645	465683.41
3808281.91	0.04678		
465703.41	3808281.91	0.04663	465003.41

3808301.91	0.05410		
465023.41	3808301.91	0.05242	465043.41
3808301.91	0.05004		
465063.41	3808301.91	0.05141	465083.41
3808301.91	0.05030		
465103.41	3808301.91	0.04760	465123.41
3808301.91	0.04748		
465143.41	3808301.91	0.04748	465163.41
3808301.91	0.04738		
465183.41	3808301.91	0.04799	465203.41
3808301.91	0.04788		
465223.41	3808301.91	0.04742	465243.41
3808301.91	0.04690		
465263.41	3808301.91	0.04746	465283.41
3808301.91	0.04805		
465303.41	3808301.91	0.04914	465323.41
3808301.91	0.04906		
465343.41	3808301.91	0.04888	465363.41
3808301.91	0.04940		
465383.41	3808301.91	0.04960	465403.41
3808301.91	0.04943		
465423.41	3808301.91	0.04991	465443.41
3808301.91	0.04989		
465463.41	3808301.91	0.04787	465483.41
3808301.91	0.04745		
465503.41	3808301.91	0.04705	465523.41
3808301.91	0.04688		
465543.41	3808301.91	0.04736	465563.41
3808301.91	0.04744		
465583.41	3808301.91	0.04726	465603.41
3808301.91	0.04689		
465623.41	3808301.91	0.04696	465643.41
3808301.91	0.04722		
465663.41	3808301.91	0.04706	465683.41
3808301.91	0.04750		
465703.41	3808301.91	0.04772	465043.41
3808321.91	0.05370		
465063.41	3808321.91	0.05272	465083.41
3808321.91	0.05157		
465103.41	3808321.91	0.05041	465123.41
3808321.91	0.04978		
465143.41	3808321.91	0.04917	465163.41
3808321.91	0.04865		
465183.41	3808321.91	0.04878	465203.41
3808321.91	0.04833		
465223.41	3808321.91	0.04803	465243.41
3808321.91	0.04838		
465263.41	3808321.91	0.04894	465283.41
3808321.91	0.04998		
465303.41	3808321.91	0.04993	465323.41

```

3808321.91      0.05006
      465343.41      3808321.91      0.05004      465363.41
3808321.91      0.05030
      465383.41      3808321.91      0.05043      465403.41
3808321.91      0.05055
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 273

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***
      INCLUDING SOURCE(S):      L0006729      , L0006730
, L0006731      , L0006732      , L0006733      ,
      L0006734      , L0006735      , L0006736      , L0006737      , L0006738
, L0006739      , L0006740      , L0006741      ,
      L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006747      , L0006748      , L0006749      ,
      L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465423.41	3808321.91	0.05079	465443.41
3808321.91	0.05055		
465463.41	3808321.91	0.04913	465483.41
3808321.91	0.04871		
465503.41	3808321.91	0.04829	465523.41
3808321.91	0.04794		
465543.41	3808321.91	0.04821	465563.41
3808321.91	0.04803		
465583.41	3808321.91	0.04770	465603.41
3808321.91	0.04786		
465623.41	3808321.91	0.04787	465643.41
3808321.91	0.04825		
465663.41	3808321.91	0.04838	465683.41
3808321.91	0.04838		
465703.41	3808321.91	0.04838	465083.41
3808341.91	0.05300		

465103.41	3808341.91	0.05230	465123.41
3808341.91	0.05130		
465143.41	3808341.91	0.05044	465163.41
3808341.91	0.04985		
465183.41	3808341.91	0.04927	465203.41
3808341.91	0.04898		
465223.41	3808341.91	0.04900	465243.41
3808341.91	0.04953		
465263.41	3808341.91	0.05062	465283.41
3808341.91	0.05097		
465303.41	3808341.91	0.05073	465323.41
3808341.91	0.05117		
465343.41	3808341.91	0.05179	465363.41
3808341.91	0.05129		
465383.41	3808341.91	0.05142	465403.41
3808341.91	0.05193		
465423.41	3808341.91	0.05170	465443.41
3808341.91	0.05128		
465463.41	3808341.91	0.05051	465483.41
3808341.91	0.05007		
465503.41	3808341.91	0.04964	465523.41
3808341.91	0.04925		
465543.41	3808341.91	0.04908	465563.41
3808341.91	0.04872		
465583.41	3808341.91	0.04841	465603.41
3808341.91	0.04871		
465623.41	3808341.91	0.04904	465643.41
3808341.91	0.04894		
465663.41	3808341.91	0.04921	465683.41
3808341.91	0.04916		
465703.41	3808341.91	0.04906	465103.41
3808361.91	0.05412		
465123.41	3808361.91	0.05204	465143.41
3808361.91	0.05083		
465163.41	3808361.91	0.05024	465183.41
3808361.91	0.04966		
465203.41	3808361.91	0.05022	465223.41
3808361.91	0.05054		
465243.41	3808361.91	0.05026	465263.41
3808361.91	0.05102		
465283.41	3808361.91	0.05162	465303.41
3808361.91	0.05214		
465323.41	3808361.91	0.05299	465343.41
3808361.91	0.05359		
465363.41	3808361.91	0.05307	465383.41
3808361.91	0.05262		
465403.41	3808361.91	0.05242	465423.41
3808361.91	0.05288		
465443.41	3808361.91	0.05255	465463.41
3808361.91	0.05093		

465483.41	3808361.91	0.05049	465503.41
3808361.91	0.05006		
465523.41	3808361.91	0.04973	465543.41
3808361.91	0.05005		
465563.41	3808361.91	0.04993	465583.41
3808361.91	0.04954		
465603.41	3808361.91	0.04936	465623.41
3808361.91	0.04980		
465643.41	3808361.91	0.05003	465663.41
3808361.91	0.04972		
465683.41	3808361.91	0.05003	465703.41
3808361.91	0.05037		
465183.41	3808381.91	0.05235	465203.41
3808381.91	0.05296		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 274

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730

, L0006731	, L0006732	, L0006733	,			
	L0006734	, L0006735	, L0006736	, L0006737	, L0006738	
, L0006739	, L0006740	, L0006741	,			
	L0006742	, L0006743	, L0006744	, L0006745	, L0006746	
, L0006747	, L0006748	, L0006749	,			
	L0006750	, L0006751	, L0006752	, L0006753	, L0006754	
, L0006755	, L0006756	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	0.05287	465243.41
3808381.91	0.05283		
465263.41	3808381.91	0.05333	465283.41
3808381.91	0.05419		
465303.41	3808381.91	0.05408	465323.41
3808381.91	0.05484		
465343.41	3808381.91	0.05510	465363.41

3808381.91	0.05456		
465383.41	3808381.91	0.05403	465403.41
3808381.91	0.05357		
465423.41	3808381.91	0.05350	465443.41
3808381.91	0.05368		
465463.41	3808381.91	0.05207	465483.41
3808381.91	0.05162		
465503.41	3808381.91	0.05119	465523.41
3808381.91	0.05081		
465543.41	3808381.91	0.05079	465563.41
3808381.91	0.05130		
465583.41	3808381.91	0.05124	465603.41
3808381.91	0.05083		
465623.41	3808381.91	0.05073	465643.41
3808381.91	0.05071		
465663.41	3808381.91	0.05084	465683.41
3808381.91	0.05094		
465703.41	3808381.91	0.05115	465303.41
3808401.91	0.05656		
465323.41	3808401.91	0.05648	465343.41
3808401.91	0.05709		
465363.41	3808401.91	0.05652	465383.41
3808401.91	0.05597		
465403.41	3808401.91	0.05544	465423.41
3808401.91	0.05493		
465443.41	3808401.91	0.05443	465463.41
3808401.91	0.05393		
465483.41	3808401.91	0.05346	465503.41
3808401.91	0.05300		
465523.41	3808401.91	0.05255	465543.41
3808401.91	0.05212		
465563.41	3808401.91	0.05212	465583.41
3808401.91	0.05230		
465603.41	3808401.91	0.05189	465623.41
3808401.91	0.05155		
465643.41	3808401.91	0.05143	465663.41
3808401.91	0.05194		
465683.41	3808401.91	0.05198	465703.41
3808401.91	0.05185		
465323.41	3808421.91	0.05898	465343.41
3808421.91	0.05845		
465363.41	3808421.91	0.05788	465383.41
3808421.91	0.05731		
465403.41	3808421.91	0.05677	465423.41
3808421.91	0.05624		
465443.41	3808421.91	0.05572	465463.41
3808421.91	0.05522		
465483.41	3808421.91	0.05474	465503.41
3808421.91	0.05427		
465523.41	3808421.91	0.05381	465543.41

3808421.91	0.05336		
465563.41	3808421.91	0.05297	465583.41
3808421.91	0.05274		
465603.41	3808421.91	0.05232	465623.41
3808421.91	0.05247		
465643.41	3808421.91	0.05280	465663.41
3808421.91	0.05259		
465683.41	3808421.91	0.05287	465703.41
3808421.91	0.05317		
465323.41	3808441.91	0.06063	465343.41
3808441.91	0.05996		
465363.41	3808441.91	0.05873	465383.41
3808441.91	0.05805		
465403.41	3808441.91	0.05750	465423.41
3808441.91	0.05697		
465443.41	3808441.91	0.05645	465463.41
3808441.91	0.05594		
465483.41	3808441.91	0.05545	465503.41
3808441.91	0.05497		
465523.41	3808441.91	0.05451	465543.41
3808441.91	0.05405		
465563.41	3808441.91	0.05361	465583.41
3808441.91	0.05318		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 275

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465603.41	3808441.91	0.05276		465623.41
3808441.91	0.05295			
465643.41	3808441.91	0.05363		465663.41
3808441.91	0.05372			
465683.41	3808441.91	0.05380		465703.41
3808441.91	0.05393			
465343.41	3808461.91	0.06181		465363.41
3808461.91	0.06009			
465383.41	3808461.91	0.05896		465403.41
3808461.91	0.05830			
465423.41	3808461.91	0.05776		465443.41
3808461.91	0.05724			
465463.41	3808461.91	0.05671		465483.41
3808461.91	0.05622			
465503.41	3808461.91	0.05552		465523.41
3808461.91	0.05497			
465543.41	3808461.91	0.05451		465563.41
3808461.91	0.05407			
465583.41	3808461.91	0.05363		465603.41
3808461.91	0.05321			
465623.41	3808461.91	0.05340		465643.41
3808461.91	0.05412			
465663.41	3808461.91	0.05469		465683.41
3808461.91	0.05479			
465703.41	3808461.91	0.05438		465343.41
3808481.91	0.06376			
465363.41	3808481.91	0.06289		465383.41
3808481.91	0.06144			
465403.41	3808481.91	0.05998		465423.41
3808481.91	0.05942			
465443.41	3808481.91	0.05887		465463.41
3808481.91	0.05834			
465483.41	3808481.91	0.05782		465503.41
3808481.91	0.05658			
465523.41	3808481.91	0.05543		465543.41
3808481.91	0.05497			
465563.41	3808481.91	0.05453		465583.41
3808481.91	0.05409			
465603.41	3808481.91	0.05366		465623.41
3808481.91	0.05385			
465643.41	3808481.91	0.05457		465663.41
3808481.91	0.05514			
465683.41	3808481.91	0.05523		465703.41
3808481.91	0.05487			
465463.41	3808501.91	0.05928		465483.41
3808501.91	0.05933			
465503.41	3808501.91	0.05825		465523.41
3808501.91	0.05661			

465543.41	3808501.91	0.05614	465563.41
3808501.91	0.05536		
465583.41	3808501.91	0.05460	465603.41
3808501.91	0.05470		
465623.41	3808501.91	0.05479	465643.41
3808501.91	0.05502		
465663.41	3808501.91	0.05559	465683.41
3808501.91	0.05568		
465703.41	3808501.91	0.05533	465523.41
3808521.91	0.05847		
465543.41	3808521.91	0.05797	465563.41
3808521.91	0.05660		
465583.41	3808521.91	0.05539	465603.41
3808521.91	0.05589		
465623.41	3808521.91	0.05590	465643.41
3808521.91	0.05574		
465663.41	3808521.91	0.05620	465683.41
3808521.91	0.05620		
465703.41	3808521.91	0.05603	464239.31
3809562.31	0.32148		
464277.31	3809562.31	0.30957	463745.31
3809591.37	0.78701		
463783.31	3809591.37	0.72425	463821.31
3809591.37	0.66937		
463859.31	3809591.37	0.61365	463897.31
3809591.37	0.54868		
463935.31	3809591.37	0.49531	464239.31
3809591.37	0.33414		
464277.31	3809591.37	0.32009	463745.31
3809620.43	0.82656		
463783.31	3809620.43	0.76610	463821.31
3809620.43	0.70594		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 276

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463859.31	3809620.43	0.64970	463897.31
3809620.43	0.59168		
463935.31	3809620.43	0.52970	463973.31
3809620.43	0.48902		
464011.31	3809620.43	0.45817	464049.31
3809620.43	0.43425		
464087.31	3809620.43	0.41855	464125.31
3809620.43	0.39927		
464163.31	3809620.43	0.38035	464201.31
3809620.43	0.36512		
464239.31	3809620.43	0.34608	464277.31
3809620.43	0.33251		
463745.31	3809649.49	0.86704	463783.31
3809649.49	0.80307		
463821.31	3809649.49	0.74368	463859.31
3809649.49	0.68619		
463897.31	3809649.49	0.62833	463935.31
3809649.49	0.57235		
463973.31	3809649.49	0.53275	464011.31
3809649.49	0.49223		
464049.31	3809649.49	0.46084	464087.31
3809649.49	0.44033		
464125.31	3809649.49	0.41580	464163.31
3809649.49	0.39753		
464201.31	3809649.49	0.37859	464239.31
3809649.49	0.35940		
464277.31	3809649.49	0.34360	464315.31
3809649.49	0.33059		
464353.31	3809649.49	0.31595	464391.31
3809649.49	0.30251		
464429.31	3809649.49	0.29097	464467.31
3809649.49	0.27923		
464505.31	3809649.49	0.27061	463745.31
3809678.55	0.89687		
463783.31	3809678.55	0.83830	463821.31
3809678.55	0.77873		
463859.31	3809678.55	0.72109	463897.31
3809678.55	0.66224		
463935.31	3809678.55	0.60845	463973.31

3809678.55	0.56308		
464011.31	3809678.55	0.52531	464049.31
3809678.55	0.48502		
464087.31	3809678.55	0.45937	464125.31
3809678.55	0.43377		
464163.31	3809678.55	0.41093	464201.31
3809678.55	0.39037		
464239.31	3809678.55	0.37180	464277.31
3809678.55	0.35649		
464315.31	3809678.55	0.34182	464353.31
3809678.55	0.32543		
464391.31	3809678.55	0.31153	464429.31
3809678.55	0.30006		
464467.31	3809678.55	0.28905	464505.31
3809678.55	0.27896		
463745.31	3809707.61	0.92795	463783.31
3809707.61	0.86718		
463821.31	3809707.61	0.81086	463859.31
3809707.61	0.75344		
463897.31	3809707.61	0.69811	463935.31
3809707.61	0.64084		
463973.31	3809707.61	0.59295	464011.31
3809707.61	0.55058		
464049.31	3809707.61	0.50948	464087.31
3809707.61	0.47751		
464125.31	3809707.61	0.44881	464163.31
3809707.61	0.42515		
464201.31	3809707.61	0.40409	464239.31
3809707.61	0.38559		
464277.31	3809707.61	0.36892	464315.31
3809707.61	0.35098		
464353.31	3809707.61	0.33676	464391.31
3809707.61	0.32155		
464429.31	3809707.61	0.31098	464467.31
3809707.61	0.29808		
464505.31	3809707.61	0.28971	463745.31
3809736.67	0.96278		
463783.31	3809736.67	0.89353	463821.31
3809736.67	0.83461		
463859.31	3809736.67	0.78168	463897.31
3809736.67	0.72745		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 277

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463935.31	3809736.67	0.67522	463973.31
3809736.67	0.61992		
464011.31	3809736.67	0.57310	464049.31
3809736.67	0.53226		
464087.31	3809736.67	0.49569	464125.31
3809736.67	0.46524		
464163.31	3809736.67	0.43759	464201.31
3809736.67	0.41832		
464239.31	3809736.67	0.39690	464277.31
3809736.67	0.37951		
464315.31	3809736.67	0.36248	464353.31
3809736.67	0.34885		
464391.31	3809736.67	0.33311	464429.31
3809736.67	0.32027		
464467.31	3809736.67	0.30964	464505.31
3809736.67	0.29655		
463745.31	3809765.73	0.99781	463783.31
3809765.73	0.92277		
463821.31	3809765.73	0.85825	463859.31
3809765.73	0.80471		
463897.31	3809765.73	0.75443	463935.31
3809765.73	0.70398		
463973.31	3809765.73	0.65479	464011.31
3809765.73	0.59833		
464049.31	3809765.73	0.55215	464087.31
3809765.73	0.51289		
464125.31	3809765.73	0.47887	464163.31
3809765.73	0.45003		
464201.31	3809765.73	0.42989	464239.31
3809765.73	0.40759		

464277.31	3809765.73	0.38948	464315.31
3809765.73	0.37313		
464353.31	3809765.73	0.35767	464391.31
3809765.73	0.34278		
464429.31	3809765.73	0.33159	464467.31
3809765.73	0.31688		
464505.31	3809765.73	0.30491	463745.31
3809794.79	1.03198		
463783.31	3809794.79	0.94889	463821.31
3809794.79	0.88103		
463859.31	3809794.79	0.82262	463897.31
3809794.79	0.77403		
463935.31	3809794.79	0.72580	463973.31
3809794.79	0.67863		
464011.31	3809794.79	0.63268	464049.31
3809794.79	0.57230		
464087.31	3809794.79	0.52993	464125.31
3809794.79	0.49558		
464163.31	3809794.79	0.46555	464201.31
3809794.79	0.44205		
464239.31	3809794.79	0.42013	464277.31
3809794.79	0.40104		
464315.31	3809794.79	0.38310	464353.31
3809794.79	0.36852		
464391.31	3809794.79	0.35579	464429.31
3809794.79	0.33936		
464467.31	3809794.79	0.32538	464505.31
3809794.79	0.31447		
463745.31	3809823.85	1.06485	463783.31
3809823.85	0.97424		
463821.31	3809823.85	0.89791	463859.31
3809823.85	0.83868		
463897.31	3809823.85	0.78698	463935.31
3809823.85	0.73821		
463973.31	3809823.85	0.69554	464011.31
3809823.85	0.65491		
464049.31	3809823.85	0.60683	464087.31
3809823.85	0.55221		
464125.31	3809823.85	0.51241	464163.31
3809823.85	0.48117		
464201.31	3809823.85	0.45574	464239.31
3809823.85	0.43289		
464277.31	3809823.85	0.41190	464315.31
3809823.85	0.39650		
464353.31	3809823.85	0.38251	464391.31
3809823.85	0.36469		
464429.31	3809823.85	0.34841	464467.31
3809823.85	0.33451		
464505.31	3809823.85	0.32275	463745.31
3809852.91	1.09917		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 278

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	1.00406	463821.31
3809852.91	0.91828		
463859.31	3809852.91	0.85488	463897.31
3809852.91	0.79838		
463935.31	3809852.91	0.74899	463973.31
3809852.91	0.70680		
464011.31	3809852.91	0.66909	464049.31
3809852.91	0.63140		
464087.31	3809852.91	0.58501	464125.31
3809852.91	0.53753		
464163.31	3809852.91	0.50299	464201.31
3809852.91	0.47804		
464239.31	3809852.91	0.45122	464277.31
3809852.91	0.42807		
464315.31	3809852.91	0.40830	464353.31
3809852.91	0.39265		
464391.31	3809852.91	0.37420	464429.31
3809852.91	0.35962		
464467.31	3809852.91	0.34436	464505.31
3809852.91	0.33127		
463745.31	3809881.97	1.13422	463783.31

3809881.97	1.03206		
463821.31	3809881.97	0.94277	463859.31
3809881.97	0.87248		
463897.31	3809881.97	0.81075	463935.31
3809881.97	0.75821		
463973.31	3809881.97	0.71731	464011.31
3809881.97	0.67959		
464049.31	3809881.97	0.64669	464087.31
3809881.97	0.60953		
464125.31	3809881.97	0.56958	464163.31
3809881.97	0.53449		
464201.31	3809881.97	0.50336	464239.31
3809881.97	0.47560		
464277.31	3809881.97	0.44652	464315.31
3809881.97	0.42271		
464353.31	3809881.97	0.40516	464391.31
3809881.97	0.38552		
464429.31	3809881.97	0.36835	464467.31
3809881.97	0.35337		
464505.31	3809881.97	0.33858	463745.31
3809911.03	1.16443		
463783.31	3809911.03	1.05607	463821.31
3809911.03	0.96696		
463859.31	3809911.03	0.89122	463897.31
3809911.03	0.82628		
463935.31	3809911.03	0.76998	463973.31
3809911.03	0.72658		
464011.31	3809911.03	0.68852	464049.31
3809911.03	0.65597		
464087.31	3809911.03	0.62324	464125.31
3809911.03	0.58772		
464163.31	3809911.03	0.55277	464201.31
3809911.03	0.51830		
464239.31	3809911.03	0.48990	464277.31
3809911.03	0.46132		
464315.31	3809911.03	0.43694	464353.31
3809911.03	0.41498		
464391.31	3809911.03	0.39479	464429.31
3809911.03	0.37709		
464467.31	3809911.03	0.36106	464505.31
3809911.03	0.34634		
463745.31	3809940.09	1.19043	463783.31
3809940.09	1.07838		
463821.31	3809940.09	0.98872	463859.31
3809940.09	0.90940		
463897.31	3809940.09	0.84294	463935.31
3809940.09	0.78494		
463973.31	3809940.09	0.73781	464011.31
3809940.09	0.69551		
464049.31	3809940.09	0.66226	464087.31

3809940.09	0.62994		
464125.31	3809940.09	0.59878	464163.31
3809940.09	0.56870		
464201.31	3809940.09	0.53385	464239.31
3809940.09	0.50144		
464277.31	3809940.09	0.47391	464315.31
3809940.09	0.44893		
464353.31	3809940.09	0.42593	464391.31
3809940.09	0.40516		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 279

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464429.31	3809940.09	0.38601	464467.31
3809940.09	0.36918		
464505.31	3809940.09	0.35609	463745.31
3809969.15	1.22798		
463783.31	3809969.15	1.10386	463821.31
3809969.15	1.00822		
463859.31	3809969.15	0.92718	463897.31
3809969.15	0.85849		
463935.31	3809969.15	0.79930	463973.31
3809969.15	0.75036		
464011.31	3809969.15	0.70450	464049.31
3809969.15	0.66685		

464087.31	3809969.15	0.63524	464125.31
3809969.15	0.60624		
464163.31	3809969.15	0.57767	464201.31
3809969.15	0.54683		
464239.31	3809969.15	0.51514	464277.31
3809969.15	0.48747		
464315.31	3809969.15	0.45857	464353.31
3809969.15	0.43452		
464391.31	3809969.15	0.41323	464429.31
3809969.15	0.39406		
464467.31	3809969.15	0.37796	464505.31
3809969.15	0.36288		
463745.31	3809998.21	1.28192	463783.31
3809998.21	1.13828		
463821.31	3809998.21	1.03224	463859.31
3809998.21	0.94620		
463897.31	3809998.21	0.87500	463935.31
3809998.21	0.81267		
463973.31	3809998.21	0.76173	464011.31
3809998.21	0.71550		
464049.31	3809998.21	0.67582	464087.31
3809998.21	0.64247		
464125.31	3809998.21	0.61438	464163.31
3809998.21	0.58624		
464201.31	3809998.21	0.55894	464239.31
3809998.21	0.52766		
464277.31	3809998.21	0.49742	464315.31
3809998.21	0.47137		
464353.31	3809998.21	0.44386	464391.31
3809998.21	0.42206		
464429.31	3809998.21	0.40244	464467.31
3809998.21	0.38689		
464505.31	3809998.21	0.37025	463745.31
3810027.27	1.33791		
463783.31	3810027.27	1.17995	463821.31
3810027.27	1.06141		
463859.31	3810027.27	0.96828	463897.31
3810027.27	0.89353		
463935.31	3810027.27	0.82650	463973.31
3810027.27	0.77405		
464011.31	3810027.27	0.72679	464049.31
3810027.27	0.68605		
464087.31	3810027.27	0.64985	464125.31
3810027.27	0.62023		
464163.31	3810027.27	0.59388	464201.31
3810027.27	0.56709		
464239.31	3810027.27	0.53961	464277.31
3810027.27	0.50895		
464315.31	3810027.27	0.48047	464353.31
3810027.27	0.45596		

464391.31	3810027.27	0.43360	464429.31
3810027.27	0.41295		
464467.31	3810027.27	0.39419	464505.31
3810027.27	0.37849		
463745.31	3810056.33	1.39282	463783.31
3810056.33	1.22371		
463821.31	3810056.33	1.09064	463859.31
3810056.33	0.99177		
463897.31	3810056.33	0.91129	463935.31
3810056.33	0.84205		
463973.31	3810056.33	0.78684	464011.31
3810056.33	0.73758		
464049.31	3810056.33	0.69422	464087.31
3810056.33	0.65741		
464125.31	3810056.33	0.62534	464163.31
3810056.33	0.59932		
464201.31	3810056.33	0.57327	464239.31
3810056.33	0.54710		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 280

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464277.31	3810056.33	0.52088	464315.31
3810056.33	0.49173		
464353.31	3810056.33	0.46439	464391.31

3810056.33	0.44124		
464429.31	3810056.33	0.42052	464467.31
3810056.33	0.40239		
464505.31	3810056.33	0.38553	463745.31
3810085.39	1.43027		
463783.31	3810085.39	1.26822	463821.31
3810085.39	1.12315		
463859.31	3810085.39	1.01528	463897.31
3810085.39	0.92973		
463935.31	3810085.39	0.85859	463973.31
3810085.39	0.79976		
464011.31	3810085.39	0.74725	464049.31
3810085.39	0.70046		
464087.31	3810085.39	0.66367	464125.31
3810085.39	0.63118		
464163.31	3810085.39	0.60356	464201.31
3810085.39	0.57776		
464239.31	3810085.39	0.55284	464277.31
3810085.39	0.52747		
464315.31	3810085.39	0.50295	464353.31
3810085.39	0.47494		
464391.31	3810085.39	0.44968	464429.31
3810085.39	0.42968		
464467.31	3810085.39	0.41027	464505.31
3810085.39	0.39449		
463745.31	3810114.45	1.44521	463783.31
3810114.45	1.31612		
463821.31	3810114.45	1.16047	463859.31
3810114.45	1.04682		
463897.31	3810114.45	0.95159	463935.31
3810114.45	0.87571		
463973.31	3810114.45	0.81193	464011.31
3810114.45	0.75741		
464049.31	3810114.45	0.70850	464087.31
3810114.45	0.66965		
464125.31	3810114.45	0.63521	464163.31
3810114.45	0.60604		
464201.31	3810114.45	0.58028	464239.31
3810114.45	0.55762		
464277.31	3810114.45	0.53334	464315.31
3810114.45	0.50814		
464353.31	3810114.45	0.48414	464391.31
3810114.45	0.46134		
464429.31	3810114.45	0.44026	464467.31
3810114.45	0.41935		
464505.31	3810114.45	0.40051	463745.31
3810143.51	1.45875		
463783.31	3810143.51	1.34202	463821.31
3810143.51	1.20718		
463859.31	3810143.51	1.08302	463897.31

3810143.51	0.97313		
463935.31	3810143.51	0.88987	463973.31
3810143.51	0.82072		
464011.31	3810143.51	0.76731	464049.31
3810143.51	0.71686		
464087.31	3810143.51	0.67395	464125.31
3810143.51	0.63899		
464163.31	3810143.51	0.60942	464201.31
3810143.51	0.58302		
464239.31	3810143.51	0.55965	464277.31
3810143.51	0.53799		
464315.31	3810143.51	0.51307	464353.31
3810143.51	0.48791		
464391.31	3810143.51	0.46568	464429.31
3810143.51	0.44435		
464467.31	3810143.51	0.42450	464505.31
3810143.51	0.40564		
464383.78	3807479.29	0.03488	464355.03
3807405.24	0.03298		
464402.07	3807352.10	0.03180	464367.23
3807296.35	0.03033		
464358.52	3807237.99	0.02843	464385.52
3807161.33	0.02730		
463132.27	3810926.37	5.16138	463237.82
3811199.31	11.97482		
464944.35	3809244.89	0.13184	465700.32
3809255.46	0.09418		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 281

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730

, L0006731	, L0006732	, L0006733	,
	L0006734	, L0006735	, L0006736 , L0006737 , L0006738
, L0006739	, L0006740	, L0006741	,
	L0006742	, L0006743	, L0006744 , L0006745 , L0006746
, L0006747	, L0006748	, L0006749	,
	L0006750	, L0006751	, L0006752 , L0006753 , L0006754
, L0006755	, L0006756	, . . .	,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465716.18	3808536.49	0.05673	465544.37
3808533.85	0.05884		
465420.13	3808486.27	0.06004	465348.77
3808491.56	0.06440		
465317.05	3808443.98	0.06110	465327.62
3808406.97	0.05742		
465108.23	3808369.97	0.05446	464999.86
3808301.24	0.05421		
464722.31	3807973.48	0.04452	464717.03
3807836.03	0.03845		
464344.33	3807936.47	0.04738	464349.61
3807780.52	0.05017		
464386.62	3807785.81	0.05035	464521.43
3807859.82	0.05183		
464537.28	3807719.72	0.04065	464426.27
3807613.99	0.03917		
464368.43	3807532.62	0.03694	464324.60
3807121.91	0.02608		
464123.31	3807123.54	0.02799	463930.13
3806909.26	0.02656		
463831.11	3806906.01	0.02931	463821.36
3806720.95	0.02552		
463727.21	3806727.44	0.02744	463598.97
3806334.59	0.02291		
463001.06	3806361.54	0.02036	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 282

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
462160.55	3809377.75	0.38303	462051.48
3809270.62	0.36538		
462014.47	3809029.10	0.37708	462010.58
3808855.75	0.38936		
461936.56	3808886.92	0.35965	461936.56
3808997.94	0.35321		
461909.30	3808768.10	0.35511	461835.28
3808894.71	0.32479		
461845.02	3808995.99	0.32403	461833.33
3809114.80	0.31472		
461843.07	3809210.24	0.31249	461809.96
3809297.89	0.29901		
461856.71	3809385.54	0.30456	461841.13
3809482.92	0.29384		
462004.74	3809379.69	0.34150	461763.22
3808793.43	0.30422		
461753.48	3808699.93	0.30099	461835.28
3808686.30	0.32506		
461823.60	3808579.17	0.31564	461761.27
3808585.02	0.29368		
462301.19	3807807.15	0.55091	462304.78
3807868.16	0.55888		
462216.84	3807882.52	0.47650	462116.34
3807886.11	0.40130		
462114.55	3807789.20	0.38193	462012.25
3807887.90	0.33597		
462008.66	3807975.84	0.34683	461917.14
3807972.25	0.29876		
461922.52	3808187.60	0.32603	461908.17
3808288.10	0.32677		
461848.94	3808377.83	0.31016	461831.00
3808494.48	0.31530		
462421.43	3808393.98	0.69265	462459.11
3808501.66	0.70778		
462437.58	3808580.62	0.67108	462654.73
3809189.00	0.58977		
462559.49	3809194.32	0.55424	465763.86
3807935.19	0.15374		
465819.84	3807935.19	0.14818	465875.82

3807935.19	0.14289		
465931.80	3807935.19	0.13792	465987.78
3807935.19	0.13319		
466043.76	3807935.19	0.12870	466099.74
3807935.19	0.12443		
466155.72	3807935.19	0.12038	466211.70
3807935.19	0.11652		
466267.68	3807935.19	0.11286	466323.66
3807935.19	0.10930		
466379.64	3807935.19	0.10599	466435.62
3807935.19	0.10283		
466491.60	3807935.19	0.09981	466547.58
3807935.19	0.09676		
466603.56	3807935.19	0.09399	466659.54
3807935.19	0.09133		
466715.52	3807935.19	0.08880	466771.50
3807935.19	0.08635		
466827.48	3807935.19	0.08395	466883.46
3807935.19	0.08170		
465763.86	3808001.41	0.15445	465819.84
3808001.41	0.14891		
465875.82	3808001.41	0.14363	465931.80
3808001.41	0.13862		
465987.78	3808001.41	0.13399	466043.76
3808001.41	0.12938		
466099.74	3808001.41	0.12529	466155.72
3808001.41	0.12123		
466211.70	3808001.41	0.11738	466267.68
3808001.41	0.11370		
466323.66	3808001.41	0.11017	466379.64
3808001.41	0.10681		
466435.62	3808001.41	0.10360	466491.60
3808001.41	0.10053		
466547.58	3808001.41	0.09755	466603.56
3808001.41	0.09478		
466659.54	3808001.41	0.09212	466715.52
3808001.41	0.08941		
466771.50	3808001.41	0.08698	466827.48
3808001.41	0.08464		
466883.46	3808001.41	0.08233	465763.86
3808067.63	0.15490		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 283

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465819.84	3808067.63	0.14935	465875.82
3808067.63	0.14413		
465931.80	3808067.63	0.13917	465987.78
3808067.63	0.13447		
466043.76	3808067.63	0.13001	466099.74
3808067.63	0.12576		
466155.72	3808067.63	0.12173	466211.70
3808067.63	0.11787		
466267.68	3808067.63	0.11420	466323.66
3808067.63	0.11067		
466379.64	3808067.63	0.10731	466435.62
3808067.63	0.10420		
466491.60	3808067.63	0.10102	466547.58
3808067.63	0.09809		
466603.56	3808067.63	0.09528	466659.54
3808067.63	0.09260		
466715.52	3808067.63	0.09005	466771.50
3808067.63	0.08761		
466827.48	3808067.63	0.08520	466883.46
3808067.63	0.08285		
465763.86	3808133.85	0.15498	465819.84
3808133.85	0.14948		
465875.82	3808133.85	0.14429	465931.80
3808133.85	0.13937		
465987.78	3808133.85	0.13488	466043.76
3808133.85	0.13040		
466099.74	3808133.85	0.12614	466155.72
3808133.85	0.12209		
466211.70	3808133.85	0.11822	466267.68
3808133.85	0.11455		

466323.66	3808133.85	0.11106	466379.64
3808133.85	0.10774		
466435.62	3808133.85	0.10456	466491.60
3808133.85	0.10153		
466547.58	3808133.85	0.09857	466603.56
3808133.85	0.09579		
466659.54	3808133.85	0.09312	466715.52
3808133.85	0.09055		
466771.50	3808133.85	0.08797	466827.48
3808133.85	0.08563		
466883.46	3808133.85	0.08336	465763.86
3808200.07	0.15473		
465819.84	3808200.07	0.14931	465875.82
3808200.07	0.14417		
465931.80	3808200.07	0.13948	465987.78
3808200.07	0.13483		
466043.76	3808200.07	0.13041	466099.74
3808200.07	0.12619		
466155.72	3808200.07	0.12218	466211.70
3808200.07	0.11835		
466267.68	3808200.07	0.11470	466323.66
3808200.07	0.11136		
466379.64	3808200.07	0.10803	466435.62
3808200.07	0.10484		
466491.60	3808200.07	0.10180	466547.58
3808200.07	0.09888		
466603.56	3808200.07	0.09609	466659.54
3808200.07	0.09342		
466715.52	3808200.07	0.09086	466771.50
3808200.07	0.08837		
466827.48	3808200.07	0.08595	466883.46
3808200.07	0.08369		
465763.86	3808266.29	0.15390	465819.84
3808266.29	0.14883		
465875.82	3808266.29	0.14391	465931.80
3808266.29	0.13911		
465987.78	3808266.29	0.13453	466043.76
3808266.29	0.13018		
466099.74	3808266.29	0.12603	466155.72
3808266.29	0.12207		
466211.70	3808266.29	0.11830	466267.68
3808266.29	0.11478		
466323.66	3808266.29	0.11133	466379.64
3808266.29	0.10815		
466435.62	3808266.29	0.10501	466491.60
3808266.29	0.10192		
466547.58	3808266.29	0.09901	466603.56
3808266.29	0.09622		
466659.54	3808266.29	0.09362	466715.52
3808266.29	0.09101		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 284

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.08858	466827.48
3808266.29	0.08619		
466883.46	3808266.29	0.08393	465763.86
3808332.51	0.15291		
465819.84	3808332.51	0.14810	465875.82
3808332.51	0.14316		
465931.80	3808332.51	0.13847	465987.78
3808332.51	0.13399		
466043.76	3808332.51	0.12972	466099.74
3808332.51	0.12564		
466155.72	3808332.51	0.12181	466211.70
3808332.51	0.11809		
466267.68	3808332.51	0.11452	466323.66
3808332.51	0.11132		
466379.64	3808332.51	0.10804	466435.62
3808332.51	0.10489		
466491.60	3808332.51	0.10188	466547.58
3808332.51	0.09900		
466603.56	3808332.51	0.09641	466659.54
3808332.51	0.09378		
466715.52	3808332.51	0.09122	466771.50

3808332.51	0.08865		
466827.48	3808332.51	0.08632	466883.46
3808332.51	0.08408		
465763.86	3808398.73	0.15165	465819.84
3808398.73	0.14694		
465875.82	3808398.73	0.14214	465931.80
3808398.73	0.13758		
465987.78	3808398.73	0.13320	466043.76
3808398.73	0.12903		
466099.74	3808398.73	0.12515	466155.72
3808398.73	0.12130		
466211.70	3808398.73	0.11762	466267.68
3808398.73	0.11436		
466323.66	3808398.73	0.11097	466379.64
3808398.73	0.10775		
466435.62	3808398.73	0.10476	466491.60
3808398.73	0.10181		
466547.58	3808398.73	0.09898	466603.56
3808398.73	0.09628		
466659.54	3808398.73	0.09368	466715.52
3808398.73	0.09113		
466771.50	3808398.73	0.08872	466827.48
3808398.73	0.08638		
466883.46	3808398.73	0.08414	465763.86
3808464.95	0.15014		
465819.84	3808464.95	0.14550	465875.82
3808464.95	0.14080		
465931.80	3808464.95	0.13639	465987.78
3808464.95	0.13219		
466043.76	3808464.95	0.12827	466099.74
3808464.95	0.12435		
466155.72	3808464.95	0.12059	466211.70
3808464.95	0.11700		
466267.68	3808464.95	0.11375	466323.66
3808464.95	0.11044		
466379.64	3808464.95	0.10739	466435.62
3808464.95	0.10436		
466491.60	3808464.95	0.10156	466547.58
3808464.95	0.09875		
466603.56	3808464.95	0.09605	466659.54
3808464.95	0.09347		
466715.52	3808464.95	0.09099	466771.50
3808464.95	0.08861		
466827.48	3808464.95	0.08632	466883.46
3808464.95	0.08411		
465763.86	3808531.17	0.14853	465819.84
3808531.17	0.14379		
465875.82	3808531.17	0.13926	465931.80
3808531.17	0.13493		
465987.78	3808531.17	0.13096	466043.76

3808531.17 0.12707
 466099.74 3808531.17 0.12335 466155.72
 3808531.17 0.11970
 466211.70 3808531.17 0.11621 466267.68
 3808531.17 0.11298
 466323.66 3808531.17 0.10987 466379.64
 3808531.17 0.10679
 466435.62 3808531.17 0.10394 466491.60
 3808531.17 0.10108
 ▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 285

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466547.58	3808531.17	0.09833	466603.56
3808531.17	0.09569		
466659.54	3808531.17	0.09314	466715.52
3808531.17	0.09071		
466771.50	3808531.17	0.08834	466827.48
3808531.17	0.08612		
466883.46	3808531.17	0.08395	465763.86
3808597.39	0.14642		
465819.84	3808597.39	0.14212	465875.82
3808597.39	0.13773		
465931.80	3808597.39	0.13333	465987.78
3808597.39	0.12948		

466043.76	3808597.39	0.12584	466099.74
3808597.39	0.12216		
466155.72	3808597.39	0.11866	466211.70
3808597.39	0.11532		
466267.68	3808597.39	0.11205	466323.66
3808597.39	0.10907		
466379.64	3808597.39	0.10617	466435.62
3808597.39	0.10327		
466491.60	3808597.39	0.10054	466547.58
3808597.39	0.09788		
466603.56	3808597.39	0.09528	466659.54
3808597.39	0.09278		
466715.52	3808597.39	0.09038	466771.50
3808597.39	0.08807		
466827.48	3808597.39	0.08584	466883.46
3808597.39	0.08376		
465763.86	3808663.61	0.14408	465819.84
3808663.61	0.14004		
465875.82	3808663.61	0.13586	465931.80
3808663.61	0.13186		
465987.78	3808663.61	0.12803	466043.76
3808663.61	0.12434		
466099.74	3808663.61	0.12089	466155.72
3808663.61	0.11746		
466211.70	3808663.61	0.11414	466267.68
3808663.61	0.11098		
466323.66	3808663.61	0.10814	466379.64
3808663.61	0.10520		
466435.62	3808663.61	0.10258	466491.60
3808663.61	0.09985		
466547.58	3808663.61	0.09720	466603.56
3808663.61	0.09466		
466659.54	3808663.61	0.09220	466715.52
3808663.61	0.08986		
466771.50	3808663.61	0.08760	466827.48
3808663.61	0.08553		
466883.46	3808663.61	0.08341	465763.86
3808729.83	0.14194		
465819.84	3808729.83	0.13814	465875.82
3808729.83	0.13412		
465931.80	3808729.83	0.13018	465987.78
3808729.83	0.12641		
466043.76	3808729.83	0.12282	466099.74
3808729.83	0.11937		
466155.72	3808729.83	0.11605	466211.70
3808729.83	0.11285		
466267.68	3808729.83	0.10978	466323.66
3808729.83	0.10704		
466379.64	3808729.83	0.10428	466435.62
3808729.83	0.10154		

466491.60	3808729.83	0.09900	466547.58
3808729.83	0.09643		
466603.56	3808729.83	0.09395	466659.54
3808729.83	0.09174		
466715.52	3808729.83	0.08943	466771.50
3808729.83	0.08721		
466827.48	3808729.83	0.08512	466883.46
3808729.83	0.08305		
465763.86	3808796.05	0.13922	465819.84
3808796.05	0.13594		
465875.82	3808796.05	0.13185	465931.80
3808796.05	0.12817		
465987.78	3808796.05	0.12458	466043.76
3808796.05	0.12116		
466099.74	3808796.05	0.11786	466155.72
3808796.05	0.11469		
466211.70	3808796.05	0.11162	466267.68
3808796.05	0.10866		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 286

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466323.66	3808796.05	0.10587	466379.64
3808796.05	0.10316		
466435.62	3808796.05	0.10063	466491.60

3808796.05	0.09804		
466547.58	3808796.05	0.09557	466603.56
3808796.05	0.09329		
466659.54	3808796.05	0.09097	466715.52
3808796.05	0.08878		
466771.50	3808796.05	0.08663	466827.48
3808796.05	0.08454		
466883.46	3808796.05	0.08261	465763.86
3808862.27	0.13596		
465819.84	3808862.27	0.13268	465875.82
3808862.27	0.12939		
465931.80	3808862.27	0.12587	465987.78
3808862.27	0.12247		
466043.76	3808862.27	0.11919	466099.74
3808862.27	0.11614		
466155.72	3808862.27	0.11298	466211.70
3808862.27	0.11003		
466267.68	3808862.27	0.10732	466323.66
3808862.27	0.10458		
466379.64	3808862.27	0.10200	466435.62
3808862.27	0.09947		
466491.60	3808862.27	0.09704	466547.58
3808862.27	0.09469		
466603.56	3808862.27	0.09236	466659.54
3808862.27	0.09022		
466715.52	3808862.27	0.08804	466771.50
3808862.27	0.08596		
466827.48	3808862.27	0.08397	466883.46
3808862.27	0.08204		
465763.86	3808928.49	0.13220	465819.84
3808928.49	0.12908		
465875.82	3808928.49	0.12620	465931.80
3808928.49	0.12321		
465987.78	3808928.49	0.12023	466043.76
3808928.49	0.11737		
466099.74	3808928.49	0.11422	466155.72
3808928.49	0.11132		
466211.70	3808928.49	0.10852	466267.68
3808928.49	0.10579		
466323.66	3808928.49	0.10314	466379.64
3808928.49	0.10058		
466435.62	3808928.49	0.09822	466491.60
3808928.49	0.09590		
466547.58	3808928.49	0.09360	466603.56
3808928.49	0.09149		
466659.54	3808928.49	0.08932	466715.52
3808928.49	0.08726		
466771.50	3808928.49	0.08522	466827.48
3808928.49	0.08332		
466883.46	3808928.49	0.08140	465763.86

3808994.71	0.12942		
465819.84	3808994.71	0.12610	465875.82
3808994.71	0.12318		
465931.80	3808994.71	0.12057	465987.78
3808994.71	0.11808		
466043.76	3808994.71	0.11521	466099.74
3808994.71	0.11231		
466155.72	3808994.71	0.10944	466211.70
3808994.71	0.10678		
466267.68	3808994.71	0.10418	466323.66
3808994.71	0.10167		
466379.64	3808994.71	0.09923	466435.62
3808994.71	0.09687		
466491.60	3808994.71	0.09467	466547.58
3808994.71	0.09258		
466603.56	3808994.71	0.09045	466659.54
3808994.71	0.08834		
466715.52	3808994.71	0.08647	466771.50
3808994.71	0.08447		
466827.48	3808994.71	0.08253	466883.46
3808994.71	0.08075		
465763.86	3809060.93	0.12679	465819.84
3809060.93	0.12362		
465875.82	3809060.93	0.12079	465931.80
3809060.93	0.11810		
465987.78	3809060.93	0.11548	466043.76
3809060.93	0.11292		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 287

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

	466099.74	3809060.93	0.11006	466155.72
3809060.93		0.10747		
	466211.70	3809060.93	0.10488	466267.68
3809060.93		0.10244		
	466323.66	3809060.93	0.10004	466379.64
3809060.93		0.09771		
	466435.62	3809060.93	0.09558	466491.60
3809060.93		0.09347		
	466547.58	3809060.93	0.09133	466603.56
3809060.93		0.08931		
	466659.54	3809060.93	0.08743	466715.52
3809060.93		0.08545		
	466771.50	3809060.93	0.08354	466827.48
3809060.93		0.08173		
	466883.46	3809060.93	0.07999	465763.86
3809127.15		0.12437		
	465819.84	3809127.15	0.12142	465875.82
3809127.15		0.11866		
	465931.80	3809127.15	0.11590	465987.78
3809127.15		0.11324		
	466043.76	3809127.15	0.11036	466099.74
3809127.15		0.10760		
	466155.72	3809127.15	0.10508	466211.70
3809127.15		0.10299		
	466267.68	3809127.15	0.10078	466323.66
3809127.15		0.09854		
	466379.64	3809127.15	0.09628	466435.62
3809127.15		0.09416		
	466491.60	3809127.15	0.09210	466547.58
3809127.15		0.09011		
	466603.56	3809127.15	0.08820	466659.54
3809127.15		0.08625		
	466715.52	3809127.15	0.08441	466771.50
3809127.15		0.08260		
	466827.48	3809127.15	0.08081	466883.46
3809127.15		0.07916		
	465763.86	3809193.37	0.12155	465819.84
3809193.37		0.11897		
	465875.82	3809193.37	0.11628	465931.80
3809193.37		0.11359		
	465987.78	3809193.37	0.11071	466043.76
3809193.37		0.10754		
	466099.74	3809193.37	0.10526	466155.72
3809193.37		0.10291		

466211.70	3809193.37	0.10085	466267.68
3809193.37	0.09883		
466323.66	3809193.37	0.09679	466379.64
3809193.37	0.09476		
466435.62	3809193.37	0.09269	466491.60
3809193.37	0.09071		
466547.58	3809193.37	0.08880	466603.56
3809193.37	0.08699		
466659.54	3809193.37	0.08511	466715.52
3809193.37	0.08338		
466771.50	3809193.37	0.08160	466827.48
3809193.37	0.07993		
466883.46	3809193.37	0.07827	465763.86
3809259.59	0.11844		
465819.84	3809259.59	0.11593	465875.82
3809259.59	0.11333		
465931.80	3809259.59	0.11081	465987.78
3809259.59	0.10804		
466043.76	3809259.59	0.10536	466099.74
3809259.59	0.10288		
466155.72	3809259.59	0.10088	466211.70
3809259.59	0.09893		
466267.68	3809259.59	0.09703	466323.66
3809259.59	0.09494		
466379.64	3809259.59	0.09300	466435.62
3809259.59	0.09112		
466491.60	3809259.59	0.08921	466547.58
3809259.59	0.08745		
466603.56	3809259.59	0.08564	466659.54
3809259.59	0.08389		
466715.52	3809259.59	0.08227	466771.50
3809259.59	0.08056		
466827.48	3809259.59	0.07895	466883.46
3809259.59	0.07735		
464503.41	3807141.91	0.36572	464523.41
3807141.91	0.35822		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 288

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,

```

          L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
          L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464543.41	3807141.91	0.35073	464563.41
3807141.91	0.34317		
464583.41	3807141.91	0.33635	464603.41
3807141.91	0.32986		
464623.41	3807141.91	0.32392	464643.41
3807141.91	0.31764		
464663.41	3807141.91	0.31258	464683.41
3807141.91	0.30649		
464703.41	3807141.91	0.30004	464723.41
3807141.91	0.29405		
464743.41	3807141.91	0.28836	464763.41
3807141.91	0.28276		
464783.41	3807141.91	0.27738	464803.41
3807141.91	0.27213		
464823.41	3807141.91	0.26675	464843.41
3807141.91	0.26175		
464863.41	3807141.91	0.25699	464883.41
3807141.91	0.25230		
464903.41	3807141.91	0.24758	464923.41
3807141.91	0.24295		
464503.41	3807161.91	0.36966	464523.41
3807161.91	0.36205		
464543.41	3807161.91	0.35445	464563.41
3807161.91	0.34678		
464583.41	3807161.91	0.33986	464603.41
3807161.91	0.33411		
464623.41	3807161.91	0.32786	464643.41
3807161.91	0.32109		
464663.41	3807161.91	0.31579	464683.41
3807161.91	0.30908		
464703.41	3807161.91	0.30289	464723.41
3807161.91	0.29693		
464743.41	3807161.91	0.29110	464763.41
3807161.91	0.28511		
464783.41	3807161.91	0.27958	464803.41

3807161.91	0.27432		
464823.41	3807161.91	0.26916	464843.41
3807161.91	0.26420		
464863.41	3807161.91	0.25932	464883.41
3807161.91	0.25430		
464903.41	3807161.91	0.24961	464923.41
3807161.91	0.24511		
464503.41	3807181.91	0.37380	464523.41
3807181.91	0.36579		
464543.41	3807181.91	0.35804	464563.41
3807181.91	0.35089		
464583.41	3807181.91	0.34362	464603.41
3807181.91	0.33745		
464623.41	3807181.91	0.33235	464643.41
3807181.91	0.32551		
464663.41	3807181.91	0.31885	464683.41
3807181.91	0.31200		
464703.41	3807181.91	0.30579	464723.41
3807181.91	0.29960		
464743.41	3807181.91	0.29352	464763.41
3807181.91	0.28764		
464783.41	3807181.91	0.28210	464803.41
3807181.91	0.27675		
464823.41	3807181.91	0.27135	464843.41
3807181.91	0.26627		
464863.41	3807181.91	0.26138	464883.41
3807181.91	0.25646		
464903.41	3807181.91	0.25166	464923.41
3807181.91	0.24701		
464503.41	3807201.91	0.37828	464523.41
3807201.91	0.36987		
464543.41	3807201.91	0.36196	464563.41
3807201.91	0.35459		
464583.41	3807201.91	0.34763	464603.41
3807201.91	0.34106		
464623.41	3807201.91	0.33559	464643.41
3807201.91	0.32855		
464663.41	3807201.91	0.32182	464683.41
3807201.91	0.31496		
464703.41	3807201.91	0.30857	464723.41
3807201.91	0.30217		
464743.41	3807201.91	0.29594	464763.41
3807201.91	0.29024		
464783.41	3807201.91	0.28463	464803.41
3807201.91	0.27911		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 , L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 , L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 , L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.27353	464843.41
3807201.91	0.26829		
464863.41	3807201.91	0.26331	464883.41
3807201.91	0.25854		
464903.41	3807201.91	0.25368	464923.41
3807201.91	0.24890		
464503.41	3807221.91	0.38208	464523.41
3807221.91	0.37357		
464543.41	3807221.91	0.36554	464563.41
3807221.91	0.35839		
464583.41	3807221.91	0.35208	464603.41
3807221.91	0.34478		
464623.41	3807221.91	0.33873	464643.41
3807221.91	0.33154		
464663.41	3807221.91	0.32454	464683.41
3807221.91	0.31784		
464703.41	3807221.91	0.31101	464723.41
3807221.91	0.30466		
464743.41	3807221.91	0.29865	464763.41
3807221.91	0.29287		
464783.41	3807221.91	0.28698	464803.41
3807221.91	0.28119		
464823.41	3807221.91	0.27586	464843.41
3807221.91	0.27045		
464863.41	3807221.91	0.26517	464883.41
3807221.91	0.26036		

464903.41	3807221.91	0.25564	464923.41
3807221.91	0.25098		
464503.41	3807241.91	0.38581	464523.41
3807241.91	0.37742		
464543.41	3807241.91	0.36932	464563.41
3807241.91	0.36182		
464583.41	3807241.91	0.35535	464603.41
3807241.91	0.34932		
464623.41	3807241.91	0.34188	464643.41
3807241.91	0.33453		
464663.41	3807241.91	0.32727	464683.41
3807241.91	0.32034		
464703.41	3807241.91	0.31365	464723.41
3807241.91	0.30735		
464743.41	3807241.91	0.30127	464763.41
3807241.91	0.29516		
464783.41	3807241.91	0.28925	464803.41
3807241.91	0.28352		
464823.41	3807241.91	0.27795	464843.41
3807241.91	0.27255		
464863.41	3807241.91	0.26736	464883.41
3807241.91	0.26249		
464903.41	3807241.91	0.25761	464923.41
3807241.91	0.25279		
464503.41	3807261.91	0.38947	464523.41
3807261.91	0.38122		
464543.41	3807261.91	0.37305	464563.41
3807261.91	0.36520		
464583.41	3807261.91	0.35864	464603.41
3807261.91	0.35244		
464623.41	3807261.91	0.34517	464643.41
3807261.91	0.33752		
464663.41	3807261.91	0.33003	464683.41
3807261.91	0.32284		
464703.41	3807261.91	0.31635	464723.41
3807261.91	0.30999		
464743.41	3807261.91	0.30373	464763.41
3807261.91	0.29741		
464783.41	3807261.91	0.29148	464803.41
3807261.91	0.28579		
464823.41	3807261.91	0.28002	464843.41
3807261.91	0.27461		
464863.41	3807261.91	0.26947	464883.41
3807261.91	0.26455		
464903.41	3807261.91	0.25947	464923.41
3807261.91	0.25447		
464503.41	3807281.91	0.39310	464523.41
3807281.91	0.38474		
464543.41	3807281.91	0.37647	464563.41
3807281.91	0.36852		


```

        464583.41    3807281.91          0.36188          464603.41
3807281.91          0.35566
        464623.41    3807281.91          0.34770          464643.41
3807281.91          0.34036
^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***                                     16:42:19

```

PAGE 290

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
        INCLUDING SOURCE(S):      L0006139      , L0006140
, L0006141      , L0006142      , L0006143      ,
        L0006144      , L0006145      , L0006146      , L0006147      , L0006148
, L0006149      , L0006150      , L0006151      ,
        L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
        L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
464663.41	3807281.91	0.33292	464683.41
3807281.91	0.32566		
464703.41	3807281.91	0.31909	464723.41
3807281.91	0.31241		
464743.41	3807281.91	0.30585	464763.41
3807281.91	0.29982		
464783.41	3807281.91	0.29371	464803.41
3807281.91	0.28774		
464823.41	3807281.91	0.28224	464843.41
3807281.91	0.27666		
464863.41	3807281.91	0.27121	464883.41
3807281.91	0.26626		
464903.41	3807281.91	0.26113	464923.41
3807281.91	0.25608		
464503.41	3807301.91	0.39722	464523.41
3807301.91	0.38851		
464543.41	3807301.91	0.38080	464563.41

3807301.91	0.37293		
464583.41	3807301.91	0.36532	464603.41
3807301.91	0.35870		
464623.41	3807301.91	0.35060	464643.41
3807301.91	0.34326		
464663.41	3807301.91	0.33576	464683.41
3807301.91	0.32842		
464703.41	3807301.91	0.32178	464723.41
3807301.91	0.31498		
464743.41	3807301.91	0.30826	464763.41
3807301.91	0.30195		
464783.41	3807301.91	0.29586	464803.41
3807301.91	0.29000		
464823.41	3807301.91	0.28452	464843.41
3807301.91	0.27886		
464863.41	3807301.91	0.27325	464883.41
3807301.91	0.26800		
464903.41	3807301.91	0.26291	464923.41
3807301.91	0.25802		
464503.41	3807321.91	0.40088	464523.41
3807321.91	0.39184		
464543.41	3807321.91	0.38432	464563.41
3807321.91	0.37797		
464583.41	3807321.91	0.36975	464603.41
3807321.91	0.36173		
464623.41	3807321.91	0.35355	464643.41
3807321.91	0.34613		
464663.41	3807321.91	0.33855	464683.41
3807321.91	0.33112		
464703.41	3807321.91	0.32430	464723.41
3807321.91	0.31746		
464743.41	3807321.91	0.31072	464763.41
3807321.91	0.30409		
464783.41	3807321.91	0.29803	464803.41
3807321.91	0.29231		
464823.41	3807321.91	0.28667	464843.41
3807321.91	0.28092		
464863.41	3807321.91	0.27524	464883.41
3807321.91	0.26980		
464903.41	3807321.91	0.26478	464923.41
3807321.91	0.26001		
464503.41	3807341.91	0.40428	464523.41
3807341.91	0.39514		
464543.41	3807341.91	0.38754	464563.41
3807341.91	0.38111		
464583.41	3807341.91	0.37280	464603.41
3807341.91	0.36471		
464623.41	3807341.91	0.35644	464643.41
3807341.91	0.34894		
464663.41	3807341.91	0.34129	464683.41

3807341.91	0.33371		
464703.41	3807341.91	0.32644	464723.41
3807341.91	0.31968		
464743.41	3807341.91	0.31318	464763.41
3807341.91	0.30649		
464783.41	3807341.91	0.30037	464803.41
3807341.91	0.29453		
464823.41	3807341.91	0.28849	464843.41
3807341.91	0.28259		
464863.41	3807341.91	0.27691	464883.41
3807341.91	0.27176		
464903.41	3807341.91	0.26680	464923.41
3807341.91	0.26193		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 291

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140

, L0006141	, L0006142	, L0006143	,			
	L0006144	, L0006145	, L0006146	, L0006147	, L0006148	
, L0006149	, L0006150	, L0006151	,			
	L0006152	, L0006153	, L0006154	, L0006155	, L0006156	
, L0006157	, L0006158	, L0006159	,			
	L0006160	, L0006161	, L0006162	, L0006163	, L0006164	
, L0006165	, L0006166	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464503.41	3807361.91	0.40797	464523.41
3807361.91	0.39965		
464543.41	3807361.91	0.39122	464563.41
3807361.91	0.38418		
464583.41	3807361.91	0.37579	464603.41
3807361.91	0.36761		
464623.41	3807361.91	0.35921	464643.41
3807361.91	0.35132		

464663.41	3807361.91	0.34371	464683.41
3807361.91	0.33632		
464703.41	3807361.91	0.32889	464723.41
3807361.91	0.32189		
464743.41	3807361.91	0.31520	464763.41
3807361.91	0.30874		
464783.41	3807361.91	0.30247	464803.41
3807361.91	0.29633		
464823.41	3807361.91	0.29017	464843.41
3807361.91	0.28438		
464863.41	3807361.91	0.27889	464883.41
3807361.91	0.27377		
464903.41	3807361.91	0.26861	464923.41
3807361.91	0.26352		
464503.41	3807381.91	0.41224	464523.41
3807381.91	0.40326		
464543.41	3807381.91	0.39594	464563.41
3807381.91	0.38716		
464583.41	3807381.91	0.37857	464603.41
3807381.91	0.37035		
464623.41	3807381.91	0.36192	464643.41
3807381.91	0.35367		
464663.41	3807381.91	0.34601	464683.41
3807381.91	0.33871		
464703.41	3807381.91	0.33134	464723.41
3807381.91	0.32412		
464743.41	3807381.91	0.31718	464763.41
3807381.91	0.31084		
464783.41	3807381.91	0.30445	464803.41
3807381.91	0.29814		
464823.41	3807381.91	0.29193	464843.41
3807381.91	0.28626		
464863.41	3807381.91	0.28092	464883.41
3807381.91	0.27565		
464903.41	3807381.91	0.27032	464923.41
3807381.91	0.26511		
464503.41	3807401.91	0.41612	464523.41
3807401.91	0.40659		
464543.41	3807401.91	0.39894	464563.41
3807401.91	0.39000		
464583.41	3807401.91	0.38125	464603.41
3807401.91	0.37276		
464623.41	3807401.91	0.36462	464643.41
3807401.91	0.35629		
464663.41	3807401.91	0.34829	464683.41
3807401.91	0.34066		
464703.41	3807401.91	0.33364	464723.41
3807401.91	0.32649		
464743.41	3807401.91	0.31942	464763.41
3807401.91	0.31263		

464783.41	3807401.91	0.30634	464803.41
3807401.91	0.30029		
464823.41	3807401.91	0.29402	464843.41
3807401.91	0.28831		
464863.41	3807401.91	0.28286	464883.41
3807401.91	0.27720		
464903.41	3807401.91	0.27196	464923.41
3807401.91	0.26692		
464503.41	3807421.91	0.42066	464523.41
3807421.91	0.41109		
464543.41	3807421.91	0.40161	464563.41
3807421.91	0.39272		
464583.41	3807421.91	0.38379	464603.41
3807421.91	0.37514		
464623.41	3807421.91	0.36679	464643.41
3807421.91	0.35873		
464663.41	3807421.91	0.35072	464683.41
3807421.91	0.34292		
464703.41	3807421.91	0.33561	464723.41
3807421.91	0.32855		
464743.41	3807421.91	0.32167	464763.41
3807421.91	0.31475		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 292

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -				
464783.41	3807421.91	0.30822	464803.41	
3807421.91	0.30200			
464823.41	3807421.91	0.29598	464843.41	
3807421.91	0.29012			
464863.41	3807421.91	0.28444	464883.41	
3807421.91	0.27895			
464903.41	3807421.91	0.27359	464923.41	
3807421.91	0.26840			
464503.41	3807441.91	0.42362	464523.41	
3807441.91	0.41383			
464543.41	3807441.91	0.40447	464563.41	
3807441.91	0.39501			
464583.41	3807441.91	0.38621	464603.41	
3807441.91	0.37743			
464623.41	3807441.91	0.36890	464643.41	
3807441.91	0.36097			
464663.41	3807441.91	0.35304	464683.41	
3807441.91	0.34524			
464703.41	3807441.91	0.33757	464723.41	
3807441.91	0.33048			
464743.41	3807441.91	0.32371	464763.41	
3807441.91	0.31686			
464783.41	3807441.91	0.31013	464803.41	
3807441.91	0.30368			
464823.41	3807441.91	0.29790	464843.41	
3807441.91	0.29191			
464863.41	3807441.91	0.28602	464883.41	
3807441.91	0.28074			
464903.41	3807441.91	0.27527	464923.41	
3807441.91	0.26987			
464503.41	3807461.91	0.42641	464523.41	
3807461.91	0.41645			
464543.41	3807461.91	0.40681	464563.41	
3807461.91	0.39759			
464583.41	3807461.91	0.38826	464603.41	
3807461.91	0.37959			
464623.41	3807461.91	0.37129	464643.41	
3807461.91	0.36287			
464663.41	3807461.91	0.35504	464683.41	
3807461.91	0.34753			
464703.41	3807461.91	0.33981	464723.41	
3807461.91	0.33239			
464743.41	3807461.91	0.32531	464763.41	
3807461.91	0.31882			
464783.41	3807461.91	0.31218	464803.41	
3807461.91	0.30568			
464823.41	3807461.91	0.29985	464843.41	
3807461.91	0.29382			
464863.41	3807461.91	0.28789	464883.41	

3807461.91	0.28258		
464903.41	3807461.91	0.27706	464923.41
3807461.91	0.27163		
464503.41	3807481.91	0.42917	464523.41
3807481.91	0.41904		
464543.41	3807481.91	0.40910	464563.41
3807481.91	0.39964		
464583.41	3807481.91	0.39054	464603.41
3807481.91	0.38172		
464623.41	3807481.91	0.37320	464643.41
3807481.91	0.36498		
464663.41	3807481.91	0.35702	464683.41
3807481.91	0.34931		
464703.41	3807481.91	0.34188	464723.41
3807481.91	0.33446		
464743.41	3807481.91	0.32728	464763.41
3807481.91	0.32083		
464783.41	3807481.91	0.31417	464803.41
3807481.91	0.30763		
464823.41	3807481.91	0.30176	464843.41
3807481.91	0.29569		
464863.41	3807481.91	0.28967	464883.41
3807481.91	0.28404		
464903.41	3807481.91	0.27859	464923.41
3807481.91	0.27330		
464503.41	3807501.91	0.43203	464523.41
3807501.91	0.42142		
464543.41	3807501.91	0.41129	464563.41
3807501.91	0.40164		
464583.41	3807501.91	0.39269	464603.41
3807501.91	0.38374		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 293

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464623.41	3807501.91	0.37505	464643.41
3807501.91	0.36698		
464663.41	3807501.91	0.35890	464683.41
3807501.91	0.35104		
464703.41	3807501.91	0.34374	464723.41
3807501.91	0.33642		
464743.41	3807501.91	0.32928	464763.41
3807501.91	0.32267		
464783.41	3807501.91	0.31601	464803.41
3807501.91	0.30951		
464823.41	3807501.91	0.30349	464843.41
3807501.91	0.29742		
464863.41	3807501.91	0.29141	464883.41
3807501.91	0.28548		
464903.41	3807501.91	0.28009	464923.41
3807501.91	0.27494		
464503.41	3807521.91	0.43382	464523.41
3807521.91	0.42315		
464543.41	3807521.91	0.41331	464563.41
3807521.91	0.40393		
464583.41	3807521.91	0.39444	464603.41
3807521.91	0.38562		
464623.41	3807521.91	0.37719	464643.41
3807521.91	0.36861		
464663.41	3807521.91	0.36066	464683.41
3807521.91	0.35304		
464703.41	3807521.91	0.34527	464723.41
3807521.91	0.33806		
464743.41	3807521.91	0.33116	464763.41
3807521.91	0.32409		
464783.41	3807521.91	0.31755	464803.41
3807521.91	0.31127		
464823.41	3807521.91	0.30483	464843.41
3807521.91	0.29887		
464863.41	3807521.91	0.29314	464883.41
3807521.91	0.28718		
464903.41	3807521.91	0.28175	464923.41
3807521.91	0.27657		
464503.41	3807541.91	0.43555	464523.41
3807541.91	0.42525		

464543.41	3807541.91	0.41529	464563.41
3807541.91	0.40568		
464583.41	3807541.91	0.39643	464603.41
3807541.91	0.38747		
464623.41	3807541.91	0.37881	464643.41
3807541.91	0.37047		
464663.41	3807541.91	0.36239	464683.41
3807541.91	0.35456		
464703.41	3807541.91	0.34701	464723.41
3807541.91	0.33968		
464743.41	3807541.91	0.33259	464763.41
3807541.91	0.32574		
464783.41	3807541.91	0.31930	464803.41
3807541.91	0.31304		
464823.41	3807541.91	0.30649	464843.41
3807541.91	0.30031		
464863.41	3807541.91	0.29442	464883.41
3807541.91	0.28872		
464903.41	3807541.91	0.28318	464923.41
3807541.91	0.27779		
464503.41	3807561.91	0.43736	464523.41
3807561.91	0.42724		
464543.41	3807561.91	0.41715	464563.41
3807561.91	0.40736		
464583.41	3807561.91	0.39828	464603.41
3807561.91	0.38921		
464623.41	3807561.91	0.38039	464643.41
3807561.91	0.37222		
464663.41	3807561.91	0.36402	464683.41
3807561.91	0.35604		
464703.41	3807561.91	0.34865	464723.41
3807561.91	0.34122		
464743.41	3807561.91	0.33400	464763.41
3807561.91	0.32742		
464783.41	3807561.91	0.32096	464803.41
3807561.91	0.31460		
464823.41	3807561.91	0.30814	464843.41
3807561.91	0.30178		
464863.41	3807561.91	0.29569	464883.41
3807561.91	0.29024		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 294

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

			INCLUDING SOURCE(S):	L0006139	, L0006140
, L0006141	, L0006142	, L0006143	,		
	L0006144	, L0006145	, L0006146	, L0006147	, L0006148
, L0006149	, L0006150	, L0006151	,		
	L0006152	, L0006153	, L0006154	, L0006155	, L0006156
, L0006157	, L0006158	, L0006159	,		
	L0006160	, L0006161	, L0006162	, L0006163	, L0006164
, L0006165	, L0006166	, . . .	,		

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
464903.41	3807561.91	0.28457	464923.41
3807561.91	0.27897		
464503.41	3807581.91	0.43948	464523.41
3807581.91	0.42877		
464543.41	3807581.91	0.41884	464563.41
3807581.91	0.40935		
464583.41	3807581.91	0.39972	464603.41
3807581.91	0.39079		
464623.41	3807581.91	0.38226	464643.41
3807581.91	0.37356		
464663.41	3807581.91	0.36551	464683.41
3807581.91	0.35781		
464703.41	3807581.91	0.34993	464723.41
3807581.91	0.34263		
464743.41	3807581.91	0.33575	464763.41
3807581.91	0.32914		
464783.41	3807581.91	0.32237	464803.41
3807581.91	0.31572		
464823.41	3807581.91	0.30963	464843.41
3807581.91	0.30338		
464863.41	3807581.91	0.29726	464883.41
3807581.91	0.29178		
464903.41	3807581.91	0.28609	464923.41
3807581.91	0.28040		
464503.41	3807601.91	0.44090	464523.41
3807601.91	0.43005		
464543.41	3807601.91	0.42013	464563.41
3807601.91	0.41077		
464583.41	3807601.91	0.40141	464603.41
3807601.91	0.39235		
464623.41	3807601.91	0.38359	464643.41

3807601.91	0.37516		
464663.41	3807601.91	0.36698	464683.41
3807601.91	0.35907		
464703.41	3807601.91	0.35144	464723.41
3807601.91	0.34427		
464743.41	3807601.91	0.33737	464763.41
3807601.91	0.33040		
464783.41	3807601.91	0.32367	464803.41
3807601.91	0.31715		
464823.41	3807601.91	0.31080	464843.41
3807601.91	0.30467		
464863.41	3807601.91	0.29872	464883.41
3807601.91	0.29292		
464903.41	3807601.91	0.28731	464923.41
3807601.91	0.28183		
464503.41	3807621.91	0.44206	464523.41
3807621.91	0.43134		
464543.41	3807621.91	0.42146	464563.41
3807621.91	0.41211		
464583.41	3807621.91	0.40296	464603.41
3807621.91	0.39379		
464623.41	3807621.91	0.38487	464643.41
3807621.91	0.37663		
464663.41	3807621.91	0.36835	464683.41
3807621.91	0.36030		
464703.41	3807621.91	0.35299	464723.41
3807621.91	0.34581		
464743.41	3807621.91	0.33875	464763.41
3807621.91	0.33158		
464783.41	3807621.91	0.32489	464803.41
3807621.91	0.31846		
464823.41	3807621.91	0.31193	464843.41
3807621.91	0.30583		
464863.41	3807621.91	0.29997	464883.41
3807621.91	0.29400		
464903.41	3807621.91	0.28843	464923.41
3807621.91	0.28307		
464503.41	3807641.91	0.44315	464523.41
3807641.91	0.43299		
464543.41	3807641.91	0.42326	464563.41
3807641.91	0.41379		
464583.41	3807641.91	0.40406	464603.41
3807641.91	0.39506		
464623.41	3807641.91	0.38646	464643.41
3807641.91	0.37768		
464663.41	3807641.91	0.36956	464683.41
3807641.91	0.36191		
464703.41	3807641.91	0.35457	464723.41
3807641.91	0.34706		

▲ *** AERMOD - VERSION 19191 ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 295

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464743.41	3807641.91	0.33968	464763.41
3807641.91	0.33294		
464783.41	3807641.91	0.32608	464803.41
3807641.91	0.31937		
464823.41	3807641.91	0.31323	464843.41
3807641.91	0.30698		
464863.41	3807641.91	0.30085	464883.41
3807641.91	0.29525		
464903.41	3807641.91	0.28953	464923.41
3807641.91	0.28391		
464503.41	3807661.91	0.44402	464523.41
3807661.91	0.43397		
464543.41	3807661.91	0.42428	464563.41
3807661.91	0.41486		
464583.41	3807661.91	0.40543	464603.41
3807661.91	0.39631		
464623.41	3807661.91	0.38749	464643.41
3807661.91	0.37899		
464663.41	3807661.91	0.37076	464683.41
3807661.91	0.36285		
464703.41	3807661.91	0.35550	464723.41
3807661.91	0.34817		

464743.41	3807661.91	0.34096	464763.41
3807661.91	0.33394		
464783.41	3807661.91	0.32716	464803.41
3807661.91	0.32059		
464823.41	3807661.91	0.31420	464843.41
3807661.91	0.30801		
464863.41	3807661.91	0.30202	464883.41
3807661.91	0.29618		
464903.41	3807661.91	0.29053	464923.41
3807661.91	0.28504		
464503.41	3807681.91	0.44470	464523.41
3807681.91	0.43466		
464543.41	3807681.91	0.42498	464563.41
3807681.91	0.41563		
464583.41	3807681.91	0.40660	464603.41
3807681.91	0.39743		
464623.41	3807681.91	0.38846	464643.41
3807681.91	0.38018		
464663.41	3807681.91	0.37184	464683.41
3807681.91	0.36373		
464703.41	3807681.91	0.35625	464723.41
3807681.91	0.34908		
464743.41	3807681.91	0.34210	464763.41
3807681.91	0.33488		
464783.41	3807681.91	0.32815	464803.41
3807681.91	0.32169		
464823.41	3807681.91	0.31512	464843.41
3807681.91	0.30898		
464863.41	3807681.91	0.30309	464883.41
3807681.91	0.29707		
464903.41	3807681.91	0.29146	464923.41
3807681.91	0.28607		
464523.41	3807701.91	0.43523	464543.41
3807701.91	0.42556		
464563.41	3807701.91	0.41622	464583.41
3807701.91	0.40720		
464603.41	3807701.91	0.39839	464623.41
3807701.91	0.38976		
464643.41	3807701.91	0.38093	464663.41
3807701.91	0.37278		
464683.41	3807701.91	0.36499	464703.41
3807701.91	0.35699		
464723.41	3807701.91	0.34969	464743.41
3807701.91	0.34278		
464763.41	3807701.91	0.33601	464783.41
3807701.91	0.32912		
464803.41	3807701.91	0.32237	464823.41
3807701.91	0.31621		
464843.41	3807701.91	0.30992	464863.41
3807701.91	0.30375		

464883.41	3807701.91	0.29813	464903.41
3807701.91	0.29237		
464923.41	3807701.91	0.28673	464543.41
3807721.91	0.42632		
464563.41	3807721.91	0.41737	464583.41
3807721.91	0.40834		
464603.41	3807721.91	0.39961	464623.41
3807721.91	0.39104		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 296

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464643.41	3807721.91	0.38209	464663.41
3807721.91	0.37369		
464683.41	3807721.91	0.36570	464703.41
3807721.91	0.35799		
464723.41	3807721.91	0.35076	464743.41
3807721.91	0.34381		
464763.41	3807721.91	0.33676	464783.41
3807721.91	0.32996		
464803.41	3807721.91	0.32337	464823.41
3807721.91	0.31695		
464843.41	3807721.91	0.31074	464863.41
3807721.91	0.30473		
464883.41	3807721.91	0.29886	464903.41

3807721.91	0.29318		
464923.41	3807721.91	0.28767	464943.41
3807721.91	0.28229		
464963.41	3807721.91	0.27708	464983.41
3807721.91	0.27202		
465003.41	3807721.91	0.26708	465023.41
3807721.91	0.26229		
465043.41	3807721.91	0.25763	465063.41
3807721.91	0.25308		
465083.41	3807721.91	0.24866	465103.41
3807721.91	0.24441		
465123.41	3807721.91	0.24045	465143.41
3807721.91	0.23643		
465163.41	3807721.91	0.23247	465183.41
3807721.91	0.22880		
465203.41	3807721.91	0.22509	465223.41
3807721.91	0.22140		
465243.41	3807721.91	0.21778	465263.41
3807721.91	0.21426		
465283.41	3807721.91	0.21087	465303.41
3807721.91	0.20771		
465323.41	3807721.91	0.20449	465343.41
3807721.91	0.20132		
465363.41	3807721.91	0.19838	465383.41
3807721.91	0.19539		
464543.41	3807741.91	0.42647	464563.41
3807741.91	0.41811		
464583.41	3807741.91	0.40925	464603.41
3807741.91	0.40057		
464623.41	3807741.91	0.39199	464643.41
3807741.91	0.38304		
464663.41	3807741.91	0.37448	464683.41
3807741.91	0.36638		
464703.41	3807741.91	0.35903	464723.41
3807741.91	0.35181		
464743.41	3807741.91	0.34469	464763.41
3807741.91	0.33746		
464783.41	3807741.91	0.33071	464803.41
3807741.91	0.32424		
464823.41	3807741.91	0.31764	464843.41
3807741.91	0.31158		
464863.41	3807741.91	0.30575	464883.41
3807741.91	0.29958		
464903.41	3807741.91	0.29400	464923.41
3807741.91	0.28867		
464943.41	3807741.91	0.28300	464963.41
3807741.91	0.27788		
464983.41	3807741.91	0.27299	465003.41
3807741.91	0.26778		
465023.41	3807741.91	0.26300	465043.41

3807741.91	0.25843		
465063.41	3807741.91	0.25373	465083.41
3807741.91	0.24942		
465103.41	3807741.91	0.24534	465123.41
3807741.91	0.24128		
465143.41	3807741.91	0.23713	465163.41
3807741.91	0.23305		
465183.41	3807741.91	0.22929	465203.41
3807741.91	0.22568		
465223.41	3807741.91	0.22213	465243.41
3807741.91	0.21839		
465263.41	3807741.91	0.21496	465283.41
3807741.91	0.21171		
465303.41	3807741.91	0.20846	465323.41
3807741.91	0.20514		
465343.41	3807741.91	0.20186	465363.41
3807741.91	0.19885		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 297

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465383.41	3807741.91	0.19594	464543.41
3807761.91	0.42510		
464563.41	3807761.91	0.41749	464583.41
3807761.91	0.40930		

464603.41	3807761.91	0.40084	464623.41
3807761.91	0.39227		
464643.41	3807761.91	0.38331	464663.41
3807761.91	0.37512		
464683.41	3807761.91	0.36745	464703.41
3807761.91	0.36009		
464723.41	3807761.91	0.35253	464743.41
3807761.91	0.34511		
464763.41	3807761.91	0.33834	464783.41
3807761.91	0.33144		
464803.41	3807761.91	0.32467	464823.41
3807761.91	0.31851		
464843.41	3807761.91	0.31258	464863.41
3807761.91	0.30675		
464883.41	3807761.91	0.30057	464903.41
3807761.91	0.29498		
464923.41	3807761.91	0.28964	464943.41
3807761.91	0.28397		
464963.41	3807761.91	0.27884	464983.41
3807761.91	0.27394		
465003.41	3807761.91	0.26872	465023.41
3807761.91	0.26369		
465043.41	3807761.91	0.25889	465063.41
3807761.91	0.25453		
465083.41	3807761.91	0.25033	465103.41
3807761.91	0.24618		
465123.41	3807761.91	0.24179	465143.41
3807761.91	0.23775		
465163.41	3807761.91	0.23386	465183.41
3807761.91	0.22980		
465203.41	3807761.91	0.22610	465223.41
3807761.91	0.22259		
465243.41	3807761.91	0.21913	465263.41
3807761.91	0.21578		
465283.41	3807761.91	0.21247	465303.41
3807761.91	0.20895		
465323.41	3807761.91	0.20572	465343.41
3807761.91	0.20260		
465363.41	3807761.91	0.19932	465383.41
3807761.91	0.19635		
464543.41	3807781.91	0.42310	464563.41
3807781.91	0.41582		
464583.41	3807781.91	0.40789	464603.41
3807781.91	0.39987		
464623.41	3807781.91	0.39190	464643.41
3807781.91	0.38385		
464663.41	3807781.91	0.37573	464683.41
3807781.91	0.36780		
464703.41	3807781.91	0.36046	464723.41
3807781.91	0.35311		

464743.41	3807781.91	0.34588	464763.41
3807781.91	0.33883		
464783.41	3807781.91	0.33203	464803.41
3807781.91	0.32550		
464823.41	3807781.91	0.31942	464843.41
3807781.91	0.31329		
464863.41	3807781.91	0.30724	464883.41
3807781.91	0.30138		
464903.41	3807781.91	0.29568	464923.41
3807781.91	0.29014		
464943.41	3807781.91	0.28477	464963.41
3807781.91	0.27953		
464983.41	3807781.91	0.27444	465003.41
3807781.91	0.26950		
465023.41	3807781.91	0.26452	465043.41
3807781.91	0.25967		
465063.41	3807781.91	0.25537	465083.41
3807781.91	0.25100		
465103.41	3807781.91	0.24667	465123.41
3807781.91	0.24247		
465143.41	3807781.91	0.23836	465163.41
3807781.91	0.23435		
465183.41	3807781.91	0.23046	465203.41
3807781.91	0.22681		
465223.41	3807781.91	0.22327	465243.41
3807781.91	0.21964		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 298

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140

, L0006141	, L0006142	, L0006143	,
	L0006144	, L0006145	, L0006146 , L0006147 , L0006148
, L0006149	, L0006150	, L0006151	,
	L0006152	, L0006153	, L0006154 , L0006155 , L0006156
, L0006157	, L0006158	, L0006159	,
	L0006160	, L0006161	, L0006162 , L0006163 , L0006164
, L0006165	, L0006166	, . . .	,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
465263.41	3807781.91	0.21623	465283.41
3807781.91	0.21295		
465303.41	3807781.91	0.20959	465323.41
3807781.91	0.20629		
465343.41	3807781.91	0.20307	465363.41
3807781.91	0.19994		
465383.41	3807781.91	0.19700	464543.41
3807801.91	0.42094		
464563.41	3807801.91	0.41370	464583.41
3807801.91	0.40611		
464603.41	3807801.91	0.39870	464623.41
3807801.91	0.39145		
464643.41	3807801.91	0.38423	464663.41
3807801.91	0.37623		
464683.41	3807801.91	0.36813	464703.41
3807801.91	0.36080		
464723.41	3807801.91	0.35360	464743.41
3807801.91	0.34650		
464763.41	3807801.91	0.33927	464783.41
3807801.91	0.33262		
464803.41	3807801.91	0.32634	464823.41
3807801.91	0.32013		
464843.41	3807801.91	0.31384	464863.41
3807801.91	0.30768		
464883.41	3807801.91	0.30200	464903.41
3807801.91	0.29624		
464923.41	3807801.91	0.29059	464943.41
3807801.91	0.28539		
464963.41	3807801.91	0.28009	464983.41
3807801.91	0.27490		
465003.41	3807801.91	0.27012	465023.41
3807801.91	0.26525		
465043.41	3807801.91	0.26046	465063.41
3807801.91	0.25606		
465083.41	3807801.91	0.25156	465103.41
3807801.91	0.24714		
465123.41	3807801.91	0.24307	465143.41
3807801.91	0.23891		
465163.41	3807801.91	0.23483	465183.41
3807801.91	0.23116		
465203.41	3807801.91	0.22751	465223.41
3807801.91	0.22388		
465243.41	3807801.91	0.22012	465263.41
3807801.91	0.21668		
465283.41	3807801.91	0.21342	465303.41

3807801.91	0.21016		
465323.41	3807801.91	0.20682	465343.41
3807801.91	0.20354		
465363.41	3807801.91	0.20058	465383.41
3807801.91	0.19764		
464543.41	3807821.91	0.41901	464563.41
3807821.91	0.41144		
464583.41	3807821.91	0.40467	464603.41
3807821.91	0.39802		
464623.41	3807821.91	0.39134	464643.41
3807821.91	0.38417		
464663.41	3807821.91	0.37655	464683.41
3807821.91	0.36891		
464703.41	3807821.91	0.36158	464723.41
3807821.91	0.35404		
464743.41	3807821.91	0.34663	464763.41
3807821.91	0.33989		
464783.41	3807821.91	0.33341	464803.41
3807821.91	0.32704		
464823.41	3807821.91	0.32039	464843.41
3807821.91	0.31426		
464863.41	3807821.91	0.30838	464883.41
3807821.91	0.30229		
464903.41	3807821.91	0.29667	464923.41
3807821.91	0.29129		
464943.41	3807821.91	0.28570	464963.41
3807821.91	0.28054		
464983.41	3807821.91	0.27560	465003.41
3807821.91	0.27045		
465023.41	3807821.91	0.26570	465043.41
3807821.91	0.26115		
465063.41	3807821.91	0.25640	465083.41
3807821.91	0.25202		
465103.41	3807821.91	0.24781	465123.41
3807821.91	0.24342		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 299

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156

, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465143.41	3807821.91	0.23937	465163.41
3807821.91	0.23555		
465183.41	3807821.91	0.23187	465203.41
3807821.91	0.22802		
465223.41	3807821.91	0.22420	465243.41
3807821.91	0.22073		
465263.41	3807821.91	0.21737	465283.41
3807821.91	0.21406		
465303.41	3807821.91	0.21053	465323.41
3807821.91	0.20728		
465343.41	3807821.91	0.20421	465363.41
3807821.91	0.20125		
465383.41	3807821.91	0.19813	464543.41
3807841.91	0.41595		
464563.41	3807841.91	0.40807	464583.41
3807841.91	0.40223		
464603.41	3807841.91	0.39642	464623.41
3807841.91	0.39038		
464643.41	3807841.91	0.38330	464663.41
3807841.91	0.37612		
464683.41	3807841.91	0.36896	464723.41
3807841.91	0.35434		
464743.41	3807841.91	0.34719	464763.41
3807841.91	0.34055		
464783.41	3807841.91	0.33385	464803.41
3807841.91	0.32725		
464823.41	3807841.91	0.32087	464843.41
3807841.91	0.31465		
464863.41	3807841.91	0.30862	464883.41
3807841.91	0.30278		
464903.41	3807841.91	0.29709	464923.41
3807841.91	0.29156		
464943.41	3807841.91	0.28620	464963.41
3807841.91	0.28097		
464983.41	3807841.91	0.27589	465003.41
3807841.91	0.27096		

465023.41	3807841.91	0.26614	465043.41
3807841.91	0.26146		
465063.41	3807841.91	0.25691	465083.41
3807841.91	0.25247		
465103.41	3807841.91	0.24814	465123.41
3807841.91	0.24394		
465143.41	3807841.91	0.23982	465163.41
3807841.91	0.23585		
465183.41	3807841.91	0.23218	465203.41
3807841.91	0.22845		
465223.41	3807841.91	0.22474	465243.41
3807841.91	0.22110		
465263.41	3807841.91	0.21769	465283.41
3807841.91	0.21441		
465303.41	3807841.91	0.21103	465323.41
3807841.91	0.20787		
465343.41	3807841.91	0.20480	465363.41
3807841.91	0.20164		
465383.41	3807841.91	0.19856	464503.41
3807861.91	0.43332		
464523.41	3807861.91	0.42274	464543.41
3807861.91	0.41334		
464563.41	3807861.91	0.40513	464583.41
3807861.91	0.39932		
464603.41	3807861.91	0.39398	464723.41
3807861.91	0.35463		
464743.41	3807861.91	0.34779	464763.41
3807861.91	0.34115		
464783.41	3807861.91	0.33423	464803.41
3807861.91	0.32741		
464823.41	3807861.91	0.32123	464843.41
3807861.91	0.31495		
464863.41	3807861.91	0.30882	464883.41
3807861.91	0.30317		
464903.41	3807861.91	0.29742	464923.41
3807861.91	0.29179		
464943.41	3807861.91	0.28661	464963.41
3807861.91	0.28132		
464983.41	3807861.91	0.27614	465003.41
3807861.91	0.27138		
465023.41	3807861.91	0.26651	465043.41
3807861.91	0.26174		
465063.41	3807861.91	0.25734	465083.41
3807861.91	0.25285		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465103.41	3807861.91	0.24843	465123.41
3807861.91	0.24438		
465143.41	3807861.91	0.24022	465163.41
3807861.91	0.23612		
465183.41	3807861.91	0.23237	465203.41
3807861.91	0.22875		
465223.41	3807861.91	0.22520	465243.41
3807861.91	0.22144		
465263.41	3807861.91	0.21800	465283.41
3807861.91	0.21473		
465303.41	3807861.91	0.21148	465323.41
3807861.91	0.20835		
465343.41	3807861.91	0.20526	465363.41
3807861.91	0.20199		
465383.41	3807861.91	0.19895	464503.41
3807881.91	0.43248		
464523.41	3807881.91	0.42194	464543.41
3807881.91	0.41261		
464723.41	3807881.91	0.35512	464743.41
3807881.91	0.34829		
464763.41	3807881.91	0.34165	464783.41
3807881.91	0.33475		
464803.41	3807881.91	0.32784	464823.41
3807881.91	0.32122		
464843.41	3807881.91	0.31512	464863.41
3807881.91	0.30928		
464883.41	3807881.91	0.30321	464903.41

3807881.91	0.29762		
464923.41	3807881.91	0.29226	464943.41
3807881.91	0.28669		
464963.41	3807881.91	0.28156	464983.41
3807881.91	0.27663		
465003.41	3807881.91	0.27150	465023.41
3807881.91	0.26677		
465043.41	3807881.91	0.26224	465063.41
3807881.91	0.25749		
465083.41	3807881.91	0.25313	465103.41
3807881.91	0.24894		
465123.41	3807881.91	0.24455	465143.41
3807881.91	0.24051		
465163.41	3807881.91	0.23663	465183.41
3807881.91	0.23256		
465203.41	3807881.91	0.22887	465223.41
3807881.91	0.22537		
465243.41	3807881.91	0.22190	465263.41
3807881.91	0.21855		
465283.41	3807881.91	0.21524	465303.41
3807881.91	0.21171		
465323.41	3807881.91	0.20850	465343.41
3807881.91	0.20546		
465363.41	3807881.91	0.20245	465383.41
3807881.91	0.19932		
464723.41	3807901.91	0.35484	464743.41
3807901.91	0.34862		
464763.41	3807901.91	0.34161	464783.41
3807901.91	0.33486		
464803.41	3807901.91	0.32826	464823.41
3807901.91	0.32156		
464843.41	3807901.91	0.31550	464863.41
3807901.91	0.30972		
464883.41	3807901.91	0.30357	464903.41
3807901.91	0.29780		
464923.41	3807901.91	0.29230	464943.41
3807901.91	0.28697		
464963.41	3807901.91	0.28198	464983.41
3807901.91	0.27711		
465003.41	3807901.91	0.27191	465023.41
3807901.91	0.26701		
465043.41	3807901.91	0.26235	465063.41
3807901.91	0.25782		
465083.41	3807901.91	0.25339	465103.41
3807901.91	0.24908		
465123.41	3807901.91	0.24489	465143.41
3807901.91	0.24079		
465163.41	3807901.91	0.23680	465183.41
3807901.91	0.23292		
465203.41	3807901.91	0.22928	465223.41

3807901.91 0.22575
 465243.41 3807901.91 0.22212 465263.41
 3807901.91 0.21872

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 301

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465283.41	3807901.91	0.21545	465303.41
3807901.91	0.21208		
465323.41	3807901.91	0.20878	465343.41
3807901.91	0.20558		
465363.41	3807901.91	0.20263	465383.41
3807901.91	0.19962		
464723.41	3807921.91	0.35407	464743.41
3807921.91	0.34847		
464763.41	3807921.91	0.34144	464783.41
3807921.91	0.33482		
464803.41	3807921.91	0.32841	464823.41
3807921.91	0.32186		
464843.41	3807921.91	0.31577	464863.41
3807921.91	0.30990		
464883.41	3807921.91	0.30376	464903.41
3807921.91	0.29789		
464923.41	3807921.91	0.29231	464943.41
3807921.91	0.28728		

464963.41	3807921.91	0.28231	464983.41
3807921.91	0.27736		
465003.41	3807921.91	0.27216	465023.41
3807921.91	0.26718		
465043.41	3807921.91	0.26242	465063.41
3807921.91	0.25806		
465083.41	3807921.91	0.25359	465103.41
3807921.91	0.24919		
465123.41	3807921.91	0.24515	465143.41
3807921.91	0.24101		
465163.41	3807921.91	0.23694	465183.41
3807921.91	0.23320		
465203.41	3807921.91	0.22960	465223.41
3807921.91	0.22606		
465243.41	3807921.91	0.22231	465263.41
3807921.91	0.21882		
465283.41	3807921.91	0.21552	465303.41
3807921.91	0.21235		
465323.41	3807921.91	0.20904	465343.41
3807921.91	0.20576		
465363.41	3807921.91	0.20281	465383.41
3807921.91	0.19988		
464723.41	3807941.91	0.35267	464743.41
3807941.91	0.34734		
464763.41	3807941.91	0.34134	464783.41
3807941.91	0.33473		
464803.41	3807941.91	0.32804	464823.41
3807941.91	0.32197		
464843.41	3807941.91	0.31574	464863.41
3807941.91	0.30952		
464883.41	3807941.91	0.30341	464903.41
3807941.91	0.29784		
464923.41	3807941.91	0.29262	464943.41
3807941.91	0.28761		
464963.41	3807941.91	0.28238	464983.41
3807941.91	0.27712		
465003.41	3807941.91	0.27194	465023.41
3807941.91	0.26723		
465043.41	3807941.91	0.26272	465063.41
3807941.91	0.25801		
465083.41	3807941.91	0.25367	465103.41
3807941.91	0.24951		
465123.41	3807941.91	0.24514	465143.41
3807941.91	0.24113		
465163.41	3807941.91	0.23727	465183.41
3807941.91	0.23322		
465203.41	3807941.91	0.22954	465223.41
3807941.91	0.22606		
465243.41	3807941.91	0.22262	465263.41
3807941.91	0.21904		

465283.41	3807941.91	0.21551	465303.41
3807941.91	0.21236		
465323.41	3807941.91	0.20923	465343.41
3807941.91	0.20618		
465363.41	3807941.91	0.20323	465383.41
3807941.91	0.20012		
465403.41	3807941.91	0.19703	465423.41
3807941.91	0.19423		
465443.41	3807941.91	0.19152	465463.41
3807941.91	0.18895		
465483.41	3807941.91	0.18631	465503.41
3807941.91	0.18377		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 302

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465523.41	3807941.91	0.18124	465543.41
3807941.91	0.17854		
465563.41	3807941.91	0.17605	465583.41
3807941.91	0.17369		
465603.41	3807941.91	0.17141	465623.41
3807941.91	0.16901		
465643.41	3807941.91	0.16661	465663.41
3807941.91	0.16443		
465683.41	3807941.91	0.16216	465703.41

3807941.91	0.15990		
464723.41	3807961.91	0.35037	464743.41
3807961.91	0.34600		
464763.41	3807961.91	0.34067	464783.41
3807961.91	0.33448		
464803.41	3807961.91	0.32800	464823.41
3807961.91	0.32167		
464843.41	3807961.91	0.31557	464863.41
3807961.91	0.30959		
464883.41	3807961.91	0.30349	464903.41
3807961.91	0.29800		
464923.41	3807961.91	0.29280	464943.41
3807961.91	0.28747		
464963.41	3807961.91	0.28233	464983.41
3807961.91	0.27728		
465003.41	3807961.91	0.27211	465023.41
3807961.91	0.26745		
465043.41	3807961.91	0.26301	465063.41
3807961.91	0.25823		
465083.41	3807961.91	0.25374	465103.41
3807961.91	0.24946		
465123.41	3807961.91	0.24530	465143.41
3807961.91	0.24123		
465163.41	3807961.91	0.23726	465183.41
3807961.91	0.23340		
465203.41	3807961.91	0.22962	465223.41
3807961.91	0.22597		
465243.41	3807961.91	0.22260	465263.41
3807961.91	0.21916		
465283.41	3807961.91	0.21578	465303.41
3807961.91	0.21263		
465323.41	3807961.91	0.20941	465343.41
3807961.91	0.20623		
465363.41	3807961.91	0.20329	465383.41
3807961.91	0.20029		
465403.41	3807961.91	0.19730	465423.41
3807961.91	0.19436		
465443.41	3807961.91	0.19160	465463.41
3807961.91	0.18922		
465483.41	3807961.91	0.18646	465503.41
3807961.91	0.18388		
465523.41	3807961.91	0.18138	465543.41
3807961.91	0.17880		
465563.41	3807961.91	0.17638	465583.41
3807961.91	0.17403		
465603.41	3807961.91	0.17160	465623.41
3807961.91	0.16922		
465643.41	3807961.91	0.16690	465663.41
3807961.91	0.16461		
465683.41	3807961.91	0.16237	465703.41

3807961.91	0.16021		
464743.41	3807981.91	0.34427	464763.41
3807981.91	0.33955		
464783.41	3807981.91	0.33390	464803.41
3807981.91	0.32779		
464823.41	3807981.91	0.32116	464843.41
3807981.91	0.31519		
464863.41	3807981.91	0.30949	464883.41
3807981.91	0.30342		
464903.41	3807981.91	0.29794	464923.41
3807981.91	0.29274		
464943.41	3807981.91	0.28728	464963.41
3807981.91	0.28219		
464983.41	3807981.91	0.27731	465003.41
3807981.91	0.27227		
465023.41	3807981.91	0.26759	465043.41
3807981.91	0.26308		
465063.41	3807981.91	0.25843	465083.41
3807981.91	0.25382		
465103.41	3807981.91	0.24938	465123.41
3807981.91	0.24548		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 303

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

465143.41	3807981.91	0.24134	465163.41
3807981.91	0.23722		
465183.41	3807981.91	0.23351	465203.41
3807981.91	0.22969		
465223.41	3807981.91	0.22594	465243.41
3807981.91	0.22258		
465263.41	3807981.91	0.21930	465283.41
3807981.91	0.21607		
465303.41	3807981.91	0.21285	465323.41
3807981.91	0.20953		
465343.41	3807981.91	0.20625	465363.41
3807981.91	0.20325		
465383.41	3807981.91	0.20035	465403.41
3807981.91	0.19750		
465423.41	3807981.91	0.19446	465443.41
3807981.91	0.19168		
465463.41	3807981.91	0.18944	465483.41
3807981.91	0.18658		
465503.41	3807981.91	0.18397	465523.41
3807981.91	0.18150		
465543.41	3807981.91	0.17902	465563.41
3807981.91	0.17663		
465583.41	3807981.91	0.17426	465603.41
3807981.91	0.17174		
465623.41	3807981.91	0.16940	465643.41
3807981.91	0.16713		
465663.41	3807981.91	0.16476	465683.41
3807981.91	0.16260		
465703.41	3807981.91	0.16054	464763.41
3808001.91	0.33776		
464783.41	3808001.91	0.33270	464803.41
3808001.91	0.32703		
464823.41	3808001.91	0.32043	464843.41
3808001.91	0.31451		
464863.41	3808001.91	0.30884	464883.41
3808001.91	0.30279		
464903.41	3808001.91	0.29736	464923.41
3808001.91	0.29225		
464943.41	3808001.91	0.28722	464963.41
3808001.91	0.28202		
464983.41	3808001.91	0.27691	465003.41
3808001.91	0.27227		
465023.41	3808001.91	0.26748	465043.41
3808001.91	0.26275		
465063.41	3808001.91	0.25847	465083.41
3808001.91	0.25399		
465103.41	3808001.91	0.24957	465123.41
3808001.91	0.24568		
465143.41	3808001.91	0.24155	465163.41
3808001.91	0.23737		

465183.41	3808001.91	0.23335	465203.41
3808001.91	0.22966		
465223.41	3808001.91	0.22618	465243.41
3808001.91	0.22283		
465263.41	3808001.91	0.21955	465283.41
3808001.91	0.21628		
465303.41	3808001.91	0.21278	465323.41
3808001.91	0.20957		
465343.41	3808001.91	0.20648	465363.41
3808001.91	0.20321		
465383.41	3808001.91	0.20025	465403.41
3808001.91	0.19745		
465423.41	3808001.91	0.19466	465443.41
3808001.91	0.19197		
465463.41	3808001.91	0.18942	465483.41
3808001.91	0.18680		
465503.41	3808001.91	0.18427	465523.41
3808001.91	0.18176		
465543.41	3808001.91	0.17906	465563.41
3808001.91	0.17661		
465583.41	3808001.91	0.17429	465603.41
3808001.91	0.17198		
465623.41	3808001.91	0.16957	465643.41
3808001.91	0.16718		
465663.41	3808001.91	0.16501	465683.41
3808001.91	0.16291		
465703.41	3808001.91	0.16082	464763.41
3808021.91	0.33498		
464783.41	3808021.91	0.33016	464803.41
3808021.91	0.32514		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 304

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3808021.91	0.31936	464843.41
3808021.91	0.31372		
464863.41	3808021.91	0.30815	464883.41
3808021.91	0.30249		
464903.41	3808021.91	0.29696	464923.41
3808021.91	0.29163		
464943.41	3808021.91	0.28671	464963.41
3808021.91	0.28173		
464983.41	3808021.91	0.27678	465003.41
3808021.91	0.27193		
465023.41	3808021.91	0.26725	465043.41
3808021.91	0.26268		
465063.41	3808021.91	0.25821	465083.41
3808021.91	0.25387		
465103.41	3808021.91	0.24964	465123.41
3808021.91	0.24550		
465143.41	3808021.91	0.24147	465163.41
3808021.91	0.23751		
465183.41	3808021.91	0.23344	465203.41
3808021.91	0.22978		
465223.41	3808021.91	0.22632	465243.41
3808021.91	0.22274		
465263.41	3808021.91	0.21940	465283.41
3808021.91	0.21617		
465303.41	3808021.91	0.21285	465323.41
3808021.91	0.20959		
465343.41	3808021.91	0.20641	465363.41
3808021.91	0.20331		
465383.41	3808021.91	0.20040	465403.41
3808021.91	0.19758		
465423.41	3808021.91	0.19466	465443.41
3808021.91	0.19193		
465463.41	3808021.91	0.18957	465483.41
3808021.91	0.18683		
465503.41	3808021.91	0.18426	465523.41
3808021.91	0.18178		
465543.41	3808021.91	0.17921	465563.41
3808021.91	0.17669		
465583.41	3808021.91	0.17425	465603.41
3808021.91	0.17200		
465623.41	3808021.91	0.16968	465643.41

3808021.91	0.16739		
465663.41	3808021.91	0.16527	465683.41
3808021.91	0.16308		
465703.41	3808021.91	0.16089	464783.41
3808041.91	0.32763		
464803.41	3808041.91	0.32302	464823.41
3808041.91	0.31799		
464843.41	3808041.91	0.31271	464863.41
3808041.91	0.30736		
464883.41	3808041.91	0.30204	464903.41
3808041.91	0.29652		
464923.41	3808041.91	0.29108	464943.41
3808041.91	0.28619		
464963.41	3808041.91	0.28143	464983.41
3808041.91	0.27669		
465003.41	3808041.91	0.27159	465023.41
3808041.91	0.26694		
465043.41	3808041.91	0.26250	465063.41
3808041.91	0.25790		
465083.41	3808041.91	0.25362	465103.41
3808041.91	0.24951		
465123.41	3808041.91	0.24525	465143.41
3808041.91	0.24129		
465163.41	3808041.91	0.23747	465183.41
3808041.91	0.23351		
465203.41	3808041.91	0.22983	465223.41
3808041.91	0.22628		
465243.41	3808041.91	0.22260	465263.41
3808041.91	0.21917		
465283.41	3808041.91	0.21592	465303.41
3808041.91	0.21282		
465323.41	3808041.91	0.20956	465343.41
3808041.91	0.20631		
465363.41	3808041.91	0.20334	465383.41
3808041.91	0.20047		
465403.41	3808041.91	0.19765	465423.41
3808041.91	0.19463		
465443.41	3808041.91	0.19188	465463.41
3808041.91	0.18966		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 305

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140

```

, L0006141      , L0006142      , L0006143      ,
                  L0006144      , L0006145      , L0006146      , L0006147      , L0006148
, L0006149      , L0006150      , L0006151      ,
                  L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
                  L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465483.41	3808041.91	0.18682	465503.41
3808041.91	0.18419		
465523.41	3808041.91	0.18169	465543.41
3808041.91	0.17930		
465563.41	3808041.91	0.17677	465583.41
3808041.91	0.17426		
465603.41	3808041.91	0.17201	465623.41
3808041.91	0.16980		
465643.41	3808041.91	0.16763	465663.41
3808041.91	0.16545		
465683.41	3808041.91	0.16319	465703.41
3808041.91	0.16096		
464803.41	3808061.91	0.32115	464823.41
3808061.91	0.31622		
464843.41	3808061.91	0.31133	464863.41
3808061.91	0.30642		
464883.41	3808061.91	0.30114	464903.41
3808061.91	0.29594		
464923.41	3808061.91	0.29088	464943.41
3808061.91	0.28601		
464963.41	3808061.91	0.28127	464983.41
3808061.91	0.27656		
465003.41	3808061.91	0.27148	465023.41
3808061.91	0.26660		
465043.41	3808061.91	0.26194	465063.41
3808061.91	0.25772		
465083.41	3808061.91	0.25335	465103.41
3808061.91	0.24903		
465123.41	3808061.91	0.24513	465143.41
3808061.91	0.24107		
465163.41	3808061.91	0.23707	465183.41
3808061.91	0.23344		

465203.41	3808061.91	0.22967	465223.41
3808061.91	0.22594		
465243.41	3808061.91	0.22257	465263.41
3808061.91	0.21906		
465283.41	3808061.91	0.21559	465303.41
3808061.91	0.21251		
465323.41	3808061.91	0.20945	465343.41
3808061.91	0.20639		
465363.41	3808061.91	0.20315	465383.41
3808061.91	0.20023		
465403.41	3808061.91	0.19745	465423.41
3808061.91	0.19470		
465443.41	3808061.91	0.19204	465463.41
3808061.91	0.18951		
465483.41	3808061.91	0.18692	465503.41
3808061.91	0.18421		
465523.41	3808061.91	0.18153	465543.41
3808061.91	0.17915		
465563.41	3808061.91	0.17678	465583.41
3808061.91	0.17445		
465603.41	3808061.91	0.17221	465623.41
3808061.91	0.17000		
465643.41	3808061.91	0.16780	465663.41
3808061.91	0.16542		
465683.41	3808061.91	0.16324	465703.41
3808061.91	0.16117		
464823.41	3808081.91	0.31492	464843.41
3808081.91	0.30990		
464863.41	3808081.91	0.30488	464883.41
3808081.91	0.30002		
464903.41	3808081.91	0.29529	464923.41
3808081.91	0.29060		
464943.41	3808081.91	0.28575	464963.41
3808081.91	0.28082		
464983.41	3808081.91	0.27593	465003.41
3808081.91	0.27119		
465023.41	3808081.91	0.26638	465043.41
3808081.91	0.26169		
465063.41	3808081.91	0.25757	465083.41
3808081.91	0.25320		
465103.41	3808081.91	0.24880	465123.41
3808081.91	0.24472		
465143.41	3808081.91	0.24076	465163.41
3808081.91	0.23689		
465183.41	3808081.91	0.23310	465203.41
3808081.91	0.22941		
465223.41	3808081.91	0.22582	465243.41
3808081.91	0.22229		

▲ *** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 306

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3808081.91	0.21885	465283.41
3808081.91	0.21554		
465303.41	3808081.91	0.21247	465323.41
3808081.91	0.20932		
465343.41	3808081.91	0.20617	465363.41
3808081.91	0.20310		
465383.41	3808081.91	0.20024	465403.41
3808081.91	0.19745		
465423.41	3808081.91	0.19456	465443.41
3808081.91	0.19186		
465463.41	3808081.91	0.18954	465483.41
3808081.91	0.18682		
465503.41	3808081.91	0.18417	465523.41
3808081.91	0.18158		
465543.41	3808081.91	0.17902	465563.41
3808081.91	0.17664		
465583.41	3808081.91	0.17436	465603.41
3808081.91	0.17213		
465623.41	3808081.91	0.16993	465643.41
3808081.91	0.16775		
465663.41	3808081.91	0.16550	465683.41
3808081.91	0.16339		
465703.41	3808081.91	0.16133	464843.41

3808101.91	0.30844		
464863.41	3808101.91	0.30350	464883.41
3808101.91	0.29902		
464903.41	3808101.91	0.29454	464923.41
3808101.91	0.29003		
464943.41	3808101.91	0.28522	464963.41
3808101.91	0.28022		
464983.41	3808101.91	0.27525	465003.41
3808101.91	0.27071		
465023.41	3808101.91	0.26604	465043.41
3808101.91	0.26145		
465063.41	3808101.91	0.25725	465083.41
3808101.91	0.25286		
465103.41	3808101.91	0.24847	465123.41
3808101.91	0.24427		
465143.41	3808101.91	0.24044	465163.41
3808101.91	0.23675		
465183.41	3808101.91	0.23275	465203.41
3808101.91	0.22910		
465223.41	3808101.91	0.22561	465243.41
3808101.91	0.22197		
465263.41	3808101.91	0.21865	465283.41
3808101.91	0.21552		
465303.41	3808101.91	0.21238	465323.41
3808101.91	0.20913		
465343.41	3808101.91	0.20592	465363.41
3808101.91	0.20299		
465383.41	3808101.91	0.20016	465403.41
3808101.91	0.19737		
465423.41	3808101.91	0.19439	465443.41
3808101.91	0.19167		
465463.41	3808101.91	0.18949	465483.41
3808101.91	0.18668		
465503.41	3808101.91	0.18408	465523.41
3808101.91	0.18156		
465543.41	3808101.91	0.17892	465563.41
3808101.91	0.17652		
465583.41	3808101.91	0.17425	465603.41
3808101.91	0.17203		
465623.41	3808101.91	0.16984	465643.41
3808101.91	0.16769		
465663.41	3808101.91	0.16553	465683.41
3808101.91	0.16345		
465703.41	3808101.91	0.16139	464863.41
3808121.91	0.30295		
464883.41	3808121.91	0.29850	464903.41
3808121.91	0.29376		
464923.41	3808121.91	0.28895	464943.41
3808121.91	0.28419		
464963.41	3808121.91	0.27948	464983.41

```

3808121.91      0.27481
      465003.41      3808121.91      0.26990      465023.41
3808121.91      0.26541
      465043.41      3808121.91      0.26109      465063.41
3808121.91      0.25655
      465083.41      3808121.91      0.25208      465103.41
3808121.91      0.24778
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 307

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
      INCLUDING SOURCE(S):      L0006139      , L0006140
, L0006141      , L0006142      , L0006143      ,
      L0006144      , L0006145      , L0006146      , L0006147      , L0006148
, L0006149      , L0006150      , L0006151      ,
      L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
      L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465123.41	3808121.91	0.24395	465143.41
3808121.91	0.24025		
465163.41	3808121.91	0.23658	465183.41
3808121.91	0.23260		
465203.41	3808121.91	0.22875	465223.41
3808121.91	0.22508		
465243.41	3808121.91	0.22177	465263.41
3808121.91	0.21857		
465283.41	3808121.91	0.21539	465303.41
3808121.91	0.21198		
465323.41	3808121.91	0.20885	465343.41
3808121.91	0.20585		
465363.41	3808121.91	0.20265	465383.41
3808121.91	0.19977		

465403.41	3808121.91	0.19704	465423.41
3808121.91	0.19433		
465443.41	3808121.91	0.19170	465463.41
3808121.91	0.18921		
465483.41	3808121.91	0.18665	465503.41
3808121.91	0.18398		
465523.41	3808121.91	0.18133	465543.41
3808121.91	0.17892		
465563.41	3808121.91	0.17660	465583.41
3808121.91	0.17434		
465603.41	3808121.91	0.17212	465623.41
3808121.91	0.16994		
465643.41	3808121.91	0.16776	465663.41
3808121.91	0.16541		
465683.41	3808121.91	0.16327	465703.41
3808121.91	0.16126		
464883.41	3808141.91	0.29723	464903.41
3808141.91	0.29284		
464923.41	3808141.91	0.28827	464943.41
3808141.91	0.28354		
464963.41	3808141.91	0.27893	464983.41
3808141.91	0.27434		
465003.41	3808141.91	0.26939	465023.41
3808141.91	0.26494		
465043.41	3808141.91	0.26070	465063.41
3808141.91	0.25612		
465083.41	3808141.91	0.25165	465103.41
3808141.91	0.24738		
465123.41	3808141.91	0.24365	465143.41
3808141.91	0.23982		
465163.41	3808141.91	0.23601	465183.41
3808141.91	0.23230		
465203.41	3808141.91	0.22852	465223.41
3808141.91	0.22482		
465243.41	3808141.91	0.22159	465263.41
3808141.91	0.21827		
465283.41	3808141.91	0.21496	465303.41
3808141.91	0.21173		
465323.41	3808141.91	0.20857	465343.41
3808141.91	0.20547		
465363.41	3808141.91	0.20245	465383.41
3808141.91	0.19963		
465403.41	3808141.91	0.19689	465423.41
3808141.91	0.19405		
465443.41	3808141.91	0.19139	465463.41
3808141.91	0.18885		
465483.41	3808141.91	0.18636	465503.41
3808141.91	0.18381		
465523.41	3808141.91	0.18125	465543.41
3808141.91	0.17873		

465563.41	3808141.91	0.17638	465583.41
3808141.91	0.17413		
465603.41	3808141.91	0.17193	465623.41
3808141.91	0.16976		
465643.41	3808141.91	0.16761	465663.41
3808141.91	0.16538		
465683.41	3808141.91	0.16319	465703.41
3808141.91	0.16106		
464883.41	3808161.91	0.29570	464903.41
3808161.91	0.29171		
464923.41	3808161.91	0.28744	464943.41
3808161.91	0.28275		
464963.41	3808161.91	0.27817	464983.41
3808161.91	0.27364		
465003.41	3808161.91	0.26884	465023.41
3808161.91	0.26439		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 308

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465043.41	3808161.91	0.26009	465063.41
3808161.91	0.25553		
465083.41	3808161.91	0.25116	465103.41
3808161.91	0.24700		
465123.41	3808161.91	0.24319	465143.41

3808161.91	0.23926		
465163.41	3808161.91	0.23538	465183.41
3808161.91	0.23184		
465203.41	3808161.91	0.22818	465223.41
3808161.91	0.22457		
465243.41	3808161.91	0.22127	465263.41
3808161.91	0.21786		
465283.41	3808161.91	0.21449	465303.41
3808161.91	0.21141		
465323.41	3808161.91	0.20822	465343.41
3808161.91	0.20507		
465363.41	3808161.91	0.20219	465383.41
3808161.91	0.19941		
465403.41	3808161.91	0.19667	465423.41
3808161.91	0.19374		
465443.41	3808161.91	0.19106	465463.41
3808161.91	0.18853		
465483.41	3808161.91	0.18599	465503.41
3808161.91	0.18354		
465523.41	3808161.91	0.18111	465543.41
3808161.91	0.17851		
465563.41	3808161.91	0.17615	465583.41
3808161.91	0.17391		
465603.41	3808161.91	0.17172	465623.41
3808161.91	0.16952		
465643.41	3808161.91	0.16737	465663.41
3808161.91	0.16529		
465683.41	3808161.91	0.16309	465703.41
3808161.91	0.16090		
464903.41	3808181.91	0.29030	464923.41
3808181.91	0.28608		
464943.41	3808181.91	0.28145	464963.41
3808181.91	0.27692		
464983.41	3808181.91	0.27250	465003.41
3808181.91	0.26812		
465023.41	3808181.91	0.26358	465043.41
3808181.91	0.25901		
465063.41	3808181.91	0.25449	465083.41
3808181.91	0.25040		
465103.41	3808181.91	0.24650	465123.41
3808181.91	0.24237		
465143.41	3808181.91	0.23859	465163.41
3808181.91	0.23496		
465183.41	3808181.91	0.23112	465203.41
3808181.91	0.22760		
465223.41	3808181.91	0.22422	465243.41
3808181.91	0.22064		
465263.41	3808181.91	0.21736	465283.41
3808181.91	0.21420		
465303.41	3808181.91	0.21085	465323.41

3808181.91	0.20779		
465343.41	3808181.91	0.20484	465363.41
3808181.91	0.20170		
465383.41	3808181.91	0.19887	465403.41
3808181.91	0.19620		
465423.41	3808181.91	0.19353	465443.41
3808181.91	0.19096		
465463.41	3808181.91	0.18839	465483.41
3808181.91	0.18563		
465503.41	3808181.91	0.18312	465523.41
3808181.91	0.18076		
465543.41	3808181.91	0.17839	465563.41
3808181.91	0.17611		
465583.41	3808181.91	0.17388	465603.41
3808181.91	0.17170		
465623.41	3808181.91	0.16937	465643.41
3808181.91	0.16706		
465663.41	3808181.91	0.16500	465683.41
3808181.91	0.16295		
465703.41	3808181.91	0.16089	464923.41
3808201.91	0.28418		
464943.41	3808201.91	0.27994	464963.41
3808201.91	0.27558		
464983.41	3808201.91	0.27122	465003.41

3808201.91 0.26697
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 309

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)

	465023.41	3808201.91	0.26245	465043.41
3808201.91		0.25790		
	465063.41	3808201.91	0.25372	465083.41
3808201.91		0.24962		
	465103.41	3808201.91	0.24560	465123.41
3808201.91		0.24172		
	465143.41	3808201.91	0.23791	465163.41
3808201.91		0.23418		
	465183.41	3808201.91	0.23056	465203.41
3808201.91		0.22701		
	465223.41	3808201.91	0.22354	465243.41
3808201.91		0.22016		
	465263.41	3808201.91	0.21684	465283.41
3808201.91		0.21360		
	465303.41	3808201.91	0.21044	465323.41
3808201.91		0.20734		
	465343.41	3808201.91	0.20431	465363.41
3808201.91		0.20135		
	465383.41	3808201.91	0.19845	465403.41
3808201.91		0.19563		
	465423.41	3808201.91	0.19305	465443.41
3808201.91		0.19051		
	465463.41	3808201.91	0.18799	465483.41
3808201.91		0.18538		
	465503.41	3808201.91	0.18293	465523.41
3808201.91		0.18059		
	465543.41	3808201.91	0.17829	465563.41
3808201.91		0.17591		
	465583.41	3808201.91	0.17357	465603.41
3808201.91		0.17140		
	465623.41	3808201.91	0.16916	465643.41
3808201.91		0.16696		
	465663.41	3808201.91	0.16491	465683.41
3808201.91		0.16279		
	465703.41	3808201.91	0.16067	464943.41
3808221.91		0.27833		
	464963.41	3808221.91	0.27415	464983.41
3808221.91		0.26985		
	465003.41	3808221.91	0.26565	465023.41
3808221.91		0.26125		
	465043.41	3808221.91	0.25687	465063.41
3808221.91		0.25288		
	465083.41	3808221.91	0.24868	465103.41
3808221.91		0.24455		
	465123.41	3808221.91	0.24094	465143.41
3808221.91		0.23715		

465163.41	3808221.91	0.23337	465183.41
3808221.91	0.22992		
465203.41	3808221.91	0.22634	465223.41
3808221.91	0.22282		
465243.41	3808221.91	0.21960	465263.41
3808221.91	0.21626		
465283.41	3808221.91	0.21297	465303.41
3808221.91	0.20996		
465323.41	3808221.91	0.20684	465343.41
3808221.91	0.20375		
465363.41	3808221.91	0.20094	465383.41
3808221.91	0.19801		
465403.41	3808221.91	0.19513	465423.41
3808221.91	0.19256		
465443.41	3808221.91	0.19005	465463.41
3808221.91	0.18758		
465483.41	3808221.91	0.18516	465503.41
3808221.91	0.18273		
465523.41	3808221.91	0.18035	465543.41
3808221.91	0.17807		
465563.41	3808221.91	0.17564	465583.41
3808221.91	0.17323		
465603.41	3808221.91	0.17108	465623.41
3808221.91	0.16892		
465643.41	3808221.91	0.16680	465663.41
3808221.91	0.16476		
465683.41	3808221.91	0.16260	465703.41
3808221.91	0.16044		
464963.41	3808241.91	0.27266	464983.41
3808241.91	0.26841		
465003.41	3808241.91	0.26426	465023.41
3808241.91	0.26015		
465043.41	3808241.91	0.25606	465063.41
3808241.91	0.25174		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 310

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,

L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465083.41	3808241.91	0.24748	465103.41
3808241.91	0.24339		
465123.41	3808241.91	0.23983	465143.41
3808241.91	0.23629		
465163.41	3808241.91	0.23276	465183.41
3808241.91	0.22901		
465203.41	3808241.91	0.22558	465223.41
3808241.91	0.22229		
465243.41	3808241.91	0.21879	465263.41
3808241.91	0.21559		
465283.41	3808241.91	0.21252	465303.41
3808241.91	0.20924		
465323.41	3808241.91	0.20625	465343.41
3808241.91	0.20337		
465363.41	3808241.91	0.20030	465383.41
3808241.91	0.19750		
465403.41	3808241.91	0.19486	465423.41
3808241.91	0.19231		
465443.41	3808241.91	0.18981	465463.41
3808241.91	0.18735		
465483.41	3808241.91	0.18495	465503.41
3808241.91	0.18238		
465523.41	3808241.91	0.17983	465543.41
3808241.91	0.17756		
465563.41	3808241.91	0.17531	465583.41
3808241.91	0.17309		
465603.41	3808241.91	0.17095	465623.41
3808241.91	0.16866		
465643.41	3808241.91	0.16638	465663.41
3808241.91	0.16436		
465683.41	3808241.91	0.16235	465703.41
3808241.91	0.16033		
464983.41	3808261.91	0.26598	465003.41
3808261.91	0.26222		
465023.41	3808261.91	0.25834	465043.41
3808261.91	0.25440		
465063.41	3808261.91	0.25034	465083.41

3808261.91	0.24639		
465103.41	3808261.91	0.24253	465123.41
3808261.91	0.23872		
465143.41	3808261.91	0.23519	465163.41
3808261.91	0.23178		
465183.41	3808261.91	0.22827	465203.41
3808261.91	0.22481		
465223.41	3808261.91	0.22143	465243.41
3808261.91	0.21814		
465263.41	3808261.91	0.21507	465283.41
3808261.91	0.21206		
465303.41	3808261.91	0.20875	465323.41
3808261.91	0.20565		
465343.41	3808261.91	0.20269	465363.41
3808261.91	0.19981		
465383.41	3808261.91	0.19697	465403.41
3808261.91	0.19423		
465423.41	3808261.91	0.19170	465443.41
3808261.91	0.18922		
465463.41	3808261.91	0.18680	465483.41
3808261.91	0.18442		
465503.41	3808261.91	0.18196	465523.41
3808261.91	0.17953		
465543.41	3808261.91	0.17729	465563.41
3808261.91	0.17496		
465583.41	3808261.91	0.17266	465603.41
3808261.91	0.17053		
465623.41	3808261.91	0.16835	465643.41
3808261.91	0.16615		
465663.41	3808261.91	0.16399	465683.41
3808261.91	0.16197		
465703.41	3808261.91	0.16001	465003.41
3808281.91	0.26003		
465023.41	3808281.91	0.25634	465043.41
3808281.91	0.25259		
465063.41	3808281.91	0.24875	465083.41
3808281.91	0.24513		
465103.41	3808281.91	0.24157	465123.41
3808281.91	0.23767		
465143.41	3808281.91	0.23413	465163.41
3808281.91	0.23079		
465183.41	3808281.91	0.22744	465203.41
3808281.91	0.22397		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3
**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
465223.41	3808281.91	0.22056	465243.41
3808281.91	0.21752		
465263.41	3808281.91	0.21448	465283.41
3808281.91	0.21142		
465303.41	3808281.91	0.20814	465323.41
3808281.91	0.20500		
465343.41	3808281.91	0.20199	465363.41
3808281.91	0.19925		
465383.41	3808281.91	0.19639	465403.41
3808281.91	0.19357		
465423.41	3808281.91	0.19100	465443.41
3808281.91	0.18852		
465463.41	3808281.91	0.18623	465483.41
3808281.91	0.18387		
465503.41	3808281.91	0.18155	465523.41
3808281.91	0.17926		
465543.41	3808281.91	0.17697	465563.41
3808281.91	0.17457		
465583.41	3808281.91	0.17221	465603.41
3808281.91	0.17010		
465623.41	3808281.91	0.16800	465643.41
3808281.91	0.16587		
465663.41	3808281.91	0.16363	465683.41
3808281.91	0.16157		
465703.41	3808281.91	0.15961	465003.41
3808301.91	0.25795		
465023.41	3808301.91	0.25447	465043.41
3808301.91	0.25102		

465063.41	3808301.91	0.24686	465083.41
3808301.91	0.24343		
465103.41	3808301.91	0.24027	465123.41
3808301.91	0.23676		
465143.41	3808301.91	0.23337	465163.41
3808301.91	0.23000		
465183.41	3808301.91	0.22636	465203.41
3808301.91	0.22304		
465223.41	3808301.91	0.21992	465243.41
3808301.91	0.21690		
465263.41	3808301.91	0.21370	465283.41
3808301.91	0.21043		
465303.41	3808301.91	0.20719	465323.41
3808301.91	0.20426		
465343.41	3808301.91	0.20146	465363.41
3808301.91	0.19847		
465383.41	3808301.91	0.19574	465403.41
3808301.91	0.19311		
465423.41	3808301.91	0.19030	465443.41
3808301.91	0.18778		
465463.41	3808301.91	0.18587	465483.41
3808301.91	0.18353		
465503.41	3808301.91	0.18123	465523.41
3808301.91	0.17892		
465543.41	3808301.91	0.17642	465563.41
3808301.91	0.17413		
465583.41	3808301.91	0.17196	465603.41
3808301.91	0.16987		
465623.41	3808301.91	0.16763	465643.41
3808301.91	0.16540		
465663.41	3808301.91	0.16338	465683.41
3808301.91	0.16125		
465703.41	3808301.91	0.15914	465043.41
3808321.91	0.24909		
465063.41	3808321.91	0.24550	465083.41
3808321.91	0.24213		
465103.41	3808321.91	0.23887	465123.41
3808321.91	0.23547		
465143.41	3808321.91	0.23215	465163.41
3808321.91	0.22885		
465183.41	3808321.91	0.22544	465203.41
3808321.91	0.22226		
465223.41	3808321.91	0.21918	465243.41
3808321.91	0.21596		
465263.41	3808321.91	0.21267	465283.41
3808321.91	0.20944		
465303.41	3808321.91	0.20645	465323.41
3808321.91	0.20351		
465343.41	3808321.91	0.20064	465363.41
3808321.91	0.19784		

465383.41 3808321.91 0.19508 465403.41
 3808321.91 0.19238
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 312

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465423.41	3808321.91	0.18975	465443.41
3808321.91	0.18729		
465463.41	3808321.91	0.18520	465483.41
3808321.91	0.18288		
465503.41	3808321.91	0.18060	465523.41
3808321.91	0.17834		
465543.41	3808321.91	0.17598	465563.41
3808321.91	0.17378		
465583.41	3808321.91	0.17164	465603.41
3808321.91	0.16940		
465623.41	3808321.91	0.16721	465643.41
3808321.91	0.16507		
465663.41	3808321.91	0.16295	465683.41
3808321.91	0.16088		
465703.41	3808321.91	0.15885	465083.41
3808341.91	0.24081		
465103.41	3808341.91	0.23740	465123.41
3808341.91	0.23416		
465143.41	3808341.91	0.23091	465163.41

3808341.91	0.22770		
465183.41	3808341.91	0.22456	465203.41
3808341.91	0.22142		
465223.41	3808341.91	0.21827	465243.41
3808341.91	0.21497		
465263.41	3808341.91	0.21168	465283.41
3808341.91	0.20849		
465303.41	3808341.91	0.20566	465323.41
3808341.91	0.20266		
465343.41	3808341.91	0.19968	465363.41
3808341.91	0.19711		
465383.41	3808341.91	0.19437	465403.41
3808341.91	0.19162		
465423.41	3808341.91	0.18913	465443.41
3808341.91	0.18672		
465463.41	3808341.91	0.18450	465483.41
3808341.91	0.18221		
465503.41	3808341.91	0.17996	465523.41
3808341.91	0.17774		
465543.41	3808341.91	0.17550	465563.41
3808341.91	0.17335		
465583.41	3808341.91	0.17121	465603.41
3808341.91	0.16889		
465623.41	3808341.91	0.16676	465643.41
3808341.91	0.16469		
465663.41	3808341.91	0.16250	465683.41
3808341.91	0.16048		
465703.41	3808341.91	0.15852	465103.41
3808361.91	0.23593		
465123.41	3808361.91	0.23307	465143.41
3808361.91	0.22997		
465163.41	3808361.91	0.22680	465183.41
3808361.91	0.22369		
465203.41	3808361.91	0.22038	465223.41
3808361.91	0.21707		
465243.41	3808361.91	0.21410	465263.41
3808361.91	0.21094		
465283.41	3808361.91	0.20774	465303.41
3808361.91	0.20465		
465323.41	3808361.91	0.20160	465343.41
3808361.91	0.19866		
465363.41	3808361.91	0.19612	465383.41
3808361.91	0.19358		
465403.41	3808361.91	0.19104	465423.41
3808361.91	0.18831		
465443.41	3808361.91	0.18586	465463.41
3808361.91	0.18403		
465483.41	3808361.91	0.18175	465503.41
3808361.91	0.17952		
465523.41	3808361.91	0.17728	465543.41

3808361.91	0.17484		
465563.41	3808361.91	0.17264	465583.41
3808361.91	0.17057		
465603.41	3808361.91	0.16849	465623.41
3808361.91	0.16629		
465643.41	3808361.91	0.16411	465663.41
3808361.91	0.16215		
465683.41	3808361.91	0.16007	465703.41
3808361.91	0.15800		
465183.41	3808381.91	0.22210	465203.41
3808381.91	0.21888		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 313

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	0.21574	465243.41
3808381.91	0.21263		
465263.41	3808381.91	0.20946	465283.41
3808381.91	0.20633		
465303.41	3808381.91	0.20346	465323.41
3808381.91	0.20049		
465343.41	3808381.91	0.19759	465363.41
3808381.91	0.19508		
465383.41	3808381.91	0.19262	465403.41
3808381.91	0.19018		

465423.41	3808381.91	0.18763	465443.41
3808381.91	0.18525		
465463.41	3808381.91	0.18323	465483.41
3808381.91	0.18099		
465503.41	3808381.91	0.17878	465523.41
3808381.91	0.17659		
465543.41	3808381.91	0.17430	465563.41
3808381.91	0.17204		
465583.41	3808381.91	0.16986	465603.41
3808381.91	0.16785		
465623.41	3808381.91	0.16577	465643.41
3808381.91	0.16369		
465663.41	3808381.91	0.16162	465683.41
3808381.91	0.15961		
465703.41	3808381.91	0.15763	465303.41
3808401.91	0.20208		
465323.41	3808401.91	0.19927	465343.41
3808401.91	0.19648		
465363.41	3808401.91	0.19401	465383.41
3808401.91	0.19158		
465403.41	3808401.91	0.18920	465423.41
3808401.91	0.18686		
465443.41	3808401.91	0.18456	465463.41
3808401.91	0.18231		
465483.41	3808401.91	0.18010	465503.41
3808401.91	0.17792		
465523.41	3808401.91	0.17579	465543.41
3808401.91	0.17369		
465563.41	3808401.91	0.17144	465583.41
3808401.91	0.16920		
465603.41	3808401.91	0.16722	465623.41
3808401.91	0.16522		
465643.41	3808401.91	0.16321	465663.41
3808401.91	0.16108		
465683.41	3808401.91	0.15911	465703.41
3808401.91	0.15721		
465323.41	3808421.91	0.19786	465343.41
3808421.91	0.19533		
465363.41	3808421.91	0.19290	465383.41
3808421.91	0.19050		
465403.41	3808421.91	0.18816	465423.41
3808421.91	0.18585		
465443.41	3808421.91	0.18359	465463.41
3808421.91	0.18136		
465483.41	3808421.91	0.17918	465503.41
3808421.91	0.17703		
465523.41	3808421.91	0.17492	465543.41
3808421.91	0.17285		
465563.41	3808421.91	0.17079	465583.41
3808421.91	0.16874		

465603.41	3808421.91	0.16678	465623.41
3808421.91	0.16466		
465643.41	3808421.91	0.16254	465663.41
3808421.91	0.16063		
465683.41	3808421.91	0.15861	465703.41
3808421.91	0.15660		
465323.41	3808441.91	0.19659	465343.41
3808441.91	0.19418		
465363.41	3808441.91	0.19199	465383.41
3808441.91	0.18970		
465403.41	3808441.91	0.18738	465423.41
3808441.91	0.18510		
465443.41	3808441.91	0.18286	465463.41
3808441.91	0.18067		
465483.41	3808441.91	0.17851	465503.41
3808441.91	0.17638		
465523.41	3808441.91	0.17430	465543.41
3808441.91	0.17225		
465563.41	3808441.91	0.17024	465583.41
3808441.91	0.16826		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 314

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465603.41	3808441.91	0.16631	465623.41

3808441.91	0.16418		
465643.41	3808441.91	0.16202	465663.41
3808441.91	0.16002		
465683.41	3808441.91	0.15806	465703.41
3808441.91	0.15617		
465343.41	3808461.91	0.19297	465363.41
3808461.91	0.19093		
465383.41	3808461.91	0.18875	465403.41
3808461.91	0.18653		
465423.41	3808461.91	0.18428	465443.41
3808461.91	0.18207		
465463.41	3808461.91	0.17991	465483.41
3808461.91	0.17777		
465503.41	3808461.91	0.17572	465523.41
3808461.91	0.17371		
465543.41	3808461.91	0.17169	465563.41
3808461.91	0.16969		
465583.41	3808461.91	0.16774	465603.41
3808461.91	0.16581		
465623.41	3808461.91	0.16370	465643.41
3808461.91	0.16153		
465663.41	3808461.91	0.15941	465683.41
3808461.91	0.15752		
465703.41	3808461.91	0.15575	465343.41
3808481.91	0.19167		
465363.41	3808481.91	0.18940	465383.41
3808481.91	0.18736		
465403.41	3808481.91	0.18538	465423.41
3808481.91	0.18317		
465443.41	3808481.91	0.18099	465463.41
3808481.91	0.17885		
465483.41	3808481.91	0.17675	465503.41
3808481.91	0.17489		
465523.41	3808481.91	0.17310	465543.41
3808481.91	0.17109		
465563.41	3808481.91	0.16912	465583.41
3808481.91	0.16718		
465603.41	3808481.91	0.16528	465623.41
3808481.91	0.16319		
465643.41	3808481.91	0.16105	465663.41
3808481.91	0.15894		
465683.41	3808481.91	0.15707	465703.41
3808481.91	0.15529		
465463.41	3808501.91	0.17802	465483.41
3808501.91	0.17577		
465503.41	3808501.91	0.17391	465523.41
3808501.91	0.17218		
465543.41	3808501.91	0.17021	465563.41
3808501.91	0.16838		
465583.41	3808501.91	0.16657	465603.41

3808501.91	0.16452		
465623.41	3808501.91	0.16252	465643.41
3808501.91	0.16053		
465663.41	3808501.91	0.15844	465683.41
3808501.91	0.15659		
465703.41	3808501.91	0.15482	465523.41
3808521.91	0.17116		
465543.41	3808521.91	0.16922	465563.41
3808521.91	0.16752		
465583.41	3808521.91	0.16585	465603.41
3808521.91	0.16374		
465623.41	3808521.91	0.16179	465643.41
3808521.91	0.15990		
465663.41	3808521.91	0.15790	465683.41
3808521.91	0.15605		
465703.41	3808521.91	0.15426	464239.31
3809562.31	0.21656		
464277.31	3809562.31	0.21157	463745.31
3809591.37	0.28290		
463783.31	3809591.37	0.27647	463821.31
3809591.37	0.27045		
463859.31	3809591.37	0.26618	463897.31
3809591.37	0.26247		
463935.31	3809591.37	0.25800	464239.31
3809591.37	0.21282		
464277.31	3809591.37	0.20793	463745.31
3809620.43	0.27544		
463783.31	3809620.43	0.26945	463821.31
3809620.43	0.26431		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 315

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
463859.31	3809620.43	0.25953	463897.31
3809620.43	0.25565		
463935.31	3809620.43	0.25176	463973.31
3809620.43	0.24653		
464011.31	3809620.43	0.24084	464049.31
3809620.43	0.23478		
464087.31	3809620.43	0.22881	464125.31
3809620.43	0.22353		
464163.31	3809620.43	0.21846	464201.31
3809620.43	0.21331		
464239.31	3809620.43	0.20896	464277.31
3809620.43	0.20430		
463745.31	3809649.49	0.26814	463783.31
3809649.49	0.26320		
463821.31	3809649.49	0.25797	463859.31
3809649.49	0.25322		
463897.31	3809649.49	0.24911	463935.31
3809649.49	0.24526		
463973.31	3809649.49	0.23976	464011.31
3809649.49	0.23491		
464049.31	3809649.49	0.22983	464087.31
3809649.49	0.22411		
464125.31	3809649.49	0.21939	464163.31
3809649.49	0.21435		
464201.31	3809649.49	0.20974	464239.31
3809649.49	0.20538		
464277.31	3809649.49	0.20083	464315.31
3809649.49	0.19633		
464353.31	3809649.49	0.19237	464391.31
3809649.49	0.18847		
464429.31	3809649.49	0.18443	464467.31
3809649.49	0.18065		
464505.31	3809649.49	0.17688	463745.31
3809678.55	0.26071		
463783.31	3809678.55	0.25615	463821.31
3809678.55	0.25196		
463859.31	3809678.55	0.24690	463897.31
3809678.55	0.24284		
463935.31	3809678.55	0.23921	463973.31
3809678.55	0.23430		
464011.31	3809678.55	0.22927	464049.31
3809678.55	0.22504		

464087.31	3809678.55	0.22015	464125.31
3809678.55	0.21535		
464163.31	3809678.55	0.21059	464201.31
3809678.55	0.20637		
464239.31	3809678.55	0.20173	464277.31
3809678.55	0.19737		
464315.31	3809678.55	0.19318	464353.31
3809678.55	0.18943		
464391.31	3809678.55	0.18559	464429.31
3809678.55	0.18160		
464467.31	3809678.55	0.17804	464505.31
3809678.55	0.17411		
463745.31	3809707.61	0.25415	463783.31
3809707.61	0.24954		
463821.31	3809707.61	0.24542	463859.31
3809707.61	0.24118		
463897.31	3809707.61	0.23689	463935.31
3809707.61	0.23334		
463973.31	3809707.61	0.22905	464011.31
3809707.61	0.22437		
464049.31	3809707.61	0.22042	464087.31
3809707.61	0.21589		
464125.31	3809707.61	0.21143	464163.31
3809707.61	0.20715		
464201.31	3809707.61	0.20257	464239.31
3809707.61	0.19831		
464277.31	3809707.61	0.19406	464315.31
3809707.61	0.19029		
464353.31	3809707.61	0.18619	464391.31
3809707.61	0.18259		
464429.31	3809707.61	0.17872	464467.31
3809707.61	0.17518		
464505.31	3809707.61	0.17168	463745.31
3809736.67	0.24853		
463783.31	3809736.67	0.24336	463821.31
3809736.67	0.23871		
463859.31	3809736.67	0.23487	463897.31
3809736.67	0.23110		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 316

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,

```

        L0006144      , L0006145      , L0006146      , L0006147      , L0006148
, L0006149      , L0006150      , L0006151      ,
        L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
        L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463935.31	3809736.67	0.22719	463973.31
3809736.67	0.22386		
464011.31	3809736.67	0.22018	464049.31
3809736.67	0.21596		
464087.31	3809736.67	0.21210	464125.31
3809736.67	0.20788		
464163.31	3809736.67	0.20383	464201.31
3809736.67	0.19919		
464239.31	3809736.67	0.19519	464277.31
3809736.67	0.19105		
464315.31	3809736.67	0.18708	464353.31
3809736.67	0.18332		
464391.31	3809736.67	0.17974	464429.31
3809736.67	0.17599		
464467.31	3809736.67	0.17264	464505.31
3809736.67	0.16935		
463745.31	3809765.73	0.24331	463783.31
3809765.73	0.23803		
463821.31	3809765.73	0.23309	463859.31
3809765.73	0.22901		
463897.31	3809765.73	0.22554	463935.31
3809765.73	0.22137		
463973.31	3809765.73	0.21759	464011.31
3809765.73	0.21545		
464049.31	3809765.73	0.21215	464087.31
3809765.73	0.20825		
464125.31	3809765.73	0.20453	464163.31
3809765.73	0.20059		
464201.31	3809765.73	0.19608	464239.31
3809765.73	0.19221		
464277.31	3809765.73	0.18818	464315.31
3809765.73	0.18417		
464353.31	3809765.73	0.18064	464391.31

3809765.73	0.17688		
464429.31	3809765.73	0.17351	464467.31
3809765.73	0.17033		
464505.31	3809765.73	0.16678	463745.31
3809794.79	0.23835		
463783.31	3809794.79	0.23267	463821.31
3809794.79	0.22778		
463859.31	3809794.79	0.22333	463897.31
3809794.79	0.21976		
463935.31	3809794.79	0.21570	463973.31
3809794.79	0.21198		
464011.31	3809794.79	0.20975	464049.31
3809794.79	0.20816		
464087.31	3809794.79	0.20458	464125.31
3809794.79	0.20080		
464163.31	3809794.79	0.19698	464201.31
3809794.79	0.19303		
464239.31	3809794.79	0.18899	464277.31
3809794.79	0.18514		
464315.31	3809794.79	0.18142	464353.31
3809794.79	0.17769		
464391.31	3809794.79	0.17429	464429.31
3809794.79	0.17115		
464467.31	3809794.79	0.16772	464505.31
3809794.79	0.16445		
463745.31	3809823.85	0.23360	463783.31
3809823.85	0.22762		
463821.31	3809823.85	0.22211	463859.31
3809823.85	0.21787		
463897.31	3809823.85	0.21403	463935.31
3809823.85	0.21009		
463973.31	3809823.85	0.20669	464011.31
3809823.85	0.20411		
464049.31	3809823.85	0.20274	464087.31
3809823.85	0.20058		
464125.31	3809823.85	0.19736	464163.31
3809823.85	0.19365		
464201.31	3809823.85	0.18967	464239.31
3809823.85	0.18597		
464277.31	3809823.85	0.18226	464315.31
3809823.85	0.17843		
464353.31	3809823.85	0.17496	464391.31
3809823.85	0.17173		
464429.31	3809823.85	0.16847	464467.31
3809823.85	0.16528		
464505.31	3809823.85	0.16198	463745.31
3809852.91	0.22933		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 317

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	0.22342	463821.31
3809852.91	0.21729		
463859.31	3809852.91	0.21286	463897.31
3809852.91	0.20861		
463935.31	3809852.91	0.20477	463973.31
3809852.91	0.20158		
464011.31	3809852.91	0.19884	464049.31
3809852.91	0.19719		
464087.31	3809852.91	0.19539	464125.31
3809852.91	0.19291		
464163.31	3809852.91	0.18950	464201.31
3809852.91	0.18578		
464239.31	3809852.91	0.18245	464277.31
3809852.91	0.17907		
464315.31	3809852.91	0.17560	464353.31
3809852.91	0.17215		
464391.31	3809852.91	0.16906	464429.31
3809852.91	0.16597		
464467.31	3809852.91	0.16278	464505.31
3809852.91	0.15967		
463745.31	3809881.97	0.22544	463783.31
3809881.97	0.21931		
463821.31	3809881.97	0.21328	463859.31
3809881.97	0.20839		

463897.31	3809881.97	0.20376	463935.31
3809881.97	0.19969		
463973.31	3809881.97	0.19682	464011.31
3809881.97	0.19415		
464049.31	3809881.97	0.19217	464087.31
3809881.97	0.19010		
464125.31	3809881.97	0.18784	464163.31
3809881.97	0.18471		
464201.31	3809881.97	0.18174	464239.31
3809881.97	0.17853		
464277.31	3809881.97	0.17562	464315.31
3809881.97	0.17272		
464353.31	3809881.97	0.16949	464391.31
3809881.97	0.16659		
464429.31	3809881.97	0.16355	464467.31
3809881.97	0.16040		
464505.31	3809881.97	0.15757	463745.31
3809911.03	0.22136		
463783.31	3809911.03	0.21509	463821.31
3809911.03	0.20950		
463859.31	3809911.03	0.20435	463897.31
3809911.03	0.19965		
463935.31	3809911.03	0.19535	463973.31
3809911.03	0.19226		
464011.31	3809911.03	0.18962	464049.31
3809911.03	0.18768		
464087.31	3809911.03	0.18557	464125.31
3809911.03	0.18329		
464163.31	3809911.03	0.18066	464201.31
3809911.03	0.17814		
464239.31	3809911.03	0.17513	464277.31
3809911.03	0.17251		
464315.31	3809911.03	0.16970	464353.31
3809911.03	0.16684		
464391.31	3809911.03	0.16403	464429.31
3809911.03	0.16109		
464467.31	3809911.03	0.15828	464505.31
3809911.03	0.15530		
463745.31	3809940.09	0.21720	463783.31
3809940.09	0.21101		
463821.31	3809940.09	0.20572	463859.31
3809940.09	0.20053		
463897.31	3809940.09	0.19594	463935.31
3809940.09	0.19170		
463973.31	3809940.09	0.18831	464011.31
3809940.09	0.18517		
464049.31	3809940.09	0.18309	464087.31
3809940.09	0.18100		
464125.31	3809940.09	0.17892	464163.31
3809940.09	0.17696		

464201.31	3809940.09	0.17494	464239.31
3809940.09	0.17229		
464277.31	3809940.09	0.16959	464315.31
3809940.09	0.16698		
464353.31	3809940.09	0.16425	464391.31
3809940.09	0.16153		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 318

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140

, L0006141	, L0006142	, L0006143	,			
	L0006144	, L0006145	, L0006146	, L0006147	, L0006148	
, L0006149	, L0006150	, L0006151	,			
	L0006152	, L0006153	, L0006154	, L0006155	, L0006156	
, L0006157	, L0006158	, L0006159	,			
	L0006160	, L0006161	, L0006162	, L0006163	, L0006164	
, L0006165	, L0006166	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464429.31	3809940.09	0.15885	464467.31
3809940.09	0.15599		
464505.31	3809940.09	0.15311	463745.31
3809969.15	0.21427		
463783.31	3809969.15	0.20749	463821.31
3809969.15	0.20198		
463859.31	3809969.15	0.19691	463897.31
3809969.15	0.19235		
463935.31	3809969.15	0.18822	463973.31
3809969.15	0.18479		
464011.31	3809969.15	0.18134	464049.31
3809969.15	0.17866		
464087.31	3809969.15	0.17665	464125.31
3809969.15	0.17496		
464163.31	3809969.15	0.17321	464201.31

3809969.15	0.17159		
464239.31	3809969.15	0.16954	464277.31
3809969.15	0.16688		
464315.31	3809969.15	0.16438	464353.31
3809969.15	0.16198		
464391.31	3809969.15	0.15934	464429.31
3809969.15	0.15660		
464467.31	3809969.15	0.15370	464505.31
3809969.15	0.15113		
463745.31	3809998.21	0.21274	463783.31
3809998.21	0.20496		
463821.31	3809998.21	0.19890	463859.31
3809998.21	0.19365		
463897.31	3809998.21	0.18909	463935.31
3809998.21	0.18483		
463973.31	3809998.21	0.18135	464011.31
3809998.21	0.17803		
464049.31	3809998.21	0.17520	464087.31
3809998.21	0.17299		
464125.31	3809998.21	0.17147	464163.31
3809998.21	0.16985		
464201.31	3809998.21	0.16825	464239.31
3809998.21	0.16644		
464277.31	3809998.21	0.16433	464315.31
3809998.21	0.16184		
464353.31	3809998.21	0.15954	464391.31
3809998.21	0.15698		
464429.31	3809998.21	0.15427	464467.31
3809998.21	0.15169		
464505.31	3809998.21	0.14900	463745.31
3810027.27	0.21136		
463783.31	3810027.27	0.20312	463821.31
3810027.27	0.19645		
463859.31	3810027.27	0.19089	463897.31
3810027.27	0.18624		
463935.31	3810027.27	0.18171	463973.31
3810027.27	0.17824		
464011.31	3810027.27	0.17495	464049.31
3810027.27	0.17212		
464087.31	3810027.27	0.16960	464125.31
3810027.27	0.16785		
464163.31	3810027.27	0.16655	464201.31
3810027.27	0.16510		
464239.31	3810027.27	0.16323	464277.31
3810027.27	0.16144		
464315.31	3810027.27	0.15937	464353.31
3810027.27	0.15706		
464391.31	3810027.27	0.15458	464429.31
3810027.27	0.15214		
464467.31	3810027.27	0.14957	464505.31

3810027.27	0.14686		
463745.31	3810056.33	0.21026	463783.31
3810056.33	0.20148		
463821.31	3810056.33	0.19413	463859.31
3810056.33	0.18840		
463897.31	3810056.33	0.18347	463935.31
3810056.33	0.17895		
463973.31	3810056.33	0.17536	464011.31
3810056.33	0.17200		
464049.31	3810056.33	0.16897	464087.31
3810056.33	0.16647		
464125.31	3810056.33	0.16438	464163.31
3810056.33	0.16310		
464201.31	3810056.33	0.16175	464239.31
3810056.33	0.16024		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 319

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464277.31	3810056.33	0.15842	464315.31
3810056.33	0.15663		
464353.31	3810056.33	0.15478	464391.31
3810056.33	0.15252		
464429.31	3810056.33	0.15004	464467.31
3810056.33	0.14737		

464505.31	3810056.33	0.14483	463745.31
3810085.39	0.20923		
463783.31	3810085.39	0.19998	463821.31
3810085.39	0.19217		
463859.31	3810085.39	0.18605	463897.31
3810085.39	0.18093		
463935.31	3810085.39	0.17645	463973.31
3810085.39	0.17266		
464011.31	3810085.39	0.16909	464049.31
3810085.39	0.16577		
464087.31	3810085.39	0.16335	464125.31
3810085.39	0.16126		
464163.31	3810085.39	0.15971	464201.31
3810085.39	0.15836		
464239.31	3810085.39	0.15708	464277.31
3810085.39	0.15551		
464315.31	3810085.39	0.15385	464353.31
3810085.39	0.15208		
464391.31	3810085.39	0.15009	464429.31
3810085.39	0.14768		
464467.31	3810085.39	0.14518	464505.31
3810085.39	0.14263		
463745.31	3810114.45	0.20743	463783.31
3810114.45	0.19900		
463821.31	3810114.45	0.19067	463859.31
3810114.45	0.18447		
463897.31	3810114.45	0.17883	463935.31
3810114.45	0.17414		
463973.31	3810114.45	0.17003	464011.31
3810114.45	0.16640		
464049.31	3810114.45	0.16298	464087.31
3810114.45	0.16039		
464125.31	3810114.45	0.15810	464163.31
3810114.45	0.15631		
464201.31	3810114.45	0.15490	464239.31
3810114.45	0.15397		
464277.31	3810114.45	0.15266	464315.31
3810114.45	0.15085		
464353.31	3810114.45	0.14895	464391.31
3810114.45	0.14694		
464429.31	3810114.45	0.14502	464467.31
3810114.45	0.14259		
464505.31	3810114.45	0.14045	463745.31
3810143.51	0.20470		
463783.31	3810143.51	0.19719	463821.31
3810143.51	0.19000		
463859.31	3810143.51	0.18334	463897.31
3810143.51	0.17679		
463935.31	3810143.51	0.17168	463973.31
3810143.51	0.16722		

464011.31	3810143.51	0.16383	464049.31
3810143.51	0.16037		
464087.31	3810143.51	0.15740	464125.31
3810143.51	0.15510		
464163.31	3810143.51	0.15328	464201.31
3810143.51	0.15176		
464239.31	3810143.51	0.15061	464277.31
3810143.51	0.14975		
464315.31	3810143.51	0.14805	464353.31
3810143.51	0.14590		
464391.31	3810143.51	0.14413	464429.31
3810143.51	0.14221		
464467.31	3810143.51	0.14033	464505.31
3810143.51	0.13834		
464383.78	3807479.29	0.49559	464355.03
3807405.24	0.49632		
464402.07	3807352.10	0.45714	464367.23
3807296.35	0.46472		
464358.52	3807237.99	0.45400	464385.52
3807161.33	0.42157		
463132.27	3810926.37	0.16542	463237.82
3811199.31	0.14300		
464944.35	3809244.89	0.17207	465700.32
3809255.46	0.12175		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 320

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
465716.18	3808536.49	0.15258	465544.37
3808533.85	0.16852		
465420.13	3808486.27	0.18328	465348.77
3808491.56	0.19045		
465317.05	3808443.98	0.19724	465327.62
3808406.97	0.19833		
465108.23	3808369.97	0.23461	464999.86
3808301.24	0.25870		
464722.31	3807973.48	0.34905	464717.03
3807836.03	0.35666		
464344.33	3807936.47	0.54765	464349.61
3807780.52	0.52210		
464386.62	3807785.81	0.49765	464521.43
3807859.82	0.42385		
464537.28	3807719.72	0.42902	464426.27
3807613.99	0.48273		
464368.43	3807532.62	0.51091	464324.60
3807121.91	0.43772		
464123.31	3807123.54	0.58852	463930.13
3806909.26	0.64989		
463831.11	3806906.01	0.78969	463821.36
3806720.95	0.61843		
463727.21	3806727.44	0.75800	463598.97
3806334.59	0.43732		
463001.06	3806361.54	1.21618	

```

^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***                                     *** 16:42:19

```

PAGE 321

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
      INCLUDING SOURCE(S):      L0005092      , L0005093
, L0005094      , L0005095      , L0005096      ,
      L0005097      , L0005098      , L0005099      , L0005100      , L0005101
, L0005102      , L0005103      , L0005104      ,
      L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
      L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
462160.55	3809377.75	0.36788	462051.48	
3809270.62	0.31593	0.29028	462010.58	
462014.47	3809029.10	0.25264	461936.56	
3808855.75	0.27442	0.15572	461835.28	
461936.56	3808886.92	0.23418	461833.33	
3808997.94	0.26120	0.24529	461809.96	
461909.30	3808768.10	0.25374	461841.13	
3808894.71	0.22471	0.30080	461763.22	
461845.02	3808995.99	0.11216	461835.28	
3809114.80	0.23826	0.08656	461761.27	
461843.07	3809210.24	0.11836	462304.78	
3809297.89	0.23937	0.09871	462116.34	
461856.71	3809385.54	0.08155	462012.25	
3809482.92	0.25069	0.07666	461917.14	
462004.74	3809379.69	0.08384	461908.17	
3808793.43	0.12443	0.07805	461831.00	
461753.48	3808699.93	0.23807	462459.11	
3808686.30	0.11448	0.47246	462654.73	
461823.60	3808579.17	0.69388	465763.86	
3808585.02	0.08005	0.14106	465875.82	
462301.19	3807807.15	0.13102	465987.78	
3807868.16	0.11773	0.12641		
462216.84	3807882.52			
3807886.11	0.08272			
462114.55	3807789.20			
3807887.90	0.07033			
462008.66	3807975.84			
3807972.25	0.06752			
461922.52	3808187.60			
3808288.10	0.08245			
461848.94	3808377.83			
3808494.48	0.08112			
462421.43	3808393.98			
3808501.66	0.43172			
462437.58	3808580.62			
3809189.00	0.83358			
462559.49	3809194.32			
3807935.19	0.14654			
465819.84	3807935.19			
3807935.19	0.13588			
465931.80	3807935.19			
3807935.19	0.12641			

466043.76	3807935.19	0.12205	466099.74
3807935.19	0.11792		
466155.72	3807935.19	0.11401	466211.70
3807935.19	0.11029		
466267.68	3807935.19	0.10677	466323.66
3807935.19	0.10336		
466379.64	3807935.19	0.10019	466435.62
3807935.19	0.09717		
466491.60	3807935.19	0.09429	466547.58
3807935.19	0.09139		
466603.56	3807935.19	0.08875	466659.54
3807935.19	0.08623		
466715.52	3807935.19	0.08382	466771.50
3807935.19	0.08150		
466827.48	3807935.19	0.07922	466883.46
3807935.19	0.07710		
465763.86	3808001.41	0.15262	465819.84
3808001.41	0.14679		
465875.82	3808001.41	0.14128	465931.80
3808001.41	0.13608		
465987.78	3808001.41	0.13128	466043.76
3808001.41	0.12655		
466099.74	3808001.41	0.12234	466155.72
3808001.41	0.11820		
466211.70	3808001.41	0.11429	466267.68
3808001.41	0.11056		
466323.66	3808001.41	0.10701	466379.64
3808001.41	0.10363		
466435.62	3808001.41	0.10041	466491.60
3808001.41	0.09735		
466547.58	3808001.41	0.09439	466603.56
3808001.41	0.09163		
466659.54	3808001.41	0.08899	466715.52
3808001.41	0.08632		
466771.50	3808001.41	0.08392	466827.48
3808001.41	0.08160		
466883.46	3808001.41	0.07933	465763.86
3808067.63	0.15904		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 322

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,

```

, L0005102      L0005097      , L0005098      , L0005099      , L0005100      , L0005101
, L0005102      , L0005103      , L0005104      ,
, L0005110      , L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
, L0005118      , L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
465819.84	3808067.63	0.15278	465875.82
3808067.63	0.14694		
465931.80	3808067.63	0.14143	465987.78
3808067.63	0.13625		
466043.76	3808067.63	0.13136	466099.74
3808067.63	0.12674		
466155.72	3808067.63	0.12238	466211.70
3808067.63	0.11823		
466267.68	3808067.63	0.11430	466323.66
3808067.63	0.11055		
466379.64	3808067.63	0.10699	466435.62
3808067.63	0.10371		
466491.60	3808067.63	0.10038	466547.58
3808067.63	0.09731		
466603.56	3808067.63	0.09439	466659.54
3808067.63	0.09160		
466715.52	3808067.63	0.08897	466771.50
3808067.63	0.08645		
466827.48	3808067.63	0.08397	466883.46
3808067.63	0.08157		
465763.86	3808133.85	0.16556	465819.84
3808133.85	0.15888		
465875.82	3808133.85	0.15264	465931.80
3808133.85	0.14678		
465987.78	3808133.85	0.14144	466043.76
3808133.85	0.13621		
466099.74	3808133.85	0.13129	466155.72
3808133.85	0.12663		
466211.70	3808133.85	0.12223	466267.68
3808133.85	0.11807		
466323.66	3808133.85	0.11414	466379.64
3808133.85	0.11043		
466435.62	3808133.85	0.10690	466491.60

3808133.85	0.10354		
466547.58	3808133.85	0.10031	466603.56
3808133.85	0.09726		
466659.54	3808133.85	0.09435	466715.52
3808133.85	0.09157		
466771.50	3808133.85	0.08881	466827.48
3808133.85	0.08629		
466883.46	3808133.85	0.08387	465763.86
3808200.07	0.17202		
465819.84	3808200.07	0.16493	465875.82
3808200.07	0.15829		
465931.80	3808200.07	0.15224	465987.78
3808200.07	0.14638		
466043.76	3808200.07	0.14086	466099.74
3808200.07	0.13566		
466155.72	3808200.07	0.13076	466211.70
3808200.07	0.12613		
466267.68	3808200.07	0.12176	466323.66
3808200.07	0.11776		
466379.64	3808200.07	0.11383	466435.62
3808200.07	0.11010		
466491.60	3808200.07	0.10656	466547.58
3808200.07	0.10320		
466603.56	3808200.07	0.10000	466659.54
3808200.07	0.09695		
466715.52	3808200.07	0.09405	466771.50
3808200.07	0.09126		
466827.48	3808200.07	0.08855	466883.46
3808200.07	0.08603		
465763.86	3808266.29	0.17800	465819.84
3808266.29	0.17075		
465875.82	3808266.29	0.16387	465931.80
3808266.29	0.15729		
465987.78	3808266.29	0.15112	466043.76
3808266.29	0.14533		
466099.74	3808266.29	0.13987	466155.72
3808266.29	0.13473		
466211.70	3808266.29	0.12990	466267.68
3808266.29	0.12540		
466323.66	3808266.29	0.12107	466379.64
3808266.29	0.11709		
466435.62	3808266.29	0.11321	466491.60
3808266.29	0.10946		
466547.58	3808266.29	0.10593	466603.56
3808266.29	0.10258		
466659.54	3808266.29	0.09947	466715.52
3808266.29	0.09639		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 323

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.09353	466827.48
3808266.29	0.09075		
466883.46	3808266.29	0.08812	465763.86
3808332.51	0.18369		
465819.84	3808332.51	0.17623	465875.82
3808332.51	0.16888		
465931.80	3808332.51	0.16200	465987.78
3808332.51	0.15555		
466043.76	3808332.51	0.14949	466099.74
3808332.51	0.14380		
466155.72	3808332.51	0.13850	466211.70
3808332.51	0.13345		
466267.68	3808332.51	0.12867	466323.66
3808332.51	0.12437		
466379.64	3808332.51	0.12008	466435.62
3808332.51	0.11602		
466491.60	3808332.51	0.11216	466547.58
3808332.51	0.10850		
466603.56	3808332.51	0.10522	466659.54
3808332.51	0.10193		
466715.52	3808332.51	0.09878	466771.50
3808332.51	0.09565		
466827.48	3808332.51	0.09281	466883.46
3808332.51	0.09010		

465763.86	3808398.73	0.18883	465819.84
3808398.73	0.18102		
465875.82	3808398.73	0.17338	465931.80
3808398.73	0.16625		
465987.78	3808398.73	0.15955	466043.76
3808398.73	0.15327		
466099.74	3808398.73	0.14749	466155.72
3808398.73	0.14190		
466211.70	3808398.73	0.13663	466267.68
3808398.73	0.13194		
466323.66	3808398.73	0.12724	466379.64
3808398.73	0.12281		
466435.62	3808398.73	0.11872	466491.60
3808398.73	0.11476		
466547.58	3808398.73	0.11100	466603.56
3808398.73	0.10746		
466659.54	3808398.73	0.10407	466715.52
3808398.73	0.10080		
466771.50	3808398.73	0.09772	466827.48
3808398.73	0.09476		
466883.46	3808398.73	0.09196	465763.86
3808464.95	0.19329		
465819.84	3808464.95	0.18514	465875.82
3808464.95	0.17721		
465931.80	3808464.95	0.16989	465987.78
3808464.95	0.16305		
466043.76	3808464.95	0.15676	466099.74
3808464.95	0.15064		
466155.72	3808464.95	0.14488	466211.70
3808464.95	0.13947		
466267.68	3808464.95	0.13459	466323.66
3808464.95	0.12976		
466379.64	3808464.95	0.12533	466435.62
3808464.95	0.12102		
466491.60	3808464.95	0.11707	466547.58
3808464.95	0.11318		
466603.56	3808464.95	0.10950	466659.54
3808464.95	0.10600		
466715.52	3808464.95	0.10268	466771.50
3808464.95	0.09953		
466827.48	3808464.95	0.09652	466883.46
3808464.95	0.09366		
465763.86	3808531.17	0.19717	465819.84
3808531.17	0.18851		
465875.82	3808531.17	0.18042	465931.80
3808531.17	0.17286		
465987.78	3808531.17	0.16599	466043.76
3808531.17	0.15944		
466099.74	3808531.17	0.15330	466155.72
3808531.17	0.14743		

466211.70	3808531.17	0.14191	466267.68
3808531.17	0.13686		
466323.66	3808531.17	0.13206	466379.64
3808531.17	0.12743		
466435.62	3808531.17	0.12317	466491.60
3808531.17	0.11899		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 324

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466547.58	3808531.17	0.11503	466603.56
3808531.17	0.11127		
466659.54	3808531.17	0.10770	466715.52
3808531.17	0.10432		
466771.50	3808531.17	0.10108	466827.48
3808531.17	0.09805		
466883.46	3808531.17	0.09513	465763.86
3808597.39	0.19989		
465819.84	3808597.39	0.19146	465875.82
3808597.39	0.18321		
465931.80	3808597.39	0.17526	465987.78
3808597.39	0.16828		
466043.76	3808597.39	0.16179	466099.74
3808597.39	0.15546		
466155.72	3808597.39	0.14956	466211.70

3808597.39	0.14402		
466267.68	3808597.39	0.13872	466323.66
3808597.39	0.13391		
466379.64	3808597.39	0.12932	466435.62
3808597.39	0.12485		
466491.60	3808597.39	0.12069	466547.58
3808597.39	0.11670		
466603.56	3808597.39	0.11287	466659.54
3808597.39	0.10924		
466715.52	3808597.39	0.10579	466771.50
3808597.39	0.10251		
466827.48	3808597.39	0.09939	466883.46
3808597.39	0.09649		
465763.86	3808663.61	0.20177	465819.84
3808663.61	0.19339		
465875.82	3808663.61	0.18516	465931.80
3808663.61	0.17746		
465987.78	3808663.61	0.17026	466043.76
3808663.61	0.16348		
466099.74	3808663.61	0.15723	466155.72
3808663.61	0.15121		
466211.70	3808663.61	0.14552	466267.68
3808663.61	0.14018		
466323.66	3808663.61	0.13540	466379.64
3808663.61	0.13062		
466435.62	3808663.61	0.12635	466491.60
3808663.61	0.12205		
466547.58	3808663.61	0.11796	466603.56
3808663.61	0.11408		
466659.54	3808663.61	0.11040	466715.52
3808663.61	0.10692		
466771.50	3808663.61	0.10361	466827.48
3808663.61	0.10059		
466883.46	3808663.61	0.09756	465763.86
3808729.83	0.20340		
465819.84	3808729.83	0.19512	465875.82
3808729.83	0.18686		
465931.80	3808729.83	0.17901	465987.78
3808729.83	0.17168		
466043.76	3808729.83	0.16483	466099.74
3808729.83	0.15840		
466155.72	3808729.83	0.15235	466211.70
3808729.83	0.14664		
466267.68	3808729.83	0.14127	466323.66
3808729.83	0.13647		
466379.64	3808729.83	0.13177	466435.62
3808729.83	0.12724		
466491.60	3808729.83	0.12306	466547.58
3808729.83	0.11895		
466603.56	3808729.83	0.11505	466659.54

3808729.83	0.11157		
466715.52	3808729.83	0.10804	466771.50
3808729.83	0.10469		
466827.48	3808729.83	0.10157	466883.46
3808729.83	0.09853		
465763.86	3808796.05	0.20374	465819.84
3808796.05	0.19600		
465875.82	3808796.05	0.18745	465931.80
3808796.05	0.17978		
465987.78	3808796.05	0.17251	466043.76
3808796.05	0.16572		
466099.74	3808796.05	0.15933	466155.72
3808796.05	0.15331		
466211.70	3808796.05	0.14763	466267.68
3808796.05	0.14226		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 325

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466323.66	3808796.05	0.13726	466379.64
3808796.05	0.13251		
466435.62	3808796.05	0.12813	466491.60
3808796.05	0.12379		
466547.58	3808796.05	0.11971	466603.56
3808796.05	0.11596		

466659.54	3808796.05	0.11225	466715.52
3808796.05	0.10878		
466771.50	3808796.05	0.10545	466827.48
3808796.05	0.10225		
466883.46	3808796.05	0.09930	465763.86
3808862.27	0.20282		
465819.84	3808862.27	0.19497	465875.82
3808862.27	0.18740		
465931.80	3808862.27	0.17981	465987.78
3808862.27	0.17265		
466043.76	3808862.27	0.16591	466099.74
3808862.27	0.15971		
466155.72	3808862.27	0.15358	466211.70
3808862.27	0.14793		
466267.68	3808862.27	0.14277	466323.66
3808862.27	0.13773		
466379.64	3808862.27	0.13304	466435.62
3808862.27	0.12856		
466491.60	3808862.27	0.12432	466547.58
3808862.27	0.12030		
466603.56	3808862.27	0.11641	466659.54
3808862.27	0.11284		
466715.52	3808862.27	0.10931	466771.50
3808862.27	0.10598		
466827.48	3808862.27	0.10285	466883.46
3808862.27	0.09985		
465763.86	3808928.49	0.20066	465819.84
3808928.49	0.19298		
465875.82	3808928.49	0.18595	465931.80
3808928.49	0.17902		
465987.78	3808928.49	0.17235	466043.76
3808928.49	0.16608		
466099.74	3808928.49	0.15963	466155.72
3808928.49	0.15373		
466211.70	3808928.49	0.14816	466267.68
3808928.49	0.14287		
466323.66	3808928.49	0.13785	466379.64
3808928.49	0.13309		
466435.62	3808928.49	0.12873	466491.60
3808928.49	0.12455		
466547.58	3808928.49	0.12051	466603.56
3808928.49	0.11683		
466659.54	3808928.49	0.11314	466715.52
3808928.49	0.10970		
466771.50	3808928.49	0.10635	466827.48
3808928.49	0.10326		
466883.46	3808928.49	0.10022	465763.86
3808994.71	0.19969		
465819.84	3808994.71	0.19157	465875.82
3808994.71	0.18441		

465931.80	3808994.71	0.17798	465987.78
3808994.71	0.17195		
466043.76	3808994.71	0.16556	466099.74
3808994.71	0.15935		
466155.72	3808994.71	0.15339	466211.70
3808994.71	0.14792		
466267.68	3808994.71	0.14271	466323.66
3808994.71	0.13778		
466379.64	3808994.71	0.13310	466435.62
3808994.71	0.12866		
466491.60	3808994.71	0.12456	466547.58
3808994.71	0.12072		
466603.56	3808994.71	0.11693	466659.54
3808994.71	0.11326		
466715.52	3808994.71	0.11000	466771.50
3808994.71	0.10664		
466827.48	3808994.71	0.10344	466883.46
3808994.71	0.10051		
465763.86	3809060.93	0.19865	465819.84
3809060.93	0.19071		
465875.82	3809060.93	0.18360	465931.80
3809060.93	0.17696		
465987.78	3809060.93	0.17066	466043.76
3809060.93	0.16466		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 326

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
466099.74	3809060.93	0.15841	466155.72
3809060.93	0.15278		
466211.70	3809060.93	0.14732	466267.68
3809060.93	0.14224		
466323.66	3809060.93	0.13739	466379.64
3809060.93	0.13278		
466435.62	3809060.93	0.12857	466491.60
3809060.93	0.12452		
466547.58	3809060.93	0.12054	466603.56
3809060.93	0.11682		
466659.54	3809060.93	0.11340	466715.52
3809060.93	0.10992		
466771.50	3809060.93	0.10663	466827.48
3809060.93	0.10354		
466883.46	3809060.93	0.10061	465763.86
3809127.15	0.19768		
465819.84	3809127.15	0.19006	465875.82
3809127.15	0.18300		
465931.80	3809127.15	0.17617	465987.78
3809127.15	0.16974		
466043.76	3809127.15	0.16318	466099.74
3809127.15	0.15701		
466155.72	3809127.15	0.15140	466211.70
3809127.15	0.14662		
466267.68	3809127.15	0.14179	466323.66
3809127.15	0.13709		
466379.64	3809127.15	0.13250	466435.62
3809127.15	0.12823		
466491.60	3809127.15	0.12417	466547.58
3809127.15	0.12033		
466603.56	3809127.15	0.11671	466659.54
3809127.15	0.11312		
466715.52	3809127.15	0.10977	466771.50
3809127.15	0.10655		
466827.48	3809127.15	0.10344	466883.46
3809127.15	0.10056		
465763.86	3809193.37	0.19573	465819.84
3809193.37	0.18872		
465875.82	3809193.37	0.18175	465931.80
3809193.37	0.17501		
465987.78	3809193.37	0.16817	466043.76
3809193.37	0.16108		
466099.74	3809193.37	0.15561	466155.72
3809193.37	0.15020		
466211.70	3809193.37	0.14540	466267.68
3809193.37	0.14083		
466323.66	3809193.37	0.13634	466379.64

3809193.37	0.13202		
466435.62	3809193.37	0.12775	466491.60
3809193.37	0.12376		
466547.58	3809193.37	0.11995	466603.56
3809193.37	0.11640		
466659.54	3809193.37	0.11286	466715.52
3809193.37	0.10959		
466771.50	3809193.37	0.10636	466827.48
3809193.37	0.10334		
466883.46	3809193.37	0.10042	465763.86
3809259.59	0.19294		
465819.84	3809259.59	0.18612	465875.82
3809259.59	0.17933		
465931.80	3809259.59	0.17287	465987.78
3809259.59	0.16618		
466043.76	3809259.59	0.15984	466099.74
3809259.59	0.15401		
466155.72	3809259.59	0.14912	466211.70
3809259.59	0.14445		
466267.68	3809259.59	0.13998	466323.66
3809259.59	0.13538		
466379.64	3809259.59	0.13112	466435.62
3809259.59	0.12709		
466491.60	3809259.59	0.12311	466547.58
3809259.59	0.11948		
466603.56	3809259.59	0.11587	466659.54
3809259.59	0.11243		
466715.52	3809259.59	0.10928	466771.50
3809259.59	0.10608		
466827.48	3809259.59	0.10310	466883.46
3809259.59	0.10021		
464503.41	3807141.91	0.12072	464523.41
3807141.91	0.12220		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 327

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117

, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464543.41	3807141.91	0.12109	464563.41
3807141.91	0.11943		
464583.41	3807141.91	0.12203	464603.41
3807141.91	0.12225		
464623.41	3807141.91	0.12178	464643.41
3807141.91	0.12411		
464663.41	3807141.91	0.12451	464683.41
3807141.91	0.12444		
464703.41	3807141.91	0.12736	464723.41
3807141.91	0.17331		
464743.41	3807141.91	0.17092	464763.41
3807141.91	0.17068		
464783.41	3807141.91	0.16851	464803.41
3807141.91	0.16653		
464823.41	3807141.91	0.16911	464843.41
3807141.91	0.18611		
464863.41	3807141.91	0.18362	464883.41
3807141.91	0.18293		
464903.41	3807141.91	0.18056	464923.41
3807141.91	0.17823		
464503.41	3807161.91	0.12201	464523.41
3807161.91	0.12364		
464543.41	3807161.91	0.12261	464563.41
3807161.91	0.12102		
464583.41	3807161.91	0.12374	464603.41
3807161.91	0.12645		
464623.41	3807161.91	0.12848	464643.41
3807161.91	0.12731		
464663.41	3807161.91	0.12909	464683.41
3807161.91	0.13174		
464703.41	3807161.91	0.13084	464723.41
3807161.91	0.17575		
464743.41	3807161.91	0.17537	464763.41
3807161.91	0.17821		
464783.41	3807161.91	0.17628	464803.41
3807161.91	0.17395		
464823.41	3807161.91	0.18219	464843.41
3807161.91	0.18861		

464863.41	3807161.91	0.18786	464883.41
3807161.91	0.18540		
464903.41	3807161.91	0.18294	464923.41
3807161.91	0.18053		
464503.41	3807181.91	0.12652	464523.41
3807181.91	0.12605		
464543.41	3807181.91	0.12602	464563.41
3807181.91	0.12624		
464583.41	3807181.91	0.12653	464603.41
3807181.91	0.12890		
464623.41	3807181.91	0.13156	464643.41
3807181.91	0.12965		
464663.41	3807181.91	0.13177	464683.41
3807181.91	0.18358		
464703.41	3807181.91	0.18088	464723.41
3807181.91	0.18088		
464743.41	3807181.91	0.18119	464763.41
3807181.91	0.18319		
464783.41	3807181.91	0.19934	464803.41
3807181.91	0.19657		
464823.41	3807181.91	0.19575	464843.41
3807181.91	0.19306		
464863.41	3807181.91	0.19042	464883.41
3807181.91	0.18786		
464903.41	3807181.91	0.18535	464923.41
3807181.91	0.18289		
464503.41	3807201.91	0.13118	464523.41
3807201.91	0.12850		
464543.41	3807201.91	0.12945	464563.41
3807201.91	0.13168		
464583.41	3807201.91	0.13055	464603.41
3807201.91	0.13191		
464623.41	3807201.91	0.13391	464643.41
3807201.91	0.13316		
464663.41	3807201.91	0.13503	464683.41
3807201.91	0.18632		
464703.41	3807201.91	0.18590	464723.41
3807201.91	0.18640		
464743.41	3807201.91	0.20805	464763.41
3807201.91	0.20505		
464783.41	3807201.91	0.20411	464803.41
3807201.91	0.20124		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³
**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.19847	464843.41
3807201.91	0.19573		
464863.41	3807201.91	0.19303	464883.41
3807201.91	0.19037		
464903.41	3807201.91	0.18780	464923.41
3807201.91	0.18528		
464503.41	3807221.91	0.13297	464523.41
3807221.91	0.13036		
464543.41	3807221.91	0.13142	464563.41
3807221.91	0.13445		
464583.41	3807221.91	0.13728	464603.41
3807221.91	0.13740		
464623.41	3807221.91	0.13694	464643.41
3807221.91	0.14041		
464663.41	3807221.91	0.14094	464683.41
3807221.91	0.19129		
464703.41	3807221.91	0.19424	464723.41
3807221.91	0.19409		
464743.41	3807221.91	0.21103	464763.41
3807221.91	0.20796		
464783.41	3807221.91	0.20701	464803.41
3807221.91	0.20411		
464823.41	3807221.91	0.20121	464843.41
3807221.91	0.19842		
464863.41	3807221.91	0.19568	464883.41
3807221.91	0.19295		
464903.41	3807221.91	0.19028	464923.41
3807221.91	0.18767		
464503.41	3807241.91	0.13539	464523.41

3807241.91	0.13561		
464543.41	3807241.91	0.13592	464563.41
3807241.91	0.13678		
464583.41	3807241.91	0.14053	464603.41
3807241.91	0.14045		
464623.41	3807241.91	0.13947	464643.41
3807241.91	0.14389		
464663.41	3807241.91	0.19761	464683.41
3807241.91	0.19778		
464703.41	3807241.91	0.19980	464723.41
3807241.91	0.21729		
464743.41	3807241.91	0.21410	464763.41
3807241.91	0.21304		
464783.41	3807241.91	0.20997	464803.41
3807241.91	0.20697		
464823.41	3807241.91	0.20403	464843.41
3807241.91	0.20115		
464863.41	3807241.91	0.19832	464883.41
3807241.91	0.19551		
464903.41	3807241.91	0.19279	464923.41
3807241.91	0.19012		
464503.41	3807261.91	0.13791	464523.41
3807261.91	0.14096		
464543.41	3807261.91	0.14046	464563.41
3807261.91	0.13919		
464583.41	3807261.91	0.14303	464603.41
3807261.91	0.14383		
464623.41	3807261.91	0.14372	464643.41
3807261.91	0.14691		
464663.41	3807261.91	0.20340	464683.41
3807261.91	0.22733		
464703.41	3807261.91	0.22386	464723.41
3807261.91	0.22265		
464743.41	3807261.91	0.21933	464763.41
3807261.91	0.21614		
464783.41	3807261.91	0.21299	464803.41
3807261.91	0.20989		
464823.41	3807261.91	0.20689	464843.41
3807261.91	0.20392		
464863.41	3807261.91	0.20099	464883.41
3807261.91	0.19811		
464903.41	3807261.91	0.19533	464923.41
3807261.91	0.19261		
464503.41	3807281.91	0.14020	464523.41
3807281.91	0.14338		
464543.41	3807281.91	0.14297	464563.41
3807281.91	0.14175		
464583.41	3807281.91	0.14568	464603.41
3807281.91	0.14942		
464623.41	3807281.91	0.15230	464643.41

3807281.91 0.15120

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 329

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464663.41	3807281.91	0.20653	464683.41
3807281.91	0.23075		
464703.41	3807281.91	0.22719	464723.41
3807281.91	0.22597		
464743.41	3807281.91	0.22261	464763.41
3807281.91	0.21927		
464783.41	3807281.91	0.21604	464803.41
3807281.91	0.21289		
464823.41	3807281.91	0.20976	464843.41
3807281.91	0.20672		
464863.41	3807281.91	0.20375	464883.41
3807281.91	0.20079		
464903.41	3807281.91	0.19792	464923.41
3807281.91	0.19510		
464503.41	3807301.91	0.14669	464523.41
3807301.91	0.14706		
464543.41	3807301.91	0.14782	464563.41
3807301.91	0.14874		
464583.41	3807301.91	0.14961	464603.41
3807301.91	0.15287		

464623.41	3807301.91	0.21043	464643.41
3807301.91	0.20715		
464663.41	3807301.91	0.20976	464683.41
3807301.91	0.23424		
464703.41	3807301.91	0.23059	464723.41
3807301.91	0.22931		
464743.41	3807301.91	0.22588	464763.41
3807301.91	0.22248		
464783.41	3807301.91	0.21915	464803.41
3807301.91	0.21588		
464823.41	3807301.91	0.21265	464843.41
3807301.91	0.20953		
464863.41	3807301.91	0.20649	464883.41
3807301.91	0.20348		
464903.41	3807301.91	0.20051	464923.41
3807301.91	0.19758		
464503.41	3807321.91	0.15325	464523.41
3807321.91	0.15077		
464543.41	3807321.91	0.15266	464563.41
3807321.91	0.15572		
464583.41	3807321.91	0.15354	464603.41
3807321.91	0.15587		
464623.41	3807321.91	0.21380	464643.41
3807321.91	0.21047		
464663.41	3807321.91	0.21309	464683.41
3807321.91	0.23781		
464703.41	3807321.91	0.23636	464723.41
3807321.91	0.23272		
464743.41	3807321.91	0.22918	464763.41
3807321.91	0.22573		
464783.41	3807321.91	0.22229	464803.41
3807321.91	0.21890		
464823.41	3807321.91	0.21559	464843.41
3807321.91	0.21239		
464863.41	3807321.91	0.20926	464883.41
3807321.91	0.20616		
464903.41	3807321.91	0.20309	464923.41
3807321.91	0.20007		
464503.41	3807341.91	0.15620	464523.41
3807341.91	0.15377		
464543.41	3807341.91	0.15572	464563.41
3807341.91	0.15884		
464583.41	3807341.91	0.15666	464603.41
3807341.91	0.15901		
464623.41	3807341.91	0.21729	464643.41
3807341.91	0.21390		
464663.41	3807341.91	0.21650	464683.41
3807341.91	0.24381		
464703.41	3807341.91	0.24001	464723.41
3807341.91	0.23624		

464743.41	3807341.91	0.23254	464763.41
3807341.91	0.22899		
464783.41	3807341.91	0.22545	464803.41
3807341.91	0.22197		
464823.41	3807341.91	0.21861	464843.41
3807341.91	0.21533		
464863.41	3807341.91	0.21207	464883.41
3807341.91	0.20885		
464903.41	3807341.91	0.20569	464923.41
3807341.91	0.20258		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 330

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

 ** CONC OF PM_10 IN MICROGRAMS/M**3
 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464503.41	3807361.91	0.15992	464523.41
3807361.91	0.16089		
464543.41	3807361.91	0.16179	464563.41
3807361.91	0.16211		
464583.41	3807361.91	0.15993	464603.41
3807361.91	0.16228		
464623.41	3807361.91	0.22335	464643.41
3807361.91	0.22336		
464663.41	3807361.91	0.22321	464683.41
3807361.91	0.24754		
464703.41	3807361.91	0.24364	464723.41

3807361.91	0.23979		
464743.41	3807361.91	0.23601	464763.41
3807361.91	0.23230		
464783.41	3807361.91	0.22867	464803.41
3807361.91	0.22512		
464823.41	3807361.91	0.22167	464843.41
3807361.91	0.21825		
464863.41	3807361.91	0.21488	464883.41
3807361.91	0.21156		
464903.41	3807361.91	0.20830	464923.41
3807361.91	0.20510		
464503.41	3807381.91	0.16555	464523.41
3807381.91	0.16845		
464543.41	3807381.91	0.16787	464563.41
3807381.91	0.16575		
464583.41	3807381.91	0.16484	464603.41
3807381.91	0.16681		
464623.41	3807381.91	0.22728	464643.41
3807381.91	0.23064		
464663.41	3807381.91	0.25556	464683.41
3807381.91	0.25137		
464703.41	3807381.91	0.24733	464723.41
3807381.91	0.24339		
464743.41	3807381.91	0.23952	464763.41
3807381.91	0.23567		
464783.41	3807381.91	0.23194	464803.41
3807381.91	0.22830		
464823.41	3807381.91	0.22473	464843.41
3807381.91	0.22118		
464863.41	3807381.91	0.21770	464883.41
3807381.91	0.21428		
464903.41	3807381.91	0.21092	464923.41
3807381.91	0.20760		
464503.41	3807401.91	0.17529	464523.41
3807401.91	0.17365		
464543.41	3807401.91	0.17148	464563.41
3807401.91	0.17016		
464583.41	3807401.91	0.17393	464603.41
3807401.91	0.17429		
464623.41	3807401.91	0.23112	464643.41
3807401.91	0.23445		
464663.41	3807401.91	0.25960	464683.41
3807401.91	0.25534		
464703.41	3807401.91	0.25109	464723.41
3807401.91	0.24701		
464743.41	3807401.91	0.24303	464763.41
3807401.91	0.23913		
464783.41	3807401.91	0.23526	464803.41
3807401.91	0.23146		
464823.41	3807401.91	0.22778	464843.41

3807401.91	0.22413		
464863.41	3807401.91	0.22054	464883.41
3807401.91	0.21700		
464903.41	3807401.91	0.21354	464923.41
3807401.91	0.21014		
464503.41	3807421.91	0.18042	464523.41
3807421.91	0.17776		
464543.41	3807421.91	0.17781	464563.41
3807421.91	0.17901		
464583.41	3807421.91	0.18009	464603.41
3807421.91	0.23950		
464623.41	3807421.91	0.23923	464643.41
3807421.91	0.24108		
464663.41	3807421.91	0.26367	464683.41
3807421.91	0.25929		
464703.41	3807421.91	0.25496	464723.41
3807421.91	0.25072		
464743.41	3807421.91	0.24657	464763.41
3807421.91	0.24256		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 331

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464783.41	3807421.91	0.23860	464803.41
3807421.91	0.23470		

464823.41	3807421.91	0.23086	464843.41
3807421.91	0.22709		
464863.41	3807421.91	0.22338	464883.41
3807421.91	0.21974		
464903.41	3807421.91	0.21616	464923.41
3807421.91	0.21265		
464503.41	3807441.91	0.18464	464523.41
3807441.91	0.18337		
464543.41	3807441.91	0.18531	464563.41
3807441.91	0.24863		
464583.41	3807441.91	0.24741	464603.41
3807441.91	0.24734		
464623.41	3807441.91	0.27462	464643.41
3807441.91	0.27246		
464663.41	3807441.91	0.26780	464683.41
3807441.91	0.26327		
464703.41	3807441.91	0.25886	464723.41
3807441.91	0.25448		
464743.41	3807441.91	0.25018	464763.41
3807441.91	0.24602		
464783.41	3807441.91	0.24196	464803.41
3807441.91	0.23793		
464823.41	3807441.91	0.23396	464843.41
3807441.91	0.23007		
464863.41	3807441.91	0.22622	464883.41
3807441.91	0.22250		
464903.41	3807441.91	0.21880	464923.41
3807441.91	0.21516		
464503.41	3807461.91	0.18973	464523.41
3807461.91	0.19364		
464543.41	3807461.91	0.19377	464563.41
3807461.91	0.25593		
464583.41	3807461.91	0.25897	464603.41
3807461.91	0.25797		
464623.41	3807461.91	0.28180	464643.41
3807461.91	0.27691		
464663.41	3807461.91	0.27206	464683.41
3807461.91	0.26730		
464703.41	3807461.91	0.26275	464723.41
3807461.91	0.25828		
464743.41	3807461.91	0.25388	464763.41
3807461.91	0.24953		
464783.41	3807461.91	0.24532	464803.41
3807461.91	0.24117		
464823.41	3807461.91	0.23708	464843.41
3807461.91	0.23307		
464863.41	3807461.91	0.22911	464883.41
3807461.91	0.22528		
464903.41	3807461.91	0.22148	464923.41
3807461.91	0.21773		

464503.41	3807481.91	0.19420	464523.41
3807481.91	0.19916		
464543.41	3807481.91	0.26583	464563.41
3807481.91	0.26522		
464583.41	3807481.91	0.26695	464603.41
3807481.91	0.29170		
464623.41	3807481.91	0.28646	464643.41
3807481.91	0.28135		
464663.41	3807481.91	0.27635	464683.41
3807481.91	0.27148		
464703.41	3807481.91	0.26671	464723.41
3807481.91	0.26208		
464743.41	3807481.91	0.25756	464763.41
3807481.91	0.25305		
464783.41	3807481.91	0.24871	464803.41
3807481.91	0.24443		
464823.41	3807481.91	0.24022	464843.41
3807481.91	0.23609		
464863.41	3807481.91	0.23201	464883.41
3807481.91	0.22803		
464903.41	3807481.91	0.22413	464923.41
3807481.91	0.22031		
464503.41	3807501.91	0.20104	464523.41
3807501.91	0.21316		
464543.41	3807501.91	0.27480	464563.41
3807501.91	0.30487		
464583.41	3807501.91	0.30212	464603.41
3807501.91	0.29658		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 332

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

464623.41	3807501.91	0.29119		464643.41
3807501.91	0.28586			
464663.41	3807501.91	0.28071		464683.41
3807501.91	0.27569			
464703.41	3807501.91	0.27073		464723.41
3807501.91	0.26593			
464743.41	3807501.91	0.26125		464763.41
3807501.91	0.25662			
464783.41	3807501.91	0.25213		464803.41
3807501.91	0.24772			
464823.41	3807501.91	0.24337		464843.41
3807501.91	0.23912			
464863.41	3807501.91	0.23492		464883.41
3807501.91	0.23078			
464903.41	3807501.91	0.22679		464923.41
3807501.91	0.22290			
464503.41	3807521.91	0.22138		464523.41
3807521.91	0.28823			
464543.41	3807521.91	0.28689		464563.41
3807521.91	0.31315			
464583.41	3807521.91	0.30732		464603.41
3807521.91	0.30155			
464623.41	3807521.91	0.29590		464643.41
3807521.91	0.29049			
464663.41	3807521.91	0.28513		464683.41
3807521.91	0.27989			
464703.41	3807521.91	0.27484		464723.41
3807521.91	0.26986			
464743.41	3807521.91	0.26498		464763.41
3807521.91	0.26026			
464783.41	3807521.91	0.25559		464803.41
3807521.91	0.25102			
464823.41	3807521.91	0.24653		464843.41
3807521.91	0.24214			
464863.41	3807521.91	0.23786		464883.41
3807521.91	0.23360			
464903.41	3807521.91	0.22950		464923.41
3807521.91	0.22551			
464503.41	3807541.91	0.29602		464523.41
3807541.91	0.29756			
464543.41	3807541.91	0.32489		464563.41
3807541.91	0.31863			
464583.41	3807541.91	0.31252		464603.41

3807541.91	0.30657		
464623.41	3807541.91	0.30077	464643.41
3807541.91	0.29511		
464663.41	3807541.91	0.28959	464683.41
3807541.91	0.28421		
464703.41	3807541.91	0.27895	464723.41
3807541.91	0.27382		
464743.41	3807541.91	0.26880	464763.41
3807541.91	0.26388		
464783.41	3807541.91	0.25906	464803.41
3807541.91	0.25435		
464823.41	3807541.91	0.24972	464843.41
3807541.91	0.24518		
464863.41	3807541.91	0.24075	464883.41
3807541.91	0.23642		
464903.41	3807541.91	0.23220	464923.41
3807541.91	0.22806		
464503.41	3807561.91	0.34083	464523.41
3807561.91	0.33729		
464543.41	3807561.91	0.33064	464563.41
3807561.91	0.32419		
464583.41	3807561.91	0.31781	464603.41
3807561.91	0.31167		
464623.41	3807561.91	0.30569	464643.41
3807561.91	0.29979		
464663.41	3807561.91	0.29410	464683.41
3807561.91	0.28856		
464703.41	3807561.91	0.28310	464723.41
3807561.91	0.27781		
464743.41	3807561.91	0.27262	464763.41
3807561.91	0.26752		
464783.41	3807561.91	0.26255	464803.41
3807561.91	0.25770		
464823.41	3807561.91	0.25294	464843.41
3807561.91	0.24824		
464863.41	3807561.91	0.24365	464883.41
3807561.91	0.23927		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 333

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101

```

, L0005102      , L0005103      , L0005104      ,
                  L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
                  L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
464903.41	3807561.91	0.23491	464923.41
3807561.91	0.23063		
464503.41	3807581.91	0.35047	464523.41
3807581.91	0.34345		
464543.41	3807581.91	0.33650	464563.41
3807581.91	0.32973		
464583.41	3807581.91	0.32325	464603.41
3807581.91	0.31685		
464623.41	3807581.91	0.31060	464643.41
3807581.91	0.30460		
464663.41	3807581.91	0.29868	464683.41
3807581.91	0.29290		
464703.41	3807581.91	0.28732	464723.41
3807581.91	0.28182		
464743.41	3807581.91	0.27643	464763.41
3807581.91	0.27118		
464783.41	3807581.91	0.26606	464803.41
3807581.91	0.26104		
464823.41	3807581.91	0.25617	464843.41
3807581.91	0.25136		
464863.41	3807581.91	0.24666	464883.41
3807581.91	0.24216		
464903.41	3807581.91	0.23769	464923.41
3807581.91	0.23329		
464503.41	3807601.91	0.35701	464523.41
3807601.91	0.34974		
464543.41	3807601.91	0.34253	464563.41
3807601.91	0.33547		
464583.41	3807601.91	0.32868	464603.41
3807601.91	0.32208		
464623.41	3807601.91	0.31565	464643.41
3807601.91	0.30939		
464663.41	3807601.91	0.30330	464683.41
3807601.91	0.29735		

464703.41	3807601.91	0.29153	464723.41
3807601.91	0.28584		
464743.41	3807601.91	0.28029	464763.41
3807601.91	0.27488		
464783.41	3807601.91	0.26959	464803.41
3807601.91	0.26443		
464823.41	3807601.91	0.25938	464843.41
3807601.91	0.25447		
464863.41	3807601.91	0.24968	464883.41
3807601.91	0.24500		
464903.41	3807601.91	0.24045	464923.41
3807601.91	0.23600		
464503.41	3807621.91	0.36369	464523.41
3807621.91	0.35610		
464543.41	3807621.91	0.34861	464563.41
3807621.91	0.34129		
464583.41	3807621.91	0.33420	464603.41
3807621.91	0.32739		
464623.41	3807621.91	0.32077	464643.41
3807621.91	0.31425		
464663.41	3807621.91	0.30796	464683.41
3807621.91	0.30180		
464703.41	3807621.91	0.29577	464723.41
3807621.91	0.28989		
464743.41	3807621.91	0.28418	464763.41
3807621.91	0.27858		
464783.41	3807621.91	0.27314	464803.41
3807621.91	0.26784		
464823.41	3807621.91	0.26263	464843.41
3807621.91	0.25759		
464863.41	3807621.91	0.25270	464883.41
3807621.91	0.24787		
464903.41	3807621.91	0.24322	464923.41
3807621.91	0.23871		
464503.41	3807641.91	0.37047	464523.41
3807641.91	0.36245		
464543.41	3807641.91	0.35464	464563.41
3807641.91	0.34708		
464583.41	3807641.91	0.33988	464603.41
3807641.91	0.33278		
464623.41	3807641.91	0.32586	464643.41
3807641.91	0.31921		
464663.41	3807641.91	0.31266	464683.41
3807641.91	0.30626		
464703.41	3807641.91	0.30005	464723.41
3807641.91	0.29400		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464743.41	3807641.91	0.28807	464763.41
3807641.91	0.28235		
464783.41	3807641.91	0.27672	464803.41
3807641.91	0.27122		
464823.41	3807641.91	0.26596	464843.41
3807641.91	0.26076		
464863.41	3807641.91	0.25569	464883.41
3807641.91	0.25084		
464903.41	3807641.91	0.24605	464923.41
3807641.91	0.24136		
464503.41	3807661.91	0.37739	464523.41
3807661.91	0.36903		
464543.41	3807661.91	0.36093	464563.41
3807661.91	0.35308		
464583.41	3807661.91	0.34555	464603.41
3807661.91	0.33823		
464623.41	3807661.91	0.33112	464643.41
3807661.91	0.32416		
464663.41	3807661.91	0.31738	464683.41
3807661.91	0.31078		
464703.41	3807661.91	0.30437	464723.41
3807661.91	0.29813		
464743.41	3807661.91	0.29204	464763.41
3807661.91	0.28611		
464783.41	3807661.91	0.28034	464803.41

3807661.91	0.27473		
464823.41	3807661.91	0.26927	464843.41
3807661.91	0.26397		
464863.41	3807661.91	0.25881	464883.41
3807661.91	0.25379		
464903.41	3807661.91	0.24891	464923.41
3807661.91	0.24417		
464503.41	3807681.91	0.38444	464523.41
3807681.91	0.37577		
464543.41	3807681.91	0.36737	464563.41
3807681.91	0.35923		
464583.41	3807681.91	0.35133	464603.41
3807681.91	0.34376		
464623.41	3807681.91	0.33638	464643.41
3807681.91	0.32917		
464663.41	3807681.91	0.32215	464683.41
3807681.91	0.31530		
464703.41	3807681.91	0.30868	464723.41
3807681.91	0.30228		
464743.41	3807681.91	0.29605	464763.41
3807681.91	0.28992		
464783.41	3807681.91	0.28401	464803.41
3807681.91	0.27829		
464823.41	3807681.91	0.27264	464843.41
3807681.91	0.26723		
464863.41	3807681.91	0.26199	464883.41
3807681.91	0.25680		
464903.41	3807681.91	0.25183	464923.41
3807681.91	0.24703		
464523.41	3807701.91	0.38256	464543.41
3807701.91	0.37386		
464563.41	3807701.91	0.36542	464583.41
3807701.91	0.35726		
464603.41	3807701.91	0.34935	464623.41
3807701.91	0.34168		
464643.41	3807701.91	0.33421	464663.41
3807701.91	0.32697		
464683.41	3807701.91	0.31995	464703.41
3807701.91	0.31304		
464723.41	3807701.91	0.30643	464743.41
3807701.91	0.30005		
464763.41	3807701.91	0.29385	464783.41
3807701.91	0.28776		
464803.41	3807701.91	0.28181	464823.41
3807701.91	0.27616		
464843.41	3807701.91	0.27057	464863.41
3807701.91	0.26513		
464883.41	3807701.91	0.25996	464903.41
3807701.91	0.25484		
464923.41	3807701.91	0.24985	464543.41

```

3807721.91      0.38032
      464563.41      3807721.91      0.37160      464583.41
3807721.91      0.36316
      464603.41      3807721.91      0.35499      464623.41
3807721.91      0.34707
^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***      16:42:19

```

PAGE 335

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
      INCLUDING SOURCE(S):      L0005092      , L0005093
, L0005094      , L0005095      , L0005096      ,
      L0005097      , L0005098      , L0005099      , L0005100      , L0005101
, L0005102      , L0005103      , L0005104      ,
      L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
      L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464643.41	3807721.91	0.33937	464663.41
3807721.91	0.33186		
464683.41	3807721.91	0.32459	464703.41
3807721.91	0.31754		
464723.41	3807721.91	0.31077	464743.41
3807721.91	0.30422		
464763.41	3807721.91	0.29780	464783.41
3807721.91	0.29157		
464803.41	3807721.91	0.28553	464823.41
3807721.91	0.27967		
464843.41	3807721.91	0.27399	464863.41
3807721.91	0.26847		
464883.41	3807721.91	0.26312	464903.41
3807721.91	0.25792		
464923.41	3807721.91	0.25289	464943.41
3807721.91	0.24799		

464963.41	3807721.91	0.24324	464983.41
3807721.91	0.23863		
465003.41	3807721.91	0.23415	465023.41
3807721.91	0.22980		
465043.41	3807721.91	0.22558	465063.41
3807721.91	0.22146		
465083.41	3807721.91	0.21747	465103.41
3807721.91	0.21362		
465123.41	3807721.91	0.20998	465143.41
3807721.91	0.20634		
465163.41	3807721.91	0.20279	465183.41
3807721.91	0.19944		
465203.41	3807721.91	0.19611	465223.41
3807721.91	0.19283		
465243.41	3807721.91	0.18962	465263.41
3807721.91	0.18651		
465283.41	3807721.91	0.18350	465303.41
3807721.91	0.18066		
465323.41	3807721.91	0.17781	465343.41
3807721.91	0.17502		
465363.41	3807721.91	0.17239	465383.41
3807721.91	0.16976		
464543.41	3807741.91	0.38678	464563.41
3807741.91	0.37788		
464583.41	3807741.91	0.36917	464603.41
3807741.91	0.36073		
464623.41	3807741.91	0.35257	464643.41
3807741.91	0.34461		
464663.41	3807741.91	0.33683	464683.41
3807741.91	0.32932		
464703.41	3807741.91	0.32218	464723.41
3807741.91	0.31523		
464743.41	3807741.91	0.30848	464763.41
3807741.91	0.30184		
464783.41	3807741.91	0.29548	464803.41
3807741.91	0.28934		
464823.41	3807741.91	0.28328	464843.41
3807741.91	0.27753		
464863.41	3807741.91	0.27197	464883.41
3807741.91	0.26639		
464903.41	3807741.91	0.26114	464923.41
3807741.91	0.25608		
464943.41	3807741.91	0.25097	464963.41
3807741.91	0.24618		
464983.41	3807741.91	0.24157	465003.41
3807741.91	0.23688		
465023.41	3807741.91	0.23247	465043.41
3807741.91	0.22822		
465063.41	3807741.91	0.22398	465083.41
3807741.91	0.21998		

465103.41	3807741.91	0.21616	465123.41
3807741.91	0.21241		
465143.41	3807741.91	0.20866	465163.41
3807741.91	0.20500		
465183.41	3807741.91	0.20155	465203.41
3807741.91	0.19823		
465223.41	3807741.91	0.19499	465243.41
3807741.91	0.19168		
465263.41	3807741.91	0.18857	465283.41
3807741.91	0.18561		
465303.41	3807741.91	0.18268	465323.41
3807741.91	0.17974		
465343.41	3807741.91	0.17685	465363.41
3807741.91	0.17415		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 336

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465383.41	3807741.91	0.17154	464543.41
3807761.91	0.39281		
464563.41	3807761.91	0.38401	464583.41
3807761.91	0.37520		
464603.41	3807761.91	0.36654	464623.41
3807761.91	0.35812		
464643.41	3807761.91	0.34983	464663.41

3807761.91	0.34190		
464683.41	3807761.91	0.33430	464703.41
3807761.91	0.32696		
464723.41	3807761.91	0.31975	464743.41
3807761.91	0.31274		
464763.41	3807761.91	0.30608	464783.41
3807761.91	0.29952		
464803.41	3807761.91	0.29314	464823.41
3807761.91	0.28710		
464843.41	3807761.91	0.28128	464863.41
3807761.91	0.27561		
464883.41	3807761.91	0.26992	464903.41
3807761.91	0.26457		
464923.41	3807761.91	0.25941	464943.41
3807761.91	0.25421		
464963.41	3807761.91	0.24933	464983.41
3807761.91	0.24464		
465003.41	3807761.91	0.23988	465023.41
3807761.91	0.23527		
465043.41	3807761.91	0.23084	465063.41
3807761.91	0.22670		
465083.41	3807761.91	0.22270	465103.41
3807761.91	0.21880		
465123.41	3807761.91	0.21481	465143.41
3807761.91	0.21107		
465163.41	3807761.91	0.20746	465183.41
3807761.91	0.20379		
465203.41	3807761.91	0.20038	465223.41
3807761.91	0.19712		
465243.41	3807761.91	0.19392	465263.41
3807761.91	0.19082		
465283.41	3807761.91	0.18779	465303.41
3807761.91	0.18466		
465323.41	3807761.91	0.18173	465343.41
3807761.91	0.17891		
465363.41	3807761.91	0.17601	465383.41
3807761.91	0.17333		
464543.41	3807781.91	0.39842	464563.41
3807781.91	0.38969		
464583.41	3807781.91	0.38081	464603.41
3807781.91	0.37209		
464623.41	3807781.91	0.36357	464643.41
3807781.91	0.35525		
464663.41	3807781.91	0.34712	464683.41
3807781.91	0.33924		
464703.41	3807781.91	0.33173	464723.41
3807781.91	0.32439		
464743.41	3807781.91	0.31726	464763.41
3807781.91	0.31035		
464783.41	3807781.91	0.30367	464803.41

3807781.91	0.29724		
464823.41	3807781.91	0.29111	464843.41
3807781.91	0.28509		
464863.41	3807781.91	0.27922	464883.41
3807781.91	0.27355		
464903.41	3807781.91	0.26804	464923.41
3807781.91	0.26271		
464943.41	3807781.91	0.25754	464963.41
3807781.91	0.25253		
464983.41	3807781.91	0.24767	465003.41
3807781.91	0.24296		
465023.41	3807781.91	0.23830	465043.41
3807781.91	0.23376		
465063.41	3807781.91	0.22960	465083.41
3807781.91	0.22545		
465103.41	3807781.91	0.22139	465123.41
3807781.91	0.21744		
465143.41	3807781.91	0.21360	465163.41
3807781.91	0.20987		
465183.41	3807781.91	0.20625	465203.41
3807781.91	0.20282		
465223.41	3807781.91	0.19950	465243.41
3807781.91	0.19615		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 337

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465263.41	3807781.91	0.19298		465283.41
3807781.91	0.18992			
465303.41	3807781.91	0.18685		465323.41
3807781.91	0.18384			
465343.41	3807781.91	0.18091		465363.41
3807781.91	0.17807			
465383.41	3807781.91	0.17537		464543.41
3807801.91	0.40371			
464563.41	3807801.91	0.39499		464583.41
3807801.91	0.38614			
464603.41	3807801.91	0.37751		464623.41
3807801.91	0.36908			
464643.41	3807801.91	0.36081		464663.41
3807801.91	0.35249			
464683.41	3807801.91	0.34434		464703.41
3807801.91	0.33665			
464723.41	3807801.91	0.32918		464743.41
3807801.91	0.32193			
464763.41	3807801.91	0.31478		464783.41
3807801.91	0.30802			
464803.41	3807801.91	0.30154		464823.41
3807801.91	0.29523			
464843.41	3807801.91	0.28902		464863.41
3807801.91	0.28298			
464883.41	3807801.91	0.27728		464903.41
3807801.91	0.27163			
464923.41	3807801.91	0.26615		464943.41
3807801.91	0.26097			
464963.41	3807801.91	0.25583		464983.41
3807801.91	0.25083			
465003.41	3807801.91	0.24613		465023.41
3807801.91	0.24144			
465043.41	3807801.91	0.23687		465063.41
3807801.91	0.23258			
465083.41	3807801.91	0.22829		465103.41
3807801.91	0.22411			
465123.41	3807801.91	0.22018		465143.41
3807801.91	0.21625			
465163.41	3807801.91	0.21242		465183.41
3807801.91	0.20888			
465203.41	3807801.91	0.20540		465223.41
3807801.91	0.20196			
465243.41	3807801.91	0.19850		465263.41
3807801.91	0.19526			
465283.41	3807801.91	0.19217		465303.41
3807801.91	0.18911			
465323.41	3807801.91	0.18604		465343.41
3807801.91	0.18303			

465363.41	3807801.91	0.18026	465383.41
3807801.91	0.17752		
464543.41	3807821.91	0.40903	464563.41
3807821.91	0.40001		
464583.41	3807821.91	0.39156	464603.41
3807821.91	0.38319		
464623.41	3807821.91	0.37485	464643.41
3807821.91	0.36642		
464663.41	3807821.91	0.35802	464683.41
3807821.91	0.34982		
464703.41	3807821.91	0.34194	464723.41
3807821.91	0.33417		
464743.41	3807821.91	0.32662	464763.41
3807821.91	0.31950		
464783.41	3807821.91	0.31265	464803.41
3807821.91	0.30600		
464823.41	3807821.91	0.29937	464843.41
3807821.91	0.29310		
464863.41	3807821.91	0.28706	464883.41
3807821.91	0.28105		
464903.41	3807821.91	0.27537	464923.41
3807821.91	0.26990		
464943.41	3807821.91	0.26443	464963.41
3807821.91	0.25927		
464983.41	3807821.91	0.25431	465003.41
3807821.91	0.24932		
465023.41	3807821.91	0.24462	465043.41
3807821.91	0.24010		
465063.41	3807821.91	0.23553	465083.41
3807821.91	0.23125		
465103.41	3807821.91	0.22712	465123.41
3807821.91	0.22293		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 338

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
-----	-----	-----	-----
465143.41	3807821.91	0.21901	465163.41
3807821.91	0.21527		
465183.41	3807821.91	0.21167	465203.41
3807821.91	0.20800		
465223.41	3807821.91	0.20440	465243.41
3807821.91	0.20105		
465263.41	3807821.91	0.19782	465283.41
3807821.91	0.19465		
465303.41	3807821.91	0.19137	465323.41
3807821.91	0.18831		
465343.41	3807821.91	0.18539	465363.41
3807821.91	0.18258		
465383.41	3807821.91	0.17969	464543.41
3807841.91	0.41339		
464563.41	3807841.91	0.40404	464583.41
3807841.91	0.39632		
464603.41	3807841.91	0.38849	464623.41
3807841.91	0.38043		
464643.41	3807841.91	0.37190	464663.41
3807841.91	0.36349		
464683.41	3807841.91	0.35528	464723.41
3807841.91	0.33934		
464743.41	3807841.91	0.33172	464763.41
3807841.91	0.32448		
464783.41	3807841.91	0.31739	464803.41
3807841.91	0.31049		
464823.41	3807841.91	0.30384	464843.41
3807841.91	0.29739		
464863.41	3807841.91	0.29116	464883.41
3807841.91	0.28514		
464903.41	3807841.91	0.27930	464923.41
3807841.91	0.27366		
464943.41	3807841.91	0.26820	464963.41
3807841.91	0.26290		
464983.41	3807841.91	0.25777	465003.41
3807841.91	0.25280		
465023.41	3807841.91	0.24798	465043.41
3807841.91	0.24330		
465063.41	3807841.91	0.23877	465083.41

3807841.91	0.23437		
465103.41	3807841.91	0.23009	465123.41
3807841.91	0.22595		
465143.41	3807841.91	0.22192	465163.41
3807841.91	0.21802		
465183.41	3807841.91	0.21436	465203.41
3807841.91	0.21071		
465223.41	3807841.91	0.20712	465243.41
3807841.91	0.20361		
465263.41	3807841.91	0.20029	465283.41
3807841.91	0.19708		
465303.41	3807841.91	0.19386	465323.41
3807841.91	0.19080		
465343.41	3807841.91	0.18784	465363.41
3807841.91	0.18484		
465383.41	3807841.91	0.18193	464503.41
3807861.91	0.44146		
464523.41	3807861.91	0.42911	464543.41
3807861.91	0.41803		
464563.41	3807861.91	0.40819	464583.41
3807861.91	0.40060		
464603.41	3807861.91	0.39325	464723.41
3807861.91	0.34479		
464743.41	3807861.91	0.33712	464763.41
3807861.91	0.32972		
464783.41	3807861.91	0.32237	464803.41
3807861.91	0.31521		
464823.41	3807861.91	0.30850	464843.41
3807861.91	0.30189		
464863.41	3807861.91	0.29546	464883.41
3807861.91	0.28942		
464903.41	3807861.91	0.28343	464923.41
3807861.91	0.27761		
464943.41	3807861.91	0.27214	464963.41
3807861.91	0.26670		
464983.41	3807861.91	0.26141	465003.41
3807861.91	0.25645		
465023.41	3807861.91	0.25150	465043.41
3807861.91	0.24667		
465063.41	3807861.91	0.24215	465083.41
3807861.91	0.23763		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 339

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465103.41	3807861.91	0.23322	465123.41
3807861.91	0.22910		
465143.41	3807861.91	0.22495	465163.41
3807861.91	0.22091		
465183.41	3807861.91	0.21713	465203.41
3807861.91	0.21349		
465223.41	3807861.91	0.20993	465243.41
3807861.91	0.20628		
465263.41	3807861.91	0.20288	465283.41
3807861.91	0.19964		
465303.41	3807861.91	0.19643	465323.41
3807861.91	0.19334		
465343.41	3807861.91	0.19032	465363.41
3807861.91	0.18720		
465383.41	3807861.91	0.18425	464503.41
3807881.91	0.44874		
464523.41	3807881.91	0.43603	464543.41
3807881.91	0.42467		
464723.41	3807881.91	0.35064	464743.41
3807881.91	0.34279		
464763.41	3807881.91	0.33522	464783.41
3807881.91	0.32770		
464803.41	3807881.91	0.32034	464823.41
3807881.91	0.31326		
464843.41	3807881.91	0.30658	464863.41
3807881.91	0.30017		
464883.41	3807881.91	0.29376	464903.41
3807881.91	0.28774		
464923.41	3807881.91	0.28195	464943.41
3807881.91	0.27613		

464963.41	3807881.91	0.27067	464983.41
3807881.91	0.26542		
465003.41	3807881.91	0.26013	465023.41
3807881.91	0.25516		
465043.41	3807881.91	0.25039	465063.41
3807881.91	0.24556		
465083.41	3807881.91	0.24103	465103.41
3807881.91	0.23668		
465123.41	3807881.91	0.23225	465143.41
3807881.91	0.22811		
465163.41	3807881.91	0.22413	465183.41
3807881.91	0.22006		
465203.41	3807881.91	0.21630	465223.41
3807881.91	0.21271		
465243.41	3807881.91	0.20919	465263.41
3807881.91	0.20579		
465283.41	3807881.91	0.20245	465303.41
3807881.91	0.19899		
465323.41	3807881.91	0.19580	465343.41
3807881.91	0.19275		
465363.41	3807881.91	0.18975	465383.41
3807881.91	0.18669		
464723.41	3807901.91	0.35647	464743.41
3807901.91	0.34872		
464763.41	3807901.91	0.34080	464783.41
3807901.91	0.33317		
464803.41	3807901.91	0.32578	464823.41
3807901.91	0.31849		
464843.41	3807901.91	0.31168	464863.41
3807901.91	0.30516		
464883.41	3807901.91	0.29857	464903.41
3807901.91	0.29229		
464923.41	3807901.91	0.28629	464943.41
3807901.91	0.28049		
464963.41	3807901.91	0.27500	464983.41
3807901.91	0.26967		
465003.41	3807901.91	0.26422	465023.41
3807901.91	0.25904		
465043.41	3807901.91	0.25408	465063.41
3807901.91	0.24928		
465083.41	3807901.91	0.24462	465103.41
3807901.91	0.24009		
465123.41	3807901.91	0.23570	465143.41
3807901.91	0.23144		
465163.41	3807901.91	0.22729	465183.41
3807901.91	0.22327		
465203.41	3807901.91	0.21947	465223.41
3807901.91	0.21580		
465243.41	3807901.91	0.21209	465263.41
3807901.91	0.20858		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 340

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465283.41	3807901.91	0.20520	465303.41
3807901.91	0.20179		
465323.41	3807901.91	0.19846	465343.41
3807901.91	0.19524		
465363.41	3807901.91	0.19223	465383.41
3807901.91	0.18920		
464723.41	3807921.91	0.36239	464743.41
3807921.91	0.35479		
464763.41	3807921.91	0.34665	464783.41
3807921.91	0.33889		
464803.41	3807921.91	0.33142	464823.41
3807921.91	0.32404		
464843.41	3807921.91	0.31704	464863.41
3807921.91	0.31031		
464883.41	3807921.91	0.30356	464903.41
3807921.91	0.29708		
464923.41	3807921.91	0.29088	464943.41
3807921.91	0.28514		
464963.41	3807921.91	0.27953	464983.41
3807921.91	0.27402		
465003.41	3807921.91	0.26845	465023.41

3807921.91	0.26309		
465043.41	3807921.91	0.25796	465063.41
3807921.91	0.25316		
465083.41	3807921.91	0.24836	465103.41
3807921.91	0.24367		
465123.41	3807921.91	0.23930	465143.41
3807921.91	0.23490		
465163.41	3807921.91	0.23060	465183.41
3807921.91	0.22660		
465203.41	3807921.91	0.22275	465223.41
3807921.91	0.21899		
465243.41	3807921.91	0.21511	465263.41
3807921.91	0.21146		
465283.41	3807921.91	0.20799	465303.41
3807921.91	0.20466		
465323.41	3807921.91	0.20125	465343.41
3807921.91	0.19790		
465363.41	3807921.91	0.19483	465383.41
3807921.91	0.19179		
464723.41	3807941.91	0.36823	464743.41
3807941.91	0.36070		
464763.41	3807941.91	0.35290	464783.41
3807941.91	0.34495		
464803.41	3807941.91	0.33713	464823.41
3807941.91	0.32981		
464843.41	3807941.91	0.32256	464863.41
3807941.91	0.31545		
464883.41	3807941.91	0.30853	464903.41
3807941.91	0.30207		
464923.41	3807941.91	0.29595	464943.41
3807941.91	0.29007		
464963.41	3807941.91	0.28416	464983.41
3807941.91	0.27832		
465003.41	3807941.91	0.27261	465023.41
3807941.91	0.26730		
465043.41	3807941.91	0.26222	465063.41
3807941.91	0.25706		
465083.41	3807941.91	0.25224	465103.41
3807941.91	0.24761		
465123.41	3807941.91	0.24289	465143.41
3807941.91	0.23848		
465163.41	3807941.91	0.23425	465183.41
3807941.91	0.22992		
465203.41	3807941.91	0.22592	465223.41
3807941.91	0.22212		
465243.41	3807941.91	0.21838	465263.41
3807941.91	0.21458		
465283.41	3807941.91	0.21086	465303.41
3807941.91	0.20746		
465323.41	3807941.91	0.20412	465343.41

3807941.91	0.20087		
465363.41	3807941.91	0.19773	465383.41
3807941.91	0.19450		
465403.41	3807941.91	0.19130	465423.41
3807941.91	0.18836		
465443.41	3807941.91	0.18552	465463.41
3807941.91	0.18281		
465483.41	3807941.91	0.18007	465503.41
3807941.91	0.17742		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 341

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465523.41	3807941.91	0.17481	465543.41
3807941.91	0.17209		
465563.41	3807941.91	0.16955	465583.41
3807941.91	0.16713		
465603.41	3807941.91	0.16479	465623.41
3807941.91	0.16237		
465643.41	3807941.91	0.15998	465663.41
3807941.91	0.15776		
465683.41	3807941.91	0.15549	465703.41
3807941.91	0.15325		
464723.41	3807961.91	0.37367	464743.41
3807961.91	0.36678		

464763.41	3807961.91	0.35922	464783.41
3807961.91	0.35129		
464803.41	3807961.91	0.34337	464823.41
3807961.91	0.33571		
464843.41	3807961.91	0.32833	464863.41
3807961.91	0.32118		
464883.41	3807961.91	0.31408	464903.41
3807961.91	0.30750		
464923.41	3807961.91	0.30123	464943.41
3807961.91	0.29499		
464963.41	3807961.91	0.28898	464983.41
3807961.91	0.28312		
465003.41	3807961.91	0.27728	465023.41
3807961.91	0.27188		
465043.41	3807961.91	0.26671	465063.41
3807961.91	0.26137		
465083.41	3807961.91	0.25632	465103.41
3807961.91	0.25148		
465123.41	3807961.91	0.24680	465143.41
3807961.91	0.24224		
465163.41	3807961.91	0.23782	465183.41
3807961.91	0.23353		
465203.41	3807961.91	0.22935	465223.41
3807961.91	0.22532		
465243.41	3807961.91	0.22155	465263.41
3807961.91	0.21778		
465283.41	3807961.91	0.21408	465303.41
3807961.91	0.21061		
465323.41	3807961.91	0.20711	465343.41
3807961.91	0.20368		
465363.41	3807961.91	0.20048	465383.41
3807961.91	0.19726		
465403.41	3807961.91	0.19407	465423.41
3807961.91	0.19095		
465443.41	3807961.91	0.18801	465463.41
3807961.91	0.18539		
465483.41	3807961.91	0.18249	465503.41
3807961.91	0.17976		
465523.41	3807961.91	0.17711	465543.41
3807961.91	0.17443		
465563.41	3807961.91	0.17189	465583.41
3807961.91	0.16943		
465603.41	3807961.91	0.16692	465623.41
3807961.91	0.16447		
465643.41	3807961.91	0.16208	465663.41
3807961.91	0.15974		
465683.41	3807961.91	0.15745	465703.41
3807961.91	0.15524		
464743.41	3807981.91	0.37286	464763.41
3807981.91	0.36562		

464783.41	3807981.91	0.35782	464803.41
3807981.91	0.34990		
464823.41	3807981.91	0.34182	464843.41
3807981.91	0.33431		
464863.41	3807981.91	0.32714	464883.41
3807981.91	0.31985		
464903.41	3807981.91	0.31310	464923.41
3807981.91	0.30665		
464943.41	3807981.91	0.30015	464963.41
3807981.91	0.29401		
464983.41	3807981.91	0.28811	465003.41
3807981.91	0.28220		
465023.41	3807981.91	0.27664	465043.41
3807981.91	0.27129		
465063.41	3807981.91	0.26590	465083.41
3807981.91	0.26062		
465103.41	3807981.91	0.25553	465123.41
3807981.91	0.25093		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 342

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807981.91	0.24620	465163.41
3807981.91	0.24153		
465183.41	3807981.91	0.23726	465203.41

3807981.91	0.23294		
465223.41	3807981.91	0.22873	465243.41
3807981.91	0.22488		
465263.41	3807981.91	0.22113	465283.41
3807981.91	0.21747		
465303.41	3807981.91	0.21385	465323.41
3807981.91	0.21019		
465343.41	3807981.91	0.20660	465363.41
3807981.91	0.20326		
465383.41	3807981.91	0.20005	465403.41
3807981.91	0.19690		
465423.41	3807981.91	0.19363	465443.41
3807981.91	0.19060		
465463.41	3807981.91	0.18802	465483.41
3807981.91	0.18498		
465503.41	3807981.91	0.18217	465523.41
3807981.91	0.17949		
465543.41	3807981.91	0.17682	465563.41
3807981.91	0.17425		
465583.41	3807981.91	0.17172	465603.41
3807981.91	0.16908		
465623.41	3807981.91	0.16661	465643.41
3807981.91	0.16422		
465663.41	3807981.91	0.16176	465683.41
3807981.91	0.15949		
465703.41	3807981.91	0.15731	464763.41
3808001.91	0.37185		
464783.41	3808001.91	0.36431	464803.41
3808001.91	0.35645		
464823.41	3808001.91	0.34813	464843.41
3808001.91	0.34043		
464863.41	3808001.91	0.33306	464883.41
3808001.91	0.32556		
464903.41	3808001.91	0.31864	464923.41
3808001.91	0.31208		
464943.41	3808001.91	0.30569	464963.41
3808001.91	0.29929		
464983.41	3808001.91	0.29305	465003.41
3808001.91	0.28727		
465023.41	3808001.91	0.28146	465043.41
3808001.91	0.27578		
465063.41	3808001.91	0.27054	465083.41
3808001.91	0.26521		
465103.41	3808001.91	0.26000	465123.41
3808001.91	0.25527		
465143.41	3808001.91	0.25042	465163.41
3808001.91	0.24559		
465183.41	3808001.91	0.24094	465203.41
3808001.91	0.23661		
465223.41	3808001.91	0.23251	465243.41

3808001.91	0.22856		
465263.41	3808001.91	0.22472	465283.41
3808001.91	0.22093		
465303.41	3808001.91	0.21699	465323.41
3808001.91	0.21332		
465343.41	3808001.91	0.20980	465363.41
3808001.91	0.20616		
465383.41	3808001.91	0.20281	465403.41
3808001.91	0.19963		
465423.41	3808001.91	0.19649	465443.41
3808001.91	0.19346		
465463.41	3808001.91	0.19057	465483.41
3808001.91	0.18765		
465503.41	3808001.91	0.18483	465523.41
3808001.91	0.18206		
465543.41	3808001.91	0.17915	465563.41
3808001.91	0.17647		
465583.41	3808001.91	0.17392	465603.41
3808001.91	0.17140		
465623.41	3808001.91	0.16882	465643.41
3808001.91	0.16627		
465663.41	3808001.91	0.16392	465683.41
3808001.91	0.16165		
465703.41	3808001.91	0.15940	464763.41
3808021.91	0.37747		
464783.41	3808021.91	0.37005	464803.41
3808021.91	0.36252		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 343

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)		Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)		CONC		

	464823.41	3808021.91	0.35453	464843.41
3808021.91		0.34680		
	464863.41	3808021.91	0.33927	464883.41
3808021.91		0.33182		
	464903.41	3808021.91	0.32460	464923.41
3808021.91		0.31767		
	464943.41	3808021.91	0.31117	464963.41
3808021.91		0.30474		
	464983.41	3808021.91	0.29844	465003.41
3808021.91		0.29232		
	465023.41	3808021.91	0.28642	465043.41
3808021.91		0.28071		
	465063.41	3808021.91	0.27515	465083.41
3808021.91		0.26978		
	465103.41	3808021.91	0.26457	465123.41
3808021.91		0.25951		
	465143.41	3808021.91	0.25460	465163.41
3808021.91		0.24982		
	465183.41	3808021.91	0.24499	465203.41
3808021.91		0.24057		
	465223.41	3808021.91	0.23637	465243.41
3808021.91		0.23212		
	465263.41	3808021.91	0.22812	465283.41
3808021.91		0.22427		
	465303.41	3808021.91	0.22037	465323.41
3808021.91		0.21657		
	465343.41	3808021.91	0.21287	465363.41
3808021.91		0.20928		
	465383.41	3808021.91	0.20590	465403.41
3808021.91		0.20262		
	465423.41	3808021.91	0.19928	465443.41
3808021.91		0.19614		
	465463.41	3808021.91	0.19334	465483.41
3808021.91		0.19025		
	465503.41	3808021.91	0.18733	465523.41
3808021.91		0.18451		
	465543.41	3808021.91	0.18165	465563.41
3808021.91		0.17885		
	465583.41	3808021.91	0.17614	465603.41
3808021.91		0.17360		
	465623.41	3808021.91	0.17104	465643.41
3808021.91		0.16852		
	465663.41	3808021.91	0.16616	465683.41
3808021.91		0.16376		

465703.41	3808021.91	0.16138	464783.41
3808041.91	0.37589		
464803.41	3808041.91	0.36858	464823.41
3808041.91	0.36099		
464843.41	3808041.91	0.35331	464863.41
3808041.91	0.34572		
464883.41	3808041.91	0.33829	464903.41
3808041.91	0.33085		
464923.41	3808041.91	0.32359	464943.41
3808041.91	0.31691		
464963.41	3808041.91	0.31045	464983.41
3808041.91	0.30412		
465003.41	3808041.91	0.29761	465023.41
3808041.91	0.29155		
465043.41	3808041.91	0.28576	465063.41
3808041.91	0.27993		
465083.41	3808041.91	0.27445	465103.41
3808041.91	0.26918		
465123.41	3808041.91	0.26386	465143.41
3808041.91	0.25887		
465163.41	3808041.91	0.25406	465183.41
3808041.91	0.24920		
465203.41	3808041.91	0.24463	465223.41
3808041.91	0.24024		
465243.41	3808041.91	0.23577	465263.41
3808041.91	0.23158		
465283.41	3808041.91	0.22760	465303.41
3808041.91	0.22379		
465323.41	3808041.91	0.21989	465343.41
3808041.91	0.21603		
465363.41	3808041.91	0.21246	465383.41
3808041.91	0.20901		
465403.41	3808041.91	0.20564	465423.41
3808041.91	0.20214		
465443.41	3808041.91	0.19889	465463.41
3808041.91	0.19615		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 344

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,

```

      L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
      L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465483.41	3808041.91	0.19289	465503.41
3808041.91	0.18985		
465523.41	3808041.91	0.18695	465543.41
3808041.91	0.18416		
465563.41	3808041.91	0.18128	465583.41
3808041.91	0.17845		
465603.41	3808041.91	0.17586	465623.41
3808041.91	0.17333		
465643.41	3808041.91	0.17085	465663.41
3808041.91	0.16838		
465683.41	3808041.91	0.16587	465703.41
3808041.91	0.16340		
464803.41	3808061.91	0.37510	464823.41
3808061.91	0.36738		
464843.41	3808061.91	0.35981	464863.41
3808061.91	0.35235		
464883.41	3808061.91	0.34471	464903.41
3808061.91	0.33727		
464923.41	3808061.91	0.33009	464943.41
3808061.91	0.32320		
464963.41	3808061.91	0.31654	464983.41
3808061.91	0.31002		
465003.41	3808061.91	0.30331	465023.41
3808061.91	0.29687		
465043.41	3808061.91	0.29070	465063.41
3808061.91	0.28502		
465083.41	3808061.91	0.27928	465103.41
3808061.91	0.27367		
465123.41	3808061.91	0.26850	465143.41
3808061.91	0.26327		
465163.41	3808061.91	0.25815	465183.41
3808061.91	0.25344		
465203.41	3808061.91	0.24865	465223.41
3808061.91	0.24397		
465243.41	3808061.91	0.23965	465263.41

3808061.91	0.23527		
465283.41	3808061.91	0.23098	465303.41
3808061.91	0.22707		
465323.41	3808061.91	0.22324	465343.41
3808061.91	0.21945		
465363.41	3808061.91	0.21554	465383.41
3808061.91	0.21195		
465403.41	3808061.91	0.20853	465423.41
3808061.91	0.20517		
465443.41	3808061.91	0.20192	465463.41
3808061.91	0.19883		
465483.41	3808061.91	0.19571	465503.41
3808061.91	0.19252		
465523.41	3808061.91	0.18939	465543.41
3808061.91	0.18654		
465563.41	3808061.91	0.18373	465583.41
3808061.91	0.18099		
465603.41	3808061.91	0.17834	465623.41
3808061.91	0.17575		
465643.41	3808061.91	0.17318	465663.41
3808061.91	0.17049		
465683.41	3808061.91	0.16799	465703.41
3808061.91	0.16561		
464823.41	3808081.91	0.37447	464843.41
3808081.91	0.36653		
464863.41	3808081.91	0.35872	464883.41
3808081.91	0.35119		
464903.41	3808081.91	0.34391	464923.41
3808081.91	0.33679		
464943.41	3808081.91	0.32968	464963.41
3808081.91	0.32263		
464983.41	3808081.91	0.31574	465003.41
3808081.91	0.30910		
465023.41	3808081.91	0.30250	465043.41
3808081.91	0.29611		
465063.41	3808081.91	0.29032	465083.41
3808081.91	0.28439		
465103.41	3808081.91	0.27854	465123.41
3808081.91	0.27305		
465143.41	3808081.91	0.26773	465163.41
3808081.91	0.26259		
465183.41	3808081.91	0.25758	465203.41
3808081.91	0.25272		
465223.41	3808081.91	0.24802	465243.41
3808081.91	0.24343		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3808081.91	0.23899	465283.41
3808081.91	0.23471		
465303.41	3808081.91	0.23071	465323.41
3808081.91	0.22667		
465343.41	3808081.91	0.22269	465363.41
3808081.91	0.21884		
465383.41	3808081.91	0.21520	465403.41
3808081.91	0.21168		
465423.41	3808081.91	0.20810	465443.41
3808081.91	0.20473		
465463.41	3808081.91	0.20173	465483.41
3808081.91	0.19842		
465503.41	3808081.91	0.19520	465523.41
3808081.91	0.19206		
465543.41	3808081.91	0.18899	465563.41
3808081.91	0.18611		
465583.41	3808081.91	0.18333	465603.41
3808081.91	0.18063		
465623.41	3808081.91	0.17799	465643.41
3808081.91	0.17538		
465663.41	3808081.91	0.17273	465683.41
3808081.91	0.17024		
465703.41	3808081.91	0.16781	464843.41
3808101.91	0.37347		
464863.41	3808101.91	0.36546	464883.41
3808101.91	0.35803		

464903.41	3808101.91	0.35073	464923.41
3808101.91	0.34352		
464943.41	3808101.91	0.33618	464963.41
3808101.91	0.32882		
464983.41	3808101.91	0.32162	465003.41
3808101.91	0.31492		
465023.41	3808101.91	0.30823	465043.41
3808101.91	0.30171		
465063.41	3808101.91	0.29565	465083.41
3808101.91	0.28952		
465103.41	3808101.91	0.28348	465123.41
3808101.91	0.27770		
465143.41	3808101.91	0.27234	465163.41
3808101.91	0.26719		
465183.41	3808101.91	0.26183	465203.41
3808101.91	0.25686		
465223.41	3808101.91	0.25210	465243.41
3808101.91	0.24728		
465263.41	3808101.91	0.24282	465283.41
3808101.91	0.23857		
465303.41	3808101.91	0.23439	465323.41
3808101.91	0.23015		
465343.41	3808101.91	0.22600	465363.41
3808101.91	0.22215		
465383.41	3808101.91	0.21846	465403.41
3808101.91	0.21483		
465423.41	3808101.91	0.21107	465443.41
3808101.91	0.20759		
465463.41	3808101.91	0.20465	465483.41
3808101.91	0.20116		
465503.41	3808101.91	0.19790	465523.41
3808101.91	0.19475		
465543.41	3808101.91	0.19152	465563.41
3808101.91	0.18854		
465583.41	3808101.91	0.18571	465603.41
3808101.91	0.18295		
465623.41	3808101.91	0.18025	465643.41
3808101.91	0.17761		
465663.41	3808101.91	0.17498	465683.41
3808101.91	0.17245		
465703.41	3808101.91	0.16996	464863.41
3808121.91	0.37328		
464883.41	3808121.91	0.36558	464903.41
3808121.91	0.35775		
464923.41	3808121.91	0.35000	464943.41
3808121.91	0.34244		
464963.41	3808121.91	0.33508	464983.41
3808121.91	0.32790		
465003.41	3808121.91	0.32063	465023.41
3808121.91	0.31386		

```

        465043.41    3808121.91          0.30737          465063.41
3808121.91          0.30079
        465083.41    3808121.91          0.29438          465103.41
3808121.91          0.28822
^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***                               ***      16:42:19

```

PAGE 346

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
        INCLUDING SOURCE(S):      L0005092      , L0005093
, L0005094      , L0005095      , L0005096      ,
        L0005097      , L0005098      , L0005099      , L0005100      , L0005101
, L0005102      , L0005103      , L0005104      ,
        L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
        L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465123.41	3808121.91	0.28260	465143.41
3808121.91	0.27720		
465163.41	3808121.91	0.27190	465183.41
3808121.91	0.26638		
465203.41	3808121.91	0.26107	465223.41
3808121.91	0.25600		
465243.41	3808121.91	0.25134	465263.41
3808121.91	0.24685		
465283.41	3808121.91	0.24245	465303.41
3808121.91	0.23787		
465323.41	3808121.91	0.23363	465343.41
3808121.91	0.22955		
465363.41	3808121.91	0.22534	465383.41
3808121.91	0.22148		
465403.41	3808121.91	0.21781	465423.41
3808121.91	0.21420		
465443.41	3808121.91	0.21072	465463.41

3808121.91	0.20740		
465483.41	3808121.91	0.20406	465503.41
3808121.91	0.20064		
465523.41	3808121.91	0.19729	465543.41
3808121.91	0.19420		
465563.41	3808121.91	0.19121	465583.41
3808121.91	0.18832		
465603.41	3808121.91	0.18549	465623.41
3808121.91	0.18273		
465643.41	3808121.91	0.17999	465663.41
3808121.91	0.17713		
465683.41	3808121.91	0.17449	465703.41
3808121.91	0.17198		
464883.41	3808141.91	0.37263	464903.41
3808141.91	0.36485		
464923.41	3808141.91	0.35704	464943.41
3808141.91	0.34923		
464963.41	3808141.91	0.34170	464983.41
3808141.91	0.33433		
465003.41	3808141.91	0.32676	465023.41
3808141.91	0.31981		
465043.41	3808141.91	0.31317	465063.41
3808141.91	0.30632		
465083.41	3808141.91	0.29969	465103.41
3808141.91	0.29337		
465123.41	3808141.91	0.28765	465143.41
3808141.91	0.28194		
465163.41	3808141.91	0.27633	465183.41
3808141.91	0.27091		
465203.41	3808141.91	0.26549	465223.41
3808141.91	0.26024		
465243.41	3808141.91	0.25551	465263.41
3808141.91	0.25077		
465283.41	3808141.91	0.24609	465303.41
3808141.91	0.24157		
465323.41	3808141.91	0.23716	465343.41
3808141.91	0.23288		
465363.41	3808141.91	0.22872	465383.41
3808141.91	0.22481		
465403.41	3808141.91	0.22103	465423.41
3808141.91	0.21719		
465443.41	3808141.91	0.21358	465463.41
3808141.91	0.21013		
465483.41	3808141.91	0.20676	465503.41
3808141.91	0.20337		
465523.41	3808141.91	0.20001	465543.41
3808141.91	0.19673		
465563.41	3808141.91	0.19365	465583.41
3808141.91	0.19069		
465603.41	3808141.91	0.18780	465623.41

3808141.91	0.18499		
465643.41	3808141.91	0.18221	465663.41
3808141.91	0.17939		
465683.41	3808141.91	0.17663	465703.41
3808141.91	0.17396		
464883.41	3808161.91	0.37958	464903.41
3808161.91	0.37193		
464923.41	3808161.91	0.36411	464943.41
3808161.91	0.35605		
464963.41	3808161.91	0.34828	464983.41
3808161.91	0.34069		
465003.41	3808161.91	0.33301	465023.41
3808161.91	0.32580		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 347

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465043.41	3808161.91	0.31887	465063.41
3808161.91	0.31182		
465083.41	3808161.91	0.30507	465103.41
3808161.91	0.29863		
465123.41	3808161.91	0.29264	465143.41
3808161.91	0.28664		
465163.41	3808161.91	0.28079	465183.41
3808161.91	0.27536		

465203.41	3808161.91	0.26990	465223.41
3808161.91	0.26457		
465243.41	3808161.91	0.25963	465263.41
3808161.91	0.25464		
465283.41	3808161.91	0.24977	465303.41
3808161.91	0.24526		
465323.41	3808161.91	0.24069	465343.41
3808161.91	0.23623		
465363.41	3808161.91	0.23209	465383.41
3808161.91	0.22812		
465403.41	3808161.91	0.22423	465423.41
3808161.91	0.22019		
465443.41	3808161.91	0.21646	465463.41
3808161.91	0.21292		
465483.41	3808161.91	0.20941	465503.41
3808161.91	0.20604		
465523.41	3808161.91	0.20272	465543.41
3808161.91	0.19927		
465563.41	3808161.91	0.19609	465583.41
3808161.91	0.19307		
465603.41	3808161.91	0.19013	465623.41
3808161.91	0.18721		
465643.41	3808161.91	0.18436	465663.41
3808161.91	0.18163		
465683.41	3808161.91	0.17880	465703.41
3808161.91	0.17600		
464903.41	3808181.91	0.37883	464923.41
3808181.91	0.37080		
464943.41	3808181.91	0.36250	464963.41
3808181.91	0.35449		
464983.41	3808181.91	0.34674	465003.41
3808181.91	0.33920		
465023.41	3808181.91	0.33164	465043.41
3808181.91	0.32421		
465063.41	3808181.91	0.31695	465083.41
3808181.91	0.31026		
465103.41	3808181.91	0.30386	465123.41
3808181.91	0.29736		
465143.41	3808181.91	0.29132	465163.41
3808181.91	0.28553		
465183.41	3808181.91	0.27962	465203.41
3808181.91	0.27413		
465223.41	3808181.91	0.26887	465243.41
3808181.91	0.26348		
465263.41	3808181.91	0.25848	465283.41
3808181.91	0.25368		
465303.41	3808181.91	0.24876	465323.41
3808181.91	0.24419		
465343.41	3808181.91	0.23980	465363.41
3808181.91	0.23528		

465383.41	3808181.91	0.23114	465403.41
3808181.91	0.22720		
465423.41	3808181.91	0.22333	465443.41
3808181.91	0.21960		
465463.41	3808181.91	0.21593	465483.41
3808181.91	0.21210		
465503.41	3808181.91	0.20858	465523.41
3808181.91	0.20524		
465543.41	3808181.91	0.20194	465563.41
3808181.91	0.19876		
465583.41	3808181.91	0.19567	465603.41
3808181.91	0.19266		
465623.41	3808181.91	0.18955	465643.41
3808181.91	0.18647		
465663.41	3808181.91	0.18368	465683.41
3808181.91	0.18093		
465703.41	3808181.91	0.17820	464923.41
3808201.91	0.37696		
464943.41	3808201.91	0.36879	464963.41
3808201.91	0.36067		
464983.41	3808201.91	0.35271	465003.41
3808201.91	0.34504		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 348

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -				
465023.41	3808201.91	0.33724		465043.41
3808201.91	0.32957			
465063.41	3808201.91	0.32241		465083.41
3808201.91	0.31548			
465103.41	3808201.91	0.30876		465123.41
3808201.91	0.30230			
465143.41	3808201.91	0.29602		465163.41
3808201.91	0.28995			
465183.41	3808201.91	0.28408		465203.41
3808201.91	0.27838			
465223.41	3808201.91	0.27286		465243.41
3808201.91	0.26753			
465263.41	3808201.91	0.26234		465283.41
3808201.91	0.25731			
465303.41	3808201.91	0.25244		465323.41
3808201.91	0.24770			
465343.41	3808201.91	0.24310		465363.41
3808201.91	0.23864			
465383.41	3808201.91	0.23430		465403.41
3808201.91	0.23011			
465423.41	3808201.91	0.22622		465443.41
3808201.91	0.22242			
465463.41	3808201.91	0.21870		465483.41
3808201.91	0.21493			
465503.41	3808201.91	0.21138		465523.41
3808201.91	0.20797			
465543.41	3808201.91	0.20465		465563.41
3808201.91	0.20129			
465583.41	3808201.91	0.19801		465603.41
3808201.91	0.19494			
465623.41	3808201.91	0.19184		465643.41
3808201.91	0.18880			
465663.41	3808201.91	0.18595		465683.41
3808201.91	0.18307			
465703.41	3808201.91	0.18021		464943.41
3808221.91	0.37498			
464963.41	3808221.91	0.36678		464983.41
3808221.91	0.35860			
465003.41	3808221.91	0.35072		465023.41
3808221.91	0.34278			
465043.41	3808221.91	0.33503		465063.41
3808221.91	0.32784			
465083.41	3808221.91	0.32057		465103.41
3808221.91	0.31351			
465123.41	3808221.91	0.30714		465143.41
3808221.91	0.30068			
465163.41	3808221.91	0.29435		465183.41
3808221.91	0.28849			
465203.41	3808221.91	0.28259		465223.41

3808221.91	0.27685		
465243.41	3808221.91	0.27152	465263.41
3808221.91	0.26615		
465283.41	3808221.91	0.26092	465303.41
3808221.91	0.25607		
465323.41	3808221.91	0.25117	465343.41
3808221.91	0.24638		
465363.41	3808221.91	0.24195	465383.41
3808221.91	0.23747		
465403.41	3808221.91	0.23309	465423.41
3808221.91	0.22911		
465443.41	3808221.91	0.22524	465463.41
3808221.91	0.22147		
465483.41	3808221.91	0.21780	465503.41
3808221.91	0.21418		
465523.41	3808221.91	0.21064	465543.41
3808221.91	0.20725		
465563.41	3808221.91	0.20376	465583.41
3808221.91	0.20033		
465603.41	3808221.91	0.19720	465623.41
3808221.91	0.19410		
465643.41	3808221.91	0.19108	465663.41
3808221.91	0.18818		
465683.41	3808221.91	0.18518	465703.41
3808221.91	0.18222		
464963.41	3808241.91	0.37279	464983.41
3808241.91	0.36440		
465003.41	3808241.91	0.35631	465023.41
3808241.91	0.34843		
465043.41	3808241.91	0.34074	465063.41
3808241.91	0.33295		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 349

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465083.41	3808241.91	0.32537	465103.41
3808241.91	0.31813		
465123.41	3808241.91	0.31161	465143.41
3808241.91	0.30523		
465163.41	3808241.91	0.29898	465183.41
3808241.91	0.29261		
465203.41	3808241.91	0.28670	465223.41
3808241.91	0.28104		
465243.41	3808241.91	0.27525	465263.41
3808241.91	0.26988		
465283.41	3808241.91	0.26473	465303.41
3808241.91	0.25945		
465323.41	3808241.91	0.25456	465343.41
3808241.91	0.24986		
465363.41	3808241.91	0.24503	465383.41
3808241.91	0.24056		
465403.41	3808241.91	0.23633	465423.41
3808241.91	0.23226		
465443.41	3808241.91	0.22829	465463.41
3808241.91	0.22444		
465483.41	3808241.91	0.22069	465503.41
3808241.91	0.21682		
465523.41	3808241.91	0.21302	465543.41
3808241.91	0.20957		
465563.41	3808241.91	0.20617	465583.41
3808241.91	0.20285		
465603.41	3808241.91	0.19966	465623.41
3808241.91	0.19636		
465643.41	3808241.91	0.19310	465663.41
3808241.91	0.19015		
465683.41	3808241.91	0.18724	465703.41
3808241.91	0.18435		
464983.41	3808261.91	0.36898	465003.41
3808261.91	0.36109		
465023.41	3808261.91	0.35323	465043.41
3808261.91	0.34547		
465063.41	3808261.91	0.33774	465083.41
3808261.91	0.33028		
465103.41	3808261.91	0.32306	465123.41
3808261.91	0.31606		

465143.41	3808261.91	0.30950	465163.41
3808261.91	0.30320		
465183.41	3808261.91	0.29690	465203.41
3808261.91	0.29078		
465223.41	3808261.91	0.28486	465243.41
3808261.91	0.27914		
465263.41	3808261.91	0.27376	465283.41
3808261.91	0.26853		
465303.41	3808261.91	0.26307	465323.41
3808261.91	0.25792		
465343.41	3808261.91	0.25301	465363.41
3808261.91	0.24826		
465383.41	3808261.91	0.24363	465403.41
3808261.91	0.23917		
465423.41	3808261.91	0.23502	465443.41
3808261.91	0.23098		
465463.41	3808261.91	0.22706	465483.41
3808261.91	0.22324		
465503.41	3808261.91	0.21940	465523.41
3808261.91	0.21563		
465543.41	3808261.91	0.21211	465563.41
3808261.91	0.20856		
465583.41	3808261.91	0.20507	465603.41
3808261.91	0.20182		
465623.41	3808261.91	0.19855	465643.41
3808261.91	0.19531		
465663.41	3808261.91	0.19213	465683.41
3808261.91	0.18915		
465703.41	3808261.91	0.18627	465003.41
3808281.91	0.36555		
465023.41	3808281.91	0.35770	465043.41
3808281.91	0.34993		
465063.41	3808281.91	0.34221	465083.41
3808281.91	0.33492		
465103.41	3808281.91	0.32785	465123.41
3808281.91	0.32053		
465143.41	3808281.91	0.31377	465163.41
3808281.91	0.30736		
465183.41	3808281.91	0.30107	465203.41
3808281.91	0.29476		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 350

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808281.91	0.28863	465243.41
3808281.91	0.28303		
465263.41	3808281.91	0.27754	465283.41
3808281.91	0.27212		
465303.41	3808281.91	0.26654	465323.41
3808281.91	0.26120		
465343.41	3808281.91	0.25610	465363.41
3808281.91	0.25139		
465383.41	3808281.91	0.24662	465403.41
3808281.91	0.24196		
465423.41	3808281.91	0.23765	465443.41
3808281.91	0.23351		
465463.41	3808281.91	0.22964	465483.41
3808281.91	0.22575		
465503.41	3808281.91	0.22196	465523.41
3808281.91	0.21826		
465543.41	3808281.91	0.21460	465563.41
3808281.91	0.21089		
465583.41	3808281.91	0.20726	465603.41
3808281.91	0.20396		
465623.41	3808281.91	0.20069	465643.41
3808281.91	0.19745		
465663.41	3808281.91	0.19413	465683.41
3808281.91	0.19103		
465703.41	3808281.91	0.18808	465003.41
3808301.91	0.36997		
465023.41	3808301.91	0.36216	465043.41
3808301.91	0.35455		
465063.41	3808301.91	0.34620	465083.41
3808301.91	0.33894		
465103.41	3808301.91	0.33217	465123.41

3808301.91	0.32510		
465143.41	3808301.91	0.31832	465163.41
3808301.91	0.31170		
465183.41	3808301.91	0.30489	465203.41
3808301.91	0.29858		
465223.41	3808301.91	0.29262	465243.41
3808301.91	0.28691		
465263.41	3808301.91	0.28107	465283.41
3808301.91	0.27526		
465303.41	3808301.91	0.26958	465323.41
3808301.91	0.26435		
465343.41	3808301.91	0.25937	465363.41
3808301.91	0.25424		
465383.41	3808301.91	0.24950	465403.41
3808301.91	0.24495		
465423.41	3808301.91	0.24026	465443.41
3808301.91	0.23596		
465463.41	3808301.91	0.23244	465483.41
3808301.91	0.22847		
465503.41	3808301.91	0.22461	465523.41
3808301.91	0.22080		
465543.41	3808301.91	0.21683	465563.41
3808301.91	0.21314		
465583.41	3808301.91	0.20965	465603.41
3808301.91	0.20628		
465623.41	3808301.91	0.20280	465643.41
3808301.91	0.19937		
465663.41	3808301.91	0.19621	465683.41
3808301.91	0.19298		
465703.41	3808301.91	0.18981	465043.41
3808321.91	0.35856		
465063.41	3808321.91	0.35073	465083.41
3808321.91	0.34335		
465103.41	3808321.91	0.33625	465123.41
3808321.91	0.32913		
465143.41	3808321.91	0.32225	465163.41
3808321.91	0.31554		
465183.41	3808321.91	0.30883	465203.41
3808321.91	0.30252		
465223.41	3808321.91	0.29645	465243.41
3808321.91	0.29033		
465263.41	3808321.91	0.28425	465283.41
3808321.91	0.27833		
465303.41	3808321.91	0.27281	465323.41
3808321.91	0.26745		
465343.41	3808321.91	0.26225	465363.41
3808321.91	0.25722		
465383.41	3808321.91	0.25233	465403.41
3808321.91	0.24758		

▲ *** AERMOD - VERSION 19191 ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 351

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465423.41	3808321.91	0.24298	465443.41
3808321.91	0.23867		
465463.41	3808321.91	0.23484	465483.41
3808321.91	0.23081		
465503.41	3808321.91	0.22689	465523.41
3808321.91	0.22304		
465543.41	3808321.91	0.21915	465563.41
3808321.91	0.21548		
465583.41	3808321.91	0.21194	465603.41
3808321.91	0.20833		
465623.41	3808321.91	0.20483	465643.41
3808321.91	0.20143		
465663.41	3808321.91	0.19809	465683.41
3808321.91	0.19486		
465703.41	3808321.91	0.19171	465083.41
3808341.91	0.34760		
465103.41	3808341.91	0.34013	465123.41
3808341.91	0.33302		
465143.41	3808341.91	0.32605	465163.41
3808341.91	0.31928		
465183.41	3808341.91	0.31273	465203.41
3808341.91	0.30631		

465223.41	3808341.91	0.30000	465243.41
3808341.91	0.29363		
465263.41	3808341.91	0.28739	465283.41
3808341.91	0.28139		
465303.41	3808341.91	0.27593	465323.41
3808341.91	0.27035		
465343.41	3808341.91	0.26491	465363.41
3808341.91	0.26003		
465383.41	3808341.91	0.25504	465403.41
3808341.91	0.25013		
465423.41	3808341.91	0.24560	465443.41
3808341.91	0.24124		
465463.41	3808341.91	0.23717	465483.41
3808341.91	0.23308		
465503.41	3808341.91	0.22910	465523.41
3808341.91	0.22522		
465543.41	3808341.91	0.22138	465563.41
3808341.91	0.21769		
465583.41	3808341.91	0.21407	465603.41
3808341.91	0.21031		
465623.41	3808341.91	0.20679	465643.41
3808341.91	0.20340		
465663.41	3808341.91	0.19992	465683.41
3808341.91	0.19667		
465703.41	3808341.91	0.19354	465103.41
3808361.91	0.34384		
465123.41	3808361.91	0.33707	465143.41
3808361.91	0.33012		
465163.41	3808361.91	0.32322	465183.41
3808361.91	0.31655		
465203.41	3808361.91	0.30975	465223.41
3808361.91	0.30310		
465243.41	3808361.91	0.29699	465263.41
3808361.91	0.29077		
465283.41	3808361.91	0.28461	465303.41
3808361.91	0.27869		
465323.41	3808361.91	0.27293	465343.41
3808361.91	0.26740		
465363.41	3808361.91	0.26246	465383.41
3808361.91	0.25761		
465403.41	3808361.91	0.25284	465423.41
3808361.91	0.24791		
465443.41	3808361.91	0.24341	465463.41
3808361.91	0.23972		
465483.41	3808361.91	0.23556	465503.41
3808361.91	0.23152		
465523.41	3808361.91	0.22753	465543.41
3808361.91	0.22337		
465563.41	3808361.91	0.21955	465583.41
3808361.91	0.21593		

465603.41	3808361.91	0.21236	465623.41
3808361.91	0.20870		
465643.41	3808361.91	0.20512	465663.41
3808361.91	0.20182		
465683.41	3808361.91	0.19845	465703.41
3808361.91	0.19513		
465183.41	3808381.91	0.31932	465203.41
3808381.91	0.31250		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 352

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	0.30590	465243.41
3808381.91	0.29949		
465263.41	3808381.91	0.29311	465283.41
3808381.91	0.28690		
465303.41	3808381.91	0.28113	465323.41
3808381.91	0.27535		
465343.41	3808381.91	0.26975	465363.41
3808381.91	0.26474		
465383.41	3808381.91	0.25989	465403.41
3808381.91	0.25514		
465423.41	3808381.91	0.25033	465443.41
3808381.91	0.24582		
465463.41	3808381.91	0.24182	465483.41

3808381.91	0.23762		
465503.41	3808381.91	0.23352	465523.41
3808381.91	0.22951		
465543.41	3808381.91	0.22544	465563.41
3808381.91	0.22148		
465583.41	3808381.91	0.21766	465603.41
3808381.91	0.21410		
465623.41	3808381.91	0.21051	465643.41
3808381.91	0.20697		
465663.41	3808381.91	0.20350	465683.41
3808381.91	0.20013		
465703.41	3808381.91	0.19685	465303.41
3808401.91	0.28321		
465323.41	3808401.91	0.27752	465343.41
3808401.91	0.27194		
465363.41	3808401.91	0.26688	465383.41
3808401.91	0.26197		
465403.41	3808401.91	0.25721	465423.41
3808401.91	0.25258		
465443.41	3808401.91	0.24808	465463.41
3808401.91	0.24371		
465483.41	3808401.91	0.23946	465503.41
3808401.91	0.23532		
465523.41	3808401.91	0.23130	465543.41
3808401.91	0.22739		
465563.41	3808401.91	0.22336	465583.41
3808401.91	0.21940		
465603.41	3808401.91	0.21580	465623.41
3808401.91	0.21224		
465643.41	3808401.91	0.20872	465663.41
3808401.91	0.20510		
465683.41	3808401.91	0.20173	465703.41
3808401.91	0.19848		
465323.41	3808421.91	0.27931	465343.41
3808421.91	0.27399		
465363.41	3808421.91	0.26888	465383.41
3808421.91	0.26392		
465403.41	3808421.91	0.25911	465423.41
3808421.91	0.25443		
465443.41	3808421.91	0.24989	465463.41
3808421.91	0.24547		
465483.41	3808421.91	0.24118	465503.41
3808421.91	0.23701		
465523.41	3808421.91	0.23295	465543.41
3808421.91	0.22900		
465563.41	3808421.91	0.22511	465583.41
3808421.91	0.22132		
465603.41	3808421.91	0.21768	465623.41
3808421.91	0.21391		
465643.41	3808421.91	0.21020	465663.41

3808421.91	0.20678		
465683.41	3808421.91	0.20329	465703.41
3808421.91	0.19985		
465323.41	3808441.91	0.28117	465343.41
3808441.91	0.27591		
465363.41	3808441.91	0.27105	465383.41
3808441.91	0.26613		
465403.41	3808441.91	0.26127	465423.41
3808441.91	0.25654		
465443.41	3808441.91	0.25195	465463.41
3808441.91	0.24748		
465483.41	3808441.91	0.24314	465503.41
3808441.91	0.23893		
465523.41	3808441.91	0.23482	465543.41
3808441.91	0.23083		
465563.41	3808441.91	0.22694	465583.41
3808441.91	0.22316		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 353

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465603.41	3808441.91	0.21947	465623.41
3808441.91	0.21563		
465643.41	3808441.91	0.21180	465663.41
3808441.91	0.20822		

465683.41	3808441.91	0.20474	465703.41
3808441.91	0.20139		
465343.41	3808461.91	0.27764	465363.41
3808461.91	0.27290		
465383.41	3808461.91	0.26806	465403.41
3808461.91	0.26324		
465423.41	3808461.91	0.25847	465443.41
3808461.91	0.25383		
465463.41	3808461.91	0.24934	465483.41
3808461.91	0.24496		
465503.41	3808461.91	0.24076	465523.41
3808461.91	0.23668		
465543.41	3808461.91	0.23264	465563.41
3808461.91	0.22872		
465583.41	3808461.91	0.22490	465603.41
3808461.91	0.22118		
465623.41	3808461.91	0.21729	465643.41
3808461.91	0.21339		
465663.41	3808461.91	0.20960	465683.41
3808461.91	0.20615		
465703.41	3808461.91	0.20290	465343.41
3808481.91	0.27912		
465363.41	3808481.91	0.27398	465383.41
3808481.91	0.26926		
465403.41	3808481.91	0.26471	465423.41
3808481.91	0.25991		
465443.41	3808481.91	0.25525	465463.41
3808481.91	0.25072		
465483.41	3808481.91	0.24631	465503.41
3808481.91	0.24229		
465523.41	3808481.91	0.23843	465543.41
3808481.91	0.23436		
465563.41	3808481.91	0.23039	465583.41
3808481.91	0.22654		
465603.41	3808481.91	0.22278	465623.41
3808481.91	0.21887		
465643.41	3808481.91	0.21493	465663.41
3808481.91	0.21110		
465683.41	3808481.91	0.20762	465703.41
3808481.91	0.20430		
465463.41	3808501.91	0.25230	465483.41
3808501.91	0.24762		
465503.41	3808501.91	0.24355	465523.41
3808501.91	0.23972		
465543.41	3808501.91	0.23562	465563.41
3808501.91	0.23178		
465583.41	3808501.91	0.22804	465603.41
3808501.91	0.22405		
465623.41	3808501.91	0.22018	465643.41
3808501.91	0.21638		

465663.41	3808501.91	0.21252	465683.41
3808501.91	0.20901		
465703.41	3808501.91	0.20565	465523.41
3808521.91	0.24078		
465543.41	3808521.91	0.23668	465563.41
3808521.91	0.23296		
465583.41	3808521.91	0.22934	465603.41
3808521.91	0.22521		
465623.41	3808521.91	0.22135	465643.41
3808521.91	0.21764		
465663.41	3808521.91	0.21382	465683.41
3808521.91	0.21027		
465703.41	3808521.91	0.20684	464239.31
3809562.31	0.46450		
464277.31	3809562.31	0.44801	463745.31
3809591.37	0.69718		
463783.31	3809591.37	0.67729	463821.31
3809591.37	0.65748		
463859.31	3809591.37	0.64221	463897.31
3809591.37	0.62791		
463935.31	3809591.37	0.61074	464239.31
3809591.37	0.45303		
464277.31	3809591.37	0.43707	463745.31
3809620.43	0.66915		
463783.31	3809620.43	0.65117	463821.31
3809620.43	0.63461		
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15			
Industrial Park\I15 Industrial *** 05/09/22			
*** AERMET - VERSION 14134 *** ***			
*** 16:42:19			

PAGE 354

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
463859.31	3809620.43	0.61823	463897.31
3809620.43	0.60389		
463935.31	3809620.43	0.58903	463973.31
3809620.43	0.56995		
464011.31	3809620.43	0.54964	464049.31
3809620.43	0.52855		
464087.31	3809620.43	0.50812	464125.31
3809620.43	0.49003		
464163.31	3809620.43	0.47291	464201.31
3809620.43	0.45589		
464239.31	3809620.43	0.44138	464277.31
3809620.43	0.42630		
463745.31	3809649.49	0.64237	463783.31
3809649.49	0.62805		
463821.31	3809649.49	0.61166	463859.31
3809649.49	0.59578		
463897.31	3809649.49	0.58122	463935.31
3809649.49	0.56697		
463973.31	3809649.49	0.54761	464011.31
3809649.49	0.53025		
464049.31	3809649.49	0.51243	464087.31
3809649.49	0.49308		
464125.31	3809649.49	0.47691	464163.31
3809649.49	0.46016		
464201.31	3809649.49	0.44492	464239.31
3809649.49	0.43066		
464277.31	3809649.49	0.41610	464315.31
3809649.49	0.40196		
464353.31	3809649.49	0.38946	464391.31
3809649.49	0.37734		
464429.31	3809649.49	0.36512	464467.31
3809649.49	0.35378		
464505.31	3809649.49	0.34277	463745.31
3809678.55	0.61589		
463783.31	3809678.55	0.60303	463821.31
3809678.55	0.59021		
463859.31	3809678.55	0.57382	463897.31
3809678.55	0.55983		
463935.31	3809678.55	0.54665	463973.31
3809678.55	0.52948		
464011.31	3809678.55	0.51201	464049.31
3809678.55	0.49702		
464087.31	3809678.55	0.48037	464125.31
3809678.55	0.46427		
464163.31	3809678.55	0.44858	464201.31

3809678.55	0.43465		
464239.31	3809678.55	0.41987	464277.31
3809678.55	0.40606		
464315.31	3809678.55	0.39296	464353.31
3809678.55	0.38117		
464391.31	3809678.55	0.36937	464429.31
3809678.55	0.35741		
464467.31	3809678.55	0.34676	464505.31
3809678.55	0.33543		
463745.31	3809707.61	0.59265	463783.31
3809707.61	0.57992		
463821.31	3809707.61	0.56763	463859.31
3809707.61	0.55411		
463897.31	3809707.61	0.53980	463935.31
3809707.61	0.52724		
463973.31	3809707.61	0.51229	464011.31
3809707.61	0.49622		
464049.31	3809707.61	0.48232	464087.31
3809707.61	0.46701		
464125.31	3809707.61	0.45215	464163.31
3809707.61	0.43802		
464201.31	3809707.61	0.42337	464239.31
3809707.61	0.40984		
464277.31	3809707.61	0.39654	464315.31
3809707.61	0.38470		
464353.31	3809707.61	0.37223	464391.31
3809707.61	0.36120		
464429.31	3809707.61	0.34969	464467.31
3809707.61	0.33919		
464505.31	3809707.61	0.32903	463745.31
3809736.67	0.57278		
463783.31	3809736.67	0.55863	463821.31
3809736.67	0.54505		
463859.31	3809736.67	0.53304	463897.31
3809736.67	0.52063		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 355

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109

```

, L0005110      , L0005111      , L0005112      ,
                  L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463935.31	3809736.67	0.50740	463973.31
3809736.67	0.49561		
464011.31	3809736.67	0.48270	464049.31
3809736.67	0.46834		
464087.31	3809736.67	0.45516	464125.31
3809736.67	0.44120		
464163.31	3809736.67	0.42793	464201.31
3809736.67	0.41335		
464239.31	3809736.67	0.40072	464277.31
3809736.67	0.38790		
464315.31	3809736.67	0.37576	464353.31
3809736.67	0.36430		
464391.31	3809736.67	0.35348	464429.31
3809736.67	0.34243		
464467.31	3809736.67	0.33253	464505.31
3809736.67	0.32294		
463745.31	3809765.73	0.55448	463783.31
3809765.73	0.54028		
463821.31	3809765.73	0.52616	463859.31
3809765.73	0.51374		
463897.31	3809765.73	0.50252	463935.31
3809765.73	0.48886		
463973.31	3809765.73	0.47610	464011.31
3809765.73	0.46787		
464049.31	3809765.73	0.45634	464087.31
3809765.73	0.44331		
464125.31	3809765.73	0.43092	464163.31
3809765.73	0.41818		
464201.31	3809765.73	0.40417	464239.31
3809765.73	0.39204		
464277.31	3809765.73	0.37973	464315.31
3809765.73	0.36764		
464353.31	3809765.73	0.35696	464391.31
3809765.73	0.34584		
464429.31	3809765.73	0.33585	464467.31
3809765.73	0.32647		

464505.31	3809765.73	0.31636	463745.31
3809794.79	0.53732		
463783.31	3809794.79	0.52225	463821.31
3809794.79	0.50854		
463859.31	3809794.79	0.49535	463897.31
3809794.79	0.48412		
463935.31	3809794.79	0.47110	463973.31
3809794.79	0.45883		
464011.31	3809794.79	0.45061	464049.31
3809794.79	0.44405		
464087.31	3809794.79	0.43210	464125.31
3809794.79	0.41979		
464163.31	3809794.79	0.40758	464201.31
3809794.79	0.39523		
464239.31	3809794.79	0.38288	464277.31
3809794.79	0.37120		
464315.31	3809794.79	0.36002	464353.31
3809794.79	0.34898		
464391.31	3809794.79	0.33891	464429.31
3809794.79	0.32961		
464467.31	3809794.79	0.31976	464505.31
3809794.79	0.31042		
463745.31	3809823.85	0.52110	463783.31
3809823.85	0.50545		
463821.31	3809823.85	0.49028	463859.31
3809823.85	0.47796		
463897.31	3809823.85	0.46623	463935.31
3809823.85	0.45384		
463973.31	3809823.85	0.44273	464011.31
3809823.85	0.43379		
464049.31	3809823.85	0.42809	464087.31
3809823.85	0.42021		
464125.31	3809823.85	0.40958	464163.31
3809823.85	0.39785		
464201.31	3809823.85	0.38562	464239.31
3809823.85	0.37432		
464277.31	3809823.85	0.36316	464315.31
3809823.85	0.35189		
464353.31	3809823.85	0.34166	464391.31
3809823.85	0.33214		
464429.31	3809823.85	0.32268	464467.31
3809823.85	0.31350		
464505.31	3809823.85	0.30422	463745.31

3809852.91 0.50658
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	0.49135	463821.31
3809852.91	0.47475		
463859.31	3809852.91	0.46216	463897.31
3809852.91	0.44955		
463935.31	3809852.91	0.43771	463973.31
3809852.91	0.42743		
464011.31	3809852.91	0.41824	464049.31
3809852.91	0.41200		
464087.31	3809852.91	0.40530	464125.31
3809852.91	0.39686		
464163.31	3809852.91	0.38615	464201.31
3809852.91	0.37477		
464239.31	3809852.91	0.36461	464277.31
3809852.91	0.35446		
464315.31	3809852.91	0.34422	464353.31
3809852.91	0.33420		
464391.31	3809852.91	0.32517	464429.31
3809852.91	0.31622		
464467.31	3809852.91	0.30719	464505.31
3809852.91	0.29846		
463745.31	3809881.97	0.49335	463783.31
3809881.97	0.47778		
463821.31	3809881.97	0.46169	463859.31
3809881.97	0.44810		
463897.31	3809881.97	0.43474	463935.31
3809881.97	0.42254		
463973.31	3809881.97	0.41331	464011.31

3809881.97	0.40454		
464049.31	3809881.97	0.39757	464087.31
3809881.97	0.39036		
464125.31	3809881.97	0.38273	464163.31
3809881.97	0.37294		
464201.31	3809881.97	0.36368	464239.31
3809881.97	0.35400		
464277.31	3809881.97	0.34517	464315.31
3809881.97	0.33653		
464353.31	3809881.97	0.32716	464391.31
3809881.97	0.31871		
464429.31	3809881.97	0.31002	464467.31
3809881.97	0.30120		
464505.31	3809881.97	0.29323	463745.31
3809911.03	0.47988		
463783.31	3809911.03	0.46414	463821.31
3809911.03	0.44950		
463859.31	3809911.03	0.43547	463897.31
3809911.03	0.42215		
463935.31	3809911.03	0.40958	463973.31
3809911.03	0.39999		
464011.31	3809911.03	0.39147	464049.31
3809911.03	0.38477		
464087.31	3809911.03	0.37762	464125.31
3809911.03	0.37010		
464163.31	3809911.03	0.36177	464201.31
3809911.03	0.35385		
464239.31	3809911.03	0.34481	464277.31
3809911.03	0.33686		
464315.31	3809911.03	0.32856	464353.31
3809911.03	0.32022		
464391.31	3809911.03	0.31212	464429.31
3809911.03	0.30380		
464467.31	3809911.03	0.29587	464505.31
3809911.03	0.28763		
463745.31	3809940.09	0.46643	463783.31
3809940.09	0.45111		
463821.31	3809940.09	0.43753	463859.31
3809940.09	0.42360		
463897.31	3809940.09	0.41084	463935.31
3809940.09	0.39866		
463973.31	3809940.09	0.38847	464011.31
3809940.09	0.37883		
464049.31	3809940.09	0.37190	464087.31
3809940.09	0.36496		
464125.31	3809940.09	0.35811	464163.31
3809940.09	0.35166		
464201.31	3809940.09	0.34513	464239.31
3809940.09	0.33712		
464277.31	3809940.09	0.32909	464315.31

3809940.09 0.32140
464353.31 3809940.09 0.31349 464391.31

3809940.09 0.30571

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 357

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464429.31	3809940.09	0.29813	464467.31
3809940.09	0.29019		
464505.31	3809940.09	0.28228	463745.31
3809969.15	0.45654		
463783.31	3809969.15	0.43982	463821.31
3809969.15	0.42583		
463859.31	3809969.15	0.41248	463897.31
3809969.15	0.40000		
463935.31	3809969.15	0.38830	463973.31
3809969.15	0.37823		
464011.31	3809969.15	0.36797	464049.31
3809969.15	0.35964		
464087.31	3809969.15	0.35306	464125.31
3809969.15	0.34733		
464163.31	3809969.15	0.34153	464201.31
3809969.15	0.33612		
464239.31	3809969.15	0.32972	464277.31
3809969.15	0.32191		

464315.31	3809969.15	0.31460	464353.31
3809969.15	0.30760		
464391.31	3809969.15	0.30012	464429.31
3809969.15	0.29247		
464467.31	3809969.15	0.28455	464505.31
3809969.15	0.27744		
463745.31	3809998.21	0.45056	463783.31
3809998.21	0.43132		
463821.31	3809998.21	0.41607	463859.31
3809998.21	0.40245		
463897.31	3809998.21	0.39018	463935.31
3809998.21	0.37837		
463973.31	3809998.21	0.36833	464011.31
3809998.21	0.35857		
464049.31	3809998.21	0.35002	464087.31
3809998.21	0.34305		
464125.31	3809998.21	0.33787	464163.31
3809998.21	0.33250		
464201.31	3809998.21	0.32725	464239.31
3809998.21	0.32154		
464277.31	3809998.21	0.31518	464315.31
3809998.21	0.30800		
464353.31	3809998.21	0.30135	464391.31
3809998.21	0.29415		
464429.31	3809998.21	0.28668	464467.31
3809998.21	0.27959		
464505.31	3809998.21	0.27231	463745.31
3810027.27	0.44512		
463783.31	3810027.27	0.42480	463821.31
3810027.27	0.40812		
463859.31	3810027.27	0.39385	463897.31
3810027.27	0.38153		
463935.31	3810027.27	0.36924	463973.31
3810027.27	0.35939		
464011.31	3810027.27	0.34989	464049.31
3810027.27	0.34149		
464087.31	3810027.27	0.33388	464125.31
3810027.27	0.32820		
464163.31	3810027.27	0.32373	464201.31
3810027.27	0.31895		
464239.31	3810027.27	0.31320	464277.31
3810027.27	0.30771		
464315.31	3810027.27	0.30163	464353.31
3810027.27	0.29506		
464391.31	3810027.27	0.28814	464429.31
3810027.27	0.28139		
464467.31	3810027.27	0.27442	464505.31
3810027.27	0.26718		
463745.31	3810056.33	0.44049	463783.31
3810056.33	0.41895		

463821.31	3810056.33	0.40062	463859.31
3810056.33	0.38610		
463897.31	3810056.33	0.37324	463935.31
3810056.33	0.36114		
463973.31	3810056.33	0.35115	464011.31
3810056.33	0.34163		
464049.31	3810056.33	0.33288	464087.31
3810056.33	0.32543		
464125.31	3810056.33	0.31905	464163.31
3810056.33	0.31470		
464201.31	3810056.33	0.31026	464239.31
3810056.33	0.30549		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 358

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464277.31	3810056.33	0.30001	464315.31
3810056.33	0.29470		
464353.31	3810056.33	0.28928	464391.31
3810056.33	0.28297		
464429.31	3810056.33	0.27622	464467.31
3810056.33	0.26909		
464505.31	3810056.33	0.26234	463745.31
3810085.39	0.43607		
463783.31	3810085.39	0.41354	463821.31

3810085.39	0.39419		
463859.31	3810085.39	0.37880	463897.31
3810085.39	0.36562		
463935.31	3810085.39	0.35380	463973.31
3810085.39	0.34347		
464011.31	3810085.39	0.33358	464049.31
3810085.39	0.32427		
464087.31	3810085.39	0.31714	464125.31
3810085.39	0.31085		
464163.31	3810085.39	0.30593	464201.31
3810085.39	0.30156		
464239.31	3810085.39	0.29742	464277.31
3810085.39	0.29266		
464315.31	3810085.39	0.28772	464353.31
3810085.39	0.28259		
464391.31	3810085.39	0.27700	464429.31
3810085.39	0.27049		
464467.31	3810085.39	0.26384	464505.31
3810085.39	0.25714		
463745.31	3810114.45	0.42967	463783.31
3810114.45	0.40952		
463821.31	3810114.45	0.38901	463859.31
3810114.45	0.37358		
463897.31	3810114.45	0.35921	463935.31
3810114.45	0.34702		
463973.31	3810114.45	0.33607	464011.31
3810114.45	0.32617		
464049.31	3810114.45	0.31673	464087.31
3810114.45	0.30932		
464125.31	3810114.45	0.30265	464163.31
3810114.45	0.29725		
464201.31	3810114.45	0.29282	464239.31
3810114.45	0.28959		
464277.31	3810114.45	0.28550	464315.31
3810114.45	0.28030		
464353.31	3810114.45	0.27496	464391.31
3810114.45	0.26942		
464429.31	3810114.45	0.26413	464467.31
3810114.45	0.25773		
464505.31	3810114.45	0.25202	463745.31
3810143.51	0.42097		
463783.31	3810143.51	0.40342	463821.31
3810143.51	0.38603		
463859.31	3810143.51	0.36957	463897.31
3810143.51	0.35307		
463935.31	3810143.51	0.33995	463973.31
3810143.51	0.32829		
464011.31	3810143.51	0.31914	464049.31
3810143.51	0.30975		
464087.31	3810143.51	0.30153	464125.31

3810143.51	0.29494		
464163.31	3810143.51	0.28954	464201.31
3810143.51	0.28491		
464239.31	3810143.51	0.28124	464277.31
3810143.51	0.27829		
464315.31	3810143.51	0.27342	464353.31
3810143.51	0.26758		
464391.31	3810143.51	0.26267	464429.31
3810143.51	0.25746		
464467.31	3810143.51	0.25239	464505.31
3810143.51	0.24711		
464383.78	3807479.29	0.21280	464355.03
3807405.24	0.19174		
464402.07	3807352.10	0.16558	464367.23
3807296.35	0.15868		
464358.52	3807237.99	0.14220	464385.52
3807161.33	0.13188		
463132.27	3810926.37	0.27079	463237.82
3811199.31	0.22673		
464944.35	3809244.89	0.34406	465700.32
3809255.46	0.20161		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 359

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

465716.18	3808536.49	0.20533	465544.37
3808533.85	0.23705		
465420.13	3808486.27	0.26098	465348.77
3808491.56	0.27842		
465317.05	3808443.98	0.28308	465327.62
3808406.97	0.27680		
465108.23	3808369.97	0.34358	464999.86
3808301.24	0.37130		
464722.31	3807973.48	0.37707	464717.03
3807836.03	0.34030		
464344.33	3807936.47	0.61648	464349.61
3807780.52	0.50433		
464386.62	3807785.81	0.48160	464521.43
3807859.82	0.42961		
464537.28	3807719.72	0.38233	464426.27
3807613.99	0.39314		
464368.43	3807532.62	0.38207	464324.60
3807121.91	0.13865		
464123.31	3807123.54	0.18998	463930.13
3806909.26	0.14833		
463831.11	3806906.01	0.16593	463821.36
3806720.95	0.12277		
463727.21	3806727.44	0.13446	463598.97
3806334.59	0.08811		
463001.06	3806361.54	0.06353	

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 360

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)

3809270.62	462160.55	3809377.75	0.26128	462051.48
		0.22713		
3808855.75	462014.47	3809029.10	0.16914	462010.58
		0.10587		
3808997.94	461936.56	3808886.92	0.09954	461936.56
		0.12948		
3808894.71	461909.30	3808768.10	0.07554	461835.28
		0.08565		
3809114.80	461845.02	3808995.99	0.10888	461833.33
		0.14477		
3809297.89	461843.07	3809210.24	0.17677	461809.96
		0.17824		
3809482.92	461856.71	3809385.54	0.19013	461841.13
		0.19027		
3808793.43	462004.74	3809379.69	0.22056	461763.22
		0.06324		
3808686.30	461753.48	3808699.93	0.06046	461835.28
		0.06156		
3808585.02	461823.60	3808579.17	0.05310	461761.27
		0.04983		
3807868.16	462301.19	3807807.15	0.07730	462304.78
		0.07517		
3807886.11	462216.84	3807882.52	0.06377	462116.34
		0.05427		
3807887.90	462114.55	3807789.20	0.05537	462012.25
		0.04684		
3807972.25	462008.66	3807975.84	0.04947	461917.14
		0.04427		
3808288.10	461922.52	3808187.60	0.05703	461908.17
		0.05926		
3808494.48	461848.94	3808377.83	0.05602	461831.00
		0.05366		
3808501.66	462421.43	3808393.98	0.12742	462459.11
		0.14016		
3809189.00	462437.58	3808580.62	0.14417	462654.73
		0.50153		
3807935.19	462559.49	3809194.32	0.43055	465763.86
		0.16144		
3807935.19	465819.84	3807935.19	0.15499	465875.82
		0.14891		
3807935.19	465931.80	3807935.19	0.14324	465987.78
		0.13789		
3807935.19	466043.76	3807935.19	0.13285	466099.74
		0.12810		
	466155.72	3807935.19	0.12361	466211.70

3807935.19	0.11937		
466267.68	3807935.19	0.11536	466323.66
3807935.19	0.11149		
466379.64	3807935.19	0.10791	466435.62
3807935.19	0.10450		
466491.60	3807935.19	0.10127	466547.58
3807935.19	0.09802		
466603.56	3807935.19	0.09506	466659.54
3807935.19	0.09225		
466715.52	3807935.19	0.08957	466771.50
3807935.19	0.08699		
466827.48	3807935.19	0.08446	466883.46
3807935.19	0.08211		
465763.86	3808001.41	0.16801	465819.84
3808001.41	0.16120		
465875.82	3808001.41	0.15480	465931.80
3808001.41	0.14878		
465987.78	3808001.41	0.14324	466043.76
3808001.41	0.13781		
466099.74	3808001.41	0.13298	466155.72
3808001.41	0.12826		
466211.70	3808001.41	0.12382	466267.68
3808001.41	0.11959		
466323.66	3808001.41	0.11557	466379.64
3808001.41	0.11176		
466435.62	3808001.41	0.10814	466491.60
3808001.41	0.10470		
466547.58	3808001.41	0.10139	466603.56
3808001.41	0.09830		
466659.54	3808001.41	0.09537	466715.52
3808001.41	0.09239		
466771.50	3808001.41	0.08972	466827.48
3808001.41	0.08715		
466883.46	3808001.41	0.08464	465763.86
3808067.63	0.17538		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 361

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118

```

, L0006119      , L0006120      , L0006121      ,
                  L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465819.84	3808067.63	0.16810	465875.82
3808067.63	0.16133		
465931.80	3808067.63	0.15497	465987.78
3808067.63	0.14901		
466043.76	3808067.63	0.14340	466099.74
3808067.63	0.13811		
466155.72	3808067.63	0.13314	466211.70
3808067.63	0.12842		
466267.68	3808067.63	0.12396	466323.66
3808067.63	0.11972		
466379.64	3808067.63	0.11570	466435.62
3808067.63	0.11200		
466491.60	3808067.63	0.10826	466547.58
3808067.63	0.10482		
466603.56	3808067.63	0.10154	466659.54
3808067.63	0.09843		
466715.52	3808067.63	0.09549	466771.50
3808067.63	0.09269		
466827.48	3808067.63	0.08993	466883.46
3808067.63	0.08726		
465763.86	3808133.85	0.18338	465819.84
3808133.85	0.17560		
465875.82	3808133.85	0.16835	465931.80
3808133.85	0.16155		
465987.78	3808133.85	0.15538	466043.76
3808133.85	0.14936		
466099.74	3808133.85	0.14370	466155.72
3808133.85	0.13837		
466211.70	3808133.85	0.13334	466267.68
3808133.85	0.12860		
466323.66	3808133.85	0.12413	466379.64
3808133.85	0.11992		
466435.62	3808133.85	0.11592	466491.60
3808133.85	0.11213		
466547.58	3808133.85	0.10848	466603.56
3808133.85	0.10505		

466659.54	3808133.85	0.10179	466715.52
3808133.85	0.09866		
466771.50	3808133.85	0.09557	466827.48
3808133.85	0.09276		
466883.46	3808133.85	0.09005	465763.86
3808200.07	0.19192		
465819.84	3808200.07	0.18356	465875.82
3808200.07	0.17577		
465931.80	3808200.07	0.16869	465987.78
3808200.07	0.16185		
466043.76	3808200.07	0.15544	466099.74
3808200.07	0.14941		
466155.72	3808200.07	0.14375	466211.70
3808200.07	0.13841		
466267.68	3808200.07	0.13338	466323.66
3808200.07	0.12878		
466379.64	3808200.07	0.12429	466435.62
3808200.07	0.12003		
466491.60	3808200.07	0.11600	466547.58
3808200.07	0.11217		
466603.56	3808200.07	0.10854	466659.54
3808200.07	0.10509		
466715.52	3808200.07	0.10182	466771.50
3808200.07	0.09866		
466827.48	3808200.07	0.09562	466883.46
3808200.07	0.09279		
465763.86	3808266.29	0.20047	465819.84
3808266.29	0.19179		
465875.82	3808266.29	0.18358	465931.80
3808266.29	0.17577		
465987.78	3808266.29	0.16847	466043.76
3808266.29	0.16164		
466099.74	3808266.29	0.15523	466155.72
3808266.29	0.14921		
466211.70	3808266.29	0.14356	466267.68
3808266.29	0.13833		
466323.66	3808266.29	0.13329	466379.64
3808266.29	0.12868		
466435.62	3808266.29	0.12420	466491.60
3808266.29	0.11988		
466547.58	3808266.29	0.11583	466603.56
3808266.29	0.11199		
466659.54	3808266.29	0.10843	466715.52
3808266.29	0.10492		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.10166	466827.48
3808266.29	0.09849		
466883.46	3808266.29	0.09552	465763.86
3808332.51	0.20921		
465819.84	3808332.51	0.20008	465875.82
3808332.51	0.19114		
465931.80	3808332.51	0.18282	465987.78
3808332.51	0.17506		
466043.76	3808332.51	0.16779	466099.74
3808332.51	0.16099		
466155.72	3808332.51	0.15468	466211.70
3808332.51	0.14869		
466267.68	3808332.51	0.14304	466323.66
3808332.51	0.13797		
466379.64	3808332.51	0.13293	466435.62
3808332.51	0.12818		
466491.60	3808332.51	0.12368	466547.58
3808332.51	0.11942		
466603.56	3808332.51	0.11560	466659.54
3808332.51	0.11180		
466715.52	3808332.51	0.10816	466771.50
3808332.51	0.10455		
466827.48	3808332.51	0.10130	466883.46
3808332.51	0.09819		
465763.86	3808398.73	0.21771	465819.84
3808398.73	0.20793		
465875.82	3808398.73	0.19844	465931.80

3808398.73	0.18963		
465987.78	3808398.73	0.18141	466043.76
3808398.73	0.17372		
466099.74	3808398.73	0.16668	466155.72
3808398.73	0.15990		
466211.70	3808398.73	0.15355	466267.68
3808398.73	0.14791		
466323.66	3808398.73	0.14228	466379.64
3808398.73	0.13700		
466435.62	3808398.73	0.13214	466491.60
3808398.73	0.12745		
466547.58	3808398.73	0.12302	466603.56
3808398.73	0.11885		
466659.54	3808398.73	0.11488	466715.52
3808398.73	0.11106		
466771.50	3808398.73	0.10748	466827.48
3808398.73	0.10404		
466883.46	3808398.73	0.10078	465763.86
3808464.95	0.22567		
465819.84	3808464.95	0.21521	465875.82
3808464.95	0.20515		
465931.80	3808464.95	0.19590	465987.78
3808464.95	0.18733		
466043.76	3808464.95	0.17946	466099.74
3808464.95	0.17187		
466155.72	3808464.95	0.16477	466211.70
3808464.95	0.15813		
466267.68	3808464.95	0.15216	466323.66
3808464.95	0.14629		
466379.64	3808464.95	0.14091	466435.62
3808464.95	0.13573		
466491.60	3808464.95	0.13097	466547.58
3808464.95	0.12632		
466603.56	3808464.95	0.12193	466659.54
3808464.95	0.11778		
466715.52	3808464.95	0.11386	466771.50
3808464.95	0.11014		
466827.48	3808464.95	0.10660	466883.46
3808464.95	0.10324		
465763.86	3808531.17	0.23302	465819.84
3808531.17	0.22169		
465875.82	3808531.17	0.21119	465931.80
3808531.17	0.20145		
465987.78	3808531.17	0.19265	466043.76
3808531.17	0.18432		
466099.74	3808531.17	0.17656	466155.72
3808531.17	0.16918		
466211.70	3808531.17	0.16229	466267.68
3808531.17	0.15601		
466323.66	3808531.17	0.15007	466379.64

3808531.17 0.14438
466435.62 3808531.17 0.13916 466491.60
3808531.17 0.13407

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 363

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466547.58	3808531.17	0.12927	466603.56
3808531.17	0.12473		
466659.54	3808531.17	0.12044	466715.52
3808531.17	0.11640		
466771.50	3808531.17	0.11252	466827.48
3808531.17	0.10892		
466883.46	3808531.17	0.10546	465763.86
3808597.39	0.23889		
465819.84	3808597.39	0.22759	465875.82
3808597.39	0.21668		
465931.80	3808597.39	0.20627	465987.78
3808597.39	0.19716		
466043.76	3808597.39	0.18874	466099.74
3808597.39	0.18062		
466155.72	3808597.39	0.17308	466211.70
3808597.39	0.16605		
466267.68	3808597.39	0.15937	466323.66
3808597.39	0.15333		

466379.64	3808597.39	0.14760	466435.62
3808597.39	0.14206		
466491.60	3808597.39	0.13692	466547.58
3808597.39	0.13202		
466603.56	3808597.39	0.12734	466659.54
3808597.39	0.12292		
466715.52	3808597.39	0.11874	466771.50
3808597.39	0.11478		
466827.48	3808597.39	0.11103	466883.46
3808597.39	0.10755		
465763.86	3808663.61	0.24352	465819.84
3808663.61	0.23208		
465875.82	3808663.61	0.22099	465931.80
3808663.61	0.21071		
465987.78	3808663.61	0.20118	466043.76
3808663.61	0.19228		
466099.74	3808663.61	0.18413	466155.72
3808663.61	0.17634		
466211.70	3808663.61	0.16902	466267.68
3808663.61	0.16220		
466323.66	3808663.61	0.15611	466379.64
3808663.61	0.15008		
466435.62	3808663.61	0.14470	466491.60
3808663.61	0.13933		
466547.58	3808663.61	0.13426	466603.56
3808663.61	0.12947		
466659.54	3808663.61	0.12494	466715.52
3808663.61	0.12068		
466771.50	3808663.61	0.11664	466827.48
3808663.61	0.11296		
466883.46	3808663.61	0.10930	465763.86
3808729.83	0.24754		
465819.84	3808729.83	0.23606	465875.82
3808729.83	0.22479		
465931.80	3808729.83	0.21419	465987.78
3808729.83	0.20437		
466043.76	3808729.83	0.19526	466099.74
3808729.83	0.18678		
466155.72	3808729.83	0.17886	466211.70
3808729.83	0.17143		
466267.68	3808729.83	0.16450	466323.66
3808729.83	0.15831		
466379.64	3808729.83	0.15231	466435.62
3808729.83	0.14656		
466491.60	3808729.83	0.14129	466547.58
3808729.83	0.13613		
466603.56	3808729.83	0.13127	466659.54
3808729.83	0.12693		
466715.52	3808729.83	0.12256	466771.50
3808729.83	0.11845		

466827.48	3808729.83	0.11461	466883.46
3808729.83	0.11091		
465763.86	3808796.05	0.24959	465819.84
3808796.05	0.23869		
465875.82	3808796.05	0.22694	465931.80
3808796.05	0.21645		
465987.78	3808796.05	0.20661	466043.76
3808796.05	0.19749		
466099.74	3808796.05	0.18897	466155.72
3808796.05	0.18101		
466211.70	3808796.05	0.17355	466267.68
3808796.05	0.16656		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 364

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466323.66	3808796.05	0.16008	466379.64
3808796.05	0.15396		
466435.62	3808796.05	0.14834	466491.60
3808796.05	0.14283		
466547.58	3808796.05	0.13766	466603.56
3808796.05	0.13293		
466659.54	3808796.05	0.12829	466715.52
3808796.05	0.12397		
466771.50	3808796.05	0.11983	466827.48

3808796.05	0.11588		
466883.46	3808796.05	0.11225	465763.86
3808862.27	0.24968		
465819.84	3808862.27	0.23858	465875.82
3808862.27	0.22800		
465931.80	3808862.27	0.21755	465987.78
3808862.27	0.20778		
466043.76	3808862.27	0.19866	466099.74
3808862.27	0.19033		
466155.72	3808862.27	0.18217	466211.70
3808862.27	0.17470		
466267.68	3808862.27	0.16792	466323.66
3808862.27	0.16134		
466379.64	3808862.27	0.15525	466435.62
3808862.27	0.14948		
466491.60	3808862.27	0.14403	466547.58
3808862.27	0.13892		
466603.56	3808862.27	0.13398	466659.54
3808862.27	0.12948		
466715.52	3808862.27	0.12505	466771.50
3808862.27	0.12090		
466827.48	3808862.27	0.11701	466883.46
3808862.27	0.11328		
465763.86	3808928.49	0.24780	465819.84
3808928.49	0.23692		
465875.82	3808928.49	0.22700	465931.80
3808928.49	0.21736		
465987.78	3808928.49	0.20818	466043.76
3808928.49	0.19961		
466099.74	3808928.49	0.19092	466155.72
3808928.49	0.18302		
466211.70	3808928.49	0.17563	466267.68
3808928.49	0.16864		
466323.66	3808928.49	0.16205	466379.64
3808928.49	0.15585		
466435.62	3808928.49	0.15020	466491.60
3808928.49	0.14481		
466547.58	3808928.49	0.13964	466603.56
3808928.49	0.13493		
466659.54	3808928.49	0.13026	466715.52
3808928.49	0.12591		
466771.50	3808928.49	0.12171	466827.48
3808928.49	0.11785		
466883.46	3808928.49	0.11407	465763.86
3808994.71	0.24719		
465819.84	3808994.71	0.23573	465875.82
3808994.71	0.22565		
465931.80	3808994.71	0.21664	465987.78
3808994.71	0.20825		
466043.76	3808994.71	0.19952	466099.74

3808994.71	0.19112		
466155.72	3808994.71	0.18312	466211.70
3808994.71	0.17582		
466267.68	3808994.71	0.16892	466323.66
3808994.71	0.16243		
466379.64	3808994.71	0.15630	466435.62
3808994.71	0.15053		
466491.60	3808994.71	0.14522	466547.58
3808994.71	0.14028		
466603.56	3808994.71	0.13542	466659.54
3808994.71	0.13075		
466715.52	3808994.71	0.12661	466771.50
3808994.71	0.12238		
466827.48	3808994.71	0.11837	466883.46
3808994.71	0.11470		
465763.86	3809060.93	0.24627	465819.84
3809060.93	0.23504		
465875.82	3809060.93	0.22503	465931.80
3809060.93	0.21575		
465987.78	3809060.93	0.20704	466043.76
3809060.93	0.19880		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 365

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

466099.74	3809060.93	0.19034	466155.72
3809060.93	0.18274		
466211.70	3809060.93	0.17546	466267.68
3809060.93	0.16870		
466323.66	3809060.93	0.16230	466379.64
3809060.93	0.15626		
466435.62	3809060.93	0.15076	466491.60
3809060.93	0.14549		
466547.58	3809060.93	0.14036	466603.56
3809060.93	0.13559		
466659.54	3809060.93	0.13122	466715.52
3809060.93	0.12680		
466771.50	3809060.93	0.12264	466827.48
3809060.93	0.11874		
466883.46	3809060.93	0.11508	465763.86
3809127.15	0.24526		
465819.84	3809127.15	0.23446	465875.82
3809127.15	0.22453		
465931.80	3809127.15	0.21503	465987.78
3809127.15	0.20614		
466043.76	3809127.15	0.19720	466099.74
3809127.15	0.18885		
466155.72	3809127.15	0.18129	466211.70
3809127.15	0.17485		
466267.68	3809127.15	0.16842	466323.66
3809127.15	0.16220		
466379.64	3809127.15	0.15617	466435.62
3809127.15	0.15059		
466491.60	3809127.15	0.14532	466547.58
3809127.15	0.14035		
466603.56	3809127.15	0.13569	466659.54
3809127.15	0.13111		
466715.52	3809127.15	0.12684	466771.50
3809127.15	0.12276		
466827.48	3809127.15	0.11883	466883.46
3809127.15	0.11522		
465763.86	3809193.37	0.24281	465819.84
3809193.37	0.23285		
465875.82	3809193.37	0.22307	465931.80
3809193.37	0.21370		
465987.78	3809193.37	0.20432	466043.76
3809193.37	0.19472		
466099.74	3809193.37	0.18727	466155.72
3809193.37	0.17998		
466211.70	3809193.37	0.17352	466267.68
3809193.37	0.16741		
466323.66	3809193.37	0.16146	466379.64
3809193.37	0.15577		
466435.62	3809193.37	0.15020	466491.60
3809193.37	0.14500		

466547.58	3809193.37	0.14007	466603.56
3809193.37	0.13550		
466659.54	3809193.37	0.13096	466715.52
3809193.37	0.12680		
466771.50	3809193.37	0.12269	466827.48
3809193.37	0.11889		
466883.46	3809193.37	0.11521	465763.86
3809259.59	0.23916		
465819.84	3809259.59	0.22950	465875.82
3809259.59	0.21999		
465931.80	3809259.59	0.21102	465987.78
3809259.59	0.20186		
466043.76	3809259.59	0.19324	466099.74
3809259.59	0.18536		
466155.72	3809259.59	0.17873	466211.70
3809259.59	0.17245		
466267.68	3809259.59	0.16648	466323.66
3809259.59	0.16039		
466379.64	3809259.59	0.15479	466435.62
3809259.59	0.14951		
466491.60	3809259.59	0.14434	466547.58
3809259.59	0.13963		
466603.56	3809259.59	0.13499	466659.54
3809259.59	0.13058		
466715.52	3809259.59	0.12656	466771.50
3809259.59	0.12250		
466827.48	3809259.59	0.11872	466883.46
3809259.59	0.11509		
464503.41	3807141.91	0.14473	464523.41
3807141.91	0.14301		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 366

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464543.41	3807141.91	0.13977	464563.41
3807141.91	0.13608		
464583.41	3807141.91	0.13436	464603.41
3807141.91	0.13142		
464623.41	3807141.91	0.12814	464643.41
3807141.91	0.12632		
464663.41	3807141.91	0.12359	464683.41
3807141.91	0.12072		
464703.41	3807141.91	0.11959	464723.41
3807141.91	0.11700		
464743.41	3807141.91	0.11378	464763.41
3807141.91	0.11129		
464783.41	3807141.91	0.10856	464803.41
3807141.91	0.10622		
464823.41	3807141.91	0.10646	464843.41
3807141.91	0.10501		
464863.41	3807141.91	0.10282	464883.41
3807141.91	0.10142		
464903.41	3807141.91	0.10183	464923.41
3807141.91	0.10472		
464503.41	3807161.91	0.14608	464523.41
3807161.91	0.14422		
464543.41	3807161.91	0.14080	464563.41
3807161.91	0.13694		
464583.41	3807161.91	0.13516	464603.41
3807161.91	0.13335		
464623.41	3807161.91	0.13127	464643.41
3807161.91	0.12760		
464663.41	3807161.91	0.12559	464683.41
3807161.91	0.12418		
464703.41	3807161.91	0.12098	464723.41
3807161.91	0.11764		
464743.41	3807161.91	0.11484	464763.41
3807161.91	0.11487		
464783.41	3807161.91	0.11294	464803.41
3807161.91	0.11026		
464823.41	3807161.91	0.10818	464843.41
3807161.91	0.10592		
464863.41	3807161.91	0.10425	464883.41
3807161.91	0.10565		
464903.41	3807161.91	0.10527	464923.41

3807161.91	0.10644		
464503.41	3807181.91	0.14895	464523.41
3807181.91	0.14579		
464543.41	3807181.91	0.14266	464563.41
3807181.91	0.13954		
464583.41	3807181.91	0.13640	464603.41
3807181.91	0.13433		
464623.41	3807181.91	0.13252	464643.41
3807181.91	0.12838		
464663.41	3807181.91	0.12653	464683.41
3807181.91	0.12550		
464703.41	3807181.91	0.12182	464723.41
3807181.91	0.11962		
464743.41	3807181.91	0.11822	464763.41
3807181.91	0.11697		
464783.41	3807181.91	0.11463	464803.41
3807181.91	0.11224		
464823.41	3807181.91	0.11183	464843.41
3807181.91	0.11018		
464863.41	3807181.91	0.10826	464883.41
3807181.91	0.10825		
464903.41	3807181.91	0.11249	464923.41
3807181.91	0.11470		
464503.41	3807201.91	0.15175	464523.41
3807201.91	0.14726		
464543.41	3807201.91	0.14443	464563.41
3807201.91	0.14217		
464583.41	3807201.91	0.13819	464603.41
3807201.91	0.13554		
464623.41	3807201.91	0.13333	464643.41
3807201.91	0.12975		
464663.41	3807201.91	0.12776	464683.41
3807201.91	0.12634		
464703.41	3807201.91	0.12337	464723.41
3807201.91	0.12223		
464743.41	3807201.91	0.12160	464763.41
3807201.91	0.11849		
464783.41	3807201.91	0.11614	464803.41
3807201.91	0.11468		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

PAGE 367

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102

```

, L0006103      , L0006104      , L0006105      ,
                  L0006106      , L0006107      , L0006108      , L0006109      , L0006110
, L0006111      , L0006112      , L0006113      ,
                  L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
                  L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	0.11564	464843.41
3807201.91	0.11723		
464863.41	3807201.91	0.11778	464883.41
3807201.91	0.11563		
464903.41	3807201.91	0.11798	464923.41
3807201.91	0.12295		
464503.41	3807221.91	0.15302	464523.41
3807221.91	0.14831		
464543.41	3807221.91	0.14536	464563.41
3807221.91	0.14338		
464583.41	3807221.91	0.14136	464603.41
3807221.91	0.13801		
464623.41	3807221.91	0.13444	464643.41
3807221.91	0.13319		
464663.41	3807221.91	0.13049	464683.41
3807221.91	0.12756		
464703.41	3807221.91	0.12731	464723.41
3807221.91	0.12539		
464743.41	3807221.91	0.12256	464763.41
3807221.91	0.11948		
464783.41	3807221.91	0.11914	464803.41
3807221.91	0.11982		
464823.41	3807221.91	0.12012	464843.41
3807221.91	0.12276		
464863.41	3807221.91	0.12787	464883.41
3807221.91	0.12562		
464903.41	3807221.91	0.12400	464923.41
3807221.91	0.12513		
464503.41	3807241.91	0.15446	464523.41
3807241.91	0.15099		
464543.41	3807241.91	0.14749	464563.41
3807241.91	0.14427		

464583.41	3807241.91	0.14267	464603.41
3807241.91	0.13914		
464623.41	3807241.91	0.13523	464643.41
3807241.91	0.13454		
464663.41	3807241.91	0.13311	464683.41
3807241.91	0.13130		
464703.41	3807241.91	0.12966	464723.41
3807241.91	0.12685		
464743.41	3807241.91	0.12399	464763.41
3807241.91	0.12330		
464783.41	3807241.91	0.12276	464803.41
3807241.91	0.12466		
464823.41	3807241.91	0.12681	464843.41
3807241.91	0.13102		
464863.41	3807241.91	0.13047	464883.41
3807241.91	0.12825		
464903.41	3807241.91	0.13182	464923.41
3807241.91	0.13396		
464503.41	3807261.91	0.15583	464523.41
3807261.91	0.15363		
464543.41	3807261.91	0.14957	464563.41
3807261.91	0.14510		
464583.41	3807261.91	0.14350	464603.41
3807261.91	0.14041		
464623.41	3807261.91	0.13696	464643.41
3807261.91	0.13562		
464663.41	3807261.91	0.13533	464683.41
3807261.91	0.13505		
464703.41	3807261.91	0.13138	464723.41
3807261.91	0.12854		
464743.41	3807261.91	0.12670	464763.41
3807261.91	0.12750		
464783.41	3807261.91	0.12900	464803.41
3807261.91	0.13005		
464823.41	3807261.91	0.13576	464843.41
3807261.91	0.13736		
464863.41	3807261.91	0.13785	464883.41
3807261.91	0.13557		
464903.41	3807261.91	0.14046	464923.41
3807261.91	0.14951		
464503.41	3807281.91	0.15693	464523.41
3807281.91	0.15466		
464543.41	3807281.91	0.15049	464563.41
3807281.91	0.14591		
464583.41	3807281.91	0.14434	464603.41
3807281.91	0.14290		
464623.41	3807281.91	0.14121	464643.41
3807281.91	0.13742		

▲ *** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 368

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464663.41	3807281.91	0.13634	464683.41
3807281.91	0.13616		
464703.41	3807281.91	0.13252	464723.41
3807281.91	0.13187		
464743.41	3807281.91	0.13235	464763.41
3807281.91	0.13245		
464783.41	3807281.91	0.13511	464803.41
3807281.91	0.14061		
464823.41	3807281.91	0.13863	464843.41
3807281.91	0.14353		
464863.41	3807281.91	0.15277	464883.41
3807281.91	0.15028		
464903.41	3807281.91	0.15664	464923.41
3807281.91	0.16323		
464503.41	3807301.91	0.16015	464523.41
3807301.91	0.15624		
464543.41	3807301.91	0.15258	464563.41
3807301.91	0.14914		
464583.41	3807301.91	0.14585	464603.41
3807301.91	0.14417		
464623.41	3807301.91	0.14294	464643.41
3807301.91	0.13860		
464663.41	3807301.91	0.13742	464683.41

3807301.91	0.13736		
464703.41	3807301.91	0.13375	464723.41
3807301.91	0.13366		
464743.41	3807301.91	0.13771	464763.41
3807301.91	0.13982		
464783.41	3807301.91	0.14420	464803.41
3807301.91	0.14337		
464823.41	3807301.91	0.14075	464843.41
3807301.91	0.14817		
464863.41	3807301.91	0.16044	464883.41
3807301.91	0.16203		
464903.41	3807301.91	0.16546	464923.41
3807301.91	0.16832		
464503.41	3807321.91	0.16333	464523.41
3807321.91	0.15774		
464543.41	3807321.91	0.15463	464563.41
3807321.91	0.15240		
464583.41	3807321.91	0.14732	464603.41
3807321.91	0.14513		
464623.41	3807321.91	0.14400	464643.41
3807321.91	0.13966		
464663.41	3807321.91	0.13858	464683.41
3807321.91	0.13881		
464703.41	3807321.91	0.13619	464723.41
3807321.91	0.13597		
464743.41	3807321.91	0.13975	464763.41
3807321.91	0.14938		
464783.41	3807321.91	0.14813	464803.41
3807321.91	0.14784		
464823.41	3807321.91	0.14617	464843.41
3807321.91	0.15398		
464863.41	3807321.91	0.16633	464883.41
3807321.91	0.17101		
464903.41	3807321.91	0.17342	464923.41
3807321.91	0.17093		
464503.41	3807341.91	0.16448	464523.41
3807341.91	0.15873		
464543.41	3807341.91	0.15560	464563.41
3807341.91	0.15340		
464583.41	3807341.91	0.14827	464603.41
3807341.91	0.14616		
464623.41	3807341.91	0.14512	464643.41
3807341.91	0.14081		
464663.41	3807341.91	0.13985	464683.41
3807341.91	0.14082		
464703.41	3807341.91	0.14185	464723.41
3807341.91	0.14060		
464743.41	3807341.91	0.14153	464763.41
3807341.91	0.15138		
464783.41	3807341.91	0.15021	464803.41

```

3807341.91      0.15059
      464823.41      3807341.91      0.15917      464843.41
3807341.91      0.17173
      464863.41      3807341.91      0.17883      464883.41
3807341.91      0.17860
      464903.41      3807341.91      0.17603      464923.41
3807341.91      0.17597
▲ *** AERMOD - VERSION 19191 ***      *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***      16:42:19

```

PAGE 369

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
      INCLUDING SOURCE(S):      L0006101      , L0006102
, L0006103      , L0006104      , L0006105      ,
      L0006106      , L0006107      , L0006108      , L0006109      , L0006110
, L0006111      , L0006112      , L0006113      ,
      L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
      L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464503.41	3807361.91	0.16593	464523.41
3807361.91	0.16203		
464543.41	3807361.91	0.15829	464563.41
3807361.91	0.15444		
464583.41	3807361.91	0.14928	464603.41
3807361.91	0.14725		
464623.41	3807361.91	0.14676	464643.41
3807361.91	0.14494		
464663.41	3807361.91	0.14336	464683.41
3807361.91	0.14245		
464703.41	3807361.91	0.14439	464723.41
3807361.91	0.15023		
464743.41	3807361.91	0.15243	464763.41
3807361.91	0.15450		

464783.41	3807361.91	0.15917	464803.41
3807361.91	0.16418		
464823.41	3807361.91	0.17728	464843.41
3807361.91	0.18148		
464863.41	3807361.91	0.18439	464883.41
3807361.91	0.18151		
464903.41	3807361.91	0.18421	464923.41
3807361.91	0.20427		
464503.41	3807381.91	0.16839	464523.41
3807381.91	0.16560		
464543.41	3807381.91	0.16100	464563.41
3807381.91	0.15567		
464583.41	3807381.91	0.15133	464603.41
3807381.91	0.14918		
464623.41	3807381.91	0.14845	464643.41
3807381.91	0.14919		
464663.41	3807381.91	0.14766	464683.41
3807381.91	0.14559		
464703.41	3807381.91	0.14660	464723.41
3807381.91	0.15673		
464743.41	3807381.91	0.16345	464763.41
3807381.91	0.16138		
464783.41	3807381.91	0.16657	464803.41
3807381.91	0.17945		
464823.41	3807381.91	0.18763	464843.41
3807381.91	0.19030		
464863.41	3807381.91	0.18737	464883.41
3807381.91	0.18733		
464903.41	3807381.91	0.20822	464923.41
3807381.91	0.22229		
464503.41	3807401.91	0.17326	464523.41
3807401.91	0.16779		
464543.41	3807401.91	0.16219	464563.41
3807401.91	0.15737		
464583.41	3807401.91	0.15617	464603.41
3807401.91	0.15312		
464623.41	3807401.91	0.14992	464643.41
3807401.91	0.15085		
464663.41	3807401.91	0.15194	464683.41
3807401.91	0.15258		
464703.41	3807401.91	0.15271	464723.41
3807401.91	0.15900		
464743.41	3807401.91	0.16659	464763.41
3807401.91	0.17576		
464783.41	3807401.91	0.18181	464803.41
3807401.91	0.18228		
464823.41	3807401.91	0.19059	464843.41
3807401.91	0.19330		
464863.41	3807401.91	0.19302	464883.41
3807401.91	0.21746		

464903.41	3807401.91	0.21941	464923.41
3807401.91	0.22572		
464503.41	3807421.91	0.17542	464523.41
3807421.91	0.16928		
464543.41	3807421.91	0.16511	464563.41
3807421.91	0.16202		
464583.41	3807421.91	0.15922	464603.41
3807421.91	0.15699		
464623.41	3807421.91	0.15519	464643.41
3807421.91	0.15364		
464663.41	3807421.91	0.15446	464683.41
3807421.91	0.15920		
464703.41	3807421.91	0.16167	464723.41
3807421.91	0.16668		
464743.41	3807421.91	0.16930	464763.41
3807421.91	0.18189		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 370

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464783.41	3807421.91	0.19181	464803.41
3807421.91	0.19323		
464823.41	3807421.91	0.19675	464843.41
3807421.91	0.20240		
464863.41	3807421.91	0.22412	464883.41

3807421.91	0.22385		
464903.41	3807421.91	0.23788	464923.41
3807421.91	0.23671		
464503.41	3807441.91	0.17698	464523.41
3807441.91	0.17171		
464543.41	3807441.91	0.16886	464563.41
3807441.91	0.16688		
464583.41	3807441.91	0.16277	464603.41
3807441.91	0.16131		
464623.41	3807441.91	0.16077	464643.41
3807441.91	0.15778		
464663.41	3807441.91	0.15762	464683.41
3807441.91	0.16205		
464703.41	3807441.91	0.17313	464723.41
3807441.91	0.17520		
464743.41	3807441.91	0.17630	464763.41
3807441.91	0.18522		
464783.41	3807441.91	0.19891	464803.41
3807441.91	0.20637		
464823.41	3807441.91	0.20295	464843.41
3807441.91	0.22849		
464863.41	3807441.91	0.24404	464883.41
3807441.91	0.24010		
464903.41	3807441.91	0.24416	464923.41
3807441.91	0.24037		
464503.41	3807461.91	0.17907	464523.41
3807461.91	0.17724		
464543.41	3807461.91	0.17337	464563.41
3807461.91	0.16926		
464583.41	3807461.91	0.16904	464603.41
3807461.91	0.16649		
464623.41	3807461.91	0.16361	464643.41
3807461.91	0.16491		
464663.41	3807461.91	0.16353	464683.41
3807461.91	0.16463		
464703.41	3807461.91	0.17596	464723.41
3807461.91	0.18356		
464743.41	3807461.91	0.19489	464763.41
3807461.91	0.19467		
464783.41	3807461.91	0.20226	464803.41
3807461.91	0.20982		
464823.41	3807461.91	0.20636	464843.41
3807461.91	0.23217		
464863.41	3807461.91	0.24790	464883.41
3807461.91	0.24386		
464903.41	3807461.91	0.24794	464923.41
3807461.91	0.24404		
464503.41	3807481.91	0.18075	464523.41
3807481.91	0.17980		
464543.41	3807481.91	0.17781	464563.41

3807481.91	0.17532		
464583.41	3807481.91	0.17313	464603.41
3807481.91	0.17159		
464623.41	3807481.91	0.17050	464643.41
3807481.91	0.16963		
464663.41	3807481.91	0.17521	464683.41
3807481.91	0.17774		
464703.41	3807481.91	0.18011	464723.41
3807481.91	0.19002		
464743.41	3807481.91	0.20185	464763.41
3807481.91	0.19831		
464783.41	3807481.91	0.20576	464803.41
3807481.91	0.21340		
464823.41	3807481.91	0.20991	464843.41
3807481.91	0.23596		
464863.41	3807481.91	0.25193	464883.41
3807481.91	0.25598		
464903.41	3807481.91	0.25184	464923.41
3807481.91	0.24780		
464503.41	3807501.91	0.18408	464523.41
3807501.91	0.18342		
464543.41	3807501.91	0.18276	464563.41
3807501.91	0.18166		
464583.41	3807501.91	0.17787	464603.41
3807501.91	0.17726		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 371

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)

	464623.41	3807501.91	0.18087	464643.41
3807501.91		0.18119		
	464663.41	3807501.91	0.18439	464683.41
3807501.91		0.19102		
	464703.41	3807501.91	0.18859	464723.41
3807501.91		0.19444		
	464743.41	3807501.91	0.20824	464763.41
3807501.91		0.20562		
	464783.41	3807501.91	0.21023	464803.41
3807501.91		0.21727		
	464823.41	3807501.91	0.21695	464843.41
3807501.91		0.24024		
	464863.41	3807501.91	0.25604	464883.41
3807501.91		0.26009		
	464903.41	3807501.91	0.25581	464923.41
3807501.91		0.25162		
	464503.41	3807521.91	0.19179	464523.41
3807521.91		0.19178		
	464543.41	3807521.91	0.18869	464563.41
3807521.91		0.18497		
	464583.41	3807521.91	0.18596	464603.41
3807521.91		0.18399		
	464623.41	3807521.91	0.18471	464643.41
3807521.91		0.19290		
	464663.41	3807521.91	0.19446	464683.41
3807521.91		0.19527		
	464703.41	3807521.91	0.20567	464723.41
3807521.91		0.21240		
	464743.41	3807521.91	0.21267	464763.41
3807521.91		0.21865		
	464783.41	3807521.91	0.22428	464803.41
3807521.91		0.22415		
	464823.41	3807521.91	0.25152	464843.41
3807521.91		0.25337		
	464863.41	3807521.91	0.26018	464883.41
3807521.91		0.26422		
	464903.41	3807521.91	0.25981	464923.41
3807521.91		0.25549		
	464503.41	3807541.91	0.19984	464523.41
3807541.91		0.19682		
	464543.41	3807541.91	0.19456	464563.41
3807541.91		0.19283		
	464583.41	3807541.91	0.19138	464603.41
3807541.91		0.19718		
	464623.41	3807541.91	0.19960	464643.41
3807541.91		0.20184		

464663.41	3807541.91	0.20735	464683.41
3807541.91	0.20962		
464703.41	3807541.91	0.21727	464723.41
3807541.91	0.22445		
464743.41	3807541.91	0.22583	464763.41
3807541.91	0.22953		
464783.41	3807541.91	0.22885	464803.41
3807541.91	0.22826		
464823.41	3807541.91	0.25886	464843.41
3807541.91	0.27489		
464863.41	3807541.91	0.27308	464883.41
3807541.91	0.26844		
464903.41	3807541.91	0.26392	464923.41
3807541.91	0.25950		
464503.41	3807561.91	0.20715	464523.41
3807561.91	0.20231		
464543.41	3807561.91	0.20108	464563.41
3807561.91	0.20461		
464583.41	3807561.91	0.20449	464603.41
3807561.91	0.20762		
464623.41	3807561.91	0.21461	464643.41
3807561.91	0.21149		
464663.41	3807561.91	0.21763	464683.41
3807561.91	0.23258		
464703.41	3807561.91	0.22931	464723.41
3807561.91	0.23408		
464743.41	3807561.91	0.24138	464763.41
3807561.91	0.23714		
464783.41	3807561.91	0.23629	464803.41
3807561.91	0.23873		
464823.41	3807561.91	0.26339	464843.41
3807561.91	0.28244		
464863.41	3807561.91	0.27758	464883.41
3807561.91	0.27274		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 372

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,

L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464903.41	3807561.91	0.26809	464923.41
3807561.91	0.26356		
464503.41	3807581.91	0.21108	464523.41
3807581.91	0.21159		
464543.41	3807581.91	0.20882	464563.41
3807581.91	0.20911		
464583.41	3807581.91	0.21781	464603.41
3807581.91	0.21910		
464623.41	3807581.91	0.21957	464643.41
3807581.91	0.23076		
464663.41	3807581.91	0.23784	464683.41
3807581.91	0.23775		
464703.41	3807581.91	0.24402	464723.41
3807581.91	0.24989		
464743.41	3807581.91	0.24592	464763.41
3807581.91	0.24161		
464783.41	3807581.91	0.24798	464803.41
3807581.91	0.27292		
464823.41	3807581.91	0.27120	464843.41
3807581.91	0.28709		
464863.41	3807581.91	0.28208	464883.41
3807581.91	0.27709		
464903.41	3807581.91	0.27230	464923.41
3807581.91	0.26764		
464503.41	3807601.91	0.22101	464523.41
3807601.91	0.23080		
464543.41	3807601.91	0.23119	464563.41
3807601.91	0.22606		
464583.41	3807601.91	0.22807	464603.41
3807601.91	0.23376		
464623.41	3807601.91	0.23586	464643.41
3807601.91	0.24395		
464663.41	3807601.91	0.25152	464683.41
3807601.91	0.25265		
464703.41	3807601.91	0.25637	464723.41
3807601.91	0.25523		
464743.41	3807601.91	0.25384	464763.41

3807601.91	0.28027		
464783.41	3807601.91	0.27936	464803.41
3807601.91	0.29313		
464823.41	3807601.91	0.29724	464843.41
3807601.91	0.29189		
464863.41	3807601.91	0.28667	464883.41
3807601.91	0.28158		
464903.41	3807601.91	0.27661	464923.41
3807601.91	0.27175		
464503.41	3807621.91	0.24124	464523.41
3807621.91	0.24929		
464543.41	3807621.91	0.24520	464563.41
3807621.91	0.24319		
464583.41	3807621.91	0.23916	464603.41
3807621.91	0.24555		
464623.41	3807621.91	0.26178	464643.41
3807621.91	0.25768		
464663.41	3807621.91	0.26255	464683.41
3807621.91	0.27024		
464703.41	3807621.91	0.26511	464723.41
3807621.91	0.26376		
464743.41	3807621.91	0.26609	464763.41
3807621.91	0.29307		
464783.41	3807621.91	0.30390	464803.41
3807621.91	0.30473		
464823.41	3807621.91	0.30233	464843.41
3807621.91	0.29679		
464863.41	3807621.91	0.29137	464883.41
3807621.91	0.28614		
464903.41	3807621.91	0.28099	464923.41
3807621.91	0.27595		
464503.41	3807641.91	0.26168	464523.41
3807641.91	0.25599		
464543.41	3807641.91	0.25001	464563.41
3807641.91	0.24906		
464583.41	3807641.91	0.26110	464603.41
3807641.91	0.26850		
464623.41	3807641.91	0.26789	464643.41
3807641.91	0.27444		
464663.41	3807641.91	0.28049	464683.41
3807641.91	0.27562		
464703.41	3807641.91	0.27039	464723.41
3807641.91	0.27706		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3
**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
464743.41	3807641.91	0.30437	464763.41
3807641.91	0.30205		
464783.41	3807641.91	0.31935	464803.41
3807641.91	0.31337		
464823.41	3807641.91	0.30745	464843.41
3807641.91	0.30175		
464863.41	3807641.91	0.29620	464883.41
3807641.91	0.29071		
464903.41	3807641.91	0.28541	464923.41
3807641.91	0.28022		
464503.41	3807661.91	0.28773	464523.41
3807661.91	0.28035		
464543.41	3807661.91	0.27348	464563.41
3807661.91	0.26773		
464583.41	3807661.91	0.27626	464603.41
3807661.91	0.28419		
464623.41	3807661.91	0.28493	464643.41
3807661.91	0.28858		
464663.41	3807661.91	0.29516	464683.41
3807661.91	0.32071		
464703.41	3807661.91	0.31431	464723.41
3807661.91	0.31231		
464743.41	3807661.91	0.32726	464763.41
3807661.91	0.33142		
464783.41	3807661.91	0.32502	464803.41
3807661.91	0.31879		
464823.41	3807661.91	0.31272	464843.41
3807661.91	0.30680		

464863.41	3807661.91	0.30102	464883.41
3807661.91	0.29539		
464903.41	3807661.91	0.28988	464923.41
3807661.91	0.28451		
464503.41	3807681.91	0.32222	464523.41
3807681.91	0.31408		
464543.41	3807681.91	0.30645	464563.41
3807681.91	0.29931		
464583.41	3807681.91	0.29261	464603.41
3807681.91	0.29696		
464623.41	3807681.91	0.30520	464643.41
3807681.91	0.30333		
464663.41	3807681.91	0.33392	464683.41
3807681.91	0.35433		
464703.41	3807681.91	0.35095	464723.41
3807681.91	0.34386		
464743.41	3807681.91	0.34057	464763.41
3807681.91	0.33744		
464783.41	3807681.91	0.33079	464803.41
3807681.91	0.32430		
464823.41	3807681.91	0.31806	464843.41
3807681.91	0.31192		
464863.41	3807681.91	0.30592	464883.41
3807681.91	0.30011		
464903.41	3807681.91	0.29441	464923.41
3807681.91	0.28884		
464523.41	3807701.91	0.34389	464543.41
3807701.91	0.33558		
464563.41	3807701.91	0.32776	464583.41
3807701.91	0.32037		
464603.41	3807701.91	0.31753	464623.41
3807701.91	0.31578		
464643.41	3807701.91	0.35219	464663.41
3807701.91	0.35325		
464683.41	3807701.91	0.36128	464703.41
3807701.91	0.36553		
464723.41	3807701.91	0.35799	464743.41
3807701.91	0.35062		
464763.41	3807701.91	0.34349	464783.41
3807701.91	0.33664		
464803.41	3807701.91	0.32999	464823.41
3807701.91	0.32343		
464843.41	3807701.91	0.31709	464863.41
3807701.91	0.31092		
464883.41	3807701.91	0.30485	464903.41
3807701.91	0.29897		
464923.41	3807701.91	0.29322	464543.41
3807721.91	0.36278		
464563.41	3807721.91	0.34000	464583.41
3807721.91	0.33234		

464603.41 3807721.91 0.32508 464623.41
 3807721.91 0.32265
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 374

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464643.41	3807721.91	0.36361	464663.41
3807721.91	0.38460		
464683.41	3807721.91	0.38051	464703.41
3807721.91	0.37250		
464723.41	3807721.91	0.36466	464743.41
3807721.91	0.35704		
464763.41	3807721.91	0.34973	464783.41
3807721.91	0.34260		
464803.41	3807721.91	0.33567	464823.41
3807721.91	0.32892		
464843.41	3807721.91	0.32234	464863.41
3807721.91	0.31593		
464883.41	3807721.91	0.30968	464903.41
3807721.91	0.30358		
464923.41	3807721.91	0.29763	464943.41
3807721.91	0.29182		
464963.41	3807721.91	0.28613	464983.41
3807721.91	0.28059		
465003.41	3807721.91	0.27516	465023.41

3807721.91	0.26988		
465043.41	3807721.91	0.26472	465063.41
3807721.91	0.25969		
465083.41	3807721.91	0.25479	465103.41
3807721.91	0.25003		
465123.41	3807721.91	0.24546	465143.41
3807721.91	0.24094		
465163.41	3807721.91	0.23652	465183.41
3807721.91	0.23229		
465203.41	3807721.91	0.22811	465223.41
3807721.91	0.22401		
465243.41	3807721.91	0.22000	465263.41
3807721.91	0.21610		
465283.41	3807721.91	0.21231	465303.41
3807721.91	0.20869		
465323.41	3807721.91	0.20510	465343.41
3807721.91	0.20159		
465363.41	3807721.91	0.19824	465383.41
3807721.91	0.19492		
464543.41	3807741.91	0.44052	464563.41
3807741.91	0.36275		
464583.41	3807741.91	0.34947	464603.41
3807741.91	0.34137		
464623.41	3807741.91	0.33858	464643.41
3807741.91	0.37582		
464663.41	3807741.91	0.39653	464683.41
3807741.91	0.38800		
464703.41	3807741.91	0.37959	464723.41
3807741.91	0.37146		
464743.41	3807741.91	0.36360	464763.41
3807741.91	0.35606		
464783.41	3807741.91	0.34866	464803.41
3807741.91	0.34145		
464823.41	3807741.91	0.33448	464843.41
3807741.91	0.32764		
464863.41	3807741.91	0.32099	464883.41
3807741.91	0.31454		
464903.41	3807741.91	0.30823	464923.41
3807741.91	0.30209		
464943.41	3807741.91	0.29605	464963.41
3807741.91	0.29020		
464983.41	3807741.91	0.28452	465003.41
3807741.91	0.27886		
465023.41	3807741.91	0.27342	465043.41
3807741.91	0.26816		
465063.41	3807741.91	0.26293	465083.41
3807741.91	0.25794		
465103.41	3807741.91	0.25313	465123.41
3807741.91	0.24841		
465143.41	3807741.91	0.24373	465163.41

3807741.91	0.23916		
465183.41	3807741.91	0.23480	465203.41
3807741.91	0.23058		
465223.41	3807741.91	0.22645	465243.41
3807741.91	0.22231		
465263.41	3807741.91	0.21837	465283.41
3807741.91	0.21459		
465303.41	3807741.91	0.21086	465323.41
3807741.91	0.20716		
465343.41	3807741.91	0.20353	465363.41
3807741.91	0.20009		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 375

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465383.41	3807741.91	0.19677	464543.41
3807761.91	0.46590		
464563.41	3807761.91	0.45430	464583.41
3807761.91	0.42901		
464603.41	3807761.91	0.39658	464623.41
3807761.91	0.39226		
464643.41	3807761.91	0.41370	464663.41
3807761.91	0.40450		
464683.41	3807761.91	0.39551	464703.41
3807761.91	0.38678		

464723.41	3807761.91	0.37845	464743.41
3807761.91	0.37038		
464763.41	3807761.91	0.36244	464783.41
3807761.91	0.35479		
464803.41	3807761.91	0.34736	464823.41
3807761.91	0.34007		
464843.41	3807761.91	0.33299	464863.41
3807761.91	0.32611		
464883.41	3807761.91	0.31945	464903.41
3807761.91	0.31294		
464923.41	3807761.91	0.30661	464943.41
3807761.91	0.30038		
464963.41	3807761.91	0.29435	464983.41
3807761.91	0.28850		
465003.41	3807761.91	0.28268	465023.41
3807761.91	0.27701		
465043.41	3807761.91	0.27152	465063.41
3807761.91	0.26629		
465083.41	3807761.91	0.26121	465103.41
3807761.91	0.25625		
465123.41	3807761.91	0.25129	465143.41
3807761.91	0.24655		
465163.41	3807761.91	0.24196	465183.41
3807761.91	0.23736		
465203.41	3807761.91	0.23301	465223.41
3807761.91	0.22883		
465243.41	3807761.91	0.22474	465263.41
3807761.91	0.22077		
465283.41	3807761.91	0.21689	465303.41
3807761.91	0.21297		
465323.41	3807761.91	0.20925	465343.41
3807761.91	0.20564		
465363.41	3807761.91	0.20201	465383.41
3807761.91	0.19859		
464543.41	3807781.91	0.47671	464563.41
3807781.91	0.46495		
464583.41	3807781.91	0.45360	464603.41
3807781.91	0.44270		
464623.41	3807781.91	0.43222	464643.41
3807781.91	0.42220		
464663.41	3807781.91	0.41261	464683.41
3807781.91	0.40336		
464703.41	3807781.91	0.39430	464723.41
3807781.91	0.38558		
464743.41	3807781.91	0.37715	464763.41
3807781.91	0.36898		
464783.41	3807781.91	0.36102	464803.41
3807781.91	0.35328		
464823.41	3807781.91	0.34574	464843.41
3807781.91	0.33843		

464863.41	3807781.91	0.33134	464883.41
3807781.91	0.32443		
464903.41	3807781.91	0.31770	464923.41
3807781.91	0.31114		
464943.41	3807781.91	0.30474	464963.41
3807781.91	0.29850		
464983.41	3807781.91	0.29243	465003.41
3807781.91	0.28653		
465023.41	3807781.91	0.28072	465043.41
3807781.91	0.27506		
465063.41	3807781.91	0.26972	465083.41
3807781.91	0.26446		
465103.41	3807781.91	0.25931	465123.41
3807781.91	0.25430		
465143.41	3807781.91	0.24943	465163.41
3807781.91	0.24468		
465183.41	3807781.91	0.24007	465203.41
3807781.91	0.23566		
465223.41	3807781.91	0.23139	465243.41
3807781.91	0.22713		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 376

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465263.41	3807781.91	0.22306	465283.41

3807781.91	0.21913		
465303.41	3807781.91	0.21522	465323.41
3807781.91	0.21140		
465343.41	3807781.91	0.20769	465363.41
3807781.91	0.20408		
465383.41	3807781.91	0.20064	464543.41
3807801.91	0.48679		
464563.41	3807801.91	0.47531	464583.41
3807801.91	0.46378		
464603.41	3807801.91	0.45250	464623.41
3807801.91	0.44153		
464643.41	3807801.91	0.43090	464663.41
3807801.91	0.42091		
464683.41	3807801.91	0.41133	464703.41
3807801.91	0.40192		
464723.41	3807801.91	0.39284	464743.41
3807801.91	0.38406		
464763.41	3807801.91	0.37560	464783.41
3807801.91	0.36733		
464803.41	3807801.91	0.35929	464823.41
3807801.91	0.35150		
464843.41	3807801.91	0.34396	464863.41
3807801.91	0.33661		
464883.41	3807801.91	0.32947	464903.41
3807801.91	0.32250		
464923.41	3807801.91	0.31569	464943.41
3807801.91	0.30913		
464963.41	3807801.91	0.30269	464983.41
3807801.91	0.29641		
465003.41	3807801.91	0.29040	465023.41
3807801.91	0.28447		
465043.41	3807801.91	0.27869	465063.41
3807801.91	0.27318		
465083.41	3807801.91	0.26773	465103.41
3807801.91	0.26242		
465123.41	3807801.91	0.25737	465143.41
3807801.91	0.25236		
465163.41	3807801.91	0.24747	465183.41
3807801.91	0.24288		
465203.41	3807801.91	0.23839	465223.41
3807801.91	0.23398		
465243.41	3807801.91	0.22959	465263.41
3807801.91	0.22543		
465283.41	3807801.91	0.22144	465303.41
3807801.91	0.21753		
465323.41	3807801.91	0.21362	465343.41
3807801.91	0.20981		
465363.41	3807801.91	0.20626	465383.41
3807801.91	0.20276		
464543.41	3807821.91	0.49644	464563.41

3807821.91	0.48473		
464583.41	3807821.91	0.47351	464603.41
3807821.91	0.46222		
464623.41	3807821.91	0.45087	464643.41
3807821.91	0.43988		
464663.41	3807821.91	0.42939	464683.41
3807821.91	0.41932		
464703.41	3807821.91	0.40956	464723.41
3807821.91	0.40021		
464743.41	3807821.91	0.39115	464763.41
3807821.91	0.38230		
464783.41	3807821.91	0.37371	464803.41
3807821.91	0.36540		
464823.41	3807821.91	0.35737	464843.41
3807821.91	0.34956		
464863.41	3807821.91	0.34196	464883.41
3807821.91	0.33453		
464903.41	3807821.91	0.32734	464923.41
3807821.91	0.32038		
464943.41	3807821.91	0.31351	464963.41
3807821.91	0.30692		
464983.41	3807821.91	0.30055	465003.41
3807821.91	0.29423		
465023.41	3807821.91	0.28820	465043.41
3807821.91	0.28238		
465063.41	3807821.91	0.27658	465083.41
3807821.91	0.27105		
465103.41	3807821.91	0.26572	465123.41
3807821.91	0.26039		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 377

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
465143.41	3807821.91	0.25533	465163.41
3807821.91	0.25049		
465183.41	3807821.91	0.24581	465203.41
3807821.91	0.24112		
465223.41	3807821.91	0.23652	465243.41
3807821.91	0.23221		
465263.41	3807821.91	0.22803	465283.41
3807821.91	0.22395		
465303.41	3807821.91	0.21981	465323.41
3807821.91	0.21590		
465343.41	3807821.91	0.21216	465363.41
3807821.91	0.20854		
465383.41	3807821.91	0.20490	464543.41
3807841.91	0.50506		
464563.41	3807841.91	0.49295	464583.41
3807841.91	0.48235		
464603.41	3807841.91	0.47156	464623.41
3807841.91	0.46040		
464643.41	3807841.91	0.44910	464663.41
3807841.91	0.43817		
464683.41	3807841.91	0.42762	464723.41
3807841.91	0.40772		
464743.41	3807841.91	0.39827	464763.41
3807841.91	0.38909		
464783.41	3807841.91	0.38023	464803.41
3807841.91	0.37165		
464823.41	3807841.91	0.36332	464843.41
3807841.91	0.35522		
464863.41	3807841.91	0.34735	464883.41
3807841.91	0.33970		
464903.41	3807841.91	0.33226	464923.41
3807841.91	0.32504		
464943.41	3807841.91	0.31804	464963.41
3807841.91	0.31124		
464983.41	3807841.91	0.30464	465003.41
3807841.91	0.29824		
465023.41	3807841.91	0.29203	465043.41
3807841.91	0.28600		
465063.41	3807841.91	0.28015	465083.41
3807841.91	0.27447		
465103.41	3807841.91	0.26895	465123.41
3807841.91	0.26361		

465143.41	3807841.91	0.25841	465163.41
3807841.91	0.25338		
465183.41	3807841.91	0.24862	465203.41
3807841.91	0.24391		
465223.41	3807841.91	0.23929	465243.41
3807841.91	0.23480		
465263.41	3807841.91	0.23052	465283.41
3807841.91	0.22639		
465303.41	3807841.91	0.22228	465323.41
3807841.91	0.21836		
465343.41	3807841.91	0.21457	465363.41
3807841.91	0.21077		
465383.41	3807841.91	0.20709	464503.41
3807861.91	0.54328		
464523.41	3807861.91	0.52773	464543.41
3807861.91	0.51358		
464563.41	3807861.91	0.50083	464583.41
3807861.91	0.49041		
464603.41	3807861.91	0.48009	464723.41
3807861.91	0.41535		
464743.41	3807861.91	0.40552	464763.41
3807861.91	0.39601		
464783.41	3807861.91	0.38686	464803.41
3807861.91	0.37798		
464823.41	3807861.91	0.36936	464843.41
3807861.91	0.36097		
464863.41	3807861.91	0.35280	464883.41
3807861.91	0.34495		
464903.41	3807861.91	0.33726	464923.41
3807861.91	0.32979		
464943.41	3807861.91	0.32265	464963.41
3807861.91	0.31564		
464983.41	3807861.91	0.30882	465003.41
3807861.91	0.30233		
465023.41	3807861.91	0.29594	465043.41
3807861.91	0.28971		
465063.41	3807861.91	0.28381	465083.41
3807861.91	0.27797		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 378

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,

```

        L0006106      , L0006107      , L0006108      , L0006109      , L0006110
, L0006111      , L0006112      , L0006113      ,
        L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
        L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465103.41	3807861.91	0.27228	465123.41
3807861.91	0.26691		
465143.41	3807861.91	0.26157	465163.41
3807861.91	0.25637		
465183.41	3807861.91	0.25147	465203.41
3807861.91	0.24674		
465223.41	3807861.91	0.24214	465243.41
3807861.91	0.23749		
465263.41	3807861.91	0.23312	465283.41
3807861.91	0.22893		
465303.41	3807861.91	0.22483	465323.41
3807861.91	0.22087		
465343.41	3807861.91	0.21701	465363.41
3807861.91	0.21309		
465383.41	3807861.91	0.20937	464503.41
3807881.91	0.55493		
464523.41	3807881.91	0.53869	464543.41
3807881.91	0.52400		
464723.41	3807881.91	0.42309	464743.41
3807881.91	0.41291		
464763.41	3807881.91	0.40306	464783.41
3807881.91	0.39360		
464803.41	3807881.91	0.38443	464823.41
3807881.91	0.37546		
464843.41	3807881.91	0.36680	464863.41
3807881.91	0.35844		
464883.41	3807881.91	0.35021	464903.41
3807881.91	0.34234		
464923.41	3807881.91	0.33476	464943.41
3807881.91	0.32726		
464963.41	3807881.91	0.32012	464983.41
3807881.91	0.31324		
465003.41	3807881.91	0.30641	465023.41

3807881.91	0.29993		
465043.41	3807881.91	0.29368	465063.41
3807881.91	0.28745		
465083.41	3807881.91	0.28155	465103.41
3807881.91	0.27588		
465123.41	3807881.91	0.27019	465143.41
3807881.91	0.26482		
465163.41	3807881.91	0.25965	465183.41
3807881.91	0.25445		
465203.41	3807881.91	0.24958	465223.41
3807881.91	0.24494		
465243.41	3807881.91	0.24039	465263.41
3807881.91	0.23601		
465283.41	3807881.91	0.23173	465303.41
3807881.91	0.22737		
465323.41	3807881.91	0.22330	465343.41
3807881.91	0.21941		
465363.41	3807881.91	0.21560	465383.41
3807881.91	0.21177		
464723.41	3807901.91	0.43108	464743.41
3807901.91	0.42046		
464763.41	3807901.91	0.41033	464783.41
3807901.91	0.40052		
464803.41	3807901.91	0.39102	464823.41
3807901.91	0.38175		
464843.41	3807901.91	0.37283	464863.41
3807901.91	0.36423		
464883.41	3807901.91	0.35573	464903.41
3807901.91	0.34757		
464923.41	3807901.91	0.33971	464943.41
3807901.91	0.33211		
464963.41	3807901.91	0.32485	464983.41
3807901.91	0.31783		
465003.41	3807901.91	0.31079	465023.41
3807901.91	0.30406		
465043.41	3807901.91	0.29760	465063.41
3807901.91	0.29135		
465083.41	3807901.91	0.28528	465103.41
3807901.91	0.27941		
465123.41	3807901.91	0.27373	465143.41
3807901.91	0.26821		
465163.41	3807901.91	0.26286	465183.41
3807901.91	0.25769		
465203.41	3807901.91	0.25277	465223.41
3807901.91	0.24802		
465243.41	3807901.91	0.24329	465263.41
3807901.91	0.23880		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 379

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465283.41	3807901.91	0.23447	465303.41
3807901.91	0.23015		
465323.41	3807901.91	0.22594	465343.41
3807901.91	0.22188		
465363.41	3807901.91	0.21805	465383.41
3807901.91	0.21425		
464723.41	3807921.91	0.43916	464743.41
3807921.91	0.42826		
464763.41	3807921.91	0.41776	464783.41
3807921.91	0.40760		
464803.41	3807921.91	0.39778	464823.41
3807921.91	0.38822		
464843.41	3807921.91	0.37901	464863.41
3807921.91	0.37013		
464883.41	3807921.91	0.36138	464903.41
3807921.91	0.35293		
464923.41	3807921.91	0.34481	464943.41
3807921.91	0.33716		
464963.41	3807921.91	0.32973	464983.41
3807921.91	0.32249		
465003.41	3807921.91	0.31528	465023.41
3807921.91	0.30833		
465043.41	3807921.91	0.30166	465063.41
3807921.91	0.29537		

465083.41	3807921.91	0.28915	465103.41
3807921.91	0.28309		
465123.41	3807921.91	0.27739	465143.41
3807921.91	0.27173		
465163.41	3807921.91	0.26622	465183.41
3807921.91	0.26104		
465203.41	3807921.91	0.25607	465223.41
3807921.91	0.25122		
465243.41	3807921.91	0.24632	465263.41
3807921.91	0.24168		
465283.41	3807921.91	0.23725	465303.41
3807921.91	0.23301		
465323.41	3807921.91	0.22873	465343.41
3807921.91	0.22453		
465363.41	3807921.91	0.22065	465383.41
3807921.91	0.21684		
464723.41	3807941.91	0.44692	464743.41
3807941.91	0.43615		
464763.41	3807941.91	0.42535	464783.41
3807941.91	0.41484		
464803.41	3807941.91	0.40462	464823.41
3807941.91	0.39485		
464843.41	3807941.91	0.38531	464863.41
3807941.91	0.37601		
464883.41	3807941.91	0.36698	464903.41
3807941.91	0.35843		
464923.41	3807941.91	0.35028	464943.41
3807941.91	0.34243		
464963.41	3807941.91	0.33468	464983.41
3807941.91	0.32709		
465003.41	3807941.91	0.31969	465023.41
3807941.91	0.31274		
465043.41	3807941.91	0.30607	465063.41
3807941.91	0.29941		
465083.41	3807941.91	0.29314	465103.41
3807941.91	0.28711		
465123.41	3807941.91	0.28106	465143.41
3807941.91	0.27537		
465163.41	3807941.91	0.26991	465183.41
3807941.91	0.26440		
465203.41	3807941.91	0.25927	465223.41
3807941.91	0.25438		
465243.41	3807941.91	0.24961	465263.41
3807941.91	0.24482		
465283.41	3807941.91	0.24014	465303.41
3807941.91	0.23583		
465323.41	3807941.91	0.23162	465343.41
3807941.91	0.22752		
465363.41	3807941.91	0.22358	465383.41
3807941.91	0.21957		

465403.41	3807941.91	0.21563	465423.41
3807941.91	0.21198		
465443.41	3807941.91	0.20846	465463.41
3807941.91	0.20509		
465483.41	3807941.91	0.20172	465503.41
3807941.91	0.19847		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 380

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102

, L0006103	, L0006104	, L0006105	,
	L0006106	, L0006107	, L0006108
, L0006111	, L0006112	, L0006113	,
	L0006114	, L0006115	, L0006116
, L0006119	, L0006120	, L0006121	,
	L0006122	, L0006123	, L0006124
, L0006127	, L0006128	, . . .	,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465523.41	3807941.91	0.19528	465543.41
3807941.91	0.19199		
465563.41	3807941.91	0.18891	465583.41
3807941.91	0.18597		
465603.41	3807941.91	0.18314	465623.41
3807941.91	0.18023		
465643.41	3807941.91	0.17737	465663.41
3807941.91	0.17471		
465683.41	3807941.91	0.17201	465703.41
3807941.91	0.16935		
464723.41	3807961.91	0.45407	464743.41
3807961.91	0.44379		
464763.41	3807961.91	0.43304	464783.41
3807961.91	0.42226		
464803.41	3807961.91	0.41174	464823.41

3807961.91	0.40157		
464843.41	3807961.91	0.39178	464863.41
3807961.91	0.38231		
464883.41	3807961.91	0.37303	464903.41
3807961.91	0.36428		
464923.41	3807961.91	0.35592	464943.41
3807961.91	0.34771		
464963.41	3807961.91	0.33980	464983.41
3807961.91	0.33213		
465003.41	3807961.91	0.32456	465023.41
3807961.91	0.31749		
465043.41	3807961.91	0.31071	465063.41
3807961.91	0.30385		
465083.41	3807961.91	0.29733	465103.41
3807961.91	0.29109		
465123.41	3807961.91	0.28506	465143.41
3807961.91	0.27921		
465163.41	3807961.91	0.27355	465183.41
3807961.91	0.26808		
465203.41	3807961.91	0.26277	465223.41
3807961.91	0.25765		
465243.41	3807961.91	0.25284	465263.41
3807961.91	0.24807		
465283.41	3807961.91	0.24342	465303.41
3807961.91	0.23904		
465323.41	3807961.91	0.23467	465343.41
3807961.91	0.23040		
465363.41	3807961.91	0.22639	465383.41
3807961.91	0.22240		
465403.41	3807961.91	0.21848	465423.41
3807961.91	0.21465		
465443.41	3807961.91	0.21103	465463.41
3807961.91	0.20776		
465483.41	3807961.91	0.20423	465503.41
3807961.91	0.20089		
465523.41	3807961.91	0.19767	465543.41
3807961.91	0.19443		
465563.41	3807961.91	0.19135	465583.41
3807961.91	0.18837		
465603.41	3807961.91	0.18536	465623.41
3807961.91	0.18243		
465643.41	3807961.91	0.17958	465663.41
3807961.91	0.17679		
465683.41	3807961.91	0.17408	465703.41
3807961.91	0.17145		
464743.41	3807981.91	0.45125	464763.41
3807981.91	0.44067		
464783.41	3807981.91	0.42981	464803.41
3807981.91	0.41908		
464823.41	3807981.91	0.40846	464843.41

3807981.91	0.39842		
464863.41	3807981.91	0.38881	464883.41
3807981.91	0.37927		
464903.41	3807981.91	0.37029	464923.41
3807981.91	0.36171		
464943.41	3807981.91	0.35320	464963.41
3807981.91	0.34512		
464983.41	3807981.91	0.33737	465003.41
3807981.91	0.32970		
465023.41	3807981.91	0.32244	465043.41
3807981.91	0.31546		
465063.41	3807981.91	0.30854	465083.41
3807981.91	0.30178		
465103.41	3807981.91	0.29528	465123.41
3807981.91	0.28931		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 381

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807981.91	0.28329	465163.41
3807981.91	0.27738		
465183.41	3807981.91	0.27191	465203.41
3807981.91	0.26646		
465223.41	3807981.91	0.26116	465243.41
3807981.91	0.25627		

465263.41	3807981.91	0.25153	465283.41
3807981.91	0.24692		
465303.41	3807981.91	0.24239	465323.41
3807981.91	0.23786		
465343.41	3807981.91	0.23343	465363.41
3807981.91	0.22929		
465383.41	3807981.91	0.22531	465403.41
3807981.91	0.22143		
465423.41	3807981.91	0.21744	465443.41
3807981.91	0.21373		
465463.41	3807981.91	0.21052	465483.41
3807981.91	0.20685		
465503.41	3807981.91	0.20344	465523.41
3807981.91	0.20018		
465543.41	3807981.91	0.19696	465563.41
3807981.91	0.19385		
465583.41	3807981.91	0.19081	465603.41
3807981.91	0.18767		
465623.41	3807981.91	0.18472	465643.41
3807981.91	0.18187		
465663.41	3807981.91	0.17896	465683.41
3807981.91	0.17626		
465703.41	3807981.91	0.17368	464763.41
3808001.91	0.44807		
464783.41	3808001.91	0.43732	464803.41
3808001.91	0.42650		
464823.41	3808001.91	0.41552	464843.41
3808001.91	0.40521		
464863.41	3808001.91	0.39533	464883.41
3808001.91	0.38550		
464903.41	3808001.91	0.37630	464923.41
3808001.91	0.36755		
464943.41	3808001.91	0.35908	464963.41
3808001.91	0.35072		
464983.41	3808001.91	0.34261	465003.41
3808001.91	0.33502		
465023.41	3808001.91	0.32750	465043.41
3808001.91	0.32020		
465063.41	3808001.91	0.31338	465083.41
3808001.91	0.30656		
465103.41	3808001.91	0.29993	465123.41
3808001.91	0.29384		
465143.41	3808001.91	0.28769	465163.41
3808001.91	0.28161		
465183.41	3808001.91	0.27576	465203.41
3808001.91	0.27030		
465223.41	3808001.91	0.26512	465243.41
3808001.91	0.26013		
465263.41	3808001.91	0.25530	465283.41
3808001.91	0.25056		

465303.41	3808001.91	0.24570	465323.41
3808001.91	0.24117		
465343.41	3808001.91	0.23681	465363.41
3808001.91	0.23236		
465383.41	3808001.91	0.22825	465403.41
3808001.91	0.22433		
465423.41	3808001.91	0.22049	465443.41
3808001.91	0.21679		
465463.41	3808001.91	0.21325	465483.41
3808001.91	0.20971		
465503.41	3808001.91	0.20630	465523.41
3808001.91	0.20294		
465543.41	3808001.91	0.19948	465563.41
3808001.91	0.19626		
465583.41	3808001.91	0.19320	465603.41
3808001.91	0.19019		
465623.41	3808001.91	0.18712	465643.41
3808001.91	0.18411		
465663.41	3808001.91	0.18132	465683.41
3808001.91	0.17862		
465703.41	3808001.91	0.17596	464763.41
3808021.91	0.45469		
464783.41	3808021.91	0.44410	464803.41
3808021.91	0.43352		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 382

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

Y-COORD (M)	CONC		
464823.41	3808021.91	0.42267	464843.41
3808021.91	0.41223		
464863.41	3808021.91	0.40214	464883.41
3808021.91	0.39226		
464903.41	3808021.91	0.38274	464923.41
3808021.91	0.37359		
464943.41	3808021.91	0.36498	464963.41
3808021.91	0.35654		
464983.41	3808021.91	0.34834	465003.41
3808021.91	0.34041		
465023.41	3808021.91	0.33278	465043.41
3808021.91	0.32542		
465063.41	3808021.91	0.31829	465083.41
3808021.91	0.31141		
465103.41	3808021.91	0.30478	465123.41
3808021.91	0.29834		
465143.41	3808021.91	0.29213	465163.41
3808021.91	0.28610		
465183.41	3808021.91	0.28007	465203.41
3808021.91	0.27452		
465223.41	3808021.91	0.26923	465243.41
3808021.91	0.26394		
465263.41	3808021.91	0.25895	465283.41
3808021.91	0.25415		
465303.41	3808021.91	0.24934	465323.41
3808021.91	0.24467		
465343.41	3808021.91	0.24013	465363.41
3808021.91	0.23573		
465383.41	3808021.91	0.23159	465403.41
3808021.91	0.22757		
465423.41	3808021.91	0.22353	465443.41
3808021.91	0.21971		
465463.41	3808021.91	0.21628	465483.41
3808021.91	0.21256		
465503.41	3808021.91	0.20904	465523.41
3808021.91	0.20565		
465543.41	3808021.91	0.20222	465563.41
3808021.91	0.19888		
465583.41	3808021.91	0.19566	465603.41
3808021.91	0.19263		
465623.41	3808021.91	0.18959	465643.41
3808021.91	0.18661		
465663.41	3808021.91	0.18380	465683.41
3808021.91	0.18097		
465703.41	3808021.91	0.17818	464783.41
3808041.91	0.45075		
464803.41	3808041.91	0.44043	464823.41

3808041.91	0.42992		
464843.41	3808041.91	0.41946	464863.41
3808041.91	0.40923		
464883.41	3808041.91	0.39931	464903.41
3808041.91	0.38952		
464923.41	3808041.91	0.38004	464943.41
3808041.91	0.37122		
464963.41	3808041.91	0.36272	464983.41
3808041.91	0.35446		
465003.41	3808041.91	0.34613	465023.41
3808041.91	0.33832		
465043.41	3808041.91	0.33087	465063.41
3808041.91	0.32345		
465083.41	3808041.91	0.31646	465103.41
3808041.91	0.30976		
465123.41	3808041.91	0.30306	465143.41
3808041.91	0.29675		
465163.41	3808041.91	0.29070	465183.41
3808041.91	0.28464		
465203.41	3808041.91	0.27893	465223.41
3808041.91	0.27344		
465243.41	3808041.91	0.26793	465263.41
3808041.91	0.26274		
465283.41	3808041.91	0.25781	465303.41
3808041.91	0.25310		
465323.41	3808041.91	0.24831	465343.41
3808041.91	0.24362		
465363.41	3808041.91	0.23924	465383.41
3808041.91	0.23504		
465403.41	3808041.91	0.23093	465423.41
3808041.91	0.22671		
465443.41	3808041.91	0.22279	465463.41
3808041.91	0.21941		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 383

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126

, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465483.41	3808041.91	0.21552	465503.41
3808041.91	0.21187		
465523.41	3808041.91	0.20839	465543.41
3808041.91	0.20505		
465563.41	3808041.91	0.20163	465583.41
3808041.91	0.19827		
465603.41	3808041.91	0.19519	465623.41
3808041.91	0.19218		
465643.41	3808041.91	0.18924	465663.41
3808041.91	0.18633		
465683.41	3808041.91	0.18338	465703.41
3808041.91	0.18049		
464803.41	3808061.91	0.44775	464823.41
3808061.91	0.43712		
464843.41	3808061.91	0.42675	464863.41
3808061.91	0.41661		
464883.41	3808061.91	0.40645	464903.41
3808061.91	0.39661		
464923.41	3808061.91	0.38716	464943.41
3808061.91	0.37811		
464963.41	3808061.91	0.36939	464983.41
3808061.91	0.36092		
465003.41	3808061.91	0.35239	465023.41
3808061.91	0.34418		
465043.41	3808061.91	0.33634	465063.41
3808061.91	0.32906		
465083.41	3808061.91	0.32180	465103.41
3808061.91	0.31474		
465123.41	3808061.91	0.30819	465143.41
3808061.91	0.30164		
465163.41	3808061.91	0.29525	465183.41
3808061.91	0.28935		
465203.41	3808061.91	0.28341	465223.41
3808061.91	0.27762		
465243.41	3808061.91	0.27227	465263.41
3808061.91	0.26687		
465283.41	3808061.91	0.26161	465303.41
3808061.91	0.25680		

465323.41	3808061.91	0.25209	465343.41
3808061.91	0.24747		
465363.41	3808061.91	0.24274	465383.41
3808061.91	0.23837		
465403.41	3808061.91	0.23423	465423.41
3808061.91	0.23016		
465443.41	3808061.91	0.22623	465463.41
3808061.91	0.22249		
465483.41	3808061.91	0.21874	465503.41
3808061.91	0.21493		
465523.41	3808061.91	0.21121	465543.41
3808061.91	0.20780		
465563.41	3808061.91	0.20446	465583.41
3808061.91	0.20119		
465603.41	3808061.91	0.19804	465623.41
3808061.91	0.19497		
465643.41	3808061.91	0.19194	465663.41
3808061.91	0.18879		
465683.41	3808061.91	0.18584	465703.41
3808061.91	0.18304		
464823.41	3808081.91	0.44513	464843.41
3808081.91	0.43437		
464863.41	3808081.91	0.42388	464883.41
3808081.91	0.41380		
464903.41	3808081.91	0.40408	464923.41
3808081.91	0.39466		
464943.41	3808081.91	0.38536	464963.41
3808081.91	0.37625		
464983.41	3808081.91	0.36740	465003.41
3808081.91	0.35889		
465023.41	3808081.91	0.35052	465043.41
3808081.91	0.34244		
465063.41	3808081.91	0.33504	465083.41
3808081.91	0.32758		
465103.41	3808081.91	0.32026	465123.41
3808081.91	0.31337		
465143.41	3808081.91	0.30672	465163.41
3808081.91	0.30031		
465183.41	3808081.91	0.29408	465203.41
3808081.91	0.28807		
465223.41	3808081.91	0.28226	465243.41
3808081.91	0.27661		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3808081.91	0.27115	465283.41
3808081.91	0.26591		
465303.41	3808081.91	0.26099	465323.41
3808081.91	0.25607		
465343.41	3808081.91	0.25124	465363.41
3808081.91	0.24656		
465383.41	3808081.91	0.24215	465403.41
3808081.91	0.23788		
465423.41	3808081.91	0.23358	465443.41
3808081.91	0.22952		
465463.41	3808081.91	0.22589	465483.41
3808081.91	0.22193		
465503.41	3808081.91	0.21808	465523.41
3808081.91	0.21435		
465543.41	3808081.91	0.21070	465563.41
3808081.91	0.20727		
465583.41	3808081.91	0.20397	465603.41
3808081.91	0.20076		
465623.41	3808081.91	0.19763	465643.41
3808081.91	0.19455		
465663.41	3808081.91	0.19144	465683.41
3808081.91	0.18850		
465703.41	3808081.91	0.18565	464843.41
3808101.91	0.44239		
464863.41	3808101.91	0.43168	464883.41
3808101.91	0.42171		
464903.41	3808101.91	0.41196	464923.41
3808101.91	0.40241		
464943.41	3808101.91	0.39286	464963.41

3808101.91	0.38340		
464983.41	3808101.91	0.37423	465003.41
3808101.91	0.36563		
465023.41	3808101.91	0.35714	465043.41
3808101.91	0.34892		
465063.41	3808101.91	0.34123	465083.41
3808101.91	0.33354		
465103.41	3808101.91	0.32601	465123.41
3808101.91	0.31881		
465143.41	3808101.91	0.31211	465163.41
3808101.91	0.30569		
465183.41	3808101.91	0.29908	465203.41
3808101.91	0.29294		
465223.41	3808101.91	0.28707	465243.41
3808101.91	0.28116		
465263.41	3808101.91	0.27568	465283.41
3808101.91	0.27047		
465303.41	3808101.91	0.26535	465323.41
3808101.91	0.26020		
465343.41	3808101.91	0.25518	465363.41
3808101.91	0.25051		
465383.41	3808101.91	0.24603	465403.41
3808101.91	0.24165		
465423.41	3808101.91	0.23714	465443.41
3808101.91	0.23296		
465463.41	3808101.91	0.22938	465483.41
3808101.91	0.22523		
465503.41	3808101.91	0.22134	465523.41
3808101.91	0.21758		
465543.41	3808101.91	0.21376	465563.41
3808101.91	0.21022		
465583.41	3808101.91	0.20686	465603.41
3808101.91	0.20358		
465623.41	3808101.91	0.20038	465643.41
3808101.91	0.19726		
465663.41	3808101.91	0.19416	465683.41
3808101.91	0.19119		
465703.41	3808101.91	0.18825	464863.41
3808121.91	0.44090		
464883.41	3808121.91	0.43061	464903.41
3808121.91	0.42029		
464923.41	3808121.91	0.41018	464943.41
3808121.91	0.40038		
464963.41	3808121.91	0.39089	464983.41
3808121.91	0.38168		
465003.41	3808121.91	0.37249	465023.41
3808121.91	0.36390		
465043.41	3808121.91	0.35568	465063.41
3808121.91	0.34743		
465083.41	3808121.91	0.33943	465103.41

3808121.91 0.33175

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 385

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465123.41	3808121.91	0.32471	465143.41
3808121.91	0.31795		
465163.41	3808121.91	0.31135	465183.41
3808121.91	0.30457		
465203.41	3808121.91	0.29805	465223.41
3808121.91	0.29182		
465243.41	3808121.91	0.28608	465263.41
3808121.91	0.28057		
465283.41	3808121.91	0.27517	465303.41
3808121.91	0.26962		
465323.41	3808121.91	0.26446	465343.41
3808121.91	0.25950		
465363.41	3808121.91	0.25443	465383.41
3808121.91	0.24976		
465403.41	3808121.91	0.24533	465423.41
3808121.91	0.24098		
465443.41	3808121.91	0.23678	465463.41
3808121.91	0.23280		
465483.41	3808121.91	0.22879	465503.41
3808121.91	0.22472		

465523.41	3808121.91	0.22073	465543.41
3808121.91	0.21705		
465563.41	3808121.91	0.21350	465583.41
3808121.91	0.21006		
465603.41	3808121.91	0.20670	465623.41
3808121.91	0.20343		
465643.41	3808121.91	0.20020	465663.41
3808121.91	0.19684		
465683.41	3808121.91	0.19373	465703.41
3808121.91	0.19078		
464883.41	3808141.91	0.43931	464903.41
3808141.91	0.42902		
464923.41	3808141.91	0.41880	464943.41
3808141.91	0.40871		
464963.41	3808141.91	0.39900	464983.41
3808141.91	0.38957		
465003.41	3808141.91	0.38004	465023.41
3808141.91	0.37122		
465043.41	3808141.91	0.36281	465063.41
3808141.91	0.35426		
465083.41	3808141.91	0.34600	465103.41
3808141.91	0.33812		
465123.41	3808141.91	0.33096	465143.41
3808141.91	0.32385		
465163.41	3808141.91	0.31690	465183.41
3808141.91	0.31020		
465203.41	3808141.91	0.30355	465223.41
3808141.91	0.29711		
465243.41	3808141.91	0.29129	465263.41
3808141.91	0.28547		
465283.41	3808141.91	0.27977	465303.41
3808141.91	0.27426		
465323.41	3808141.91	0.26890	465343.41
3808141.91	0.26371		
465363.41	3808141.91	0.25868	465383.41
3808141.91	0.25395		
465403.41	3808141.91	0.24938	465423.41
3808141.91	0.24476		
465443.41	3808141.91	0.24042	465463.41
3808141.91	0.23627		
465483.41	3808141.91	0.23223	465503.41
3808141.91	0.22817		
465523.41	3808141.91	0.22418	465543.41
3808141.91	0.22027		
465563.41	3808141.91	0.21660	465583.41
3808141.91	0.21308		
465603.41	3808141.91	0.20966	465623.41
3808141.91	0.20631		
465643.41	3808141.91	0.20303	465663.41
3808141.91	0.19971		

465683.41	3808141.91	0.19646	465703.41
3808141.91	0.19332		
464883.41	3808161.91	0.44824	464903.41
3808161.91	0.43808		
464923.41	3808161.91	0.42782	464943.41
3808161.91	0.41741		
464963.41	3808161.91	0.40740	464983.41
3808161.91	0.39770		
465003.41	3808161.91	0.38800	465023.41
3808161.91	0.37887		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 386

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

 ** CONC OF PM_10 IN MICROGRAMS/M**3
 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465043.41	3808161.91	0.37012	465063.41
3808161.91	0.36132		
465083.41	3808161.91	0.35289	465103.41
3808161.91	0.34486		
465123.41	3808161.91	0.33738	465143.41
3808161.91	0.32993		
465163.41	3808161.91	0.32269	465183.41
3808161.91	0.31595		
465203.41	3808161.91	0.30923	465223.41
3808161.91	0.30268		
465243.41	3808161.91	0.29659	465263.41

3808161.91	0.29050		
465283.41	3808161.91	0.28455	465303.41
3808161.91	0.27903		
465323.41	3808161.91	0.27349	465343.41
3808161.91	0.26807		
465363.41	3808161.91	0.26305	465383.41
3808161.91	0.25823		
465403.41	3808161.91	0.25352	465423.41
3808161.91	0.24867		
465443.41	3808161.91	0.24418	465463.41
3808161.91	0.23992		
465483.41	3808161.91	0.23570	465503.41
3808161.91	0.23166		
465523.41	3808161.91	0.22769	465543.41
3808161.91	0.22359		
465563.41	3808161.91	0.21980	465583.41
3808161.91	0.21620		
465603.41	3808161.91	0.21269	465623.41
3808161.91	0.20923		
465643.41	3808161.91	0.20585	465663.41
3808161.91	0.20261		
465683.41	3808161.91	0.19928	465703.41
3808161.91	0.19598		
464903.41	3808181.91	0.44732	464923.41
3808181.91	0.43680		
464943.41	3808181.91	0.42608	464963.41
3808181.91	0.41577		
464983.41	3808181.91	0.40584	465003.41
3808181.91	0.39622		
465023.41	3808181.91	0.38667	465043.41
3808181.91	0.37733		
465063.41	3808181.91	0.36824	465083.41
3808181.91	0.35983		
465103.41	3808181.91	0.35181	465123.41
3808181.91	0.34372		
465143.41	3808181.91	0.33619	465163.41
3808181.91	0.32898		
465183.41	3808181.91	0.32168	465203.41
3808181.91	0.31489		
465223.41	3808181.91	0.30839	465243.41
3808181.91	0.30178		
465263.41	3808181.91	0.29564	465283.41
3808181.91	0.28975		
465303.41	3808181.91	0.28375	465323.41
3808181.91	0.27817		
465343.41	3808181.91	0.27282	465363.41
3808181.91	0.26735		
465383.41	3808181.91	0.26231	465403.41
3808181.91	0.25754		
465423.41	3808181.91	0.25285	465443.41

3808181.91	0.24834		
465463.41	3808181.91	0.24391	465483.41
3808181.91	0.23932		
465503.41	3808181.91	0.23509	465523.41
3808181.91	0.23108		
465543.41	3808181.91	0.22713	465563.41
3808181.91	0.22332		
465583.41	3808181.91	0.21963	465603.41
3808181.91	0.21604		
465623.41	3808181.91	0.21234	465643.41
3808181.91	0.20870		
465663.41	3808181.91	0.20538	465683.41
3808181.91	0.20212		
465703.41	3808181.91	0.19889	464923.41
3808201.91	0.44559		
464943.41	3808201.91	0.43495	464963.41
3808201.91	0.42445		
464983.41	3808201.91	0.41423	465003.41
3808201.91	0.40439		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 387

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465023.41	3808201.91	0.39451	465043.41
3808201.91	0.38484		

465063.41	3808201.91	0.37581	465083.41
3808201.91	0.36707		
465103.41	3808201.91	0.35864	465123.41
3808201.91	0.35055		
465143.41	3808201.91	0.34271	465163.41
3808201.91	0.33514		
465183.41	3808201.91	0.32785	465203.41
3808201.91	0.32078		
465223.41	3808201.91	0.31395	465243.41
3808201.91	0.30736		
465263.41	3808201.91	0.30098	465283.41
3808201.91	0.29479		
465303.41	3808201.91	0.28882	465323.41
3808201.91	0.28302		
465343.41	3808201.91	0.27740	465363.41
3808201.91	0.27196		
465383.41	3808201.91	0.26668	465403.41
3808201.91	0.26159		
465423.41	3808201.91	0.25685	465443.41
3808201.91	0.25225		
465463.41	3808201.91	0.24774	465483.41
3808201.91	0.24319		
465503.41	3808201.91	0.23891	465523.41
3808201.91	0.23480		
465543.41	3808201.91	0.23080	465563.41
3808201.91	0.22678		
465583.41	3808201.91	0.22285	465603.41
3808201.91	0.21917		
465623.41	3808201.91	0.21547	465643.41
3808201.91	0.21185		
465663.41	3808201.91	0.20845	465683.41
3808201.91	0.20503		
465703.41	3808201.91	0.20164	464943.41
3808221.91	0.44409		
464963.41	3808221.91	0.43343	464983.41
3808221.91	0.42288		
465003.41	3808221.91	0.41274	465023.41
3808221.91	0.40262		
465043.41	3808221.91	0.39278	465063.41
3808221.91	0.38363		
465083.41	3808221.91	0.37446	465103.41
3808221.91	0.36557		
465123.41	3808221.91	0.35751	465143.41
3808221.91	0.34941		
465163.41	3808221.91	0.34150	465183.41
3808221.91	0.33416		
465203.41	3808221.91	0.32682	465223.41
3808221.91	0.31969		
465243.41	3808221.91	0.31307	465263.41
3808221.91	0.30643		

465283.41	3808221.91	0.29998	465303.41
3808221.91	0.29399		
465323.41	3808221.91	0.28797	465343.41
3808221.91	0.28210		
465363.41	3808221.91	0.27666	465383.41
3808221.91	0.27118		
465403.41	3808221.91	0.26585	465423.41
3808221.91	0.26098		
465443.41	3808221.91	0.25626	465463.41
3808221.91	0.25167		
465483.41	3808221.91	0.24721	465503.41
3808221.91	0.24282		
465523.41	3808221.91	0.23855	465543.41
3808221.91	0.23445		
465563.41	3808221.91	0.23025	465583.41
3808221.91	0.22612		
465603.41	3808221.91	0.22236	465623.41
3808221.91	0.21864		
465643.41	3808221.91	0.21502	465663.41
3808221.91	0.21154		
465683.41	3808221.91	0.20797	465703.41
3808221.91	0.20444		
464963.41	3808241.91	0.44269	464983.41
3808241.91	0.43180		
465003.41	3808241.91	0.42133	465023.41
3808241.91	0.41118		
465043.41	3808241.91	0.40131	465063.41
3808241.91	0.39139		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 388

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

465083.41	3808241.91	0.37261	0.38179	465103.41
3808241.91	465123.41	0.35624	0.36431	465143.41
3808241.91	3808241.91	0.34037	0.34836	465183.41
465163.41	3808241.91	0.32586	0.33296	465223.41
3808241.91	465203.41	0.31196	0.31865	465263.41
3808241.91	3808241.91	0.29903	0.30556	465303.41
465283.41	3808241.91	0.28716	0.29297	465343.41
3808241.91	465323.41	0.27572	0.28122	465383.41
3808241.91	3808241.91	0.26551	0.27051	465423.41
465403.41	3808241.91	0.25594	0.26066	465463.41
3808241.91	465443.41	0.24666	0.25136	465503.41
3808241.91	3808241.91	0.23785	0.24204	465543.41
465523.41	3808241.91	0.22971	0.23373	465583.41
3808241.91	465563.41	0.22188	0.22585	465623.41
3808241.91	3808241.91	0.21441	0.21797	465663.41
465643.41	3808241.91	0.20745	0.21092	465703.41
3808241.91	465683.41	0.42933	0.43966	465003.41
3808261.91	3808261.91	0.40904	0.41910	465043.41
465023.41	3808261.91	0.38951	0.39909	465083.41
3808261.91	465103.41	0.37134	0.38028	465123.41
3808261.91	3808261.91	0.35496	0.36298	465163.41
465143.41	3808261.91	0.34699	0.34699	465203.41
3808261.91	465183.41			

3808261.91	0.33926		
465223.41	3808261.91	0.33180	465243.41
3808261.91	0.32460		
465263.41	3808261.91	0.31784	465283.41
3808261.91	0.31130		
465303.41	3808261.91	0.30450	465323.41
3808261.91	0.29809		
465343.41	3808261.91	0.29198	465363.41
3808261.91	0.28609		
465383.41	3808261.91	0.28036	465403.41
3808261.91	0.27485		
465423.41	3808261.91	0.26971	465443.41
3808261.91	0.26473		
465463.41	3808261.91	0.25991	465483.41
3808261.91	0.25521		
465503.41	3808261.91	0.25050	465523.41
3808261.91	0.24590		
465543.41	3808261.91	0.24160	465563.41
3808261.91	0.23727		
465583.41	3808261.91	0.23303	465603.41
3808261.91	0.22908		
465623.41	3808261.91	0.22511	465643.41
3808261.91	0.22119		
465663.41	3808261.91	0.21736	465683.41
3808261.91	0.21376		
465703.41	3808261.91	0.21028	465003.41
3808281.91	0.43726		
465023.41	3808281.91	0.42692	465043.41
3808281.91	0.41675		
465063.41	3808281.91	0.40670	465083.41
3808281.91	0.39722		
465103.41	3808281.91	0.38806	465123.41
3808281.91	0.37865		
465143.41	3808281.91	0.36995	465163.41
3808281.91	0.36172		
465183.41	3808281.91	0.35367	465203.41
3808281.91	0.34564		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 389

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110

```

, L0006111      , L0006112      , L0006113      ,
                  L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
                  L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -
465223.41	3808281.91	0.33786	465243.41
3808281.91	0.33074		
465263.41	3808281.91	0.32378	465283.41
3808281.91	0.31694		
465303.41	3808281.91	0.30995	465323.41
3808281.91	0.30326		
465343.41	3808281.91	0.29688	465363.41
3808281.91	0.29097		
465383.41	3808281.91	0.28503	465403.41
3808281.91	0.27924		
465423.41	3808281.91	0.27387	465443.41
3808281.91	0.26873		
465463.41	3808281.91	0.26392	465483.41
3808281.91	0.25910		
465503.41	3808281.91	0.25442	465523.41
3808281.91	0.24986		
465543.41	3808281.91	0.24536	465563.41
3808281.91	0.24082		
465583.41	3808281.91	0.23638	465603.41
3808281.91	0.23234		
465623.41	3808281.91	0.22835	465643.41
3808281.91	0.22440		
465663.41	3808281.91	0.22037	465683.41
3808281.91	0.21661		
465703.41	3808281.91	0.21303	465003.41
3808301.91	0.44544		
465023.41	3808301.91	0.43504	465043.41
3808301.91	0.42495		
465063.41	3808301.91	0.41401	465083.41
3808301.91	0.40445		
465103.41	3808301.91	0.39554	465123.41
3808301.91	0.38631		
465143.41	3808301.91	0.37749	465163.41
3808301.91	0.36891		

465183.41	3808301.91	0.36015	465203.41
3808301.91	0.35203		
465223.41	3808301.91	0.34437	465243.41
3808301.91	0.33703		
465263.41	3808301.91	0.32959	465283.41
3808301.91	0.32222		
465303.41	3808301.91	0.31503	465323.41
3808301.91	0.30841		
465343.41	3808301.91	0.30210	465363.41
3808301.91	0.29565		
465383.41	3808301.91	0.28968	465403.41
3808301.91	0.28397		
465423.41	3808301.91	0.27810	465443.41
3808301.91	0.27273		
465463.41	3808301.91	0.26829	465483.41
3808301.91	0.26334		
465503.41	3808301.91	0.25853	465523.41
3808301.91	0.25380		
465543.41	3808301.91	0.24890	465563.41
3808301.91	0.24435		
465583.41	3808301.91	0.24003	465603.41
3808301.91	0.23588		
465623.41	3808301.91	0.23162	465643.41
3808301.91	0.22742		
465663.41	3808301.91	0.22355	465683.41
3808301.91	0.21961		
465703.41	3808301.91	0.21575	465043.41
3808321.91	0.43268		
465063.41	3808321.91	0.42224	465083.41
3808321.91	0.41240		
465103.41	3808321.91	0.40297	465123.41
3808321.91	0.39357		
465143.41	3808321.91	0.38451	465163.41
3808321.91	0.37571		
465183.41	3808321.91	0.36696	465203.41
3808321.91	0.35875		
465223.41	3808321.91	0.35086	465243.41
3808321.91	0.34295		
465263.41	3808321.91	0.33514	465283.41
3808321.91	0.32755		
465303.41	3808321.91	0.32048	465323.41
3808321.91	0.31362		
465343.41	3808321.91	0.30699	465363.41
3808321.91	0.30059		
465383.41	3808321.91	0.29439	465403.41
3808321.91	0.28838		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465423.41	3808321.91	0.28257	465443.41
3808321.91	0.27712		
465463.41	3808321.91	0.27227	465483.41
3808321.91	0.26721		
465503.41	3808321.91	0.26229	465523.41
3808321.91	0.25747		
465543.41	3808321.91	0.25262	465563.41
3808321.91	0.24805		
465583.41	3808321.91	0.24364	465603.41
3808321.91	0.23917		
465623.41	3808321.91	0.23485	465643.41
3808321.91	0.23065		
465663.41	3808321.91	0.22654	465683.41
3808321.91	0.22257		
465703.41	3808321.91	0.21870	465083.41
3808341.91	0.42041		
465103.41	3808341.91	0.41038	465123.41
3808341.91	0.40086		
465143.41	3808341.91	0.39158	465163.41
3808341.91	0.38258		
465183.41	3808341.91	0.37391	465203.41
3808341.91	0.36545		
465223.41	3808341.91	0.35718	465243.41
3808341.91	0.34888		
465263.41	3808341.91	0.34077	465283.41

3808341.91	0.33300		
465303.41	3808341.91	0.32591	465323.41
3808341.91	0.31872		
465343.41	3808341.91	0.31172	465363.41
3808341.91	0.30545		
465383.41	3808341.91	0.29906	465403.41
3808341.91	0.29279		
465423.41	3808341.91	0.28700	465443.41
3808341.91	0.28145		
465463.41	3808341.91	0.27626	465483.41
3808341.91	0.27107		
465503.41	3808341.91	0.26604	465523.41
3808341.91	0.26113		
465543.41	3808341.91	0.25630	465563.41
3808341.91	0.25166		
465583.41	3808341.91	0.24712	465603.41
3808341.91	0.24243		
465623.41	3808341.91	0.23805	465643.41
3808341.91	0.23383		
465663.41	3808341.91	0.22952	465683.41
3808341.91	0.22550		
465703.41	3808341.91	0.22162	465103.41
3808361.91	0.41779		
465123.41	3808361.91	0.40855	465143.41
3808361.91	0.39915		
465163.41	3808361.91	0.38987	465183.41
3808361.91	0.38093		
465203.41	3808361.91	0.37190	465223.41
3808361.91	0.36309		
465243.41	3808361.91	0.35501	465263.41
3808361.91	0.34682		
465283.41	3808361.91	0.33876	465303.41
3808361.91	0.33104		
465323.41	3808361.91	0.32354	465343.41
3808361.91	0.31636		
465363.41	3808361.91	0.30993	465383.41
3808361.91	0.30364		
465403.41	3808361.91	0.29747	465423.41
3808361.91	0.29115		
465443.41	3808361.91	0.28536	465463.41
3808361.91	0.28058		
465483.41	3808361.91	0.27526	465503.41
3808361.91	0.27009		
465523.41	3808361.91	0.26501	465543.41
3808361.91	0.25976		
465563.41	3808361.91	0.25492	465583.41
3808361.91	0.25034		
465603.41	3808361.91	0.24583	465623.41
3808361.91	0.24125		
465643.41	3808361.91	0.23676	465663.41

```

3808361.91      0.23264
      465683.41      3808361.91      0.22843      465703.41
3808361.91      0.22431
      465183.41      3808381.91      0.38682      465203.41
3808381.91      0.37763
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 391

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
      INCLUDING SOURCE(S):      L0006101      , L0006102
, L0006103      , L0006104      , L0006105      ,
      L0006106      , L0006107      , L0006108      , L0006109      , L0006110
, L0006111      , L0006112      , L0006113      ,
      L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
      L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	0.36878	465243.41
3808381.91	0.36020		
465263.41	3808381.91	0.35172	465283.41
3808381.91	0.34350		
465303.41	3808381.91	0.33586	465323.41
3808381.91	0.32825		
465343.41	3808381.91	0.32090	465363.41
3808381.91	0.31432		
465383.41	3808381.91	0.30795	465403.41
3808381.91	0.30174		
465423.41	3808381.91	0.29550	465443.41
3808381.91	0.28964		
465463.41	3808381.91	0.28443	465483.41
3808381.91	0.27899		
465503.41	3808381.91	0.27372	465523.41
3808381.91	0.26856		

465543.41	3808381.91	0.26336	465563.41
3808381.91	0.25831		
465583.41	3808381.91	0.25345	465603.41
3808381.91	0.24892		
465623.41	3808381.91	0.24437	465643.41
3808381.91	0.23989		
465663.41	3808381.91	0.23552	465683.41
3808381.91	0.23129		
465703.41	3808381.91	0.22717	465303.41
3808401.91	0.34032		
465323.41	3808401.91	0.33273	465343.41
3808401.91	0.32532		
465363.41	3808401.91	0.31860	465383.41
3808401.91	0.31210		
465403.41	3808401.91	0.30580	465423.41
3808401.91	0.29970		
465443.41	3808401.91	0.29379	465463.41
3808401.91	0.28808		
465483.41	3808401.91	0.28253	465503.41
3808401.91	0.27715		
465523.41	3808401.91	0.27192	465543.41
3808401.91	0.26686		
465563.41	3808401.91	0.26168	465583.41
3808401.91	0.25660		
465603.41	3808401.91	0.25198	465623.41
3808401.91	0.24743		
465643.41	3808401.91	0.24294	465663.41
3808401.91	0.23836		
465683.41	3808401.91	0.23409	465703.41
3808401.91	0.22997		
465323.41	3808421.91	0.33680	465343.41
3808421.91	0.32962		
465363.41	3808421.91	0.32276	465383.41
3808421.91	0.31612		
465403.41	3808421.91	0.30970	465423.41
3808421.91	0.30347		
465443.41	3808421.91	0.29745	465463.41
3808421.91	0.29161		
465483.41	3808421.91	0.28596	465503.41
3808421.91	0.28047		
465523.41	3808421.91	0.27515	465543.41
3808421.91	0.26999		
465563.41	3808421.91	0.26494	465583.41
3808421.91	0.26002		
465603.41	3808421.91	0.25530	465623.41
3808421.91	0.25045		
465643.41	3808421.91	0.24569	465663.41
3808421.91	0.24131		
465683.41	3808421.91	0.23685	465703.41
3808421.91	0.23248		

465323.41	3808441.91	0.34099	465343.41
3808441.91	0.33382		
465363.41	3808441.91	0.32718	465383.41
3808441.91	0.32052		
465403.41	3808441.91	0.31395	465423.41
3808441.91	0.30760		
465443.41	3808441.91	0.30144	465463.41
3808441.91	0.29548		
465483.41	3808441.91	0.28971	465503.41
3808441.91	0.28411		
465523.41	3808441.91	0.27868	465543.41
3808441.91	0.27342		
465563.41	3808441.91	0.26831	465583.41
3808441.91	0.26335		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 392

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465603.41	3808441.91	0.25854	465623.41
3808441.91	0.25356		
465643.41	3808441.91	0.24862	465663.41
3808441.91	0.24399		
465683.41	3808441.91	0.23951	465703.41
3808441.91	0.23521		
465343.41	3808461.91	0.33780	465363.41

3808461.91	0.33124		
465383.41	3808461.91	0.32460	465403.41
3808461.91	0.31801		
465423.41	3808461.91	0.31153	465443.41
3808461.91	0.30526		
465463.41	3808461.91	0.29919	465483.41
3808461.91	0.29330		
465503.41	3808461.91	0.28767	465523.41
3808461.91	0.28222		
465543.41	3808461.91	0.27685	465563.41
3808461.91	0.27164		
465583.41	3808461.91	0.26659	465603.41
3808461.91	0.26169		
465623.41	3808461.91	0.25662	465643.41
3808461.91	0.25155		
465663.41	3808461.91	0.24662	465683.41
3808461.91	0.24215		
465703.41	3808461.91	0.23792	465343.41
3808481.91	0.34147		
465363.41	3808481.91	0.33432	465383.41
3808481.91	0.32776		
465403.41	3808481.91	0.32145	465423.41
3808481.91	0.31487		
465443.41	3808481.91	0.30850	465463.41
3808481.91	0.30232		
465483.41	3808481.91	0.29635	465503.41
3808481.91	0.29088		
465523.41	3808481.91	0.28564	465543.41
3808481.91	0.28017		
465563.41	3808481.91	0.27487	465583.41
3808481.91	0.26972		
465603.41	3808481.91	0.26473	465623.41
3808481.91	0.25957		
465643.41	3808481.91	0.25442	465663.41
3808481.91	0.24942		
465683.41	3808481.91	0.24487	465703.41
3808481.91	0.24052		
465463.41	3808501.91	0.30572	465483.41
3808501.91	0.29933		
465503.41	3808501.91	0.29375	465523.41
3808501.91	0.28850		
465543.41	3808501.91	0.28295	465563.41
3808501.91	0.27775		
465583.41	3808501.91	0.27270	465603.41
3808501.91	0.26737		
465623.41	3808501.91	0.26222	465643.41
3808501.91	0.25719		
465663.41	3808501.91	0.25211	465683.41
3808501.91	0.24749		
465703.41	3808501.91	0.24306	465523.41

3808521.91	0.29108		
465543.41	3808521.91	0.28546	465563.41
3808521.91	0.28037		
465583.41	3808521.91	0.27541	465603.41
3808521.91	0.26987		
465623.41	3808521.91	0.26470	465643.41
3808521.91	0.25973		
465663.41	3808521.91	0.25467	465683.41
3808521.91	0.24995		
465703.41	3808521.91	0.24540	464239.31
3809562.31	0.68864		
464277.31	3809562.31	0.65950	463745.31
3809591.37	1.03061		
463783.31	3809591.37	1.01808	463821.31
3809591.37	1.00194		
463859.31	3809591.37	0.98926	463897.31
3809591.37	0.97388		
463935.31	3809591.37	0.94965	464239.31
3809591.37	0.66671		
464277.31	3809591.37	0.63875	463745.31
3809620.43	0.97920		
463783.31	3809620.43	0.96884	463821.31
3809620.43	0.95746		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 393

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

463859.31	3809620.43	0.94261		463897.31
3809620.43	0.92721			
463935.31	3809620.43	0.90714		463973.31
3809620.43	0.87689			
464011.31	3809620.43	0.84217		464049.31
3809620.43	0.80457			
464087.31	3809620.43	0.76723		464125.31
3809620.43	0.73359			
464163.31	3809620.43	0.70188		464201.31
3809620.43	0.67097			
464239.31	3809620.43	0.64490		464277.31
3809620.43	0.61864			
463745.31	3809649.49	0.93089		463783.31
3809649.49	0.92555			
463821.31	3809649.49	0.91386		463859.31
3809649.49	0.89955			
463897.31	3809649.49	0.88377		463935.31
3809649.49	0.86499			
463973.31	3809649.49	0.83479		464011.31
3809649.49	0.80550			
464049.31	3809649.49	0.77385		464087.31
3809649.49	0.73886			
464125.31	3809649.49	0.70882		464163.31
3809649.49	0.67810			
464201.31	3809649.49	0.65040		464239.31
3809649.49	0.62495			
464277.31	3809649.49	0.59976		464315.31
3809649.49	0.57588			
464353.31	3809649.49	0.55512		464391.31
3809649.49	0.53528			
464429.31	3809649.49	0.51548		464467.31
3809649.49	0.49715			
464505.31	3809649.49	0.47932		463745.31
3809678.55	0.88402			
463783.31	3809678.55	0.88012		463821.31
3809678.55	0.87365			
463859.31	3809678.55	0.85820		463897.31
3809678.55	0.84332			
463935.31	3809678.55	0.82651		463973.31
3809678.55	0.80033			
464011.31	3809678.55	0.77139		464049.31
3809678.55	0.74487			
464087.31	3809678.55	0.71477		464125.31
3809678.55	0.68528			
464163.31	3809678.55	0.65663		464201.31
3809678.55	0.63129			
464239.31	3809678.55	0.60525		464277.31
3809678.55	0.58147			

464315.31	3809678.55	0.55942	464353.31
3809678.55	0.53997		
464391.31	3809678.55	0.52084	464429.31
3809678.55	0.50170		
464467.31	3809678.55	0.48470	464505.31
3809678.55	0.46668		
463745.31	3809707.61	0.84318	463783.31
3809707.61	0.83865		
463821.31	3809707.61	0.83243	463859.31
3809707.61	0.82137		
463897.31	3809707.61	0.80592	463935.31
3809707.61	0.79029		
463973.31	3809707.61	0.76807	464011.31
3809707.61	0.74186		
464049.31	3809707.61	0.71757	464087.31
3809707.61	0.69010		
464125.31	3809707.61	0.66298	464163.31
3809707.61	0.63716		
464201.31	3809707.61	0.61095	464239.31
3809707.61	0.58711		
464277.31	3809707.61	0.56429	464315.31
3809707.61	0.54439		
464353.31	3809707.61	0.52401	464391.31
3809707.61	0.50627		
464429.31	3809707.61	0.48804	464467.31
3809707.61	0.47151		
464505.31	3809707.61	0.45553	463745.31
3809736.67	0.80833		
463783.31	3809736.67	0.80086	463821.31
3809736.67	0.79202		
463859.31	3809736.67	0.78305	463897.31
3809736.67	0.77062		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 394

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463935.31	3809736.67	0.75404	463973.31
3809736.67	0.73722		
464011.31	3809736.67	0.71649	464049.31
3809736.67	0.69190		
464087.31	3809736.67	0.66824	464125.31
3809736.67	0.64293		
464163.31	3809736.67	0.61876	464201.31
3809736.67	0.59291		
464239.31	3809736.67	0.57066	464277.31
3809736.67	0.54876		
464315.31	3809736.67	0.52851	464353.31
3809736.67	0.50986		
464391.31	3809736.67	0.49258	464429.31
3809736.67	0.47523		
464467.31	3809736.67	0.45981	464505.31
3809736.67	0.44492		
463745.31	3809765.73	0.77655	463783.31
3809765.73	0.76836		
463821.31	3809765.73	0.75821	463859.31
3809765.73	0.74828		
463897.31	3809765.73	0.73766	463935.31
3809765.73	0.72053		
463973.31	3809765.73	0.70241	464011.31
3809765.73	0.68951		
464049.31	3809765.73	0.66980	464087.31
3809765.73	0.64674		
464125.31	3809765.73	0.62426	464163.31
3809765.73	0.60119		
464201.31	3809765.73	0.57647	464239.31
3809765.73	0.55518		
464277.31	3809765.73	0.53420	464315.31
3809765.73	0.51415		
464353.31	3809765.73	0.49679	464391.31
3809765.73	0.47918		
464429.31	3809765.73	0.46360	464467.31
3809765.73	0.44912		
464505.31	3809765.73	0.43365	463745.31
3809794.79	0.74703		
463783.31	3809794.79	0.73694	463821.31

3809794.79	0.72699		
463859.31	3809794.79	0.71559	463897.31
3809794.79	0.70484		
463935.31	3809794.79	0.68880	463973.31
3809794.79	0.67171		
464011.31	3809794.79	0.65914	464049.31
3809794.79	0.64761		
464087.31	3809794.79	0.62661	464125.31
3809794.79	0.60456		
464163.31	3809794.79	0.58260	464201.31
3809794.79	0.56067		
464239.31	3809794.79	0.53921	464277.31
3809794.79	0.51932		
464315.31	3809794.79	0.50077	464353.31
3809794.79	0.48296		
464391.31	3809794.79	0.46704	464429.31
3809794.79	0.45262		
464467.31	3809794.79	0.43758	464505.31
3809794.79	0.42341		
463745.31	3809823.85	0.71944	463783.31
3809823.85	0.70793		
463821.31	3809823.85	0.69534	463859.31
3809823.85	0.68503		
463897.31	3809823.85	0.67339	463935.31
3809823.85	0.65842		
463973.31	3809823.85	0.64336	464011.31
3809823.85	0.62990		
464049.31	3809823.85	0.62006	464087.31
3809823.85	0.60572		
464125.31	3809823.85	0.58658	464163.31
3809823.85	0.56562		
464201.31	3809823.85	0.54409	464239.31
3809823.85	0.52439		
464277.31	3809823.85	0.50542	464315.31
3809823.85	0.48683		
464353.31	3809823.85	0.47032	464391.31
3809823.85	0.45531		
464429.31	3809823.85	0.44073	464467.31
3809823.85	0.42681		
464505.31	3809823.85	0.41288	463745.31
3809852.91	0.69483		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

PAGE 395

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	0.68353	463821.31
3809852.91	0.66841		
463859.31	3809852.91	0.65744	463897.31
3809852.91	0.64434		
463935.31	3809852.91	0.63028	463973.31
3809852.91	0.61669		
464011.31	3809852.91	0.60308	464049.31
3809852.91	0.59268		
464087.31	3809852.91	0.58052	464125.31
3809852.91	0.56504		
464163.31	3809852.91	0.54590	464201.31
3809852.91	0.52589		
464239.31	3809852.91	0.50807	464277.31
3809852.91	0.49073		
464315.31	3809852.91	0.47378	464353.31
3809852.91	0.45765		
464391.31	3809852.91	0.44344	464429.31
3809852.91	0.42971		
464467.31	3809852.91	0.41609	464505.31
3809852.91	0.40308		
463745.31	3809881.97	0.67253	463783.31
3809881.97	0.66032		
463821.31	3809881.97	0.64570	463859.31
3809881.97	0.63300		
463897.31	3809881.97	0.61865	463935.31
3809881.97	0.60409		
463973.31	3809881.97	0.59228	464011.31
3809881.97	0.57952		
464049.31	3809881.97	0.56823	464087.31
3809881.97	0.55557		

464125.31	3809881.97	0.54164	464163.31
3809881.97	0.52416		
464201.31	3809881.97	0.50757	464239.31
3809881.97	0.49062		
464277.31	3809881.97	0.47538	464315.31
3809881.97	0.46090		
464353.31	3809881.97	0.44579	464391.31
3809881.97	0.43249		
464429.31	3809881.97	0.41919	464467.31
3809881.97	0.40597		
464505.31	3809881.97	0.39417	463745.31
3809911.03	0.65019		
463783.31	3809911.03	0.63735	463821.31
3809911.03	0.62465		
463859.31	3809911.03	0.61112	463897.31
3809911.03	0.59678		
463935.31	3809911.03	0.58171	463973.31
3809911.03	0.56943		
464011.31	3809911.03	0.55725	464049.31
3809911.03	0.54660		
464087.31	3809911.03	0.53428	464125.31
3809911.03	0.52079		
464163.31	3809911.03	0.50576	464201.31
3809911.03	0.49137		
464239.31	3809911.03	0.47553	464277.31
3809911.03	0.46168		
464315.31	3809911.03	0.44777	464353.31
3809911.03	0.43425		
464391.31	3809911.03	0.42150	464429.31
3809911.03	0.40879		
464467.31	3809911.03	0.39693	464505.31
3809911.03	0.38481		
463745.31	3809940.09	0.62820	463783.31
3809940.09	0.61563		
463821.31	3809940.09	0.60425	463859.31
3809940.09	0.59072		
463897.31	3809940.09	0.57718	463935.31
3809940.09	0.56275		
463973.31	3809940.09	0.54968	464011.31
3809940.09	0.53596		
464049.31	3809940.09	0.52516	464087.31
3809940.09	0.51340		
464125.31	3809940.09	0.50115	464163.31
3809940.09	0.48919		
464201.31	3809940.09	0.47704	464239.31
3809940.09	0.46286		
464277.31	3809940.09	0.44899	464315.31
3809940.09	0.43602		
464353.31	3809940.09	0.42317	464391.31
3809940.09	0.41092		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 396

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464429.31	3809940.09	0.39932	464467.31
3809940.09	0.38749		
464505.31	3809940.09	0.37591	463745.31
3809969.15	0.61173		
463783.31	3809969.15	0.59678	463821.31
3809969.15	0.58456		
463859.31	3809969.15	0.57173	463897.31
3809969.15	0.55858		
463935.31	3809969.15	0.54492	463973.31
3809969.15	0.53213		
464011.31	3809969.15	0.51765	464049.31
3809969.15	0.50490		
464087.31	3809969.15	0.49391	464125.31
3809969.15	0.48357		
464163.31	3809969.15	0.47277	464201.31
3809969.15	0.46244		
464239.31	3809969.15	0.45078	464277.31
3809969.15	0.43730		
464315.31	3809969.15	0.42496	464353.31
3809969.15	0.41346		
464391.31	3809969.15	0.40166	464429.31

3809969.15	0.38999		
464467.31	3809969.15	0.37822	464505.31
3809969.15	0.36784		
463745.31	3809998.21	0.60115	463783.31
3809998.21	0.58231		
463821.31	3809998.21	0.56801	463859.31
3809998.21	0.55466		
463897.31	3809998.21	0.54176	463935.31
3809998.21	0.52797		
463973.31	3809998.21	0.51534	464011.31
3809998.21	0.50177		
464049.31	3809998.21	0.48887	464087.31
3809998.21	0.47749		
464125.31	3809998.21	0.46816	464163.31
3809998.21	0.45817		
464201.31	3809998.21	0.44823	464239.31
3809998.21	0.43769		
464277.31	3809998.21	0.42643	464315.31
3809998.21	0.41431		
464353.31	3809998.21	0.40336	464391.31
3809998.21	0.39199		
464429.31	3809998.21	0.38060	464467.31
3809998.21	0.37004		
464505.31	3809998.21	0.35947	463745.31
3810027.27	0.59146		
463783.31	3810027.27	0.57091	463821.31
3810027.27	0.55436		
463859.31	3810027.27	0.53993	463897.31
3810027.27	0.52692		
463935.31	3810027.27	0.51244	463973.31
3810027.27	0.50018		
464011.31	3810027.27	0.48716	464049.31
3810027.27	0.47467		
464087.31	3810027.27	0.46251	464125.31
3810027.27	0.45261		
464163.31	3810027.27	0.44412	464201.31
3810027.27	0.43500		
464239.31	3810027.27	0.42451	464277.31
3810027.27	0.41461		
464315.31	3810027.27	0.40414	464353.31
3810027.27	0.39332		
464391.31	3810027.27	0.38237	464429.31
3810027.27	0.37203		
464467.31	3810027.27	0.36167	464505.31
3810027.27	0.35116		
463745.31	3810056.33	0.58297	463783.31
3810056.33	0.56063		
463821.31	3810056.33	0.54155	463859.31
3810056.33	0.52666		
463897.31	3810056.33	0.51282	463935.31

```

3810056.33      0.49865
      463973.31      3810056.33      0.48627      464011.31
3810056.33      0.47334
      464049.31      3810056.33      0.46050      464087.31
3810056.33      0.44875
      464125.31      3810056.33      0.43798      464163.31
3810056.33      0.42982
      464201.31      3810056.33      0.42136      464239.31
3810056.33      0.41240
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 397

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE PERIOD ( 16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
      INCLUDING SOURCE(S):      L0006101      , L0006102
, L0006103      , L0006104      , L0006105      ,
      L0006106      , L0006107      , L0006108      , L0006109      , L0006110
, L0006111      , L0006112      , L0006113      ,
      L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
      L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464277.31	3810056.33	0.40258	464315.31
3810056.33	0.39328		
464353.31	3810056.33	0.38414	464391.31
3810056.33	0.37409		
464429.31	3810056.33	0.36375	464467.31
3810056.33	0.35317		
464505.31	3810056.33	0.34338	463745.31
3810085.39	0.57479		
463783.31	3810085.39	0.55107	463821.31
3810085.39	0.53045		
463859.31	3810085.39	0.51422	463897.31
3810085.39	0.49987		

463935.31	3810085.39	0.48615	463973.31
3810085.39	0.47334		
464011.31	3810085.39	0.45999	464049.31
3810085.39	0.44648		
464087.31	3810085.39	0.43537	464125.31
3810085.39	0.42491		
464163.31	3810085.39	0.41606	464201.31
3810085.39	0.40782		
464239.31	3810085.39	0.39990	464277.31
3810085.39	0.39120		
464315.31	3810085.39	0.38247	464353.31
3810085.39	0.37377		
464391.31	3810085.39	0.36476	464429.31
3810085.39	0.35477		
464467.31	3810085.39	0.34487	464505.31
3810085.39	0.33517		
463745.31	3810114.45	0.56388	463783.31
3810114.45	0.54357		
463821.31	3810114.45	0.52131	463859.31
3810114.45	0.50498		
463897.31	3810114.45	0.48886	463935.31
3810114.45	0.47462		
463973.31	3810114.45	0.46097	464011.31
3810114.45	0.44773		
464049.31	3810114.45	0.43418	464087.31
3810114.45	0.42282		
464125.31	3810114.45	0.41195	464163.31
3810114.45	0.40255		
464201.31	3810114.45	0.39435	464239.31
3810114.45	0.38785		
464277.31	3810114.45	0.38019	464315.31
3810114.45	0.37115		
464353.31	3810114.45	0.36220	464391.31
3810114.45	0.35327		
464429.31	3810114.45	0.34501	464467.31
3810114.45	0.33548		
464505.31	3810114.45	0.32718	463745.31
3810143.51	0.54996		
463783.31	3810143.51	0.53318	463821.31
3810143.51	0.51538		
463859.31	3810143.51	0.49758	463897.31
3810143.51	0.47838		
463935.31	3810143.51	0.46281	463973.31
3810143.51	0.44820		
464011.31	3810143.51	0.43615	464049.31
3810143.51	0.42282		
464087.31	3810143.51	0.41044	464125.31
3810143.51	0.39983		
464163.31	3810143.51	0.39058	464201.31
3810143.51	0.38221		

464239.31	3810143.51	0.37516	464277.31
3810143.51	0.36922		
464315.31	3810143.51	0.36071	464353.31
3810143.51	0.35108		
464391.31	3810143.51	0.34306	464429.31
3810143.51	0.33493		
464467.31	3810143.51	0.32726	464505.31
3810143.51	0.31956		
464383.78	3807479.29	0.22347	464355.03
3807405.24	0.21668		
464402.07	3807352.10	0.19124	464367.23
3807296.35	0.18920		
464358.52	3807237.99	0.17462	464385.52
3807161.33	0.15982		
463132.27	3810926.37	0.30147	463237.82
3811199.31	0.24835		
464944.35	3809244.89	0.47171	465700.32
3809255.46	0.25149		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 398

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465716.18	3808536.49	0.24397	465544.37
3808533.85	0.28661		
465420.13	3808486.27	0.31664	465348.77

3808491.56	0.34127		
465317.05	3808443.98	0.34378	465327.62
3808406.97	0.33219		
465108.23	3808369.97	0.41843	464999.86
3808301.24	0.44713		
464722.31	3807973.48	0.45846	464717.03
3807836.03	0.40853		
464344.33	3807936.47	0.60177	464349.61
3807780.52	0.61046		
464386.62	3807785.81	0.58338	464521.43
3807859.82	0.52811		
464537.28	3807719.72	0.36523	464426.27
3807613.99	0.28577		
464368.43	3807532.62	0.25629	464324.60
3807121.91	0.15656		
464123.31	3807123.54	0.18088	463930.13
3806909.26	0.14650		
463831.11	3806906.01	0.15601	463821.36
3806720.95	0.11649		
463727.21	3806727.44	0.11645	463598.97
3806334.59	0.07150		
463001.06	3806361.54	0.04082	

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 399

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

462160.55	3809377.75	1.87594	462051.48
3809270.62	1.61956		
462014.47	3809029.10	1.33615	462010.58
3808855.75	1.14779		
461936.56	3808886.92	1.06484	461936.56
3808997.94	1.15418		
461909.30	3808768.10	0.87187	461835.28
3808894.71	0.94131		
461845.02	3808995.99	1.02735	461833.33
3809114.80	1.12123		
461843.07	3809210.24	1.23418	461809.96
3809297.89	1.25156		
461856.71	3809385.54	1.34421	461841.13
3809482.92	1.34791		
462004.74	3809379.69	1.56905	461763.22
3808793.43	0.73323		
461753.48	3808699.93	0.70885	461835.28
3808686.30	0.74420		
461823.60	3808579.17	0.67199	461761.27
3808585.02	0.62786		
462301.19	3807807.15	0.99599	462304.78
3807868.16	1.00706		
462216.84	3807882.52	0.87004	462116.34
3807886.11	0.74645		
462114.55	3807789.20	0.71419	462012.25
3807887.90	0.64147		
462008.66	3807975.84	0.67486	461917.14
3807972.25	0.59458		
461922.52	3808187.60	0.68415	461908.17
3808288.10	0.69042		
461848.94	3808377.83	0.65909	461831.00
3808494.48	0.66508		
462421.43	3808393.98	1.51731	462459.11
3808501.66	1.80350		
462437.58	3808580.62	1.82911	462654.73
3809189.00	3.73643		
462559.49	3809194.32	3.17029	465763.86
3807935.19	1.02882		
465819.84	3807935.19	0.99353	465875.82
3807935.19	0.96109		
465931.80	3807935.19	0.93020	465987.78
3807935.19	0.90211		
466043.76	3807935.19	0.87449	466099.74
3807935.19	0.84960		
466155.72	3807935.19	0.82526	466211.70
3807935.19	0.80387		
466267.68	3807935.19	0.78246	466323.66
3807935.19	0.76479		

466379.64	3807935.19	0.74724	466435.62
3807935.19	0.73049		
466491.60	3807935.19	0.71296	466547.58
3807935.19	0.69631		
466603.56	3807935.19	0.68051	466659.54
3807935.19	0.66335		
466715.52	3807935.19	0.64852	466771.50
3807935.19	0.63424		
466827.48	3807935.19	0.61870	466883.46
3807935.19	0.60270		
465763.86	3808001.41	1.07051	465819.84
3808001.41	1.03310		
465875.82	3808001.41	0.99880	465931.80
3808001.41	0.96699		
465987.78	3808001.41	0.93528	466043.76
3808001.41	0.90823		
466099.74	3808001.41	0.87924	466155.72
3808001.41	0.85506		
466211.70	3808001.41	0.83089	466267.68
3808001.41	0.80802		
466323.66	3808001.41	0.78962	466379.64
3808001.41	0.77237		
466435.62	3808001.41	0.75303	466491.60
3808001.41	0.73519		
466547.58	3808001.41	0.71630	466603.56
3808001.41	0.69946		
466659.54	3808001.41	0.68286	466715.52
3808001.41	0.66816		
466771.50	3808001.41	0.65118	466827.48
3808001.41	0.63465		
466883.46	3808001.41	0.61780	465763.86
3808067.63	1.11484		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 400

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465819.84	3808067.63	1.07660	465875.82
3808067.63	1.03959		
465931.80	3808067.63	1.00456	465987.78
3808067.63	0.97246		
466043.76	3808067.63	0.94151	466099.74
3808067.63	0.91437		
466155.72	3808067.63	0.88723	466211.70
3808067.63	0.86319		
466267.68	3808067.63	0.84016	466323.66
3808067.63	0.82073		
466379.64	3808067.63	0.79921	466435.62
3808067.63	0.77761		
466491.60	3808067.63	0.75824	466547.58
3808067.63	0.73991		
466603.56	3808067.63	0.72156	466659.54
3808067.63	0.70319		
466715.52	3808067.63	0.68645	466771.50
3808067.63	0.66849		
466827.48	3808067.63	0.65108	466883.46
3808067.63	0.63348		
465763.86	3808133.85	1.16404	465819.84
3808133.85	1.12221		
465875.82	3808133.85	1.08238	465931.80
3808133.85	1.04601		
465987.78	3808133.85	1.00928	466043.76
3808133.85	0.97862		
466099.74	3808133.85	0.94846	466155.72
3808133.85	0.92171		
466211.70	3808133.85	0.89628	466267.68
3808133.85	0.87195		
466323.66	3808133.85	0.84923	466379.64
3808133.85	0.82613		
466435.62	3808133.85	0.80325	466491.60
3808133.85	0.78098		
466547.58	3808133.85	0.76146	466603.56
3808133.85	0.74235		
466659.54	3808133.85	0.72428	466715.52
3808133.85	0.70545		
466771.50	3808133.85	0.68623	466827.48

3808133.85	0.66740		
466883.46	3808133.85	0.64941	465763.86
3808200.07	1.21510		
465819.84	3808200.07	1.17025	465875.82
3808200.07	1.12794		
465931.80	3808200.07	1.08632	465987.78
3808200.07	1.05130		
466043.76	3808200.07	1.01710	466099.74
3808200.07	0.98642		
466155.72	3808200.07	0.95905	466211.70
3808200.07	0.93381		
466267.68	3808200.07	0.90459	466323.66
3808200.07	0.87839		
466379.64	3808200.07	0.85300	466435.62
3808200.07	0.82830		
466491.60	3808200.07	0.80659	466547.58
3808200.07	0.78547		
466603.56	3808200.07	0.76570	466659.54
3808200.07	0.74472		
466715.52	3808200.07	0.72397	466771.50
3808200.07	0.70399		
466827.48	3808200.07	0.68409	466883.46
3808200.07	0.66487		
465763.86	3808266.29	1.26982	465819.84
3808266.29	1.21844		
465875.82	3808266.29	1.17184	465931.80
3808266.29	1.13164		
465987.78	3808266.29	1.09283	466043.76
3808266.29	1.05833		
466099.74	3808266.29	1.02635	466155.72
3808266.29	0.99739		
466211.70	3808266.29	0.96524	466267.68
3808266.29	0.93578		
466323.66	3808266.29	0.90742	466379.64
3808266.29	0.87944		
466435.62	3808266.29	0.85318	466491.60
3808266.29	0.83189		
466547.58	3808266.29	0.81002	466603.56
3808266.29	0.78717		
466659.54	3808266.29	0.76437	466715.52
3808266.29	0.74242		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 401

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466771.50	3808266.29	0.72100	466827.48
3808266.29	0.70031		
466883.46	3808266.29	0.68015	465763.86
3808332.51	1.32203		
465819.84	3808332.51	1.26619	465875.82
3808332.51	1.21992		
465931.80	3808332.51	1.17566	465987.78
3808332.51	1.13646		
466043.76	3808332.51	1.10006	466099.74
3808332.51	1.06674		
466155.72	3808332.51	1.03030	466211.70
3808332.51	0.99785		
466267.68	3808332.51	0.96641	466323.66
3808332.51	0.93473		
466379.64	3808332.51	0.90586	466435.62
3808332.51	0.88009		
466491.60	3808332.51	0.85576	466547.58
3808332.51	0.83238		
466603.56	3808332.51	0.80773	466659.54
3808332.51	0.78410		
466715.52	3808332.51	0.76083	466771.50
3808332.51	0.73780		
466827.48	3808332.51	0.71598	466883.46
3808332.51	0.69509		
465763.86	3808398.73	1.37530	465819.84
3808398.73	1.31725		
465875.82	3808398.73	1.26584	465931.80
3808398.73	1.22060		
465987.78	3808398.73	1.17953	466043.76
3808398.73	1.14105		

466099.74	3808398.73	1.10281	466155.72
3808398.73	1.06549		
466211.70	3808398.73	1.02944	466267.68
3808398.73	0.99386		
466323.66	3808398.73	0.96426	466379.64
3808398.73	0.93519		
466435.62	3808398.73	0.90582	466491.60
3808398.73	0.88030		
466547.58	3808398.73	0.85353	466603.56
3808398.73	0.82776		
466659.54	3808398.73	0.80220	466715.52
3808398.73	0.77775		
466771.50	3808398.73	0.75416	466827.48
3808398.73	0.73130		
466883.46	3808398.73	0.70958	465763.86
3808464.95	1.42562		
465819.84	3808464.95	1.36611	465875.82
3808464.95	1.31628		
465931.80	3808464.95	1.26917	465987.78
3808464.95	1.22098		
466043.76	3808464.95	1.17747	466099.74
3808464.95	1.13588		
466155.72	3808464.95	1.09593	466211.70
3808464.95	1.06101		
466267.68	3808464.95	1.02399	466323.66
3808464.95	0.99219		
466379.64	3808464.95	0.95972	466435.62
3808464.95	0.93135		
466491.60	3808464.95	0.90184	466547.58
3808464.95	0.87369		
466603.56	3808464.95	0.84568	466659.54
3808464.95	0.81898		
466715.52	3808464.95	0.79366	466771.50
3808464.95	0.76912		
466827.48	3808464.95	0.74573	466883.46
3808464.95	0.72346		
465763.86	3808531.17	1.46918	465819.84
3808531.17	1.41255		
465875.82	3808531.17	1.36065	465931.80
3808531.17	1.30993		
465987.78	3808531.17	1.25743	466043.76
3808531.17	1.21086		
466099.74	3808531.17	1.16592	466155.72
3808531.17	1.12724		
466211.70	3808531.17	1.08955	466267.68
3808531.17	1.05207		
466323.66	3808531.17	1.01835	466379.64
3808531.17	0.98460		
466435.62	3808531.17	0.95251	466491.60
3808531.17	0.92162		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 402

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466547.58	3808531.17	0.89112	466603.56
3808531.17	0.86243		
466659.54	3808531.17	0.83463	466715.52
3808531.17	0.80815		
466771.50	3808531.17	0.78275	466827.48
3808531.17	0.75898		
466883.46	3808531.17	0.73615	465763.86
3808597.39	1.51380		
465819.84	3808597.39	1.45076	465875.82
3808597.39	1.39399		
465931.80	3808597.39	1.34330	465987.78
3808597.39	1.29016		
466043.76	3808597.39	1.23956	466099.74
3808597.39	1.19693		
466155.72	3808597.39	1.15515	466211.70
3808597.39	1.11412		
466267.68	3808597.39	1.07825	466323.66
3808597.39	1.04074		
466379.64	3808597.39	1.00518	466435.62
3808597.39	0.97138		
466491.60	3808597.39	0.93882	466547.58

3808597.39	0.90748		
466603.56	3808597.39	0.87789	466659.54
3808597.39	0.84911		
466715.52	3808597.39	0.82188	466771.50
3808597.39	0.79598		
466827.48	3808597.39	0.77134	466883.46
3808597.39	0.74839		
465763.86	3808663.61	1.55361	465819.84
3808663.61	1.48528		
465875.82	3808663.61	1.42649	465931.80
3808663.61	1.36993		
465987.78	3808663.61	1.31604	466043.76
3808663.61	1.26904		
466099.74	3808663.61	1.22327	466155.72
3808663.61	1.17890		
466211.70	3808663.61	1.13953	466267.68
3808663.61	1.09813		
466323.66	3808663.61	1.05976	466379.64
3808663.61	1.02242		
466435.62	3808663.61	0.98803	466491.60
3808663.61	0.95399		
466547.58	3808663.61	0.92184	466603.56
3808663.61	0.89082		
466659.54	3808663.61	0.86140	466715.52
3808663.61	0.83365		
466771.50	3808663.61	0.80728	466827.48
3808663.61	0.78309		
466883.46	3808663.61	0.75908	465763.86
3808729.83	1.58387		
465819.84	3808729.83	1.50927	465875.82
3808729.83	1.44991		
465931.80	3808729.83	1.39374	465987.78
3808729.83	1.34299		
466043.76	3808729.83	1.29356	466099.74
3808729.83	1.24846		
466155.72	3808729.83	1.20277	466211.70
3808729.83	1.15832		
466267.68	3808729.83	1.11525	466323.66
3808729.83	1.07574		
466379.64	3808729.83	1.03749	466435.62
3808729.83	1.00133		
466491.60	3808729.83	0.96731	466547.58
3808729.83	0.93401		
466603.56	3808729.83	0.90248	466659.54
3808729.83	0.87416		
466715.52	3808729.83	0.84572	466771.50
3808729.83	0.81884		
466827.48	3808729.83	0.79372	466883.46
3808729.83	0.76942		
465763.86	3808796.05	1.60974	465819.84

3808796.05	1.53407		
465875.82	3808796.05	1.47365	465931.80
3808796.05	1.41454		
465987.78	3808796.05	1.36254	466043.76
3808796.05	1.31344		
466099.74	3808796.05	1.26730	466155.72
3808796.05	1.21989		
466211.70	3808796.05	1.17440	466267.68
3808796.05	1.13039		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 403

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466323.66	3808796.05	1.08960	466379.64
3808796.05	1.05044		
466435.62	3808796.05	1.01404	466491.60
3808796.05	0.97842		
466547.58	3808796.05	0.94490	466603.56
3808796.05	0.91406		
466659.54	3808796.05	0.88384	466715.52
3808796.05	0.85559		
466771.50	3808796.05	0.82852	466827.48
3808796.05	0.80261		
466883.46	3808796.05	0.77875	465763.86
3808862.27	1.63778		

465819.84	3808862.27	1.56523	465875.82
3808862.27	1.49834		
465931.80	3808862.27	1.43734	465987.78
3808862.27	1.38428		
466043.76	3808862.27	1.33448	466099.74
3808862.27	1.28340		
466155.72	3808862.27	1.23365	466211.70
3808862.27	1.18639		
466267.68	3808862.27	1.14320	466323.66
3808862.27	1.10093		
466379.64	3808862.27	1.06143	466435.62
3808862.27	1.02390		
466491.60	3808862.27	0.98846	466547.58
3808862.27	0.95505		
466603.56	3808862.27	0.92284	466659.54
3808862.27	0.89332		
466715.52	3808862.27	0.86431	466771.50
3808862.27	0.83701		
466827.48	3808862.27	0.81139	466883.46
3808862.27	0.78686		
465763.86	3808928.49	1.66562	465819.84
3808928.49	1.59379		
465875.82	3808928.49	1.52651	465931.80
3808928.49	1.46280		
465987.78	3808928.49	1.40400	466043.76
3808928.49	1.34863		
466099.74	3808928.49	1.29601	466155.72
3808928.49	1.24541		
466211.70	3808928.49	1.19822	466267.68
3808928.49	1.15295		
466323.66	3808928.49	1.10995	466379.64
3808928.49	1.06942		
466435.62	3808928.49	1.03230	466491.60
3808928.49	0.99689		
466547.58	3808928.49	0.96293	466603.56
3808928.49	0.93187		
466659.54	3808928.49	0.90113	466715.52
3808928.49	0.87247		
466771.50	3808928.49	0.84476	466827.48
3808928.49	0.81919		
466883.46	3808928.49	0.79415	465763.86
3808994.71	1.67928		
465819.84	3808994.71	1.60401	465875.82
3808994.71	1.53634		
465931.80	3808994.71	1.47500	465987.78
3808994.71	1.41616		
466043.76	3808994.71	1.35990	466099.74
3808994.71	1.30619		
466155.72	3808994.71	1.25483	466211.70
3808994.71	1.20677		

466267.68	3808994.71	1.16117	466323.66
3808994.71	1.11824		
466379.64	3808994.71	1.07772	466435.62
3808994.71	1.03948		
466491.60	3808994.71	1.00419	466547.58
3808994.71	0.97133		
466603.56	3808994.71	0.93910	466659.54
3808994.71	0.90814		
466715.52	3808994.71	0.88048	466771.50
3808994.71	0.85239		
466827.48	3808994.71	0.82571	466883.46
3808994.71	0.80126		
465763.86	3809060.93	1.69124	465819.84
3809060.93	1.61572		
465875.82	3809060.93	1.54753	465931.80
3809060.93	1.48400		
465987.78	3809060.93	1.42454	466043.76
3809060.93	1.36856		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 404

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
466099.74	3809060.93	1.31320	466155.72
3809060.93	1.26212		
466211.70	3809060.93	1.21320	466267.68

3809060.93	1.16779		
466323.66	3809060.93	1.12481	466379.64
3809060.93	1.08422		
466435.62	3809060.93	1.04720	466491.60
3809060.93	1.01180		
466547.58	3809060.93	0.97737	466603.56
3809060.93	0.94534		
466659.54	3809060.93	0.91589	466715.52
3809060.93	0.88628		
466771.50	3809060.93	0.85834	466827.48
3809060.93	0.83217		
466883.46	3809060.93	0.80749	465763.86
3809127.15	1.70288		
465819.84	3809127.15	1.62847	465875.82
3809127.15	1.56013		
465931.80	3809127.15	1.49471	465987.78
3809127.15	1.43365		
466043.76	3809127.15	1.37363	466099.74
3809127.15	1.31641		
466155.72	3809127.15	1.26442	466211.70
3809127.15	1.21967		
466267.68	3809127.15	1.17543	466323.66
3809127.15	1.13284		
466379.64	3809127.15	1.09176	466435.62
3809127.15	1.05373		
466491.60	3809127.15	1.01777	466547.58
3809127.15	0.98390		
466603.56	3809127.15	0.95217	466659.54
3809127.15	0.92102		
466715.52	3809127.15	0.89201	466771.50
3809127.15	0.86427		
466827.48	3809127.15	0.83758	466883.46
3809127.15	0.81300		
465763.86	3809193.37	1.71333	465819.84
3809193.37	1.63939		
465875.82	3809193.37	1.56995	465931.80
3809193.37	1.50480		
465987.78	3809193.37	1.44054	466043.76
3809193.37	1.37386		
466099.74	3809193.37	1.32067	466155.72
3809193.37	1.26912		
466211.70	3809193.37	1.22334	466267.68
3809193.37	1.18016		
466323.66	3809193.37	1.13844	466379.64
3809193.37	1.09870		
466435.62	3809193.37	1.05999	466491.60
3809193.37	1.02392		
466547.58	3809193.37	0.98980	466603.56
3809193.37	0.95809		
466659.54	3809193.37	0.92682	466715.52

3809193.37	0.89802		
466771.50	3809193.37	0.86977	466827.48
3809193.37	0.84352		
466883.46	3809193.37	0.81817	465763.86
3809259.59	1.72290		
465819.84	3809259.59	1.64888	465875.82
3809259.59	1.57764		
465931.80	3809259.59	1.51100	465987.78
3809259.59	1.44509		
466043.76	3809259.59	1.38220	466099.74
3809259.59	1.32474		
466155.72	3809259.59	1.27600	466211.70
3809259.59	1.23010		
466267.68	3809259.59	1.18680	466323.66
3809259.59	1.14326		
466379.64	3809259.59	1.10324	466435.62
3809259.59	1.06558		
466491.60	3809259.59	1.02900	466547.58
3809259.59	0.99563		
466603.56	3809259.59	0.96290	466659.54
3809259.59	0.93190		
466715.52	3809259.59	0.90356	466771.50
3809259.59	0.87516		
466827.48	3809259.59	0.84868	466883.46
3809259.59	0.82325		
464503.41	3807141.91	1.10308	464523.41
3807141.91	1.09583		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 405

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	X-COORD (M)

	464543.41	3807141.91	1.07974	464563.41
3807141.91		1.06125		
	464583.41	3807141.91	1.05513	464603.41
3807141.91		1.04183		
	464623.41	3807141.91	1.02663	464643.41
3807141.91		1.01854		
	464663.41	3807141.91	1.00588	464683.41
3807141.91		0.99058		
	464703.41	3807141.91	0.98323	464723.41
3807141.91		1.01517		
	464743.41	3807141.91	0.99508	464763.41
3807141.91		0.97960		
	464783.41	3807141.91	0.96080	464803.41
3807141.91		0.94323		
	464823.41	3807141.91	0.93906	464843.41
3807141.91		0.94346		
	464863.41	3807141.91	0.92564	464883.41
3807141.91		0.91216		
	464903.41	3807141.91	0.90360	464923.41
3807141.91		0.90799		
	464503.41	3807161.91	1.11712	464523.41
3807161.91		1.10958		
	464543.41	3807161.91	1.09298	464563.41
3807161.91		1.07394		
	464583.41	3807161.91	1.06754	464603.41
3807161.91		1.06145		
	464623.41	3807161.91	1.05248	464643.41
3807161.91		1.03352		
	464663.41	3807161.91	1.02410	464683.41
3807161.91		1.01548		
	464703.41	3807161.91	0.99720	464723.41
3807161.91		1.02528		
	464743.41	3807161.91	1.00854	464763.41
3807161.91		1.00405		
	464783.41	3807161.91	0.98759	464803.41
3807161.91		0.96829		
	464823.41	3807161.91	0.96170	464843.41
3807161.91		0.95228		
	464863.41	3807161.91	0.93756	464883.41
3807161.91		0.93178		
	464903.41	3807161.91	0.92438	464923.41
3807161.91		0.91871		
	464503.41	3807181.91	1.14122	464523.41
3807181.91		1.12598		

464543.41	3807181.91	1.11146	464563.41
3807181.91	1.09754		
464583.41	3807181.91	1.08305	464603.41
3807181.91	1.07504		
464623.41	3807181.91	1.06852	464643.41
3807181.91	1.04683		
464663.41	3807181.91	1.03659	464683.41
3807181.91	1.07930		
464703.41	3807181.91	1.05721	464723.41
3807181.91	1.04261		
464743.41	3807181.91	1.03050	464763.41
3807181.91	1.02032		
464783.41	3807181.91	1.02071	464803.41
3807181.91	1.00148		
464823.41	3807181.91	0.99078	464843.41
3807181.91	0.97432		
464863.41	3807181.91	0.95670	464883.41
3807181.91	0.94660		
464903.41	3807181.91	0.95043	464923.41
3807181.91	0.94358		
464503.41	3807201.91	1.16564	464523.41
3807201.91	1.14261		
464543.41	3807201.91	1.13009	464563.41
3807201.91	1.12108		
464583.41	3807201.91	1.10217	464603.41
3807201.91	1.09032		
464623.41	3807201.91	1.08104	464643.41
3807201.91	1.06196		
464663.41	3807201.91	1.05054	464683.41
3807201.91	1.09099		
464703.41	3807201.91	1.07342	464723.41
3807201.91	1.06215		
464743.41	3807201.91	1.07376	464763.41
3807201.91	1.05194		
464783.41	3807201.91	1.03439	464803.41
3807201.91	1.01807		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 406

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,

```

          L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
          L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464823.41	3807201.91	1.00981	464843.41
3807201.91	1.00910		
464863.41	3807201.91	0.99536	464883.41
3807201.91	0.97689		
464903.41	3807201.91	0.96992	464923.41
3807201.91	0.97489		
464503.41	3807221.91	1.18058	464523.41
3807221.91	1.15689		
464543.41	3807221.91	1.14394	464563.41
3807221.91	1.13683		
464583.41	3807221.91	1.12934	464603.41
3807221.91	1.11268		
464623.41	3807221.91	1.09519	464643.41
3807221.91	1.08773		
464663.41	3807221.91	1.07181	464683.41
3807221.91	1.10647		
464703.41	3807221.91	1.10072	464723.41
3807221.91	1.08587		
464743.41	3807221.91	1.08459	464763.41
3807221.91	1.06237		
464783.41	3807221.91	1.05117	464803.41
3807221.91	1.04156		
464823.41	3807221.91	1.03116	464843.41
3807221.91	1.02914		
464863.41	3807221.91	1.02661	464883.41
3807221.91	1.00782		
464903.41	3807221.91	0.99562	464923.41
3807221.91	0.98775		
464503.41	3807241.91	1.19709	464523.41
3807241.91	1.18122		
464543.41	3807241.91	1.16517	464563.41
3807241.91	1.15073		
464583.41	3807241.91	1.14522	464603.41
3807241.91	1.12864		
464623.41	3807241.91	1.10773	464643.41

3807241.91	1.10252		
464663.41	3807241.91	1.14522	464683.41
3807241.91	1.13118		
464703.41	3807241.91	1.11918	464723.41
3807241.91	1.11874		
464743.41	3807241.91	1.09681	464763.41
3807241.91	1.08410		
464783.41	3807241.91	1.06980	464803.41
3807241.91	1.06954		
464823.41	3807241.91	1.06142	464843.41
3807241.91	1.05424		
464863.41	3807241.91	1.04819	464883.41
3807241.91	1.02909		
464903.41	3807241.91	1.02142	464923.41
3807241.91	1.01550		
464503.41	3807261.91	1.21360	464523.41
3807261.91	1.20549		
464543.41	3807261.91	1.18628	464563.41
3807261.91	1.16452		
464583.41	3807261.91	1.15871	464603.41
3807261.91	1.14400		
464623.41	3807261.91	1.12529	464643.41
3807261.91	1.11586		
464663.41	3807261.91	1.16485	464683.41
3807261.91	1.17923		
464703.41	3807261.91	1.15448	464723.41
3807261.91	1.13435		
464743.41	3807261.91	1.11547	464763.41
3807261.91	1.10531		
464783.41	3807261.91	1.10349	464803.41
3807261.91	1.08943		
464823.41	3807261.91	1.08774	464843.41
3807261.91	1.08461		
464863.41	3807261.91	1.06914	464883.41
3807261.91	1.04976		
464903.41	3807261.91	1.04821	464923.41
3807261.91	1.06443		
464503.41	3807281.91	1.22912	464523.41
3807281.91	1.22066		
464543.41	3807281.91	1.20085	464563.41
3807281.91	1.17844		
464583.41	3807281.91	1.17233	464603.41
3807281.91	1.16582		
464623.41	3807281.91	1.15484	464643.41
3807281.91	1.13264		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464663.41	3807281.91	1.17741	464683.41
3807281.91	1.19191		
464703.41	3807281.91	1.16663	464723.41
3807281.91	1.15328		
464743.41	3807281.91	1.14160	464763.41
3807281.91	1.12917		
464783.41	3807281.91	1.12580	464803.41
3807281.91	1.12233		
464823.41	3807281.91	1.11000	464843.41
3807281.91	1.10696		
464863.41	3807281.91	1.10914	464883.41
3807281.91	1.08928		
464903.41	3807281.91	1.10103	464923.41
3807281.91	1.10220		
464503.41	3807301.91	1.25761	464523.41
3807301.91	1.23954		
464543.41	3807301.91	1.22306	464563.41
3807301.91	1.20650		
464583.41	3807301.91	1.18976	464603.41
3807301.91	1.18102		
464623.41	3807301.91	1.22715	464643.41
3807301.91	1.20039		
464663.41	3807301.91	1.19010	464683.41
3807301.91	1.20474		
464703.41	3807301.91	1.17894	464723.41
3807301.91	1.16683		

464743.41	3807301.91	1.17283	464763.41
3807301.91	1.16274		
464783.41	3807301.91	1.15367	464803.41
3807301.91	1.14591		
464823.41	3807301.91	1.12391	464843.41
3807301.91	1.12274		
464863.41	3807301.91	1.14400	464883.41
3807301.91	1.13583		
464903.41	3807301.91	1.12940	464923.41
3807301.91	1.13479		
464503.41	3807321.91	1.28558	464523.41
3807321.91	1.25784		
464543.41	3807321.91	1.24427	464563.41
3807321.91	1.23511		
464583.41	3807321.91	1.20799	464603.41
3807321.91	1.19466		
464623.41	3807321.91	1.24087	464643.41
3807321.91	1.21347		
464663.41	3807321.91	1.20294	464683.41
3807321.91	1.21818		
464703.41	3807321.91	1.19720	464723.41
3807321.91	1.18235		
464743.41	3807321.91	1.18711	464763.41
3807321.91	1.19100		
464783.41	3807321.91	1.18160	464803.41
3807321.91	1.16132		
464823.41	3807321.91	1.14338	464843.41
3807321.91	1.14398		
464863.41	3807321.91	1.16520	464883.41
3807321.91	1.16441		
464903.41	3807321.91	1.16779	464923.41
3807321.91	1.14856		
464503.41	3807341.91	1.30223	464523.41
3807341.91	1.27367		
464543.41	3807341.91	1.25960	464563.41
3807341.91	1.25004		
464583.41	3807341.91	1.22218	464603.41
3807341.91	1.20845		
464623.41	3807341.91	1.25473	464643.41
3807341.91	1.22670		
464663.41	3807341.91	1.21596	464683.41
3807341.91	1.23563		
464703.41	3807341.91	1.22413	464723.41
3807341.91	1.21078		
464743.41	3807341.91	1.20001	464763.41
3807341.91	1.20417		
464783.41	3807341.91	1.19476	464803.41
3807341.91	1.17748		
464823.41	3807341.91	1.17968	464843.41
3807341.91	1.20219		

464863.41 3807341.91 1.20401 464883.41
 3807341.91 1.19267
 464903.41 3807341.91 1.18171 464923.41
 3807341.91 1.16753
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 408

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

464503.41	3807361.91	1.32123	464523.41
3807361.91	1.30313		
464543.41	3807361.91	1.28444	464563.41
3807361.91	1.26514		
464583.41	3807361.91	1.23653	464603.41
3807361.91	1.22240		
464623.41	3807361.91	1.27306	464643.41
3807361.91	1.25622		
464663.41	3807361.91	1.23960	464683.41
3807361.91	1.24934		
464703.41	3807361.91	1.24068	464723.41
3807361.91	1.24632		
464743.41	3807361.91	1.23339	464763.41
3807361.91	1.22083		
464783.41	3807361.91	1.22097	464803.41
3807361.91	1.21553		
464823.41	3807361.91	1.23913	464843.41

3807361.91	1.23364		
464863.41	3807361.91	1.23844	464883.41
3807361.91	1.21682		
464903.41	3807361.91	1.21114	464923.41
3807361.91	1.22596		
464503.41	3807381.91	1.34645	464523.41
3807381.91	1.33302		
464543.41	3807381.91	1.31029	464563.41
3807381.91	1.28104		
464583.41	3807381.91	1.25567	464603.41
3807381.91	1.24004		
464623.41	3807381.91	1.28867	464643.41
3807381.91	1.28315		
464663.41	3807381.91	1.29116	464683.41
3807381.91	1.26817		
464703.41	3807381.91	1.25555	464723.41
3807381.91	1.27029		
464743.41	3807381.91	1.27579	464763.41
3807381.91	1.25469		
464783.41	3807381.91	1.24775	464803.41
3807381.91	1.26832		
464823.41	3807381.91	1.27272	464843.41
3807381.91	1.27629		
464863.41	3807381.91	1.25402	464883.41
3807381.91	1.24010		
464903.41	3807381.91	1.25952	464923.41
3807381.91	1.30958		
464503.41	3807401.91	1.38394	464523.41
3807401.91	1.35526		
464543.41	3807401.91	1.32657	464563.41
3807401.91	1.29906		
464583.41	3807401.91	1.28820	464603.41
3807401.91	1.26691		
464623.41	3807401.91	1.30320	464643.41
3807401.91	1.29762		
464663.41	3807401.91	1.31411	464683.41
3807401.91	1.29958		
464703.41	3807401.91	1.28398	464723.41
3807401.91	1.28479		
464743.41	3807401.91	1.29416	464763.41
3807401.91	1.29507		
464783.41	3807401.91	1.28553	464803.41
3807401.91	1.28359		
464823.41	3807401.91	1.28825	464843.41
3807401.91	1.29208		
464863.41	3807401.91	1.27529	464883.41
3807401.91	1.30647		
464903.41	3807401.91	1.31944	464923.41
3807401.91	1.33113		
464503.41	3807421.91	1.40778	464523.41

3807421.91	1.37514		
464543.41	3807421.91	1.35104	464563.41
3807421.91	1.33131		
464583.41	3807421.91	1.31131	464603.41
3807421.91	1.35307		
464623.41	3807421.91	1.33436	464643.41
3807421.91	1.31824		
464663.41	3807421.91	1.33075	464683.41
3807421.91	1.33676		
464703.41	3807421.91	1.32397	464723.41
3807421.91	1.31242		
464743.41	3807421.91	1.30971	464763.41
3807421.91	1.31595		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 409

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464783.41	3807421.91	1.33090	464803.41
3807421.91	1.31942		
464823.41	3807421.91	1.31150	464843.41
3807421.91	1.32490		
464863.41	3807421.91	1.33982	464883.41
3807421.91	1.35358		
464903.41	3807421.91	1.38096	464923.41
3807421.91	1.37947		

464503.41	3807441.91	1.42703	464523.41
3807441.91	1.39790		
464543.41	3807441.91	1.37953	464563.41
3807441.91	1.42596		
464583.41	3807441.91	1.39910	464603.41
3807441.91	1.38135		
464623.41	3807441.91	1.39399	464643.41
3807441.91	1.36816		
464663.41	3807441.91	1.34978	464683.41
3807441.91	1.35428		
464703.41	3807441.91	1.35786	464723.41
3807441.91	1.35277		
464743.41	3807441.91	1.33369	464763.41
3807441.91	1.33358		
464783.41	3807441.91	1.35790	464803.41
3807441.91	1.37488		
464823.41	3807441.91	1.34941	464843.41
3807441.91	1.37487		
464863.41	3807441.91	1.43200	464883.41
3807441.91	1.40705		
464903.41	3807441.91	1.41390	464923.41
3807441.91	1.44871		
464503.41	3807461.91	1.44873	464523.41
3807461.91	1.43560		
464543.41	3807461.91	1.41077	464563.41
3807461.91	1.44883		
464583.41	3807461.91	1.43834	464603.41
3807461.91	1.41537		
464623.41	3807461.91	1.41539	464643.41
3807461.91	1.40092		
464663.41	3807461.91	1.38408	464683.41
3807461.91	1.37031		
464703.41	3807461.91	1.37418	464723.41
3807461.91	1.38288		
464743.41	3807461.91	1.38361	464763.41
3807461.91	1.36864		
464783.41	3807461.91	1.37507	464803.41
3807461.91	1.39260		
464823.41	3807461.91	1.36680	464843.41
3807461.91	1.39263		
464863.41	3807461.91	1.45069	464883.41
3807461.91	1.42530		
464903.41	3807461.91	1.43227	464923.41
3807461.91	1.46770		
464503.41	3807481.91	1.46828	464523.41
3807481.91	1.45817		
464543.41	3807481.91	1.50735	464563.41
3807481.91	1.48511		
464583.41	3807481.91	1.46565	464603.41
3807481.91	1.47145		

464623.41	3807481.91	1.44795	464643.41
3807481.91	1.42660		
464663.41	3807481.91	1.42672	464683.41
3807481.91	1.41049		
464703.41	3807481.91	1.39476	464723.41
3807481.91	1.40466		
464743.41	3807481.91	1.42327	464763.41
3807481.91	1.39486		
464783.41	3807481.91	1.39272	464803.41
3807481.91	1.41081		
464823.41	3807481.91	1.38468	464843.41
3807481.91	1.41086		
464863.41	3807481.91	1.47220	464883.41
3807481.91	1.47611		
464903.41	3807481.91	1.49807	464923.41
3807481.91	1.48877		
464503.41	3807501.91	1.49577	464523.41
3807501.91	1.49238		
464543.41	3807501.91	1.54038	464563.41
3807501.91	1.55287		
464583.41	3807501.91	1.52243	464603.41
3807501.91	1.50019		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 410

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -	464623.41	3807501.91	1.50005	464643.41
3807501.91	1.47478			
	464663.41	3807501.91	1.45952	464683.41
3807501.91	1.46142			
	464703.41	3807501.91	1.43561	464723.41
3807501.91	1.42641			
	464743.41	3807501.91	1.44488	464763.41
3807501.91	1.42195			
	464783.41	3807501.91	1.41451	464803.41
3807501.91	1.43006			
	464823.41	3807501.91	1.41268	464843.41
3807501.91	1.43344			
	464863.41	3807501.91	1.49569	464883.41
3807501.91	1.54687			
	464903.41	3807501.91	1.53304	464923.41
3807501.91	1.50998			
	464503.41	3807521.91	1.55044	464523.41
3807521.91	1.60610			
	464543.41	3807521.91	1.57985	464563.41
3807521.91	1.57816			
	464583.41	3807521.91	1.56015	464603.41
3807521.91	1.53952			
	464623.41	3807521.91	1.52199	464643.41
3807521.91	1.51814			
	464663.41	3807521.91	1.50234	464683.41
3807521.91	1.48426			
	464703.41	3807521.91	1.48417	464723.41
3807521.91	1.47170			
	464743.41	3807521.91	1.46845	464763.41
3807521.91	1.46699			
	464783.41	3807521.91	1.45610	464803.41
3807521.91	1.45587			
	464823.41	3807521.91	1.49023	464843.41
3807521.91	1.50373			
	464863.41	3807521.91	1.51578	464883.41
3807521.91	1.56783			
	464903.41	3807521.91	1.55365	464923.41
3807521.91	1.53007			
	464503.41	3807541.91	1.66297	464523.41
3807541.91	1.63946			
	464543.41	3807541.91	1.64415	464563.41
3807541.91	1.61594			
	464583.41	3807541.91	1.59010	464603.41
3807541.91	1.58833			
	464623.41	3807541.91	1.56813	464643.41
3807541.91	1.54852			
	464663.41	3807541.91	1.54565	464683.41
3807541.91	1.53016			
	464703.41	3807541.91	1.51907	464723.41

3807541.91	1.52660		
464743.41	3807541.91	1.51194	464763.41
3807541.91	1.50147		
464783.41	3807541.91	1.49692	464803.41
3807541.91	1.47607		
464823.41	3807541.91	1.53661	464843.41
3807541.91	1.57603		
464863.41	3807541.91	1.57283	464883.41
3807541.91	1.59522		
464903.41	3807541.91	1.58162	464923.41
3807541.91	1.56808		
464503.41	3807561.91	1.74100	464523.41
3807561.91	1.70491		
464543.41	3807561.91	1.67795	464563.41
3807561.91	1.67586		
464583.41	3807561.91	1.64542	464603.41
3807561.91	1.62616		
464623.41	3807561.91	1.62621	464643.41
3807561.91	1.59522		
464663.41	3807561.91	1.58278	464683.41
3807561.91	1.60159		
464703.41	3807561.91	1.57402	464723.41
3807561.91	1.56373		
464743.41	3807561.91	1.57885	464763.41
3807561.91	1.54765		
464783.41	3807561.91	1.52487	464803.41
3807561.91	1.51362		
464823.41	3807561.91	1.56196	464843.41
3807561.91	1.61553		
464863.41	3807561.91	1.65478	464883.41
3807561.91	1.62495		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 411

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464903.41	3807561.91	1.61393	464923.41
3807561.91	1.59645		
464503.41	3807581.91	1.77148	464523.41
3807581.91	1.74913		
464543.41	3807581.91	1.72379	464563.41
3807581.91	1.70195		
464583.41	3807581.91	1.69535	464603.41
3807581.91	1.67537		
464623.41	3807581.91	1.65291	464643.41
3807581.91	1.65050		
464663.41	3807581.91	1.63429	464683.41
3807581.91	1.62886		
464703.41	3807581.91	1.62512	464723.41
3807581.91	1.61091		
464743.41	3807581.91	1.60118	464763.41
3807581.91	1.56952		
464783.41	3807581.91	1.56950	464803.41
3807581.91	1.61882		
464823.41	3807581.91	1.60040	464843.41
3807581.91	1.63806		
464863.41	3807581.91	1.67789	464883.41
3807581.91	1.64737		
464903.41	3807581.91	1.63602	464923.41
3807581.91	1.62011		
464503.41	3807601.91	1.81893	464523.41
3807601.91	1.82935		
464543.41	3807601.91	1.79811	464563.41
3807601.91	1.75535		
464583.41	3807601.91	1.73083	464603.41
3807601.91	1.72530		
464623.41	3807601.91	1.70550	464643.41
3807601.91	1.69064		
464663.41	3807601.91	1.69710	464683.41
3807601.91	1.67841		
464703.41	3807601.91	1.66456	464723.41
3807601.91	1.65774		
464743.41	3807601.91	1.63095	464763.41
3807601.91	1.64711		
464783.41	3807601.91	1.65667	464803.41
3807601.91	1.68944		

464823.41	3807601.91	1.69227	464843.41
3807601.91	1.71632		
464863.41	3807601.91	1.70354	464883.41
3807601.91	1.68902		
464903.41	3807601.91	1.66610	464923.41
3807601.91	1.64215		
464503.41	3807621.91	1.90384	464523.41
3807621.91	1.88977		
464543.41	3807621.91	1.86450	464563.41
3807621.91	1.82253		
464583.41	3807621.91	1.78500	464603.41
3807621.91	1.76835		
464623.41	3807621.91	1.78731	464643.41
3807621.91	1.75385		
464663.41	3807621.91	1.73981	464683.41
3807621.91	1.75480		
464703.41	3807621.91	1.71761	464723.41
3807621.91	1.68995		
464743.41	3807621.91	1.67534	464763.41
3807621.91	1.72726		
464783.41	3807621.91	1.75018	464803.41
3807621.91	1.73611		
464823.41	3807621.91	1.78118	464843.41
3807621.91	1.76082		
464863.41	3807621.91	1.73530	464883.41
3807621.91	1.72104		
464903.41	3807621.91	1.69493	464923.41
3807621.91	1.66954		
464503.41	3807641.91	1.97118	464523.41
3807641.91	1.93779		
464543.41	3807641.91	1.89188	464563.41
3807641.91	1.85437		
464583.41	3807641.91	1.84881	464603.41
3807641.91	1.82771		
464623.41	3807641.91	1.81939	464643.41
3807641.91	1.81254		
464663.41	3807641.91	1.79398	464683.41
3807641.91	1.78105		
464703.41	3807641.91	1.74325	464723.41
3807641.91	1.74094		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 412

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464743.41	3807641.91	1.79397	464763.41
3807641.91	1.77134		
464783.41	3807641.91	1.80340	464803.41
3807641.91	1.84376		
464823.41	3807641.91	1.81204	464843.41
3807641.91	1.79782		
464863.41	3807641.91	1.77887	464883.41
3807641.91	1.74900		
464903.41	3807641.91	1.72439	464923.41
3807641.91	1.69720		
464503.41	3807661.91	2.06499	464523.41
3807661.91	2.01167		
464543.41	3807661.91	1.96036	464563.41
3807661.91	1.91557		
464583.41	3807661.91	1.89573	464603.41
3807661.91	1.90057		
464623.41	3807661.91	1.87660	464643.41
3807661.91	1.85829		
464663.41	3807661.91	1.87247	464683.41
3807661.91	1.88166		
464703.41	3807661.91	1.84146	464723.41
3807661.91	1.83975		
464743.41	3807661.91	1.87430	464763.41
3807661.91	1.87551		
464783.41	3807661.91	1.90071	464803.41
3807661.91	1.88449		
464823.41	3807661.91	1.86645	464843.41
3807661.91	1.83904		
464863.41	3807661.91	1.80997	464883.41
3807661.91	1.78522		
464903.41	3807661.91	1.75243	464923.41

3807661.91	1.72088		
464503.41	3807681.91	2.18416	464523.41
3807681.91	2.12794		
464543.41	3807681.91	2.07384	464563.41
3807681.91	2.02191		
464583.41	3807681.91	1.97220	464603.41
3807681.91	1.95049		
464623.41	3807681.91	1.96570	464643.41
3807681.91	1.93339		
464663.41	3807681.91	1.95458	464683.41
3807681.91	2.02607		
464703.41	3807681.91	1.99590	464723.41
3807681.91	1.95901		
464743.41	3807681.91	1.92818	464763.41
3807681.91	1.97704		
464783.41	3807681.91	1.95206	464803.41
3807681.91	1.92144		
464823.41	3807681.91	1.90358	464843.41
3807681.91	1.87250		
464863.41	3807681.91	1.84231	464883.41
3807681.91	1.81198		
464903.41	3807681.91	1.77812	464923.41
3807681.91	1.74504		
464523.41	3807701.91	2.21555	464543.41
3807701.91	2.15918		
464563.41	3807701.91	2.10513	464583.41
3807701.91	2.05342		
464603.41	3807701.91	2.01362	464623.41
3807701.91	2.00627		
464643.41	3807701.91	2.04632	464663.41
3807701.91	2.05775		
464683.41	3807701.91	2.06703	464703.41
3807701.91	2.07670		
464723.41	3807701.91	2.09518	464743.41
3807701.91	2.05129		
464763.41	3807701.91	2.01326	464783.41
3807701.91	1.99518		
464803.41	3807701.91	1.97181	464823.41
3807701.91	1.93627		
464843.41	3807701.91	1.90675	464863.41
3807701.91	1.87441		
464883.41	3807701.91	1.83818	464903.41
3807701.91	1.80374		
464923.41	3807701.91	1.77075	464543.41
3807721.91	2.27661		
464563.41	3807721.91	2.18303	464583.41
3807721.91	2.12929		
464603.41	3807721.91	2.07796	464623.41
3807721.91	2.03941		

▲ *** AERMOD - VERSION 19191 ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 413

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464643.41	3807721.91	2.11668	464663.41
3807721.91	2.16478		
464683.41	3807721.91	2.15283	464703.41
3807721.91	2.17802		
464723.41	3807721.91	2.14185	464743.41
3807721.91	2.09899		
464763.41	3807721.91	2.07636	464783.41
3807721.91	2.04318		
464803.41	3807721.91	2.00829	464823.41
3807721.91	1.97839		
464843.41	3807721.91	1.93952	464863.41
3807721.91	1.90215		
464883.41	3807721.91	1.86553	464903.41
3807721.91	1.83027		
464923.41	3807721.91	1.79597	464943.41
3807721.91	1.76227		
464963.41	3807721.91	1.72978	464983.41
3807721.91	1.69811		
465003.41	3807721.91	1.66728	465023.41
3807721.91	1.63686		
465043.41	3807721.91	1.60755	465063.41
3807721.91	1.57868		

465083.41	3807721.91	1.55087	465103.41
3807721.91	1.52337		
465123.41	3807721.91	1.49632	465143.41
3807721.91	1.47019		
465163.41	3807721.91	1.44508	465183.41
3807721.91	1.42001		
465203.41	3807721.91	1.39578	465223.41
3807721.91	1.37257		
465243.41	3807721.91	1.34998	465263.41
3807721.91	1.32764		
465283.41	3807721.91	1.30608	465303.41
3807721.91	1.28450		
465323.41	3807721.91	1.26371	465343.41
3807721.91	1.24377		
465363.41	3807721.91	1.22373	465383.41
3807721.91	1.20496		
464543.41	3807741.91	2.51794	464563.41
3807741.91	2.26406		
464583.41	3807741.91	2.19376	464603.41
3807741.91	2.13676		
464623.41	3807741.91	2.09901	464643.41
3807741.91	2.18151		
464663.41	3807741.91	2.23578	464683.41
3807741.91	2.27561		
464703.41	3807741.91	2.22528	464723.41
3807741.91	2.17984		
464743.41	3807741.91	2.14261	464763.41
3807741.91	2.12005		
464783.41	3807741.91	2.08258	464803.41
3807741.91	2.04626		
464823.41	3807741.91	2.00990	464843.41
3807741.91	1.96948		
464863.41	3807741.91	1.93009	464883.41
3807741.91	1.89357		
464903.41	3807741.91	1.85667	464923.41
3807741.91	1.82097		
464943.41	3807741.91	1.78729	464963.41
3807741.91	1.75370		
464983.41	3807741.91	1.72049	465003.41
3807741.91	1.68926		
465023.41	3807741.91	1.65837	465043.41
3807741.91	1.62783		
465063.41	3807741.91	1.59877	465083.41
3807741.91	1.56980		
465103.41	3807741.91	1.54144	465123.41
3807741.91	1.51391		
465143.41	3807741.91	1.48769	465163.41
3807741.91	1.46220		
465183.41	3807741.91	1.43675	465203.41
3807741.91	1.41187		

465223.41	3807741.91	1.38796	465243.41
3807741.91	1.36480		
465263.41	3807741.91	1.34218	465283.41
3807741.91	1.31968		
465303.41	3807741.91	1.29785	465323.41
3807741.91	1.27745		
465343.41	3807741.91	1.25762	465363.41
3807741.91	1.23739		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 414

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465383.41	3807741.91	1.21757	464543.41
3807761.91	2.77757		
464563.41	3807761.91	2.57249	464583.41
3807761.91	2.43742		
464603.41	3807761.91	2.30575	464623.41
3807761.91	2.27177		
464643.41	3807761.91	2.33437	464663.41
3807761.91	2.35884		
464683.41	3807761.91	2.31427	464703.41
3807761.91	2.26245		
464723.41	3807761.91	2.23086	464743.41
3807761.91	2.20172		
464763.41	3807761.91	2.15886	464783.41

3807761.91	2.12300		
464803.41	3807761.91	2.08408	464823.41
3807761.91	2.04093		
464843.41	3807761.91	1.99895	464863.41
3807761.91	1.95845		
464883.41	3807761.91	1.92089	464903.41
3807761.91	1.88297		
464923.41	3807761.91	1.84629	464943.41
3807761.91	1.81170		
464963.41	3807761.91	1.77722	464983.41
3807761.91	1.74316		
465003.41	3807761.91	1.71113	465023.41
3807761.91	1.67977		
465043.41	3807761.91	1.64911	465063.41
3807761.91	1.61857		
465083.41	3807761.91	1.58878	465103.41
3807761.91	1.55985		
465123.41	3807761.91	1.53248	465143.41
3807761.91	1.50552		
465163.41	3807761.91	1.47889	465183.41
3807761.91	1.45365		
465203.41	3807761.91	1.42841	465223.41
3807761.91	1.40397		
465243.41	3807761.91	1.37992	465263.41
3807761.91	1.35642		
465283.41	3807761.91	1.33359	465303.41
3807761.91	1.31245		
465323.41	3807761.91	1.29151	465343.41
3807761.91	1.27045		
465363.41	3807761.91	1.25065	465383.41
3807761.91	1.23095		
464543.41	3807781.91	2.86137	464563.41
3807781.91	2.78701		
464583.41	3807781.91	2.69682	464603.41
3807781.91	2.60955		
464623.41	3807781.91	2.53003	464643.41
3807781.91	2.46704		
464663.41	3807781.91	2.42106	464683.41
3807781.91	2.38368		
464703.41	3807781.91	2.32968	464723.41
3807781.91	2.28767		
464743.41	3807781.91	2.24519	464763.41
3807781.91	2.20861		
464783.41	3807781.91	2.16192	464803.41
3807781.91	2.11696		
464823.41	3807781.91	2.07229	464843.41
3807781.91	2.02964		
464863.41	3807781.91	1.98895	464883.41
3807781.91	1.94901		
464903.41	3807781.91	1.91067	464923.41

3807781.91	1.87341		
464943.41	3807781.91	1.83714	464963.41
3807781.91	1.80152		
464983.41	3807781.91	1.76724	465003.41
3807781.91	1.73351		
465023.41	3807781.91	1.70129	465043.41
3807781.91	1.66993		
465063.41	3807781.91	1.63859	465083.41
3807781.91	1.60832		
465103.41	3807781.91	1.57931	465123.41
3807781.91	1.55106		
465143.41	3807781.91	1.52328	465163.41
3807781.91	1.49657		
465183.41	3807781.91	1.47057	465203.41
3807781.91	1.44475		
465223.41	3807781.91	1.41957	465243.41
3807781.91	1.39565		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 415

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3807781.91	1.37182	465283.41
3807781.91	1.34884		
465303.41	3807781.91	1.32673	465323.41
3807781.91	1.30522		

465343.41	3807781.91	1.28428	465363.41
3807781.91	1.26388		
465383.41	3807781.91	1.24350	464543.41
3807801.91	2.92436		
464563.41	3807801.91	2.84968	464583.41
3807801.91	2.77753		
464603.41	3807801.91	2.70729	464623.41
3807801.91	2.62605		
464643.41	3807801.91	2.54184	464663.41
3807801.91	2.48820		
464683.41	3807801.91	2.44234	464703.41
3807801.91	2.38631		
464723.41	3807801.91	2.33488	464743.41
3807801.91	2.29057		
464763.41	3807801.91	2.24637	464783.41
3807801.91	2.19776		
464803.41	3807801.91	2.15030	464823.41
3807801.91	2.10465		
464843.41	3807801.91	2.06160	464863.41
3807801.91	2.01952		
464883.41	3807801.91	1.97838	464903.41
3807801.91	1.93904		
464923.41	3807801.91	1.90086	464943.41
3807801.91	1.86286		
464963.41	3807801.91	1.82673	464983.41
3807801.91	1.79164		
465003.41	3807801.91	1.75681	465023.41
3807801.91	1.72326		
465043.41	3807801.91	1.69105	465063.41
3807801.91	1.65910		
465083.41	3807801.91	1.62864	465103.41
3807801.91	1.59906		
465123.41	3807801.91	1.56970	465143.41
3807801.91	1.54172		
465163.41	3807801.91	1.51455	465183.41
3807801.91	1.48741		
465203.41	3807801.91	1.46108	465223.41
3807801.91	1.43556		
465243.41	3807801.91	1.41198	465263.41
3807801.91	1.38808		
465283.41	3807801.91	1.36436	465303.41
3807801.91	1.34136		
465323.41	3807801.91	1.31956	465343.41
3807801.91	1.29839		
465363.41	3807801.91	1.27702	465383.41
3807801.91	1.25631		
464543.41	3807821.91	2.98365	464563.41
3807821.91	2.90963		
464583.41	3807821.91	2.83673	464603.41
3807821.91	2.76335		

464623.41	3807821.91	2.69162	464643.41
3807821.91	2.61097		
464663.41	3807821.91	2.54538	464683.41
3807821.91	2.48572		
464703.41	3807821.91	2.42785	464723.41
3807821.91	2.38349		
464743.41	3807821.91	2.33594	464763.41
3807821.91	2.28381		
464783.41	3807821.91	2.23325	464803.41
3807821.91	2.18457		
464823.41	3807821.91	2.13917	464843.41
3807821.91	2.09391		
464863.41	3807821.91	2.05031	464883.41
3807821.91	2.00888		
464903.41	3807821.91	1.96801	464923.41
3807821.91	1.92784		
464943.41	3807821.91	1.88981	464963.41
3807821.91	1.85206		
464983.41	3807821.91	1.81572	465003.41
3807821.91	1.78083		
465023.41	3807821.91	1.74628	465043.41
3807821.91	1.71266		
465063.41	3807821.91	1.68071	465083.41
3807821.91	1.64941		
465103.41	3807821.91	1.61858	465123.41
3807821.91	1.58931		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 416

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807821.91	1.56060	465163.41
3807821.91	1.53222		
465183.41	3807821.91	1.50455	465203.41
3807821.91	1.47832		
465223.41	3807821.91	1.45322	465243.41
3807821.91	1.42813		
465263.41	3807821.91	1.40335	465283.41
3807821.91	1.37929		
465303.41	3807821.91	1.35666	465323.41
3807821.91	1.33433		
465343.41	3807821.91	1.31212	465363.41
3807821.91	1.29041		
465383.41	3807821.91	1.27000	464543.41
3807841.91	3.04120		
464563.41	3807841.91	2.96487	464583.41
3807841.91	2.89341		
464603.41	3807841.91	2.82184	464623.41
3807841.91	2.74794		
464643.41	3807841.91	2.67828	464663.41
3807841.91	2.61207		
464683.41	3807841.91	2.54815	464723.41
3807841.91	2.43063		
464743.41	3807841.91	2.37591	464763.41
3807841.91	2.32184		
464783.41	3807841.91	2.27030	464803.41
3807841.91	2.22121		
464823.41	3807841.91	2.17321	464843.41
3807841.91	2.12721		
464863.41	3807841.91	2.08263	464883.41
3807841.91	2.03937		
464903.41	3807841.91	1.99704	464923.41
3807841.91	1.95636		
464943.41	3807841.91	1.91648	464963.41
3807841.91	1.87821		
464983.41	3807841.91	1.84070	465003.41
3807841.91	1.80467		
465023.41	3807841.91	1.76935	465043.41
3807841.91	1.73545		
465063.41	3807841.91	1.70253	465083.41
3807841.91	1.67023		
465103.41	3807841.91	1.63923	465123.41
3807841.91	1.60911		
465143.41	3807841.91	1.57955	465163.41
3807841.91	1.55113		
465183.41	3807841.91	1.52294	465203.41

3807841.91	1.49635		
465223.41	3807841.91	1.47029	465243.41
3807841.91	1.44498		
465263.41	3807841.91	1.41985	465283.41
3807841.91	1.39534		
465303.41	3807841.91	1.37206	465323.41
3807841.91	1.34890		
465343.41	3807841.91	1.32631	465363.41
3807841.91	1.30495		
465383.41	3807841.91	1.28387	464503.41
3807861.91	3.27359		
464523.41	3807861.91	3.18288	464543.41
3807861.91	3.09828		
464563.41	3807861.91	3.02003	464583.41
3807861.91	2.94751		
464603.41	3807861.91	2.87712	464723.41
3807861.91	2.47442		
464743.41	3807861.91	2.41657	464763.41
3807861.91	2.36076		
464783.41	3807861.91	2.30821	464803.41
3807861.91	2.25813		
464823.41	3807861.91	2.20858	464843.41
3807861.91	2.16128		
464863.41	3807861.91	2.11548	464883.41
3807861.91	2.07017		
464903.41	3807861.91	2.02709	464923.41
3807861.91	1.98536		
464943.41	3807861.91	1.94419	464963.41
3807861.91	1.90455		
464983.41	3807861.91	1.86655	465003.41
3807861.91	1.82909		
465023.41	3807861.91	1.79334	465043.41
3807861.91	1.75871		
465063.41	3807861.91	1.72453	465083.41
3807861.91	1.69193		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 417

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028

, L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465103.41	3807861.91	1.66034	465123.41
3807861.91	1.62910		
465143.41	3807861.91	1.59968	465163.41
3807861.91	1.57113		
465183.41	3807861.91	1.54251	465203.41
3807861.91	1.51463		
465223.41	3807861.91	1.48756	465243.41
3807861.91	1.46196		
465263.41	3807861.91	1.43677	465283.41
3807861.91	1.41181		
465303.41	3807861.91	1.38765	465323.41
3807861.91	1.36405		
465343.41	3807861.91	1.34113	465363.41
3807861.91	1.31965		
465383.41	3807861.91	1.29919	464503.41
3807881.91	3.34329		
464523.41	3807881.91	3.24856	464543.41
3807881.91	3.16071		
464723.41	3807881.91	2.51812	464743.41
3807881.91	2.45835		
464763.41	3807881.91	2.40073	464783.41
3807881.91	2.34651		
464803.41	3807881.91	2.29553	464823.41
3807881.91	2.24541		
464843.41	3807881.91	2.19621	464863.41
3807881.91	2.14808		
464883.41	3807881.91	2.10247	464903.41
3807881.91	2.05747		
464923.41	3807881.91	2.01427	464943.41
3807881.91	1.97280		
464963.41	3807881.91	1.93197	464983.41
3807881.91	1.89238		
465003.41	3807881.91	1.85470	465023.41
3807881.91	1.81798		
465043.41	3807881.91	1.78196	465063.41
3807881.91	1.74769		

465083.41	3807881.91	1.71425	465103.41
3807881.91	1.68142		
465123.41	3807881.91	1.65057	465143.41
3807881.91	1.62039		
465163.41	3807881.91	1.59038	465183.41
3807881.91	1.56188		
465203.41	3807881.91	1.53393	465223.41
3807881.91	1.50632		
465243.41	3807881.91	1.47953	465263.41
3807881.91	1.45343		
465283.41	3807881.91	1.42812	465303.41
3807881.91	1.40433		
465323.41	3807881.91	1.38051	465343.41
3807881.91	1.35745		
465363.41	3807881.91	1.33480	465383.41
3807881.91	1.31429		
464723.41	3807901.91	2.56550	464743.41
3807901.91	2.50154		
464763.41	3807901.91	2.44318	464783.41
3807901.91	2.38721		
464803.41	3807901.91	2.33332	464823.41
3807901.91	2.28183		
464843.41	3807901.91	2.23109	464863.41
3807901.91	2.18145		
464883.41	3807901.91	2.13463	464903.41
3807901.91	2.08898		
464923.41	3807901.91	2.04430	464943.41
3807901.91	2.00148		
464963.41	3807901.91	1.95950	464983.41
3807901.91	1.91888		
465003.41	3807901.91	1.88073	465023.41
3807901.91	1.84287		
465043.41	3807901.91	1.80651	465063.41
3807901.91	1.77129		
465083.41	3807901.91	1.73682	465103.41
3807901.91	1.70413		
465123.41	3807901.91	1.67207	465143.41
3807901.91	1.64099		
465163.41	3807901.91	1.61085	465183.41
3807901.91	1.58161		
465203.41	3807901.91	1.55274	465223.41
3807901.91	1.52465		
465243.41	3807901.91	1.49795	465263.41
3807901.91	1.47149		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465283.41	3807901.91	1.44571	465303.41
3807901.91	1.42124		
465323.41	3807901.91	1.39808	465343.41
3807901.91	1.37572		
465363.41	3807901.91	1.35259	465383.41
3807901.91	1.33095		
464723.41	3807921.91	2.61489	464743.41
3807921.91	2.54721		
464763.41	3807921.91	2.48742	464783.41
3807921.91	2.42926		
464803.41	3807921.91	2.37266	464823.41
3807921.91	2.31921		
464843.41	3807921.91	2.26701	464863.41
3807921.91	2.21608		
464883.41	3807921.91	2.16782	464903.41
3807921.91	2.12094		
464923.41	3807921.91	2.07551	464943.41
3807921.91	2.03093		
464963.41	3807921.91	1.98788	464983.41
3807921.91	1.94673		
465003.41	3807921.91	1.90722	465023.41
3807921.91	1.86891		
465043.41	3807921.91	1.83178	465063.41
3807921.91	1.79529		
465083.41	3807921.91	1.76085	465103.41
3807921.91	1.72750		
465123.41	3807921.91	1.69429	465143.41

3807921.91	1.66262		
465163.41	3807921.91	1.63197	465183.41
3807921.91	1.60169		
465203.41	3807921.91	1.57224	465223.41
3807921.91	1.54366		
465243.41	3807921.91	1.51665	465263.41
3807921.91	1.49099		
465283.41	3807921.91	1.46496	465303.41
3807921.91	1.43941		
465323.41	3807921.91	1.41620	465343.41
3807921.91	1.39507		
465363.41	3807921.91	1.37154	465383.41
3807921.91	1.34931		
464723.41	3807941.91	2.66605	464743.41
3807941.91	2.59773		
464763.41	3807941.91	2.53253	464783.41
3807941.91	2.47194		
464803.41	3807941.91	2.41456	464823.41
3807941.91	2.35843		
464843.41	3807941.91	2.30483	464863.41
3807941.91	2.25273		
464883.41	3807941.91	2.20323	464903.41
3807941.91	2.15433		
464923.41	3807941.91	2.10702	464943.41
3807941.91	2.06127		
464963.41	3807941.91	2.01773	464983.41
3807941.91	1.97576		
465003.41	3807941.91	1.93520	465023.41
3807941.91	1.89583		
465043.41	3807941.91	1.85730	465063.41
3807941.91	1.82100		
465083.41	3807941.91	1.78569	465103.41
3807941.91	1.75072		
465123.41	3807941.91	1.71744	465143.41
3807941.91	1.68504		
465163.41	3807941.91	1.65323	465183.41
3807941.91	1.62304		
465203.41	3807941.91	1.59316	465223.41
3807941.91	1.56434		
465243.41	3807941.91	1.53609	465263.41
3807941.91	1.51021		
465283.41	3807941.91	1.48596	465303.41
3807941.91	1.45995		
465323.41	3807941.91	1.43534	465343.41
3807941.91	1.41179		
465363.41	3807941.91	1.38786	465383.41
3807941.91	1.36609		
465403.41	3807941.91	1.34481	465423.41
3807941.91	1.32300		
465443.41	3807941.91	1.30216	465463.41

3807941.91 1.28049
465483.41 3807941.91 1.26042 465503.41
3807941.91 1.24122

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 419

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465523.41	3807941.91	1.22218	465543.41
3807941.91	1.20453		
465563.41	3807941.91	1.18691	465583.41
3807941.91	1.16919		
465603.41	3807941.91	1.15182	465623.41
3807941.91	1.13577		
465643.41	3807941.91	1.12031	465663.41
3807941.91	1.10455		
465683.41	3807941.91	1.09057	465703.41
3807941.91	1.07650		
464723.41	3807961.91	2.71601	464743.41
3807961.91	2.64768		
464763.41	3807961.91	2.58000	464783.41
3807961.91	2.51658		
464803.41	3807961.91	2.45689	464823.41
3807961.91	2.39939		
464843.41	3807961.91	2.34342	464863.41
3807961.91	2.28994		

464883.41	3807961.91	2.23853	464903.41
3807961.91	2.18824		
464923.41	3807961.91	2.13965	464943.41
3807961.91	2.09334		
464963.41	3807961.91	2.04820	464983.41
3807961.91	2.00504		
465003.41	3807961.91	1.96349	465023.41
3807961.91	1.92316		
465043.41	3807961.91	1.88371	465063.41
3807961.91	1.84700		
465083.41	3807961.91	1.81062	465103.41
3807961.91	1.77537		
465123.41	3807961.91	1.74125	465143.41
3807961.91	1.70787		
465163.41	3807961.91	1.67591	465183.41
3807961.91	1.64494		
465203.41	3807961.91	1.61558	465223.41
3807961.91	1.58729		
465243.41	3807961.91	1.55843	465263.41
3807961.91	1.53126		
465283.41	3807961.91	1.50644	465303.41
3807961.91	1.47994		
465323.41	3807961.91	1.45512	465343.41
3807961.91	1.43090		
465363.41	3807961.91	1.40656	465383.41
3807961.91	1.38351		
465403.41	3807961.91	1.36183	465423.41
3807961.91	1.34029		
465443.41	3807961.91	1.31861	465463.41
3807961.91	1.29646		
465483.41	3807961.91	1.27669	465503.41
3807961.91	1.25671		
465523.41	3807961.91	1.23735	465543.41
3807961.91	1.21903		
465563.41	3807961.91	1.20058	465583.41
3807961.91	1.18276		
465603.41	3807961.91	1.16577	465623.41
3807961.91	1.14946		
465643.41	3807961.91	1.13405	465663.41
3807961.91	1.11864		
465683.41	3807961.91	1.10341	465703.41
3807961.91	1.08848		
464743.41	3807981.91	2.69791	464763.41
3807981.91	2.62921		
464783.41	3807981.91	2.56303	464803.41
3807981.91	2.50034		
464823.41	3807981.91	2.44122	464843.41
3807981.91	2.38385		
464863.41	3807981.91	2.32808	464883.41
3807981.91	2.27514		

464903.41	3807981.91	2.22345	464923.41
3807981.91	2.17401		
464943.41	3807981.91	2.12652	464963.41
3807981.91	2.08019		
464983.41	3807981.91	2.03587	465003.41
3807981.91	1.99281		
465023.41	3807981.91	1.95153	465043.41
3807981.91	1.91122		
465063.41	3807981.91	1.87358	465083.41
3807981.91	1.83683		
465103.41	3807981.91	1.80091	465123.41
3807981.91	1.76553		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 420

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465143.41	3807981.91	1.73188	465163.41
3807981.91	1.70011		
465183.41	3807981.91	1.66818	465203.41
3807981.91	1.63881		
465223.41	3807981.91	1.61167	465243.41
3807981.91	1.58223		
465263.41	3807981.91	1.55364	465283.41
3807981.91	1.52611		
465303.41	3807981.91	1.49960	465323.41

3807981.91	1.47442		
465343.41	3807981.91	1.45085	465363.41
3807981.91	1.42630		
465383.41	3807981.91	1.40226	465403.41
3807981.91	1.37936		
465423.41	3807981.91	1.35715	465443.41
3807981.91	1.33561		
465463.41	3807981.91	1.31287	465483.41
3807981.91	1.29267		
465503.41	3807981.91	1.27271	465523.41
3807981.91	1.25286		
465543.41	3807981.91	1.23398	465563.41
3807981.91	1.21516		
465583.41	3807981.91	1.19689	465603.41
3807981.91	1.18024		
465623.41	3807981.91	1.16420	465643.41
3807981.91	1.14769		
465663.41	3807981.91	1.13245	465683.41
3807981.91	1.11653		
465703.41	3807981.91	1.10068	464763.41
3808001.91	2.67930		
464783.41	3808001.91	2.61150	464803.41
3808001.91	2.54624		
464823.41	3808001.91	2.48538	464843.41
3808001.91	2.42574		
464863.41	3808001.91	2.36835	464883.41
3808001.91	2.31370		
464903.41	3808001.91	2.26102	464923.41
3808001.91	2.20981		
464943.41	3808001.91	2.16045	464963.41
3808001.91	2.11340		
464983.41	3808001.91	2.06805	465003.41
3808001.91	2.02376		
465023.41	3808001.91	1.98154	465043.41
3808001.91	1.94119		
465063.41	3808001.91	1.90166	465083.41
3808001.91	1.86361		
465103.41	3808001.91	1.82688	465123.41
3808001.91	1.79072		
465143.41	3808001.91	1.75634	465163.41
3808001.91	1.72410		
465183.41	3808001.91	1.69336	465203.41
3808001.91	1.66331		
465223.41	3808001.91	1.63353	465243.41
3808001.91	1.60350		
465263.41	3808001.91	1.57434	465283.41
3808001.91	1.54672		
465303.41	3808001.91	1.52052	465323.41
3808001.91	1.49483		
465343.41	3808001.91	1.46974	465363.41

3808001.91	1.44550			
465383.41	3808001.91	1.42128		465403.41
3808001.91	1.39779			
465423.41	3808001.91	1.37470		465443.41
3808001.91	1.35221			
465463.41	3808001.91	1.32988		465483.41
3808001.91	1.30894			
465503.41	3808001.91	1.28821		465523.41
3808001.91	1.26844			
465543.41	3808001.91	1.25004		465563.41
3808001.91	1.23108			
465583.41	3808001.91	1.21241		465603.41
3808001.91	1.19456			
465623.41	3808001.91	1.17862		465643.41
3808001.91	1.16261			
465663.41	3808001.91	1.14581		465683.41
3808001.91	1.12933			
465703.41	3808001.91	1.11343		464763.41
3808021.91	2.72922			
464783.41	3808021.91	2.66085		464803.41
3808021.91	2.59431			

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 421

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

- - - - -
 - - - - -

464823.41	3808021.91	2.53046	464843.41
3808021.91	2.46907		
464863.41	3808021.91	2.41002	464883.41
3808021.91	2.35369		
464903.41	3808021.91	2.29907	464923.41
3808021.91	2.24695		
464943.41	3808021.91	2.19630	464963.41
3808021.91	2.14752		
464983.41	3808021.91	2.10096	465003.41
3808021.91	2.05608		
465023.41	3808021.91	2.01318	465043.41
3808021.91	1.97136		
465063.41	3808021.91	1.93099	465083.41
3808021.91	1.89161		
465103.41	3808021.91	1.85394	465123.41
3808021.91	1.81754		
465143.41	3808021.91	1.78198	465163.41
3808021.91	1.74883		
465183.41	3808021.91	1.71786	465203.41
3808021.91	1.68783		
465223.41	3808021.91	1.65695	465243.41
3808021.91	1.62711		
465263.41	3808021.91	1.59759	465283.41
3808021.91	1.56875		
465303.41	3808021.91	1.54178	465323.41
3808021.91	1.51566		
465343.41	3808021.91	1.49004	465363.41
3808021.91	1.46503		
465383.41	3808021.91	1.44016	465403.41
3808021.91	1.41618		
465423.41	3808021.91	1.39318	465443.41
3808021.91	1.37067		
465463.41	3808021.91	1.34735	465483.41
3808021.91	1.32626		
465503.41	3808021.91	1.30554	465523.41
3808021.91	1.28504		
465543.41	3808021.91	1.26575	465563.41
3808021.91	1.24780		
465583.41	3808021.91	1.22971	465603.41
3808021.91	1.21116		
465623.41	3808021.91	1.19346	465643.41
3808021.91	1.17652		
465663.41	3808021.91	1.15930	465683.41
3808021.91	1.14353		
465703.41	3808021.91	1.12798	464783.41
3808041.91	2.71075		
464803.41	3808041.91	2.64256	464823.41
3808041.91	2.57731		
464843.41	3808041.91	2.51443	464863.41
3808041.91	2.45330		

464883.41	3808041.91	2.39491	464903.41
3808041.91	2.33917		
464923.41	3808041.91	2.28557	464943.41
3808041.91	2.23360		
464963.41	3808041.91	2.18352	464983.41
3808041.91	2.13524		
465003.41	3808041.91	2.09012	465023.41
3808041.91	2.04569		
465043.41	3808041.91	2.00241	465063.41
3808041.91	1.96112		
465083.41	3808041.91	1.92119	465103.41
3808041.91	1.88221		
465123.41	3808041.91	1.84508	465143.41
3808041.91	1.80994		
465163.41	3808041.91	1.77500	465183.41
3808041.91	1.74303		
465203.41	3808041.91	1.71284	465223.41
3808041.91	1.68081		
465243.41	3808041.91	1.65133	465263.41
3808041.91	1.62205		
465283.41	3808041.91	1.59264	465303.41
3808041.91	1.56405		
465323.41	3808041.91	1.53711	465343.41
3808041.91	1.51090		
465363.41	3808041.91	1.48521	465383.41
3808041.91	1.45981		
465403.41	3808041.91	1.43517	465423.41
3808041.91	1.41234		
465443.41	3808041.91	1.38987	465463.41
3808041.91	1.36505		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 422

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465483.41	3808041.91	1.34419	465503.41
3808041.91	1.32419		
465523.41	3808041.91	1.30348	465543.41
3808041.91	1.28308		
465563.41	3808041.91	1.26423	465583.41
3808041.91	1.24591		
465603.41	3808041.91	1.22703	465623.41
3808041.91	1.20862		
465643.41	3808041.91	1.19068	465663.41
3808041.91	1.17356		
465683.41	3808041.91	1.15791	465703.41
3808041.91	1.14274		
464803.41	3808061.91	2.69311	464823.41
3808061.91	2.62665		
464843.41	3808061.91	2.56077	464863.41
3808061.91	2.49831		
464883.41	3808061.91	2.43829	464903.41
3808061.91	2.38102		
464923.41	3808061.91	2.32549	464943.41
3808061.91	2.27206		
464963.41	3808061.91	2.22059	464983.41
3808061.91	2.17101		
465003.41	3808061.91	2.12468	465023.41
3808061.91	2.07956		
465043.41	3808061.91	2.03566	465063.41
3808061.91	1.99283		
465083.41	3808061.91	1.95197	465103.41
3808061.91	1.91258		
465123.41	3808061.91	1.87397	465143.41
3808061.91	1.83819		
465163.41	3808061.91	1.80482	465183.41
3808061.91	1.77110		
465203.41	3808061.91	1.73886	465223.41
3808061.91	1.70716		
465243.41	3808061.91	1.67541	465263.41
3808061.91	1.64586		
465283.41	3808061.91	1.61630	465303.41
3808061.91	1.58714		
465323.41	3808061.91	1.55919	465343.41
3808061.91	1.53219		
465363.41	3808061.91	1.50665	465383.41

3808061.91	1.48087		
465403.41	3808061.91	1.45570	465423.41
3808061.91	1.43159		
465443.41	3808061.91	1.40824	465463.41
3808061.91	1.38425		
465483.41	3808061.91	1.36210	465503.41
3808061.91	1.34207		
465523.41	3808061.91	1.32206	465543.41
3808061.91	1.30128		
465563.41	3808061.91	1.28110	465583.41
3808061.91	1.26146		
465603.41	3808061.91	1.24222	465623.41
3808061.91	1.22346		
465643.41	3808061.91	1.20541	465663.41
3808061.91	1.18937		
465683.41	3808061.91	1.17276	465703.41
3808061.91	1.15631		
464823.41	3808081.91	2.67657	464843.41
3808081.91	2.61069		
464863.41	3808081.91	2.54656	464883.41
3808081.91	2.48432		
464903.41	3808081.91	2.42427	464923.41
3808081.91	2.36723		
464943.41	3808081.91	2.31225	464963.41
3808081.91	2.25936		
464983.41	3808081.91	2.20936	465003.41
3808081.91	2.16078		
465023.41	3808081.91	2.11444	465043.41
3808081.91	2.06938		
465063.41	3808081.91	2.02543	465083.41
3808081.91	1.98354		
465103.41	3808081.91	1.94413	465123.41
3808081.91	1.90519		
465143.41	3808081.91	1.86879	465163.41
3808081.91	1.83503		
465183.41	3808081.91	1.79988	465203.41
3808081.91	1.76588		
465223.41	3808081.91	1.73351	465243.41
3808081.91	1.70160		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 423

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012

```

, L0006013      , L0006014      , L0006015      ,
                  L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
                  L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
                  L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465263.41	3808081.91	1.67020	465283.41
3808081.91	1.64010		
465303.41	3808081.91	1.61030	465323.41
3808081.91	1.58192		
465343.41	3808081.91	1.55454	465363.41
3808081.91	1.52797		
465383.41	3808081.91	1.50219	465403.41
3808081.91	1.47698		
465423.41	3808081.91	1.45294	465443.41
3808081.91	1.42906		
465463.41	3808081.91	1.40404	465483.41
3808081.91	1.38204		
465503.41	3808081.91	1.36045	465523.41
3808081.91	1.33959		
465543.41	3808081.91	1.31960	465563.41
3808081.91	1.29931		
465583.41	3808081.91	1.27919	465603.41
3808081.91	1.25958		
465623.41	3808081.91	1.24045	465643.41
3808081.91	1.22199		
465663.41	3808081.91	1.20472	465683.41
3808081.91	1.18756		
465703.41	3808081.91	1.17081	464843.41
3808101.91	2.66071		
464863.41	3808101.91	2.59537	464883.41
3808101.91	2.53193		
464903.41	3808101.91	2.47041	464923.41
3808101.91	2.41084		
464943.41	3808101.91	2.35426	464963.41
3808101.91	2.30076		
464983.41	3808101.91	2.24929	465003.41
3808101.91	2.19889		

465023.41	3808101.91	2.15081	465043.41
3808101.91	2.10452		
465063.41	3808101.91	2.05943	465083.41
3808101.91	2.01646		
465103.41	3808101.91	1.97635	465123.41
3808101.91	1.93806		
465143.41	3808101.91	1.90123	465163.41
3808101.91	1.86395		
465183.41	3808101.91	1.82896	465203.41
3808101.91	1.79459		
465223.41	3808101.91	1.76065	465243.41
3808101.91	1.72752		
465263.41	3808101.91	1.69572	465283.41
3808101.91	1.66432		
465303.41	3808101.91	1.63432	465323.41
3808101.91	1.60549		
465343.41	3808101.91	1.57851	465363.41
3808101.91	1.55120		
465383.41	3808101.91	1.52420	465403.41
3808101.91	1.49824		
465423.41	3808101.91	1.47408	465443.41
3808101.91	1.44960		
465463.41	3808101.91	1.42377	465483.41
3808101.91	1.40173		
465503.41	3808101.91	1.37946	465523.41
3808101.91	1.35817		
465543.41	3808101.91	1.33808	465563.41
3808101.91	1.31787		
465583.41	3808101.91	1.29734	465603.41
3808101.91	1.27733		
465623.41	3808101.91	1.25782	465643.41
3808101.91	1.23900		
465663.41	3808101.91	1.22133	465683.41
3808101.91	1.20323		
465703.41	3808101.91	1.18577	464863.41
3808121.91	2.64690		
464883.41	3808121.91	2.58138	464903.41
3808121.91	2.51864		
464923.41	3808121.91	2.45766	464943.41
3808121.91	2.39945		
464963.41	3808121.91	2.34390	464983.41
3808121.91	2.29001		
465003.41	3808121.91	2.23860	465023.41
3808121.91	2.18916		
465043.41	3808121.91	2.14111	465063.41
3808121.91	2.09531		
465083.41	3808121.91	2.05268	465103.41
3808121.91	2.01244		

▲ *** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 424

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465123.41	3808121.91	1.97220	465143.41
3808121.91	1.93218		
465163.41	3808121.91	1.89393	465183.41
3808121.91	1.85803		
465203.41	3808121.91	1.82333	465223.41
3808121.91	1.78878		
465243.41	3808121.91	1.75461	465263.41
3808121.91	1.72147		
465283.41	3808121.91	1.68977	465303.41
3808121.91	1.65971		
465323.41	3808121.91	1.62979	465343.41
3808121.91	1.60183		
465363.41	3808121.91	1.57477	465383.41
3808121.91	1.54776		
465403.41	3808121.91	1.52094	465423.41
3808121.91	1.49496		
465443.41	3808121.91	1.46965	465463.41
3808121.91	1.44489		
465483.41	3808121.91	1.42104	465503.41
3808121.91	1.39916		
465523.41	3808121.91	1.37783	465543.41
3808121.91	1.35600		
465563.41	3808121.91	1.33506	465583.41

3808121.91	1.31410		
465603.41	3808121.91	1.29367	465623.41
3808121.91	1.27375		
465643.41	3808121.91	1.25521	465663.41
3808121.91	1.23822		
465683.41	3808121.91	1.22048	465703.41
3808121.91	1.20241		
464883.41	3808141.91	2.63322	464903.41
3808141.91	2.56798		
464923.41	3808141.91	2.50573	464943.41
3808141.91	2.44569		
464963.41	3808141.91	2.38797	464983.41
3808141.91	2.33245		
465003.41	3808141.91	2.27949	465023.41
3808141.91	2.22858		
465043.41	3808141.91	2.17913	465063.41
3808141.91	2.13204		
465083.41	3808141.91	2.08875	465103.41
3808141.91	2.04843		
465123.41	3808141.91	2.00562	465143.41
3808141.91	1.96516		
465163.41	3808141.91	1.92592	465183.41
3808141.91	1.88827		
465203.41	3808141.91	1.85246	465223.41
3808141.91	1.81704		
465243.41	3808141.91	1.78199	465263.41
3808141.91	1.74853		
465283.41	3808141.91	1.71628	465303.41
3808141.91	1.68501		
465323.41	3808141.91	1.65570	465343.41
3808141.91	1.62663		
465363.41	3808141.91	1.59837	465383.41
3808141.91	1.57020		
465403.41	3808141.91	1.54296	465423.41
3808141.91	1.51752		
465443.41	3808141.91	1.49212	465463.41
3808141.91	1.46680		
465483.41	3808141.91	1.44232	465503.41
3808141.91	1.41903		
465523.41	3808141.91	1.39784	465543.41
3808141.91	1.37641		
465563.41	3808141.91	1.35518	465583.41
3808141.91	1.33375		
465603.41	3808141.91	1.31287	465623.41
3808141.91	1.29252		
465643.41	3808141.91	1.27274	465663.41
3808141.91	1.25469		
465683.41	3808141.91	1.23772	465703.41
3808141.91	1.21991		
464883.41	3808161.91	2.68644	464903.41

3808161.91	2.61980		
464923.41	3808161.91	2.55533	464943.41
3808161.91	2.49336		
464963.41	3808161.91	2.43382	464983.41
3808161.91	2.37658		
465003.41	3808161.91	2.32198	465023.41
3808161.91	2.26951		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 425

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465043.41	3808161.91	2.21860	465063.41
3808161.91	2.17055		
465083.41	3808161.91	2.12614	465103.41
3808161.91	2.08418		
465123.41	3808161.91	2.04062	465143.41
3808161.91	1.99903		
465163.41	3808161.91	1.95986	465183.41
3808161.91	1.92032		
465203.41	3808161.91	1.88266	465223.41
3808161.91	1.84613		
465243.41	3808161.91	1.81064	465263.41
3808161.91	1.77649		
465283.41	3808161.91	1.74445	465303.41
3808161.91	1.71230		

465323.41	3808161.91	1.68158	465343.41
3808161.91	1.65180		
465363.41	3808161.91	1.62241	465383.41
3808161.91	1.59400		
465403.41	3808161.91	1.56615	465423.41
3808161.91	1.54037		
465443.41	3808161.91	1.51479	465463.41
3808161.91	1.48930		
465483.41	3808161.91	1.46528	465503.41
3808161.91	1.44096		
465523.41	3808161.91	1.41750	465543.41
3808161.91	1.39666		
465563.41	3808161.91	1.37480	465583.41
3808161.91	1.35290		
465603.41	3808161.91	1.33157	465623.41
3808161.91	1.31165		
465643.41	3808161.91	1.29178	465663.41
3808161.91	1.27199		
465683.41	3808161.91	1.25394	465703.41
3808161.91	1.23784		
464903.41	3808181.91	2.67387	464923.41
3808181.91	2.60749		
464943.41	3808181.91	2.54356	464963.41
3808181.91	2.48217		
464983.41	3808181.91	2.42318	465003.41
3808181.91	2.36645		
465023.41	3808181.91	2.31234	465043.41
3808181.91	2.26036		
465063.41	3808181.91	2.21269	465083.41
3808181.91	2.16614		
465103.41	3808181.91	2.12125	465123.41
3808181.91	2.07702		
465143.41	3808181.91	2.03435	465163.41
3808181.91	1.99302		
465183.41	3808181.91	1.95295	465203.41
3808181.91	1.91411		
465223.41	3808181.91	1.87646	465243.41
3808181.91	1.84059		
465263.41	3808181.91	1.80516	465283.41
3808181.91	1.77197		
465303.41	3808181.91	1.73982	465323.41
3808181.91	1.70801		
465343.41	3808181.91	1.67681	465363.41
3808181.91	1.64807		
465383.41	3808181.91	1.61910	465403.41
3808181.91	1.59039		
465423.41	3808181.91	1.56273	465443.41
3808181.91	1.53623		
465463.41	3808181.91	1.51089	465483.41
3808181.91	1.48731		

465503.41	3808181.91	1.46320	465523.41
3808181.91	1.43897		
465543.41	3808181.91	1.41569	465563.41
3808181.91	1.39296		
465583.41	3808181.91	1.37058	465603.41
3808181.91	1.34878		
465623.41	3808181.91	1.32959	465643.41
3808181.91	1.31060		
465663.41	3808181.91	1.29038	465683.41
3808181.91	1.27073		
465703.41	3808181.91	1.25358	464923.41
3808201.91	2.66171		
464943.41	3808201.91	2.59483	464963.41
3808201.91	2.53161		
464983.41	3808201.91	2.47078	465003.41
3808201.91	2.41232		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 426

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465023.41	3808201.91	2.35650	465043.41
3808201.91	2.30524		
465063.41	3808201.91	2.25482	465083.41
3808201.91	2.20736		
465103.41	3808201.91	2.15975	465123.41

3808201.91	2.11417		
465143.41	3808201.91	2.07025	465163.41
3808201.91	2.02757		
465183.41	3808201.91	1.98623	465203.41
3808201.91	1.94622		
465223.41	3808201.91	1.90770	465243.41
3808201.91	1.87044		
465263.41	3808201.91	1.83543	465283.41
3808201.91	1.80087		
465303.41	3808201.91	1.76735	465323.41
3808201.91	1.73525		
465343.41	3808201.91	1.70379	465363.41
3808201.91	1.67342		
465383.41	3808201.91	1.64534	465403.41
3808201.91	1.61708		
465423.41	3808201.91	1.58850	465443.41
3808201.91	1.56074		
465463.41	3808201.91	1.53381	465483.41
3808201.91	1.50896		
465503.41	3808201.91	1.48380	465523.41
3808201.91	1.45900		
465543.41	3808201.91	1.43486	465563.41
3808201.91	1.41309		
465583.41	3808201.91	1.39086	465603.41
3808201.91	1.36856		
465623.41	3808201.91	1.34783	465643.41
3808201.91	1.32853		
465663.41	3808201.91	1.30785	465683.41
3808201.91	1.28930		
465703.41	3808201.91	1.27070	464943.41
3808221.91	2.64988		
464963.41	3808221.91	2.58372	464983.41
3808221.91	2.52094		
465003.41	3808221.91	2.46063	465023.41
3808221.91	2.40424		
465043.41	3808221.91	2.35215	465063.41
3808221.91	2.29894		
465083.41	3808221.91	2.24825	465103.41
3808221.91	2.20029		
465123.41	3808221.91	2.15238	465143.41
3808221.91	2.10682		
465163.41	3808221.91	2.06272	465183.41
3808221.91	2.02013		
465203.41	3808221.91	1.97912	465223.41
3808221.91	1.94057		
465243.41	3808221.91	1.90223	465263.41
3808221.91	1.86554		
465283.41	3808221.91	1.83003	465303.41
3808221.91	1.79520		
465323.41	3808221.91	1.76256	465343.41

3808221.91	1.73135		
465363.41	3808221.91	1.70040	465383.41
3808221.91	1.67073		
465403.41	3808221.91	1.64230	465423.41
3808221.91	1.61303		
465443.41	3808221.91	1.58460	465463.41
3808221.91	1.55698		
465483.41	3808221.91	1.53014	465503.41
3808221.91	1.50499		
465523.41	3808221.91	1.48005	465543.41
3808221.91	1.45534		
465563.41	3808221.91	1.43261	465583.41
3808221.91	1.41190		
465603.41	3808221.91	1.38908	465623.41
3808221.91	1.36773		
465643.41	3808221.91	1.34657	465663.41
3808221.91	1.32544		
465683.41	3808221.91	1.30617	465703.41
3808221.91	1.28813		
464963.41	3808241.91	2.63851	464983.41
3808241.91	2.57366		
465003.41	3808241.91	2.51140	465023.41
3808241.91	2.45235		
465043.41	3808241.91	2.39688	465063.41
3808241.91	2.34238		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 427

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)

3808241.91	465083.41	3808241.91	2.29144	465103.41
		2.24030		
3808241.91	465123.41	3808241.91	2.19104	465143.41
		2.14389		
3808241.91	465163.41	3808241.91	2.09846	465183.41
		2.05508		
3808241.91	465203.41	3808241.91	2.01254	465223.41
		1.97267		
3808241.91	465243.41	3808241.91	1.93402	465263.41
		1.89604		
3808241.91	465283.41	3808241.91	1.85893	465303.41
		1.82452		
3808241.91	465323.41	3808241.91	1.79036	465343.41
		1.75823		
3808241.91	465363.41	3808241.91	1.72739	465383.41
		1.69663		
3808241.91	465403.41	3808241.91	1.66604	465423.41
		1.63605		
3808241.91	465443.41	3808241.91	1.60693	465463.41
		1.57865		
3808241.91	465483.41	3808241.91	1.55117	465503.41
		1.52663		
3808241.91	465523.41	3808241.91	1.50244	465543.41
		1.47717		
3808241.91	465563.41	3808241.91	1.45265	465583.41
		1.43011		
3808241.91	465603.41	3808241.91	1.40678	465623.41
		1.38631		
3808241.91	465643.41	3808241.91	1.36588	465663.41
		1.34428		
3808241.91	465683.41	3808241.91	1.32330	465703.41
		1.30412		
3808261.91	464983.41	3808261.91	2.62927	465003.41
		2.56519		
3808261.91	465023.41	3808261.91	2.50355	465043.41
		2.44443		
3808261.91	465063.41	3808261.91	2.38779	465083.41
		2.33296		
3808261.91	465103.41	3808261.91	2.28097	465123.41
		2.23043		
3808261.91	465143.41	3808261.91	2.18193	465163.41
		2.13477		
3808261.91	465183.41	3808261.91	2.08977	465203.41
		2.04745		
3808261.91	465223.41	3808261.91	2.00589	465243.41
		1.96567		

465263.41	3808261.91	1.92607	465283.41
3808261.91	1.88811		
465303.41	3808261.91	1.85281	465323.41
3808261.91	1.81980		
465343.41	3808261.91	1.78625	465363.41
3808261.91	1.75395		
465383.41	3808261.91	1.72350	465403.41
3808261.91	1.69243		
465423.41	3808261.91	1.66170	465443.41
3808261.91	1.63188		
465463.41	3808261.91	1.60290	465483.41
3808261.91	1.57477		
465503.41	3808261.91	1.54846	465523.41
3808261.91	1.52390		
465543.41	3808261.91	1.49803	465563.41
3808261.91	1.47461		
465583.41	3808261.91	1.45116	465603.41
3808261.91	1.42731		
465623.41	3808261.91	1.40507	465643.41
3808261.91	1.38413		
465663.41	3808261.91	1.36318	465683.41
3808261.91	1.34226		
465703.41	3808261.91	1.32134	465003.41
3808281.91	2.61508		
465023.41	3808281.91	2.55156	465043.41
3808281.91	2.49078		
465063.41	3808281.91	2.43226	465083.41
3808281.91	2.37578		
465103.41	3808281.91	2.32156	465123.41
3808281.91	2.27002		
465143.41	3808281.91	2.22059	465163.41
3808281.91	2.17250		
465183.41	3808281.91	2.12622	465203.41
3808281.91	2.08190		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 428

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,

L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		

465223.41	3808281.91	2.03909	465243.41
3808281.91	1.99700		
465263.41	3808281.91	1.95649	465283.41
3808281.91	1.91808		
465303.41	3808281.91	1.88168	465323.41
3808281.91	1.84833		
465343.41	3808281.91	1.81443	465363.41
3808281.91	1.78134		
465383.41	3808281.91	1.74918	465403.41
3808281.91	1.71990		
465423.41	3808281.91	1.68966	465443.41
3808281.91	1.65938		
465463.41	3808281.91	1.62789	465483.41
3808281.91	1.59908		
465503.41	3808281.91	1.57108	465523.41
3808281.91	1.54413		
465543.41	3808281.91	1.51886	465563.41
3808281.91	1.49454		
465583.41	3808281.91	1.47141	465603.41
3808281.91	1.44703		
465623.41	3808281.91	1.42409	465643.41
3808281.91	1.40181		
465663.41	3808281.91	1.38102	465683.41
3808281.91	1.36200		
465703.41	3808281.91	1.34077	465003.41
3808301.91	2.66640		
465023.41	3808301.91	2.60129	465043.41
3808301.91	2.53731		
465063.41	3808301.91	2.47879	465083.41
3808301.91	2.42054		
465103.41	3808301.91	2.36296	465123.41
3808301.91	2.30956		
465143.41	3808301.91	2.25834	465163.41
3808301.91	2.20917		
465183.41	3808301.91	2.16220	465203.41
3808301.91	2.11638		
465223.41	3808301.91	2.07163	465243.41

3808301.91	2.02838		
465263.41	3808301.91	1.98794	465283.41
3808301.91	1.94899		
465303.41	3808301.91	1.91376	465323.41
3808301.91	1.87712		
465343.41	3808301.91	1.84210	465363.41
3808301.91	1.80884		
465383.41	3808301.91	1.77576	465403.41
3808301.91	1.74468		
465423.41	3808301.91	1.71486	465443.41
3808301.91	1.68425		
465463.41	3808301.91	1.64974	465483.41
3808301.91	1.62025		
465503.41	3808301.91	1.59161	465523.41
3808301.91	1.56475		
465543.41	3808301.91	1.54016	465563.41
3808301.91	1.51461		
465583.41	3808301.91	1.48966	465603.41
3808301.91	1.46476		
465623.41	3808301.91	1.44228	465643.41
3808301.91	1.42065		
465663.41	3808301.91	1.39789	465683.41
3808301.91	1.37869		
465703.41	3808301.91	1.35850	465043.41
3808321.91	2.58536		
465063.41	3808321.91	2.52331	465083.41
3808321.91	2.46341		
465103.41	3808321.91	2.40613	465123.41
3808321.91	2.35090		
465143.41	3808321.91	2.29771	465163.41
3808321.91	2.24644		
465183.41	3808321.91	2.19773	465203.41
3808321.91	2.15009		
465223.41	3808321.91	2.10430	465243.41
3808321.91	2.06106		
465263.41	3808321.91	2.01959	465283.41
3808321.91	1.98172		
465303.41	3808321.91	1.94311	465323.41
3808321.91	1.90667		
465343.41	3808321.91	1.87043	465363.41
3808321.91	1.83510		
465383.41	3808321.91	1.80354	465403.41
3808321.91	1.77055		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3
 **

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
465423.41	3808321.91	1.73876	465443.41
3808321.91	1.70745		
465463.41	3808321.91	1.67439	465483.41
3808321.91	1.64423		
465503.41	3808321.91	1.61493	465523.41
3808321.91	1.58653		
465543.41	3808321.91	1.56013	465563.41
3808321.91	1.53393		
465583.41	3808321.91	1.50860	465603.41
3808321.91	1.48431		
465623.41	3808321.91	1.46079	465643.41
3808321.91	1.43975		
465663.41	3808321.91	1.41777	465683.41
3808321.91	1.39603		
465703.41	3808321.91	1.37548	465083.41
3808341.91	2.50694		
465103.41	3808341.91	2.44784	465123.41
3808341.91	2.39062		
465143.41	3808341.91	2.33584	465163.41
3808341.91	2.28323		
465183.41	3808341.91	2.23251	465203.41
3808341.91	2.18377		
465223.41	3808341.91	2.13752	465243.41
3808341.91	2.09333		
465263.41	3808341.91	2.05298	465283.41
3808341.91	2.01249		
465303.41	3808341.91	1.97299	465323.41
3808341.91	1.93518		

465343.41	3808341.91	1.90119	465363.41
3808341.91	1.86404		
465383.41	3808341.91	1.82913	465403.41
3808341.91	1.79655		
465423.41	3808341.91	1.76357	465443.41
3808341.91	1.73085		
465463.41	3808341.91	1.69795	465483.41
3808341.91	1.66712		
465503.41	3808341.91	1.63719	465523.41
3808341.91	1.60840		
465543.41	3808341.91	1.58092	465563.41
3808341.91	1.55351		
465583.41	3808341.91	1.52746	465603.41
3808341.91	1.50330		
465623.41	3808341.91	1.48116	465643.41
3808341.91	1.45702		
465663.41	3808341.91	1.43511	465683.41
3808341.91	1.41375		
465703.41	3808341.91	1.39160	465103.41
3808361.91	2.48882		
465123.41	3808361.91	2.42978	465143.41
3808361.91	2.37299		
465163.41	3808361.91	2.31895	465183.41
3808361.91	2.26688		
465203.41	3808361.91	2.21799	465223.41
3808361.91	2.17076		
465243.41	3808361.91	2.12433	465263.41
3808361.91	2.08269		
465283.41	3808361.91	2.04243	465303.41
3808361.91	2.00256		
465323.41	3808361.91	1.96690	465343.41
3808361.91	1.92934		
465363.41	3808361.91	1.89137	465383.41
3808361.91	1.85462		
465403.41	3808361.91	1.82065	465423.41
3808361.91	1.78808		
465443.41	3808361.91	1.75557	465463.41
3808361.91	1.71925		
465483.41	3808361.91	1.68775	465503.41
3808361.91	1.65718		
465523.41	3808361.91	1.62839	465543.41
3808361.91	1.60147		
465563.41	3808361.91	1.57455	465583.41
3808361.91	1.54734		
465603.41	3808361.91	1.52111	465623.41
3808361.91	1.49877		
465643.41	3808361.91	1.47544	465663.41
3808361.91	1.45167		
465683.41	3808361.91	1.43032	465703.41
3808361.91	1.40904		

465183.41 3808381.91 2.30316 465203.41
 3808381.91 2.25423
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 430

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465223.41	3808381.91	2.20590	465243.41
3808381.91	2.15958		
465263.41	3808381.91	2.11635	465283.41
3808381.91	2.07661		
465303.41	3808381.91	2.03480	465323.41
3808381.91	1.99540		
465343.41	3808381.91	1.95825	465363.41
3808381.91	1.91944		
465383.41	3808381.91	1.88186	465403.41
3808381.91	1.84549		
465423.41	3808381.91	1.81142	465443.41
3808381.91	1.77912		
465463.41	3808381.91	1.74287	465483.41
3808381.91	1.71072		
465503.41	3808381.91	1.67952	465523.41
3808381.91	1.64930		
465543.41	3808381.91	1.62113	465563.41
3808381.91	1.59575		
465583.41	3808381.91	1.56909	465603.41

3808381.91	1.54208		
465623.41	3808381.91	1.51690	465643.41
3808381.91	1.49320		
465663.41	3808381.91	1.46979	465683.41
3808381.91	1.44693		
465703.41	3808381.91	1.42768	465303.41
3808401.91	2.06594		
465323.41	3808401.91	2.02474	465343.41
3808401.91	1.98795		
465363.41	3808401.91	1.94830	465383.41
3808401.91	1.90992		
465403.41	3808401.91	1.87276	465423.41
3808401.91	1.83675		
465443.41	3808401.91	1.80185	465463.41
3808401.91	1.76801		
465483.41	3808401.91	1.73520	465503.41
3808401.91	1.70336		
465523.41	3808401.91	1.67247	465543.41
3808401.91	1.64247		
465563.41	3808401.91	1.61456	465583.41
3808401.91	1.58831		
465603.41	3808401.91	1.56081	465623.41
3808401.91	1.53530		
465643.41	3808401.91	1.50991	465663.41
3808401.91	1.48701		
465683.41	3808401.91	1.46665	465703.41
3808401.91	1.44317		
465323.41	3808421.91	2.05619	465343.41
3808421.91	2.01443		
465363.41	3808421.91	1.97403	465383.41
3808421.91	1.93492		
465403.41	3808421.91	1.89706	465423.41
3808421.91	1.86038		
465443.41	3808421.91	1.82485	465463.41
3808421.91	1.79040		
465483.41	3808421.91	1.75699	465503.41
3808421.91	1.72459		
465523.41	3808421.91	1.69315	465543.41
3808421.91	1.66263		
465563.41	3808421.91	1.63336	465583.41
3808421.91	1.60508		
465603.41	3808421.91	1.57711	465623.41
3808421.91	1.55231		
465643.41	3808421.91	1.52783	465663.41
3808421.91	1.50290		
465683.41	3808421.91	1.48260	465703.41
3808421.91	1.45986		
465323.41	3808441.91	2.08428	465343.41
3808441.91	2.04152		
465363.41	3808441.91	1.99931	465383.41

3808441.91	1.95796		
465403.41	3808441.91	1.91939	465423.41
3808441.91	1.88204		
465443.41	3808441.91	1.84585	465463.41
3808441.91	1.81078		
465483.41	3808441.91	1.77678	465503.41
3808441.91	1.74381		
465523.41	3808441.91	1.71183	465543.41
3808441.91	1.68079		
465563.41	3808441.91	1.65066	465583.41
3808441.91	1.62140		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 431

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465603.41	3808441.91	1.59297	465623.41
3808441.91	1.56784		
465643.41	3808441.91	1.54698	465663.41
3808441.91	1.52244		
465683.41	3808441.91	1.49811	465703.41
3808441.91	1.47476		
465343.41	3808461.91	2.07175	465363.41
3808461.91	2.02291		
465383.41	3808461.91	1.98140	465403.41
3808461.91	1.94178		

465423.41	3808461.91	1.90377	465443.41
3808461.91	1.86695		
465463.41	3808461.91	1.83127	465483.41
3808461.91	1.79670		
465503.41	3808461.91	1.76296	465523.41
3808461.91	1.72907		
465543.41	3808461.91	1.69754	465563.41
3808461.91	1.66693		
465583.41	3808461.91	1.63722	465603.41
3808461.91	1.60836		
465623.41	3808461.91	1.58283	465643.41
3808461.91	1.56200		
465663.41	3808461.91	1.53798	465683.41
3808461.91	1.51354		
465703.41	3808461.91	1.48899	465343.41
3808481.91	2.09642		
465363.41	3808481.91	2.05342	465383.41
3808481.91	2.01043		
465403.41	3808481.91	1.96456	465423.41
3808481.91	1.92598		
465443.41	3808481.91	1.88861	465463.41
3808481.91	1.85240		
465483.41	3808481.91	1.81731	465503.41
3808481.91	1.78134		
465523.41	3808481.91	1.74569	465543.41
3808481.91	1.71369		
465563.41	3808481.91	1.68264	465583.41
3808481.91	1.65250		
465603.41	3808481.91	1.62324	465623.41
3808481.91	1.59734		
465643.41	3808481.91	1.57618	465663.41
3808481.91	1.55182		
465683.41	3808481.91	1.52705	465703.41
3808481.91	1.50316		
465463.41	3808501.91	1.87477	465483.41
3808501.91	1.84088		
465503.41	3808501.91	1.80453	465523.41
3808501.91	1.76461		
465543.41	3808501.91	1.73216	465563.41
3808501.91	1.69974		
465583.41	3808501.91	1.66818	465603.41
3808501.91	1.64010		
465623.41	3808501.91	1.61274	465643.41
3808501.91	1.58986		
465663.41	3808501.91	1.56519	465683.41
3808501.91	1.54009		
465703.41	3808501.91	1.51610	465523.41
3808521.91	1.78698		
465543.41	3808521.91	1.75403	465563.41
3808521.91	1.71635		

465583.41	3808521.91	1.68331	465603.41
3808521.91	1.65590		
465623.41	3808521.91	1.63142	465643.41
3808521.91	1.60361		
465663.41	3808521.91	1.57850	465683.41
3808521.91	1.55435		
465703.41	3808521.91	1.52870	464239.31
3809562.31	26.26824		
464277.31	3809562.31	26.12660	463745.31
3809591.37	19.51564		
463783.31	3809591.37	19.25562	463821.31
3809591.37	18.85544		
463859.31	3809591.37	18.68786	463897.31
3809591.37	18.91506		
463935.31	3809591.37	19.13731	464239.31
3809591.37	17.86286		
464277.31	3809591.37	17.67011	463745.31
3809620.43	15.44643		
463783.31	3809620.43	15.30266	463821.31
3809620.43	15.17435		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 432

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
-----	-----	-----	-----
-----	-----	-----	-----
463859.31	3809620.43	15.02397	463897.31

3809620.43	15.05514		
463935.31	3809620.43	15.17223	463973.31
3809620.43	15.12556		
464011.31	3809620.43	15.01018	464049.31
3809620.43	14.81802		
464087.31	3809620.43	14.59754	464125.31
3809620.43	14.45002		
464163.31	3809620.43	14.28231	464201.31
3809620.43	14.07648		
464239.31	3809620.43	13.99825	464277.31
3809620.43	13.85145		
463745.31	3809649.49	13.09910	463783.31
3809649.49	13.08800		
463821.31	3809649.49	12.97559	463859.31
3809649.49	12.87262		
463897.31	3809649.49	12.83950	463935.31
3809649.49	12.87028		
463973.31	3809649.49	12.75024	464011.31
3809649.49	12.66925		
464049.31	3809649.49	12.54967	464087.31
3809649.49	12.35455		
464125.31	3809649.49	12.23504	464163.31
3809649.49	12.07410		
464201.31	3809649.49	11.93306	464239.31
3809649.49	11.82203		
464277.31	3809649.49	11.66204	464315.31
3809649.49	11.50175		
464353.31	3809649.49	11.40264	464391.31
3809649.49	11.30295		
464429.31	3809649.49	11.18005	464467.31
3809649.49	11.09302		
464505.31	3809649.49	11.02032	463745.31
3809678.55	11.49131		
463783.31	3809678.55	11.49882	463821.31
3809678.55	11.50515		
463859.31	3809678.55	11.38736	463897.31
3809678.55	11.34768		
463935.31	3809678.55	11.36049	463973.31
3809678.55	11.25520		
464011.31	3809678.55	11.13764	464049.31
3809678.55	11.05802		
464087.31	3809678.55	10.92549	464125.31
3809678.55	10.78721		
464163.31	3809678.55	10.62963	464201.31
3809678.55	10.52496		
464239.31	3809678.55	10.35770	464277.31
3809678.55	10.21924		
464315.31	3809678.55	10.08576	464353.31
3809678.55	9.99172		
464391.31	3809678.55	9.88329	464429.31

3809678.55	9.76204		
464467.31	3809678.55	9.70179	464505.31
3809678.55	9.57998		
463745.31	3809707.61	10.37164	463783.31
3809707.61	10.35851		
463821.31	3809707.61	10.35808	463859.31
3809707.61	10.32135		
463897.31	3809707.61	10.26316	463935.31
3809707.61	10.24850		
463973.31	3809707.61	10.17860	464011.31
3809707.61	10.06501		
464049.31	3809707.61	9.98722	464087.31
3809707.61	9.86245		
464125.31	3809707.61	9.73097	464163.31
3809707.61	9.60508		
464201.31	3809707.61	9.45875	464239.31
3809707.61	9.32726		
464277.31	3809707.61	9.18780	464315.31
3809707.61	9.08196		
464353.31	3809707.61	8.94853	464391.31
3809707.61	8.85397		
464429.31	3809707.61	8.75288	464467.31
3809707.61	8.66316		
464505.31	3809707.61	8.59003	463745.31
3809736.67	9.56691		
463783.31	3809736.67	9.48761	463821.31
3809736.67	9.43321		
463859.31	3809736.67	9.42275	463897.31
3809736.67	9.40167		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 433

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC	X-COORD (M)
463935.31	3809736.67	9.35682	463973.31
3809736.67	9.33219		
464011.31	3809736.67	9.27557	464049.31
3809736.67	9.16737		
464087.31	3809736.67	9.06558	464125.31
3809736.67	8.94031		
464163.31	3809736.67	8.81703	464201.31
3809736.67	8.67526		
464239.31	3809736.67	8.55017	464277.31
3809736.67	8.41662		
464315.31	3809736.67	8.29232	464353.31
3809736.67	8.19469		
464391.31	3809736.67	8.09364	464429.31
3809736.67	7.98298		
464467.31	3809736.67	7.91076	464505.31
3809736.67	7.83381		
463745.31	3809765.73	8.93354	463783.31
3809765.73	8.83372		
463821.31	3809765.73	8.74732	463859.31
3809765.73	8.71084		
463897.31	3809765.73	8.70364	463935.31
3809765.73	8.63077		
463973.31	3809765.73	8.57696	464011.31
3809765.73	8.59974		
464049.31	3809765.73	8.53597	464087.31
3809765.73	8.42382		
464125.31	3809765.73	8.30893	464163.31
3809765.73	8.18625		
464201.31	3809765.73	8.05378	464239.31
3809765.73	7.93163		
464277.31	3809765.73	7.80468	464315.31
3809765.73	7.67816		
464353.31	3809765.73	7.58890	464391.31
3809765.73	7.47334		
464429.31	3809765.73	7.39376	464467.31
3809765.73	7.31479		
464505.31	3809765.73	7.21991	463745.31
3809794.79	8.41401		
463783.31	3809794.79	8.27448	463821.31
3809794.79	8.18322		
463859.31	3809794.79	8.11096	463897.31
3809794.79	8.08921		

463935.31	3809794.79	8.01753	463973.31
3809794.79	7.95609		
464011.31	3809794.79	7.99058	464049.31
3809794.79	7.99584		
464087.31	3809794.79	7.89250	464125.31
3809794.79	7.77926		
464163.31	3809794.79	7.66024	464201.31
3809794.79	7.54085		
464239.31	3809794.79	7.41178	464277.31
3809794.79	7.29235		
464315.31	3809794.79	7.17883	464353.31
3809794.79	7.07732		
464391.31	3809794.79	6.98926	464429.31
3809794.79	6.90588		
464467.31	3809794.79	6.81404	464505.31
3809794.79	6.74320		
463745.31	3809823.85	7.97699	463783.31
3809823.85	7.80761		
463821.31	3809823.85	7.66557	463859.31
3809823.85	7.60037		
463897.31	3809823.85	7.55029	463935.31
3809823.85	7.47976		
463973.31	3809823.85	7.43508	464011.31
3809823.85	7.43442		
464049.31	3809823.85	7.48645	464087.31
3809823.85	7.43472		
464125.31	3809823.85	7.33787	464163.31
3809823.85	7.22202		
464201.31	3809823.85	7.09696	464239.31
3809823.85	6.98232		
464277.31	3809823.85	6.86789	464315.31
3809823.85	6.76202		
464353.31	3809823.85	6.66612	464391.31
3809823.85	6.57514		
464429.31	3809823.85	6.48378	464467.31
3809823.85	6.39967		
464505.31	3809823.85	6.32692	463745.31
3809852.91	7.62339		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apol1\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 434

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,

```

, L0006021      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006022      , L0006022      , L0006023      ,
, L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
, L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
463783.31	3809852.91	7.45077	463821.31
3809852.91	7.26085		
463859.31	3809852.91	7.17499	463897.31
3809852.91	7.08982		
463935.31	3809852.91	7.01920	463973.31
3809852.91	6.98042		
464011.31	3809852.91	6.96120	464049.31
3809852.91	7.00031		
464087.31	3809852.91	6.99836	464125.31
3809852.91	6.92394		
464163.31	3809852.91	6.81858	464201.31
3809852.91	6.71206		
464239.31	3809852.91	6.60850	464277.31
3809852.91	6.50370		
464315.31	3809852.91	6.39754	464353.31
3809852.91	6.30157		
464391.31	3809852.91	6.21266	464429.31
3809852.91	6.13815		
464467.31	3809852.91	6.05436	464505.31
3809852.91	5.97800		
463745.31	3809881.97	7.33001	463783.31
3809881.97	7.13600		
463821.31	3809881.97	6.94666	463859.31
3809881.97	6.82440		
463897.31	3809881.97	6.70933	463935.31
3809881.97	6.61840		
463973.31	3809881.97	6.59191	464011.31
3809881.97	6.56918		
464049.31	3809881.97	6.58227	464087.31
3809881.97	6.57369		
464125.31	3809881.97	6.54028	464163.31
3809881.97	6.45081		
464201.31	3809881.97	6.36550	464239.31

3809881.97	6.26719		
464277.31	3809881.97	6.17151	464315.31
3809881.97	6.08532		
464353.31	3809881.97	5.99650	464391.31
3809881.97	5.91451		
464429.31	3809881.97	5.83145	464467.31
3809881.97	5.74855		
464505.31	3809881.97	5.68067	463745.31
3809911.03	7.05171		
463783.31	3809911.03	6.84196	463821.31
3809911.03	6.67492		
463859.31	3809911.03	6.53102	463897.31
3809911.03	6.40627		
463935.31	3809911.03	6.29644	463973.31
3809911.03	6.24967		
464011.31	3809911.03	6.22111	464049.31
3809911.03	6.22829		
464087.31	3809911.03	6.21545	464125.31
3809911.03	6.17993		
464163.31	3809911.03	6.11583	464201.31
3809911.03	6.05171		
464239.31	3809911.03	5.96147	464277.31
3809911.03	5.88687		
464315.31	3809911.03	5.80345	464353.31
3809911.03	5.71934		
464391.31	3809911.03	5.63961	464429.31
3809911.03	5.55850		
464467.31	3809911.03	5.48683	464505.31
3809911.03	5.40926		
463745.31	3809940.09	6.79036	463783.31
3809940.09	6.57917		
463821.31	3809940.09	6.42499	463859.31
3809940.09	6.27285		
463897.31	3809940.09	6.15058	463935.31
3809940.09	6.04011		
463973.31	3809940.09	5.97000	464011.31
3809940.09	5.90542		
464049.31	3809940.09	5.89629	464087.31
3809940.09	5.87891		
464125.31	3809940.09	5.85446	464163.31
3809940.09	5.82907		
464201.31	3809940.09	5.78627	464239.31
3809940.09	5.70831		
464277.31	3809940.09	5.62849	464315.31
3809940.09	5.55355		
464353.31	3809940.09	5.47323	464391.31
3809940.09	5.39554		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 435

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464429.31	3809940.09	5.32247	464467.31
3809940.09	5.24471		
464505.31	3809940.09	5.17258	463745.31
3809969.15	6.62210		
463783.31	3809969.15	6.36849	463821.31
3809969.15	6.19451		
463859.31	3809969.15	6.04503	463897.31
3809969.15	5.91955		
463935.31	3809969.15	5.81093	463973.31
3809969.15	5.73469		
464011.31	3809969.15	5.64788	464049.31
3809969.15	5.59712		
464087.31	3809969.15	5.57914	464125.31
3809969.15	5.57289		
464163.31	3809969.15	5.55627	464201.31
3809969.15	5.53500		
464239.31	3809969.15	5.48385	464277.31
3809969.15	5.40382		
464315.31	3809969.15	5.32811	464353.31
3809969.15	5.26025		
464391.31	3809969.15	5.18398	464429.31
3809969.15	5.10605		
464467.31	3809969.15	5.02671	464505.31
3809969.15	4.96484		

463745.31	3809998.21	6.54685	463783.31
3809998.21	6.22901		
463821.31	3809998.21	6.01689	463859.31
3809998.21	5.85199		
463897.31	3809998.21	5.72186	463935.31
3809998.21	5.60239		
463973.31	3809998.21	5.51888	464011.31
3809998.21	5.43581		
464049.31	3809998.21	5.37269	464087.31
3809998.21	5.33818		
464125.31	3809998.21	5.33682	464163.31
3809998.21	5.32315		
464201.31	3809998.21	5.30340	464239.31
3809998.21	5.26172		
464277.31	3809998.21	5.20194	464315.31
3809998.21	5.12753		
464353.31	3809998.21	5.05854	464391.31
3809998.21	4.98395		
464429.31	3809998.21	4.90641	464467.31
3809998.21	4.84001		
464505.31	3809998.21	4.77065	463745.31
3810027.27	6.48231		
463783.31	3810027.27	6.13821	463821.31
3810027.27	5.88603		
463859.31	3810027.27	5.69773	463897.31
3810027.27	5.55821		
463935.31	3810027.27	5.42023	463973.31
3810027.27	5.33329		
464011.31	3810027.27	5.24932	464049.31
3810027.27	5.18305		
464087.31	3810027.27	5.12736	464125.31
3810027.27	5.10798		
464163.31	3810027.27	5.10834	464201.31
3810027.27	5.09334		
464239.31	3810027.27	5.05091	464277.31
3810027.27	5.00345		
464315.31	3810027.27	4.94251	464353.31
3810027.27	4.87447		
464391.31	3810027.27	4.80141	464429.31
3810027.27	4.73277		
464467.31	3810027.27	4.66251	464505.31
3810027.27	4.59230		
463745.31	3810056.33	6.42403	463783.31
3810056.33	6.06356		
463821.31	3810056.33	5.76968	463859.31
3810056.33	5.56784		
463897.31	3810056.33	5.40860	463935.31
3810056.33	5.26749		
463973.31	3810056.33	5.17051	464011.31
3810056.33	5.07952		

464049.31	3810056.33	4.99947	464087.31
3810056.33	4.94148		
464125.31	3810056.33	4.90044	464163.31
3810056.33	4.89774		
464201.31	3810056.33	4.88593	464239.31
3810056.33	4.85986		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 436

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
464277.31	3810056.33	4.81399	464315.31
3810056.33	4.76314		
464353.31	3810056.33	4.70841	464391.31
3810056.33	4.64218		
464429.31	3810056.33	4.57078	464467.31
3810056.33	4.49663		
464505.31	3810056.33	4.43088	463745.31
3810085.39	6.36542		
463783.31	3810085.39	5.99684	463821.31
3810085.39	5.67925		
463859.31	3810085.39	5.45177	463897.31
3810085.39	5.27823		
463935.31	3810085.39	5.13614	463973.31
3810085.39	5.02534		
464011.31	3810085.39	4.92041	464049.31

3810085.39	4.82261		
464087.31	3810085.39	4.76607	464125.31
3810085.39	4.72186		
464163.31	3810085.39	4.70147	464201.31
3810085.39	4.68674		
464239.31	3810085.39	4.67067	464277.31
3810085.39	4.63603		
464315.31	3810085.39	4.59385	464353.31
3810085.39	4.54117		
464391.31	3810085.39	4.48186	464429.31
3810085.39	4.41298		
464467.31	3810085.39	4.34267	464505.31
3810085.39	4.27596		
463745.31	3810114.45	6.24982	463783.31
3810114.45	5.95023		
463821.31	3810114.45	5.61610	463859.31
3810114.45	5.38277		
463897.31	3810114.45	5.17742	463935.31
3810114.45	5.02094		
463973.31	3810114.45	4.89069	464011.31
3810114.45	4.77999		
464049.31	3810114.45	4.67439	464087.31
3810114.45	4.60673		
464125.31	3810114.45	4.54919	464163.31
3810114.45	4.51368		
464201.31	3810114.45	4.49361	464239.31
3810114.45	4.49363		
464277.31	3810114.45	4.46957	464315.31
3810114.45	4.41988		
464353.31	3810114.45	4.36614	464391.31
3810114.45	4.30831		
464429.31	3810114.45	4.25582	464467.31
3810114.45	4.18517		
464505.31	3810114.45	4.12890	463745.31
3810143.51	6.10767		
463783.31	3810143.51	5.85385	463821.31
3810143.51	5.59304		
463859.31	3810143.51	5.33862	463897.31
3810143.51	5.08471		
463935.31	3810143.51	4.90269	463973.31
3810143.51	4.75170		
464011.31	3810143.51	4.65159	464049.31
3810143.51	4.54218		
464087.31	3810143.51	4.45271	464125.31
3810143.51	4.39241		
464163.31	3810143.51	4.35269	464201.31
3810143.51	4.32436		
464239.31	3810143.51	4.31161	464277.31
3810143.51	4.30865		
464315.31	3810143.51	4.26270	464353.31

3810143.51	4.19657		
464391.31	3810143.51	4.14804	464429.31
3810143.51	4.09438		
464467.31	3810143.51	4.04442	464505.31
3810143.51	3.99247		
464383.78	3807479.29	1.68813	464355.03
3807405.24	1.60558		
464402.07	3807352.10	1.43937	464367.23
3807296.35	1.41040		
464358.52	3807237.99	1.31468	464385.52
3807161.33	1.21065		
463132.27	3810926.37	7.48413	463237.82
3811199.31	13.90587		
464944.35	3809244.89	3.81294	465700.32
3809255.46	1.81506		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 437

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (16656 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
465716.18	3808536.49	1.52355	465544.37
3808533.85	1.76290		
465420.13	3808486.27	1.93897	465348.77
3808491.56	2.09847		
465317.05	3808443.98	2.10112	465327.62
3808406.97	2.02645		

465108.23	3808369.97	2.49097	464999.86
3808301.24	2.67659		
464722.31	3807973.48	2.74834	464717.03
3807836.03	2.43567		
464344.33	3807936.47	3.79224	464349.61
3807780.52	3.66451		
464386.62	3807785.81	3.51153	464521.43
3807859.82	3.18502		
464537.28	3807719.72	2.29321	464426.27
3807613.99	2.13049		
464368.43	3807532.62	2.01829	464324.60
3807121.91	1.22415		
464123.31	3807123.54	1.54314	463930.13
3806909.26	1.37141		
463831.11	3806906.01	1.54957	463821.36
3806720.95	1.19270		
463727.21	3806727.44	1.34908	463598.97
3806334.59	0.82809		
463001.06	3806361.54	1.47428	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 438

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
462160.55	3809377.75	5.56966	(09022407)	462051.48

3809270.62	5.13377	(09022407)		
462014.47	3809029.10	7.22511	(10042219)	462010.58
3808855.75	5.83784	(10042219)		
461936.56	3808886.92	5.77234	(10042219)	461936.56
3808997.94	7.06395	(10042219)		
461909.30	3808768.10	3.42583	(10042219)	461835.28
3808894.71	5.13601	(10042219)		
461845.02	3808995.99	6.47697	(10042219)	461833.33
3809114.80	6.68469	(10042219)		
461843.07	3809210.24	4.66335	(09022407)	461809.96
3809297.89	3.99489	(09022407)		
461856.71	3809385.54	4.52215	(09022407)	461841.13
3809482.92	4.51036	(09022407)		
462004.74	3809379.69	5.08723	(09022407)	461763.22
3808793.43	3.00791	(10042219)		
461753.48	3808699.93	4.10343	(09021520)	461835.28
3808686.30	4.44553	(09021520)		
461823.60	3808579.17	6.86474	(09021520)	461761.27
3808585.02	6.46113	(09021520)		
462301.19	3807807.15	14.71735	(10021207)	462304.78
3807868.16	9.31314	(10021207)		
462216.84	3807882.52	9.10666	(09020119)	462116.34
3807886.11	9.65004	(09020119)		
462114.55	3807789.20	7.17345	(10021207)	462012.25
3807887.90	9.90824	(09020119)		
462008.66	3807975.84	11.52806	(09020119)	461917.14
3807972.25	10.99523	(09020119)		
461922.52	3808187.60	18.07836	(10021620)	461908.17
3808288.10	20.30295	(10021620)		
461848.94	3808377.83	15.20986	(10021620)	461831.00
3808494.48	9.20334	(09021520)		
462421.43	3808393.98	23.56368	(10021620)	462459.11
3808501.66	13.86483	(09021520)		
462437.58	3808580.62	10.30002	(09021520)	462654.73
3809189.00	8.13886	(09022407)		
462559.49	3809194.32	7.84873	(09022407)	465763.86
3807935.19	3.22773	(09010519)		
465819.84	3807935.19	3.15718	(09010519)	465875.82
3807935.19	3.08597	(09010519)		
465931.80	3807935.19	3.01585	(09010519)	465987.78
3807935.19	2.94599	(09010519)		
466043.76	3807935.19	2.87698	(09010519)	466099.74
3807935.19	2.80901	(09010519)		
466155.72	3807935.19	2.74222	(09010519)	466211.70
3807935.19	2.67666	(09010519)		
466267.68	3807935.19	2.61268	(09010519)	466323.66
3807935.19	2.54831	(09010519)		
466379.64	3807935.19	2.48769	(09010519)	466435.62
3807935.19	2.42856	(09010519)		
466491.60	3807935.19	2.37100	(09010519)	466547.58

3807935.19	2.31026	(09010519)		
466603.56	3807935.19	2.25497	(09010519)	466659.54
3807935.19	2.20127	(09010519)		
466715.52	3807935.19	2.14926	(09010519)	466771.50
3807935.19	2.09821	(09010519)		
466827.48	3807935.19	2.04683	(09010519)	466883.46
3807935.19	1.99858	(09010519)		
465763.86	3808001.41	3.56559	(09010519)	465819.84
3808001.41	3.46713	(09010519)		
465875.82	3808001.41	3.37019	(09010519)	465931.80
3808001.41	3.27574	(09010519)		
465987.78	3808001.41	3.18675	(09010519)	466043.76
3808001.41	3.09478	(09010519)		
466099.74	3808001.41	3.01319	(09010519)	466155.72
3808001.41	2.92976	(09010519)		
466211.70	3808001.41	2.84952	(09010519)	466267.68
3808001.41	2.77122	(09010519)		
466323.66	3808001.41	2.69500	(09010519)	466379.64
3808001.41	2.62141	(09010519)		
466435.62	3808001.41	2.55032	(09010519)	466491.60
3808001.41	2.48166	(09010519)		
466547.58	3808001.41	2.41390	(09010519)	466603.56
3808001.41	2.35057	(09010519)		
466659.54	3808001.41	2.28955	(09010519)	466715.52
3808001.41	2.22544	(09010519)		
466771.50	3808001.41	2.16862	(09010519)	466827.48
3808001.41	2.11322	(09010519)		
466883.46	3808001.41	2.05777	(09010519)	465763.86
3808067.63	3.85834	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 439

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	(YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)

465819.84	3808067.63	3.73083	(09010519)			465875.82
3808067.63	3.60953	(09010519)				
465931.80	3808067.63	3.49300	(09010519)			465987.78
3808067.63	3.38129	(09010519)				
466043.76	3808067.63	3.27416	(09010519)			466099.74
3808067.63	3.17143	(09010519)				
466155.72	3808067.63	3.07319	(09010519)			466211.70
3808067.63	2.97842	(09010519)				
466267.68	3808067.63	2.88772	(09010519)			466323.66
3808067.63	2.79990	(09010519)				
466379.64	3808067.63	2.71570	(09010519)			466435.62
3808067.63	2.63826	(09010519)				
466491.60	3808067.63	2.55748	(09010519)			466547.58
3808067.63	2.48309	(09010519)				
466603.56	3808067.63	2.41177	(09010519)			466659.54
3808067.63	2.34344	(09010519)				
466715.52	3808067.63	2.27852	(09010519)			466771.50
3808067.63	2.21608	(09010519)				
466827.48	3808067.63	2.15377	(09010519)			466883.46
3808067.63	2.09277	(09010519)				
465763.86	3808133.85	4.08241	(09010519)			465819.84
3808133.85	3.92953	(09010519)				
465875.82	3808133.85	3.78523	(09010519)			465931.80
3808133.85	3.64824	(09010519)				
465987.78	3808133.85	3.52369	(09010519)			466043.76
3808133.85	3.39924	(09010519)				
466099.74	3808133.85	3.28105	(09010519)			466155.72
3808133.85	3.16857	(09010519)				
466211.70	3808133.85	3.06154	(09010519)			466267.68
3808133.85	2.96000	(09010519)				
466323.66	3808133.85	2.86353	(09010519)			466379.64
3808133.85	2.77229	(09010519)				
466435.62	3808133.85	2.68480	(09010519)			466491.60
3808133.85	2.60138	(09010519)				
466547.58	3808133.85	2.52029	(09010519)			466603.56
3808133.85	2.44395	(09010519)				
466659.54	3808133.85	2.37098	(09010519)			466715.52
3808133.85	2.30072	(09010519)				
466771.50	3808133.85	2.23013	(09010519)			466827.48
3808133.85	2.16649	(09010519)				
466883.46	3808133.85	2.10608	(10032206)			465763.86
3808200.07	4.22073	(09010519)				

465819.84	3808200.07	4.04771	(09010519)	465875.82
3808200.07	3.88512	(09010519)		
465931.80	3808200.07	3.73785	(09010519)	465987.78
3808200.07	3.59329	(09010519)		
466043.76	3808200.07	3.45701	(09010519)	466099.74
3808200.07	3.32823	(09010519)		
466155.72	3808200.07	3.20651	(09010519)	466211.70
3808200.07	3.09136	(09010519)		
466267.68	3808200.07	2.99422	(10032206)	466323.66
3808200.07	2.90696	(10032206)		
466379.64	3808200.07	2.81941	(10032206)	466435.62
3808200.07	2.73576	(10032206)		
466491.60	3808200.07	2.65589	(10032206)	466547.58
3808200.07	2.57956	(10032206)		
466603.56	3808200.07	2.50658	(10032206)	466659.54
3808200.07	2.43675	(10032206)		
466715.52	3808200.07	2.37003	(10032206)	466771.50
3808200.07	2.30506	(10032206)		
466827.48	3808200.07	2.24158	(10032206)	466883.46
3808200.07	2.18279	(10032206)		
465763.86	3808266.29	4.32215	(10032206)	465819.84
3808266.29	4.15945	(10032206)		
465875.82	3808266.29	4.00330	(10032206)	465931.80
3808266.29	3.85242	(10032206)		
465987.78	3808266.29	3.71032	(10032206)	466043.76
3808266.29	3.57632	(10032206)		
466099.74	3808266.29	3.44982	(10032206)	466155.72
3808266.29	3.33025	(10032206)		
466211.70	3808266.29	3.21751	(10032206)	466267.68
3808266.29	3.11305	(10032206)		
466323.66	3808266.29	3.01134	(10032206)	466379.64
3808266.29	2.91861	(10032206)		
466435.62	3808266.29	2.82734	(10032206)	466491.60
3808266.29	2.73797	(10032206)		
466547.58	3808266.29	2.65419	(10032206)	466603.56
3808266.29	2.57440	(10032206)		
466659.54	3808266.29	2.50081	(10032206)	466715.52
3808266.29	2.42676	(10032206)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 440

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,

```

        L0005941      , L0005942      , L0005943      , L0005944      , L0005945
, L0005946      , L0005947      , L0005948      ,
        L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
        L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466771.50	3808266.29	2.35840	(10032206)	466827.48
3808266.29	2.29122	(10032206)		
466883.46	3808266.29	2.22815	(10032206)	465763.86
3808332.51	4.47762	(10032206)		
465819.84	3808332.51	4.30190	(10032206)	465875.82
3808332.51	4.12575	(10032206)		
465931.80	3808332.51	3.96098	(10032206)	465987.78
3808332.51	3.80660	(10032206)		
466043.76	3808332.51	3.66161	(10032206)	466099.74
3808332.51	3.52546	(10032206)		
466155.72	3808332.51	3.39913	(10032206)	466211.70
3808332.51	3.27828	(10032206)		
466267.68	3808332.51	3.16375	(10032206)	466323.66
3808332.51	3.06247	(10032206)		
466379.64	3808332.51	2.95958	(10032206)	466435.62
3808332.51	2.86197	(10032206)		
466491.60	3808332.51	2.76943	(10032206)	466547.58
3808332.51	2.68153	(10032206)		
466603.56	3808332.51	2.60406	(10032206)	466659.54
3808332.51	2.52526	(10032206)		
466715.52	3808332.51	2.44940	(10032206)	466771.50
3808332.51	2.37274	(10032206)		
466827.48	3808332.51	2.30471	(10032206)	466883.46
3808332.51	2.23952	(10032206)		
465763.86	3808398.73	4.50336	(10032206)	465819.84
3808398.73	4.31897	(10032206)		
465875.82	3808398.73	4.13605	(10032206)	465931.80
3808398.73	3.96629	(10032206)		
465987.78	3808398.73	3.80694	(10032206)	466043.76
3808398.73	3.65769	(10032206)		
466099.74	3808398.73	3.52191	(10032206)	466155.72
3808398.73	3.38918	(10032206)		
466211.70	3808398.73	3.26451	(10032206)	466267.68

3808398.73	3.15610	(10032206)		
466323.66	3808398.73	3.04499	(10032206)	466379.64
3808398.73	2.94064	(10032206)		
466435.62	3808398.73	2.84514	(10032206)	466491.60
3808398.73	2.75214	(10032206)		
466547.58	3808398.73	2.66393	(10032206)	466603.56
3808398.73	2.58086	(10032206)		
466659.54	3808398.73	2.50134	(10032206)	466715.52
3808398.73	2.42437	(10032206)		
466771.50	3808398.73	2.35212	(10032206)	466827.48
3808398.73	2.28250	(10032206)		
466883.46	3808398.73	2.21653	(10032206)	465763.86
3808464.95	4.39639	(10032206)		
465819.84	3808464.95	4.21203	(10032206)	465875.82
3808464.95	4.03097	(10032206)		
465931.80	3808464.95	3.86490	(10032206)	465987.78
3808464.95	3.71075	(10032206)		
466043.76	3808464.95	3.56990	(10032206)	466099.74
3808464.95	3.43165	(10032206)		
466155.72	3808464.95	3.30196	(10032206)	466211.70
3808464.95	3.18033	(10032206)		
466267.68	3808464.95	3.07254	(10032206)	466323.66
3808464.95	2.96422	(10032206)		
466379.64	3808464.95	2.86591	(10032206)	466435.62
3808464.95	2.76970	(10032206)		
466491.60	3808464.95	2.68242	(10032206)	466547.58
3808464.95	2.59549	(10032206)		
466603.56	3808464.95	2.51313	(10032206)	466659.54
3808464.95	2.43503	(10032206)		
466715.52	3808464.95	2.36110	(10032206)	466771.50
3808464.95	2.29083	(10032206)		
466827.48	3808464.95	2.22384	(10032206)	466883.46
3808464.95	2.16006	(10032206)		
465763.86	3808531.17	4.17113	(10032206)	465819.84
3808531.17	3.99050	(10032206)		
465875.82	3808531.17	3.82243	(10032206)	465931.80
3808531.17	3.66559	(10032206)		
465987.78	3808531.17	3.52541	(10032206)	466043.76
3808531.17	3.39083	(10032206)		
466099.74	3808531.17	3.26502	(10032206)	466155.72
3808531.17	3.14381	(10032206)		
466211.70	3808531.17	3.03023	(10032206)	466267.68
3808531.17	2.92753	(10032206)		
466323.66	3808531.17	2.82977	(10032206)	466379.64
3808531.17	2.73478	(10032206)		
466435.62	3808531.17	2.64830	(10032206)	466491.60
3808531.17	2.56218	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 441

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***
INCLUDING SOURCE(S): L0005936 , L0005937
, L0005938 , L0005939 , L0005940 ,
L0005941 , L0005942 , L0005943 , L0005944 , L0005945
, L0005946 , L0005947 , L0005948 ,
L0005949 , L0005950 , L0005951 , L0005952 , L0005953
, L0005954 , L0005955 , L0005956 ,
L0005957 , L0005958 , L0005959 , L0005960 , L0005961
, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466547.58	3808531.17	2.48063	(10032206)	466603.56
3808531.17	2.40325	(10032206)		
466659.54	3808531.17	2.32966	(10032206)	466715.52
3808531.17	2.26024	(10032206)		
466771.50	3808531.17	2.19321	(10032206)	466827.48
3808531.17	2.13111	(10032206)		
466883.46	3808531.17	2.07104	(10032206)	465763.86
3808597.39	4.54372	(09031319)		
465819.84	3808597.39	4.32933	(09031319)	465875.82
3808597.39	4.11871	(09031319)		
465931.80	3808597.39	3.91561	(09031319)	465987.78
3808597.39	3.74093	(09031319)		
466043.76	3808597.39	3.57965	(09031319)	466099.74
3808597.39	3.42186	(09031319)		
466155.72	3808597.39	3.27572	(09031319)	466211.70
3808597.39	3.13927	(09031319)		
466267.68	3808597.39	3.00894	(09031319)	466323.66
3808597.39	2.89229	(09031319)		
466379.64	3808597.39	2.78113	(09031319)	466435.62
3808597.39	2.67254	(09031319)		
466491.60	3808597.39	2.57238	(09031319)	466547.58
3808597.39	2.47654	(09031319)		
466603.56	3808597.39	2.38458	(09031319)	466659.54
3808597.39	2.29758	(09031319)		

466715.52	3808597.39	2.21560	(09031319)	466771.50
3808597.39	2.13782 (09031319)			
466827.48	3808597.39	2.06401	(09031319)	466883.46
3808597.39	1.99590 (09031319)			
465763.86	3808663.61	4.82807	(09031319)	465819.84
3808663.61	4.61468 (09031319)			
465875.82	3808663.61	4.40212	(09031319)	465931.80
3808663.61	4.20366 (09031319)			
465987.78	3808663.61	4.01856	(09031319)	466043.76
3808663.61	3.84441 (09031319)			
466099.74	3808663.61	3.68483	(09031319)	466155.72
3808663.61	3.53046 (09031319)			
466211.70	3808663.61	3.38463	(09031319)	466267.68
3808663.61	3.24806 (09031319)			
466323.66	3808663.61	3.12785	(09031319)	466379.64
3808663.61	3.00605 (09031319)			
466435.62	3808663.61	2.89905	(09031319)	466491.60
3808663.61	2.78979 (09031319)			
466547.58	3808663.61	2.68607	(09031319)	466603.56
3808663.61	2.58795 (09031319)			
466659.54	3808663.61	2.49494	(09031319)	466715.52
3808663.61	2.40747 (09031319)			
466771.50	3808663.61	2.32440	(09031319)	466827.48
3808663.61	2.24918 (09031319)			
466883.46	3808663.61	2.17344	(09031319)	465763.86
3808729.83	4.92235 (09031319)			
465819.84	3808729.83	4.72824	(09031319)	465875.82
3808729.83	4.52796 (09031319)			
465931.80	3808729.83	4.33532	(09031319)	465987.78
3808729.83	4.15449 (09031319)			
466043.76	3808729.83	3.98504	(09031319)	466099.74
3808729.83	3.82516 (09031319)			
466155.72	3808729.83	3.67432	(09031319)	466211.70
3808729.83	3.53103 (09031319)			
466267.68	3808729.83	3.39637	(09031319)	466323.66
3808729.83	3.27748 (09031319)			
466379.64	3808729.83	3.15968	(09031319)	466435.62
3808729.83	3.04493 (09031319)			
466491.60	3808729.83	2.93995	(09031319)	466547.58
3808729.83	2.83532 (09031319)			
466603.56	3808729.83	2.73595	(09031319)	466659.54
3808729.83	2.64862 (09031319)			
466715.52	3808729.83	2.55828	(09031319)	466771.50
3808729.83	2.47286 (09031319)			
466827.48	3808729.83	2.39335	(09031319)	466883.46
3808729.83	2.31573 (09031319)			
465763.86	3808796.05	5.11561	(09010419)	465819.84
3808796.05	4.87503 (09010419)			
465875.82	3808796.05	4.60406	(09010419)	465931.80
3808796.05	4.36157 (09010419)			

465987.78	3808796.05	4.13199	(09010419)	466043.76
3808796.05	3.98197 (09031319)			
466099.74	3808796.05	3.83904	(09031319)	466155.72
3808796.05	3.70257 (09031319)			
466211.70	3808796.05	3.57228	(09031319)	466267.68
3808796.05	3.44763 (09031319)			

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 442

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

466323.66	3808796.05	3.33126	(09031319)	466379.64
3808796.05	3.21924 (09031319)			
466435.62	3808796.05	3.11602	(09031319)	466491.60
3808796.05	3.01156 (09031319)			
466547.58	3808796.05	2.91258	(09031319)	466603.56
3808796.05	2.82215 (09031319)			
466659.54	3808796.05	2.73108	(09031319)	466715.52
3808796.05	2.64587 (09031319)			
466771.50	3808796.05	2.56319	(09031319)	466827.48
3808796.05	2.48322 (09031319)			
466883.46	3808796.05	2.41018	(09031319)	465763.86
3808862.27	5.29302 (09010419)			
465819.84	3808862.27	5.07193	(09010419)	465875.82
3808862.27	4.85235 (09010419)			
465931.80	3808862.27	4.62514	(09010419)	465987.78

3808862.27	4.40805 (09010419)		
466043.76	3808862.27	4.20155 (09010419)	466099.74
3808862.27	4.01070 (09010419)		
466155.72	3808862.27	3.81935 (09010419)	466211.70
3808862.27	3.64298 (09010419)		
466267.68	3808862.27	3.48176 (09010419)	466323.66
3808862.27	3.32326 (09010419)		
466379.64	3808862.27	3.18618 (09031319)	466435.62
3808862.27	3.09182 (09031319)		
466491.60	3808862.27	3.00095 (09031319)	466547.58
3808862.27	2.91383 (09031319)		
466603.56	3808862.27	2.82726 (09031319)	466659.54
3808862.27	2.74847 (09031319)		
466715.52	3808862.27	2.66792 (09031319)	466771.50
3808862.27	2.59147 (09031319)		
466827.48	3808862.27	2.51926 (09031319)	466883.46
3808862.27	2.44899 (09031319)		
465763.86	3808928.49	5.19459 (09010419)	465819.84
3808928.49	5.02202 (09010419)		
465875.82	3808928.49	4.85781 (09010419)	465931.80
3808928.49	4.68494 (09010419)		
465987.78	3808928.49	4.51089 (09010419)	466043.76
3808928.49	4.34218 (09010419)		
466099.74	3808928.49	4.15954 (09010419)	466155.72
3808928.49	3.99052 (09010419)		
466211.70	3808928.49	3.82809 (09010419)	466267.68
3808928.49	3.67093 (09010419)		
466323.66	3808928.49	3.51964 (09010419)	466379.64
3808928.49	3.37478 (09010419)		
466435.62	3808928.49	3.24142 (09010419)	466491.60
3808928.49	3.11214 (09010419)		
466547.58	3808928.49	2.98632 (09010419)	466603.56
3808928.49	2.87101 (09010419)		
466659.54	3808928.49	2.75484 (09010419)	466715.52
3808928.49	2.64618 (09010419)		
466771.50	3808928.49	2.55763 (09031319)	466827.48
3808928.49	2.49516 (09031319)		
466883.46	3808928.49	2.43131 (09031319)	465763.86
3808994.71	5.14346 (09120320)		
465819.84	3808994.71	4.92686 (09120320)	465875.82
3808994.71	4.73080 (09120320)		
465931.80	3808994.71	4.55549 (09010419)	465987.78
3808994.71	4.44188 (09010419)		
466043.76	3808994.71	4.30245 (09010419)	466099.74
3808994.71	4.15764 (09010419)		
466155.72	3808994.71	4.01175 (09010419)	466211.70
3808994.71	3.87453 (09010419)		
466267.68	3808994.71	3.73920 (09010419)	466323.66
3808994.71	3.60725 (09010419)		
466379.64	3808994.71	3.47866 (09010419)	466435.62

3808994.71	3.35385	(09010419)		
466491.60	3808994.71	3.23689	(09010419)	466547.58
3808994.71	3.12601	(09010419)		
466603.56	3808994.71	3.01344	(09010419)	466659.54
3808994.71	2.90287	(09010419)		
466715.52	3808994.71	2.80420	(09010419)	466771.50
3808994.71	2.70060	(09010419)		
466827.48	3808994.71	2.60106	(09010419)	466883.46
3808994.71	2.50946	(09010419)		
465763.86	3809060.93	5.01073	(09120320)	465819.84
3809060.93	4.85229	(09120320)		
465875.82	3809060.93	4.70309	(09120320)	465931.80
3809060.93	4.55350	(09120320)		
465987.78	3809060.93	4.40189	(09120320)	466043.76
3809060.93	4.24852	(09120320)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 443

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	4.07600	(09120320)	466155.72
3809060.93	3.91654	(09120320)		
466211.70	3809060.93	3.78322	(09010419)	466267.68
3809060.93	3.67878	(09010419)		
466323.66	3809060.93	3.57335	(09010419)	466379.64
3809060.93	3.46817	(09010419)		

466435.62	3809060.93	3.37010	(09010419)	466491.60
3809060.93	3.27117 (09010419)			
466547.58	3809060.93	3.16927	(09010419)	466603.56
3809060.93	3.07203 (09010419)			
466659.54	3809060.93	2.98113	(09010419)	466715.52
3809060.93	2.88435 (09010419)			
466771.50	3809060.93	2.79091	(09010419)	466827.48
3809060.93	2.70182 (09010419)			
466883.46	3809060.93	2.61623	(09010419)	465763.86
3809127.15	4.81150 (10021420)			
465819.84	3809127.15	4.60834	(09120320)	465875.82
3809127.15	4.51354 (09120320)			
465931.80	3809127.15	4.40527	(09120320)	465987.78
3809127.15	4.29159 (09120320)			
466043.76	3809127.15	4.15674	(09120320)	466099.74
3809127.15	4.02100 (09120320)			
466155.72	3809127.15	3.89205	(09120320)	466211.70
3809127.15	3.78144 (09120320)			
466267.68	3809127.15	3.66003	(09120320)	466323.66
3809127.15	3.53482 (09120320)			
466379.64	3809127.15	3.40680	(09120320)	466435.62
3809127.15	3.28439 (09120320)			
466491.60	3809127.15	3.20387	(09010419)	466547.58
3809127.15	3.12607 (09010419)			
466603.56	3809127.15	3.04958	(09010419)	466659.54
3809127.15	2.96825 (09010419)			
466715.52	3809127.15	2.89004	(09010419)	466771.50
3809127.15	2.81167 (09010419)			
466827.48	3809127.15	2.73285	(09010419)	466883.46
3809127.15	2.65900 (09010419)			
465763.86	3809193.37	5.01700	(10021420)	465819.84
3809193.37	4.77567 (10021420)			
465875.82	3809193.37	4.52303	(10021420)	465931.80
3809193.37	4.26899 (10021420)			
465987.78	3809193.37	4.02548	(09120320)	466043.76
3809193.37	3.91615 (09120320)			
466099.74	3809193.37	3.84255	(09120320)	466155.72
3809193.37	3.75567 (09120320)			
466211.70	3809193.37	3.67589	(09120320)	466267.68
3809193.37	3.59166 (09120320)			
466323.66	3809193.37	3.49972	(09120320)	466379.64
3809193.37	3.40401 (09120320)			
466435.62	3809193.37	3.30180	(09120320)	466491.60
3809193.37	3.20179 (09120320)			
466547.58	3809193.37	3.10211	(09120320)	466603.56
3809193.37	3.00592 (09120320)			
466659.54	3809193.37	2.90529	(09120320)	466715.52
3809193.37	2.82338 (09010419)			
466771.50	3809193.37	2.76035	(09010419)	466827.48
3809193.37	2.69961 (09010419)			

466883.46	3809193.37	2.63695	(09010419)	465763.86
3809259.59	5.01157 (10021420)			
465819.84	3809259.59	4.82992	(10021420)	465875.82
3809259.59	4.62776 (10021420)			
465931.80	3809259.59	4.42000	(10021420)	465987.78
3809259.59	4.19101 (10021420)			
466043.76	3809259.59	3.96426	(10021420)	466099.74
3809259.59	3.74793 (10021420)			
466155.72	3809259.59	3.55780	(10021420)	466211.70
3809259.59	3.47857 (09120320)			
466267.68	3809259.59	3.42907	(09120320)	466323.66
3809259.59	3.36213 (09120320)			
466379.64	3809259.59	3.29536	(09120320)	466435.62
3809259.59	3.22556 (09120320)			
466491.60	3809259.59	3.14854	(09120320)	466547.58
3809259.59	3.07503 (09120320)			
466603.56	3809259.59	2.99488	(09120320)	466659.54
3809259.59	2.91402 (09120320)			
466715.52	3809259.59	2.83761	(09120320)	466771.50
3809259.59	2.75436 (09120320)			
466827.48	3809259.59	2.67396	(09120320)	466883.46
3809259.59	2.59315 (09120320)			
464503.41	3807141.91	24.02439	(10112518)	464523.41
3807141.91	24.64824 (10112518)			

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 444

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
-------------	-------------	------	------------	-------------

Y-COORD (M)	CONC	(YYMMDDHH)	
464543.41	3807141.91	25.05936	(10112518) 464563.41
3807141.91	25.16847	(10112518)	
464583.41	3807141.91	24.66701	(10112518) 464603.41
3807141.91	24.01976	(10112518)	
464623.41	3807141.91	23.15085	(10112518) 464643.41
3807141.91	21.89715	(10112518)	
464663.41	3807141.91	21.43974	(09011918) 464683.41
3807141.91	22.17930	(09011918)	
464703.41	3807141.91	22.46578	(09011918) 464723.41
3807141.91	22.68806	(09011918)	
464743.41	3807141.91	22.76924	(09011918) 464763.41
3807141.91	22.53627	(09011918)	
464783.41	3807141.91	22.13122	(09011918) 464803.41
3807141.91	21.49142	(09011918)	
464823.41	3807141.91	20.39801	(09011918) 464843.41
3807141.91	19.39455	(09011918)	
464863.41	3807141.91	18.36679	(09011918) 464883.41
3807141.91	17.19195	(09011918)	
464903.41	3807141.91	15.85712	(09011918) 464923.41
3807141.91	14.51594	(09011918)	
464503.41	3807161.91	24.89618	(10112518) 464523.41
3807161.91	25.37525	(10112518)	
464543.41	3807161.91	25.63247	(10112518) 464563.41
3807161.91	25.57619	(10112518)	
464583.41	3807161.91	24.90729	(10112518) 464603.41
3807161.91	23.94707	(10112518)	
464623.41	3807161.91	22.79191	(10112518) 464643.41
3807161.91	21.62464	(10112518)	
464663.41	3807161.91	22.22597	(09011918) 464683.41
3807161.91	22.64846	(09011918)	
464703.41	3807161.91	23.03560	(09011918) 464723.41
3807161.91	23.20980	(09011918)	
464743.41	3807161.91	23.08519	(09011918) 464763.41
3807161.91	22.37762	(09011918)	
464783.41	3807161.91	21.74347	(09011918) 464803.41
3807161.91	21.03323	(09011918)	
464823.41	3807161.91	20.10964	(09011918) 464843.41
3807161.91	19.08565	(09011918)	
464863.41	3807161.91	17.91782	(09011918) 464883.41
3807161.91	16.48074	(09011918)	
464903.41	3807161.91	15.18761	(09011918) 464923.41
3807161.91	13.92827	(09011918)	
464503.41	3807181.91	25.57287	(10112518) 464523.41
3807181.91	26.00213	(10112518)	
464543.41	3807181.91	26.03313	(10112518) 464563.41
3807181.91	25.68889	(10112518)	
464583.41	3807181.91	25.01084	(10112518) 464603.41

3807181.91	23.92091	(10112518)		
464623.41	3807181.91	22.59465	(10112518)	464643.41
3807181.91	22.46716	(09011918)		
464663.41	3807181.91	23.07906	(09011918)	464683.41
3807181.91	23.31179	(09011918)		
464703.41	3807181.91	23.61229	(09011918)	464723.41
3807181.91	23.48380	(09011918)		
464743.41	3807181.91	23.02418	(09011918)	464763.41
3807181.91	22.34661	(09011918)		
464783.41	3807181.91	21.63010	(09011918)	464803.41
3807181.91	20.76277	(09011918)		
464823.41	3807181.91	19.56907	(09011918)	464843.41
3807181.91	18.41935	(09011918)		
464863.41	3807181.91	17.22508	(09011918)	464883.41
3807181.91	15.86823	(09011918)		
464903.41	3807181.91	14.51581	(09011918)	464923.41
3807181.91	13.20175	(09011918)		
464503.41	3807201.91	26.18971	(10112518)	464523.41
3807201.91	26.57537	(10112518)		
464543.41	3807201.91	26.37176	(10112518)	464563.41
3807201.91	25.72492	(10112518)		
464583.41	3807201.91	24.96987	(10112518)	464603.41
3807201.91	23.79085	(10112518)		
464623.41	3807201.91	22.45536	(09011918)	464643.41
3807201.91	23.36957	(09011918)		
464663.41	3807201.91	23.84769	(09011918)	464683.41
3807201.91	23.97269	(09011918)		
464703.41	3807201.91	24.02602	(09011918)	464723.41
3807201.91	23.60244	(09011918)		
464743.41	3807201.91	22.89937	(09011918)	464763.41
3807201.91	22.31395	(09011918)		
464783.41	3807201.91	21.46379	(09011918)	464803.41
3807201.91	20.37946	(09011918)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 445

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961

, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3807201.91	18.98220	(09011918)	464843.41
3807201.91	17.68596	(09011918)		
464863.41	3807201.91	16.43147	(09011918)	464883.41
3807201.91	15.18949	(09011918)		
464903.41	3807201.91	13.82144	(09011918)	464923.41
3807201.91	12.48455	(09011918)		
464503.41	3807221.91	26.91366	(10112518)	464523.41
3807221.91	27.12434	(10112518)		
464543.41	3807221.91	26.73353	(10112518)	464563.41
3807221.91	25.86271	(10112518)		
464583.41	3807221.91	24.70452	(10112518)	464603.41
3807221.91	23.45891	(10112518)		
464623.41	3807221.91	23.47199	(09011918)	464643.41
3807221.91	23.99074	(09011918)		
464663.41	3807221.91	24.37528	(09011918)	464683.41
3807221.91	24.51602	(09011918)		
464703.41	3807221.91	24.05888	(09011918)	464723.41
3807221.91	23.57840	(09011918)		
464743.41	3807221.91	23.00137	(09011918)	464763.41
3807221.91	22.26016	(09011918)		
464783.41	3807221.91	21.06620	(09011918)	464803.41
3807221.91	19.69088	(09011918)		
464823.41	3807221.91	18.49117	(09011918)	464843.41
3807221.91	17.05016	(09011918)		
464863.41	3807221.91	15.59067	(09011918)	464883.41
3807221.91	14.35926	(09011918)		
464903.41	3807221.91	13.10089	(09011918)	464923.41
3807221.91	11.84990	(09011918)		
464503.41	3807241.91	27.54991	(10112518)	464523.41
3807241.91	27.40706	(10112518)		
464543.41	3807241.91	26.86939	(10112518)	464563.41
3807241.91	25.94984	(10112518)		
464583.41	3807241.91	24.57810	(10112518)	464603.41
3807241.91	23.54233	(09011918)		
464623.41	3807241.91	24.48053	(09011918)	464643.41
3807241.91	24.77784	(09011918)		
464663.41	3807241.91	24.84082	(09011918)	464683.41
3807241.91	24.66774	(09011918)		

464703.41	3807241.91	24.21949	(09011918)	464723.41
3807241.91	23.68969	(09011918)		
464743.41	3807241.91	22.95914	(09011918)	464763.41
3807241.91	21.81933	(09011918)		
464783.41	3807241.91	20.55493	(09011918)	464803.41
3807241.91	19.20169	(09011918)		
464823.41	3807241.91	17.77686	(09011918)	464843.41
3807241.91	16.34852	(09011918)		
464863.41	3807241.91	14.96630	(09011918)	464883.41
3807241.91	13.70321	(09011918)		
464903.41	3807241.91	12.39242	(09011918)	464923.41
3807241.91	11.13108	(09011918)		
464503.41	3807261.91	28.11881	(10112518)	464523.41
3807261.91	27.61319	(10112518)		
464543.41	3807261.91	26.92940	(10112518)	464563.41
3807261.91	25.94899	(10112518)		
464583.41	3807261.91	24.41370	(10112518)	464603.41
3807261.91	24.60025	(09011918)		
464623.41	3807261.91	25.33811	(09011918)	464643.41
3807261.91	25.53073	(09011918)		
464663.41	3807261.91	25.27846	(09011918)	464683.41
3807261.91	24.74213	(09011918)		
464703.41	3807261.91	24.37586	(09011918)	464723.41
3807261.91	23.68439	(09011918)		
464743.41	3807261.91	22.69115	(09011918)	464763.41
3807261.91	21.29138	(09011918)		
464783.41	3807261.91	19.97061	(09011918)	464803.41
3807261.91	18.61577	(09011918)		
464823.41	3807261.91	17.03733	(09011918)	464843.41
3807261.91	15.61621	(09011918)		
464863.41	3807261.91	14.28444	(09011918)	464883.41
3807261.91	13.00607	(09011918)		
464903.41	3807261.91	11.66229	(09011918)	464923.41
3807261.91	10.40558	(09011918)		
464503.41	3807281.91	28.62988	(10112518)	464523.41
3807281.91	27.91669	(10112518)		
464543.41	3807281.91	27.02787	(10112518)	464563.41
3807281.91	25.85021	(10112518)		
464583.41	3807281.91	24.79822	(09011918)	464603.41
3807281.91	25.48564	(09011918)		
464623.41	3807281.91	25.84350	(09011918)	464643.41
3807281.91	26.12158	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***
INCLUDING SOURCE(S): L0005936 , L0005937
, L0005938 , L0005939 , L0005940 ,
L0005941 , L0005942 , L0005943 , L0005944 , L0005945
, L0005946 , L0005947 , L0005948 ,
L0005949 , L0005950 , L0005951 , L0005952 , L0005953
, L0005954 , L0005955 , L0005956 ,
L0005957 , L0005958 , L0005959 , L0005960 , L0005961
, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)
464663.41	3807281.91	25.78057	(09011918)	464683.41
3807281.91	25.05645	(09011918)		
464703.41	3807281.91	24.50877	(09011918)	464723.41
3807281.91	23.41152	(09011918)		
464743.41	3807281.91	22.05652	(09011918)	464763.41
3807281.91	20.86896	(09011918)		
464783.41	3807281.91	19.35314	(09011918)	464803.41
3807281.91	17.76257	(09011918)		
464823.41	3807281.91	16.39918	(09011918)	464843.41
3807281.91	14.88386	(09011918)		
464863.41	3807281.91	13.41682	(09011918)	464883.41
3807281.91	12.18268	(09011918)		
464903.41	3807281.91	10.89446	(09011918)	464923.41
3807281.91	9.70178	(09011918)		
464503.41	3807301.91	28.82884	(10112518)	464523.41
3807301.91	28.06380	(10112518)		
464543.41	3807301.91	26.91057	(10112518)	464563.41
3807301.91	25.44697	(10112518)		
464583.41	3807301.91	25.90017	(09011918)	464603.41
3807301.91	26.43218	(09011918)		
464623.41	3807301.91	26.55040	(09011918)	464643.41
3807301.91	26.70103	(09011918)		
464663.41	3807301.91	26.18020	(09011918)	464683.41
3807301.91	25.26400	(09011918)		
464703.41	3807301.91	24.52977	(09011918)	464723.41
3807301.91	23.22385	(09011918)		
464743.41	3807301.91	21.64602	(09011918)	464763.41
3807301.91	20.16671	(09011918)		
464783.41	3807301.91	18.64406	(09011918)	464803.41

3807301.91	17.14405	(09011918)	
464823.41	3807301.91	15.76915	(09011918) 464843.41
3807301.91	14.22595	(09011918)	
464863.41	3807301.91	12.72066	(09011918) 464883.41
3807301.91	11.40803	(09011918)	
464903.41	3807301.91	10.19978	(09011918) 464923.41
3807301.91	9.07047	(09011918)	
464503.41	3807321.91	28.94202	(10112518) 464523.41
3807321.91	28.12050	(10112518)	
464543.41	3807321.91	26.71098	(10112518) 464563.41
3807321.91	25.93365	(09011918)	
464583.41	3807321.91	26.94918	(09011918) 464603.41
3807321.91	27.34057	(09011918)	
464623.41	3807321.91	27.25044	(09011918) 464643.41
3807321.91	27.19667	(09011918)	
464663.41	3807321.91	26.46650	(09011918) 464683.41
3807321.91	25.34026	(09011918)	
464703.41	3807321.91	24.32009	(09011918) 464723.41
3807321.91	22.89220	(09011918)	
464743.41	3807321.91	21.24050	(09011918) 464763.41
3807321.91	19.44830	(09011918)	
464783.41	3807321.91	17.93979	(09011918) 464803.41
3807321.91	16.52014	(09011918)	
464823.41	3807321.91	15.04142	(09011918) 464843.41
3807321.91	13.48736	(09011918)	
464863.41	3807321.91	12.00753	(09011918) 464883.41
3807321.91	10.68959	(09011918)	
464903.41	3807321.91	9.51902	(09011918) 464923.41
3807321.91	8.49571	(09011918)	
464503.41	3807341.91	29.17082	(10112518) 464523.41
3807341.91	28.11872	(10112518)	
464543.41	3807341.91	26.50804	(10112518) 464563.41
3807341.91	27.13714	(09011918)	
464583.41	3807341.91	27.98090	(09011918) 464603.41
3807341.91	28.15990	(09011918)	
464623.41	3807341.91	27.84671	(09011918) 464643.41
3807341.91	27.57411	(09011918)	
464663.41	3807341.91	26.62947	(09011918) 464683.41
3807341.91	25.24807	(09011918)	
464703.41	3807341.91	23.70891	(09011918) 464723.41
3807341.91	22.27364	(09011918)	
464743.41	3807341.91	20.77123	(09011918) 464763.41
3807341.91	18.91075	(09011918)	
464783.41	3807341.91	17.32870	(09011918) 464803.41
3807341.91	15.81049	(09011918)	
464823.41	3807341.91	14.15553	(09011918) 464843.41
3807341.91	12.60507	(09011918)	
464863.41	3807341.91	11.20952	(09011918) 464883.41
3807341.91	10.03798	(09011918)	
464903.41	3807341.91	8.92372	(09011918) 464923.41

3807341.91 8.15714 (09122717)
 ▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 447

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
464503.41	3807361.91	29.25901	(10112518)	464523.41
3807361.91	27.81665 (10112518)			
464543.41	3807361.91	27.39036	(09011918)	464563.41
3807361.91	28.28030 (09011918)			
464583.41	3807361.91	28.92636	(09011918)	464603.41
3807361.91	28.87392 (09011918)			
464623.41	3807361.91	28.27884	(09011918)	464643.41
3807361.91	27.50732 (09011918)			
464663.41	3807361.91	26.43914	(09011918)	464683.41
3807361.91	25.08641 (09011918)			
464703.41	3807361.91	23.32623	(09011918)	464723.41
3807361.91	21.61255 (09011918)			
464743.41	3807361.91	19.92166	(09011918)	464763.41
3807361.91	18.22370 (09011918)			
464783.41	3807361.91	16.53783	(09011918)	464803.41
3807361.91	14.88382 (09011918)			
464823.41	3807361.91	13.24361	(09011918)	464843.41
3807361.91	11.81402 (09011918)			
464863.41	3807361.91	10.50016	(09011918)	464883.41
3807361.91	9.37720 (09011918)			

464903.41	3807361.91	8.34785	(09122717)	464923.41
3807361.91	7.82234	(09030119)		
464503.41	3807381.91	29.14969	(10112518)	464523.41
3807381.91	27.41046	(10112518)		
464543.41	3807381.91	28.51831	(09011918)	464563.41
3807381.91	29.33221	(09011918)		
464583.41	3807381.91	29.66842	(09011918)	464603.41
3807381.91	29.38718	(09011918)		
464623.41	3807381.91	28.58755	(09011918)	464643.41
3807381.91	27.32922	(09011918)		
464663.41	3807381.91	26.07262	(09011918)	464683.41
3807381.91	24.67284	(09011918)		
464703.41	3807381.91	22.87613	(09011918)	464723.41
3807381.91	20.94016	(09011918)		
464743.41	3807381.91	19.03669	(09011918)	464763.41
3807381.91	17.41113	(09011918)		
464783.41	3807381.91	15.68125	(09011918)	464803.41
3807381.91	13.99441	(09011918)		
464823.41	3807381.91	12.40632	(09011918)	464843.41
3807381.91	11.03681	(09011918)		
464863.41	3807381.91	9.85687	(09011918)	464883.41
3807381.91	8.73169	(09011918)		
464903.41	3807381.91	8.02409	(09030119)	464923.41
3807381.91	6.44162	(09011918)		
464503.41	3807401.91	28.74637	(10112518)	464523.41
3807401.91	28.70435	(09011918)		
464543.41	3807401.91	29.70505	(09011918)	464563.41
3807401.91	30.24541	(09011918)		
464583.41	3807401.91	30.00593	(09011918)	464603.41
3807401.91	29.56549	(09011918)		
464623.41	3807401.91	28.79242	(09011918)	464643.41
3807401.91	27.31069	(09011918)		
464663.41	3807401.91	25.61977	(09011918)	464683.41
3807401.91	23.84864	(09011918)		
464703.41	3807401.91	22.24303	(09011918)	464723.41
3807401.91	20.31602	(09011918)		
464743.41	3807401.91	18.31487	(09011918)	464763.41
3807401.91	16.42970	(09011918)		
464783.41	3807401.91	14.79021	(09011918)	464803.41
3807401.91	13.25506	(09011918)		
464823.41	3807401.91	11.70997	(09011918)	464843.41
3807401.91	10.37263	(09011918)		
464863.41	3807401.91	9.19335	(09011918)	464883.41
3807401.91	8.15650	(09122717)		
464903.41	3807401.91	7.29456	(09030119)	464923.41
3807401.91	6.73322	(09030119)		
464503.41	3807421.91	28.78486	(09011918)	464523.41
3807421.91	30.00081	(09011918)		
464543.41	3807421.91	30.64613	(09011918)	464563.41
3807421.91	30.75240	(09011918)		

464583.41	3807421.91	30.41129	(09011918)	464603.41
3807421.91	29.63197	(09011918)		
464623.41	3807421.91	28.48529	(09011918)	464643.41
3807421.91	27.05347	(09011918)		
464663.41	3807421.91	25.22663	(09011918)	464683.41
3807421.91	23.22519	(09011918)		
464703.41	3807421.91	21.33934	(09011918)	464723.41
3807421.91	19.44413	(09011918)		
464743.41	3807421.91	17.55778	(09011918)	464763.41
3807421.91	15.62953	(09011918)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 448

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464783.41	3807421.91	13.91981	(09011918)	464803.41
3807421.91	12.37858	(09011918)		
464823.41	3807421.91	10.96934	(09011918)	464843.41
3807421.91	9.64949	(09011918)		
464863.41	3807421.91	8.54329	(09122717)	464883.41
3807421.91	7.55530	(09030119)		
464903.41	3807421.91	6.84549	(09030119)	464923.41
3807421.91	6.74781	(09030119)		
464503.41	3807441.91	30.21368	(09011918)	464523.41
3807441.91	31.13829	(09011918)		
464543.41	3807441.91	31.39703	(09011918)	464563.41

3807441.91	31.11357	(09011918)	
464583.41	3807441.91	30.63747	(09011918) 464603.41
3807441.91	29.53117	(09011918)	
464623.41	3807441.91	28.04684	(09011918) 464643.41
3807441.91	26.55865	(09011918)	
464663.41	3807441.91	24.66645	(09011918) 464683.41
3807441.91	22.58328	(09011918)	
464703.41	3807441.91	20.41415	(09011918) 464723.41
3807441.91	18.49112	(09011918)	
464743.41	3807441.91	16.66583	(09011918) 464763.41
3807441.91	14.80942	(09011918)	
464783.41	3807441.91	13.07886	(09011918) 464803.41
3807441.91	11.50138	(09011918)	
464823.41	3807441.91	10.21043	(09011918) 464843.41
3807441.91	8.95896	(09011918)	
464863.41	3807441.91	7.41519	(09011918) 464883.41
3807441.91	7.23427	(09030119)	
464903.41	3807441.91	7.07053	(09030119) 464923.41
3807441.91	5.74654	(09030119)	
464503.41	3807461.91	31.53451	(09011918) 464523.41
3807461.91	31.88926	(09011918)	
464543.41	3807461.91	31.95100	(09011918) 464563.41
3807461.91	31.59871	(09011918)	
464583.41	3807461.91	30.46244	(09011918) 464603.41
3807461.91	29.22835	(09011918)	
464623.41	3807461.91	27.74894	(09011918) 464643.41
3807461.91	25.72862	(09011918)	
464663.41	3807461.91	23.81627	(09011918) 464683.41
3807461.91	21.85649	(09011918)	
464703.41	3807461.91	19.63086	(09011918) 464723.41
3807461.91	17.52659	(09011918)	
464743.41	3807461.91	15.59828	(09011918) 464763.41
3807461.91	13.92218	(09011918)	
464783.41	3807461.91	12.27436	(09011918) 464803.41
3807461.91	10.76452	(09011918)	
464823.41	3807461.91	9.59309	(09122717) 464843.41
3807461.91	9.48802	(09030119)	
464863.41	3807461.91	7.43600	(09030119) 464883.41
3807461.91	7.71550	(09030119)	
464903.41	3807461.91	7.49165	(09030119) 464923.41
3807461.91	5.97165	(09030119)	
464503.41	3807481.91	32.79920	(09011918) 464523.41
3807481.91	32.79403	(09011918)	
464543.41	3807481.91	32.38064	(09011918) 464563.41
3807481.91	31.58061	(09011918)	
464583.41	3807481.91	30.37945	(09011918) 464603.41
3807481.91	28.81734	(09011918)	
464623.41	3807481.91	26.99475	(09011918) 464643.41
3807481.91	25.00964	(09011918)	
464663.41	3807481.91	22.91152	(09011918) 464683.41

3807481.91	20.78720	(09011918)		
464703.41	3807481.91	18.70528	(09011918)	464723.41
3807481.91	16.62411	(09011918)		
464743.41	3807481.91	14.69381	(09011918)	464763.41
3807481.91	13.04012	(09011918)		
464783.41	3807481.91	11.44386	(09011918)	464803.41
3807481.91	10.01082	(09011918)		
464823.41	3807481.91	10.39962	(09030119)	464843.41
3807481.91	10.24132	(09030119)		
464863.41	3807481.91	7.86135	(09030119)	464883.41
3807481.91	7.71655	(09030119)		
464903.41	3807481.91	6.31213	(09030119)	464923.41
3807481.91	6.19478	(09030119)		
464503.41	3807501.91	33.81362	(09011918)	464523.41
3807501.91	33.46799	(09011918)		
464543.41	3807501.91	32.62269	(09011918)	464563.41
3807501.91	31.40666	(09011918)		
464583.41	3807501.91	30.10214	(09011918)	464603.41
3807501.91	28.24468	(09011918)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 449

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	26.14202	(09011918)	464643.41
3807501.91	24.15516	(09011918)		

464663.41	3807501.91	21.91773	(09011918)	464683.41
3807501.91	19.68585	(09011918)		
464703.41	3807501.91	17.67318	(09011918)	464723.41
3807501.91	15.65635	(09011918)		
464743.41	3807501.91	13.78459	(09011918)	464763.41
3807501.91	12.12486	(09011918)		
464783.41	3807501.91	10.62605	(09122717)	464803.41
3807501.91	10.69145	(09030119)		
464823.41	3807501.91	11.01604	(09030119)	464843.41
3807501.91	10.88120	(09030119)		
464863.41	3807501.91	8.28649	(09030119)	464883.41
3807501.91	6.44768	(09030119)		
464903.41	3807501.91	6.38313	(09030119)	464923.41
3807501.91	6.41421	(09030119)		
464503.41	3807521.91	34.29999	(09011918)	464523.41
3807521.91	33.54845	(09011918)		
464543.41	3807521.91	32.63070	(09011918)	464563.41
3807521.91	31.38120	(09011918)		
464583.41	3807521.91	29.41131	(09011918)	464603.41
3807521.91	27.48522	(09011918)		
464623.41	3807521.91	25.43811	(09011918)	464643.41
3807521.91	23.02362	(09011918)		
464663.41	3807521.91	20.82881	(09011918)	464683.41
3807521.91	18.70428	(09011918)		
464703.41	3807521.91	16.52445	(09011918)	464723.41
3807521.91	14.60416	(09011918)		
464743.41	3807521.91	12.83739	(09011918)	464763.41
3807521.91	11.20165	(09011918)		
464783.41	3807521.91	11.40966	(09030119)	464803.41
3807521.91	11.46007	(09030119)		
464823.41	3807521.91	10.97049	(09030119)	464843.41
3807521.91	9.73889	(09030119)		
464863.41	3807521.91	8.79866	(09030119)	464883.41
3807521.91	6.70551	(09030119)		
464903.41	3807521.91	6.61169	(09030119)	464923.41
3807521.91	6.62816	(09030119)		
464503.41	3807541.91	34.59744	(09011918)	464523.41
3807541.91	33.79975	(09011918)		
464543.41	3807541.91	32.50239	(09011918)	464563.41
3807541.91	30.80996	(09011918)		
464583.41	3807541.91	28.83547	(09011918)	464603.41
3807541.91	26.63967	(09011918)		
464623.41	3807541.91	24.33384	(09011918)	464643.41
3807541.91	22.01232	(09011918)		
464663.41	3807541.91	19.71944	(09011918)	464683.41
3807541.91	17.52409	(09011918)		
464703.41	3807541.91	15.47139	(09011918)	464723.41
3807541.91	13.57725	(09011918)		
464743.41	3807541.91	11.86186	(09011918)	464763.41
3807541.91	11.76084	(09030119)		

464783.41	3807541.91	11.94877	(09030119)	464803.41
3807541.91	12.36966	(09030119)		
464823.41	3807541.91	10.55403	(09030119)	464843.41
3807541.91	8.96311	(09030119)		
464863.41	3807541.91	8.68836	(09030119)	464883.41
3807541.91	6.81937	(09030119)		
464903.41	3807541.91	6.83547	(09030119)	464923.41
3807541.91	6.83670	(09030119)		
464503.41	3807561.91	34.81126	(09011918)	464523.41
3807561.91	33.85466	(09011918)		
464543.41	3807561.91	32.17223	(09011918)	464563.41
3807561.91	30.09735	(09011918)		
464583.41	3807561.91	28.07777	(09011918)	464603.41
3807561.91	25.66227	(09011918)		
464623.41	3807561.91	23.17146	(09011918)	464643.41
3807561.91	20.90755	(09011918)		
464663.41	3807561.91	18.56591	(09011918)	464683.41
3807561.91	16.35706	(09011918)		
464703.41	3807561.91	14.40415	(09011918)	464723.41
3807561.91	12.56790	(09011918)		
464743.41	3807561.91	11.67938	(09030119)	464763.41
3807561.91	12.31946	(09030119)		
464783.41	3807561.91	12.77104	(09030119)	464803.41
3807561.91	12.88366	(09030119)		
464823.41	3807561.91	11.06172	(09030119)	464843.41
3807561.91	9.17310	(09030119)		
464863.41	3807561.91	7.03882	(09030119)	464883.41
3807561.91	7.05216	(09030119)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 450

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

	464903.41	3807561.91	7.05162	(09030119)	464923.41
3807561.91		7.03620 (09030119)			
	464503.41	3807581.91	35.17775	(09011918)	464523.41
3807581.91		33.41976 (09011918)			
	464543.41	3807581.91	31.60245	(09011918)	464563.41
3807581.91		29.55092 (09011918)			
	464583.41	3807581.91	26.94660	(09011918)	464603.41
3807581.91		24.53991 (09011918)			
	464623.41	3807581.91	22.15654	(09011918)	464643.41
3807581.91		19.61451 (09011918)			
	464663.41	3807581.91	17.37129	(09011918)	464683.41
3807581.91		15.28865 (09011918)			
	464703.41	3807581.91	13.31007	(09011918)	464723.41
3807581.91		12.47981 (09030119)			
	464743.41	3807581.91	12.70893	(09030119)	464763.41
3807581.91		13.33862 (09030119)			
	464783.41	3807581.91	13.13802	(09030119)	464803.41
3807581.91		11.19435 (09030119)			
	464823.41	3807581.91	11.18424	(09030119)	464843.41
3807581.91		9.67560 (09030119)			
	464863.41	3807581.91	7.28134	(09030119)	464883.41
3807581.91		7.27646 (09030119)			
	464903.41	3807581.91	7.25750	(09030119)	464923.41
3807581.91		7.22380 (09030119)			
	464503.41	3807601.91	34.84279	(09011918)	464523.41
3807601.91		32.65093 (09011918)			
	464543.41	3807601.91	30.61381	(09011918)	464563.41
3807601.91		28.48351 (09011918)			
	464583.41	3807601.91	25.94936	(09011918)	464603.41
3807601.91		23.36941 (09011918)			
	464623.41	3807601.91	20.84298	(09011918)	464643.41
3807601.91		18.44125 (09011918)			
	464663.41	3807601.91	16.19358	(09011918)	464683.41
3807601.91		14.13780 (09011918)			
	464703.41	3807601.91	12.88459	(09030119)	464723.41
3807601.91		13.11852 (09030119)			
	464743.41	3807601.91	13.63266	(09030119)	464763.41
3807601.91		13.56477 (09030119)			
	464783.41	3807601.91	12.16840	(09030119)	464803.41
3807601.91		10.38160 (09030119)			
	464823.41	3807601.91	10.01107	(09030119)	464843.41
3807601.91		7.77654 (09030119)			
	464863.41	3807601.91	7.51546	(09030119)	464883.41

3807601.91	7.49230	(09030119)	
464903.41	3807601.91	7.45290	(09030119) 464923.41
3807601.91	7.39843	(09030119)	
464503.41	3807621.91	34.15705	(09011918) 464523.41
3807621.91	31.80074	(09011918)	
464543.41	3807621.91	29.58323	(09011918) 464563.41
3807621.91	27.31377	(09011918)	
464583.41	3807621.91	24.81008	(09011918) 464603.41
3807621.91	22.11700	(09011918)	
464623.41	3807621.91	19.52254	(09011918) 464643.41
3807621.91	17.22748	(09011918)	
464663.41	3807621.91	15.01922	(09011918) 464683.41
3807621.91	13.03195	(09011918)	
464703.41	3807621.91	13.54970	(09030119) 464723.41
3807621.91	14.07402	(09030119)	
464743.41	3807621.91	14.21782	(09030119) 464763.41
3807621.91	12.21178	(09030119)	
464783.41	3807621.91	10.72867	(09030119) 464803.41
3807621.91	10.60121	(09030119)	
464823.41	3807621.91	7.77721	(09030119) 464843.41
3807621.91	7.76746	(09030119)	
464863.41	3807621.91	7.73941	(09030119) 464883.41
3807621.91	7.69567	(09030119)	
464903.41	3807621.91	7.63481	(09030119) 464923.41
3807621.91	7.55882	(09030119)	
464503.41	3807641.91	33.28215	(09011918) 464523.41
3807641.91	31.18411	(09011918)	
464543.41	3807641.91	28.87483	(09011918) 464563.41
3807641.91	26.31926	(09011918)	
464583.41	3807641.91	23.38695	(09011918) 464603.41
3807641.91	20.78236	(09011918)	
464623.41	3807641.91	18.33237	(09011918) 464643.41
3807641.91	15.93664	(09011918)	
464663.41	3807641.91	13.85746	(09011918) 464683.41
3807641.91	14.00405	(09030119)	
464703.41	3807641.91	14.72861	(09030119) 464723.41
3807641.91	14.52768	(09030119)	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 451

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945

```

, L0005946      , L0005947      , L0005948      ,
                  L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
                  L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464743.41	3807641.91	12.38283	(09030119)	464763.41
3807641.91	12.37975	(09030119)		
464783.41	3807641.91	10.83276	(09030119)	464803.41
3807641.91	8.04711	(09030119)		
464823.41	3807641.91	8.03283	(09030119)	464843.41
3807641.91	8.00114	(09030119)		
464863.41	3807641.91	7.95151	(09030119)	464883.41
3807641.91	7.88333	(09030119)		
464903.41	3807641.91	7.80066	(09030119)	464923.41
3807641.91	7.88133	(09031219)		
464503.41	3807661.91	32.09923	(09011918)	464523.41
3807661.91	29.91976	(09011918)		
464543.41	3807661.91	27.49976	(09011918)	464563.41
3807661.91	24.89682	(09011918)		
464583.41	3807661.91	22.10757	(09011918)	464603.41
3807661.91	19.44789	(09011918)		
464623.41	3807661.91	16.98244	(09011918)	464643.41
3807661.91	14.74372	(09011918)		
464663.41	3807661.91	14.00536	(09030119)	464683.41
3807661.91	14.07901	(09030119)		
464703.41	3807661.91	14.70322	(09030119)	464723.41
3807661.91	13.49242	(09030119)		
464743.41	3807661.91	11.51079	(09030119)	464763.41
3807661.91	11.10154	(09030119)		
464783.41	3807661.91	8.61353	(09030119)	464803.41
3807661.91	8.31454	(09030119)		
464823.41	3807661.91	8.27726	(09030119)	464843.41
3807661.91	8.22066	(09030119)		
464863.41	3807661.91	8.14607	(09030119)	464883.41
3807661.91	8.09577	(09031219)		
464903.41	3807661.91	8.18616	(09031219)	464923.41
3807661.91	8.25415	(09031219)		
464503.41	3807681.91	30.68735	(09011918)	464523.41
3807681.91	28.37691	(09011918)		

464543.41	3807681.91	25.88747	(09011918)	464563.41
3807681.91	23.30898	(09011918)		
464583.41	3807681.91	20.72381	(09011918)	464603.41
3807681.91	18.09219	(09011918)		
464623.41	3807681.91	15.66297	(09011918)	464643.41
3807681.91	14.66286	(09030119)		
464663.41	3807681.91	14.56544	(09030119)	464683.41
3807681.91	11.32015	(09030119)		
464703.41	3807681.91	11.46004	(09030119)	464723.41
3807681.91	11.65932	(09030119)		
464743.41	3807681.91	11.78427	(09030119)	464763.41
3807681.91	8.63433	(09030119)		
464783.41	3807681.91	8.61247	(09030119)	464803.41
3807681.91	8.56858	(09030119)		
464823.41	3807681.91	8.50598	(09030119)	464843.41
3807681.91	8.42309	(09030119)		
464863.41	3807681.91	8.42043	(09031219)	464883.41
3807681.91	8.50897	(09031219)		
464903.41	3807681.91	8.57265	(09031219)	464923.41
3807681.91	8.61267	(09031219)		
464523.41	3807701.91	26.74421	(09011918)	464543.41
3807701.91	24.22844	(09011918)		
464563.41	3807701.91	21.67566	(09011918)	464583.41
3807701.91	19.15974	(09011918)		
464603.41	3807701.91	16.72480	(09011918)	464623.41
3807701.91	15.34204	(09030119)		
464643.41	3807701.91	14.76898	(09030119)	464663.41
3807701.91	13.14130	(09030119)		
464683.41	3807701.91	11.89867	(09030119)	464703.41
3807701.91	11.27243	(09030119)		
464723.41	3807701.91	8.95975	(09030119)	464743.41
3807701.91	8.95547	(09030119)		
464763.41	3807701.91	8.92739	(09030119)	464783.41
3807701.91	8.87830	(09030119)		
464803.41	3807701.91	8.80772	(09030119)	464823.41
3807701.91	8.71508	(09030119)		
464843.41	3807701.91	8.76526	(09031219)	464863.41
3807701.91	8.85043	(09031219)		
464883.41	3807701.91	8.90861	(09031219)	464903.41
3807701.91	8.94264	(09031219)		
464923.41	3807701.91	8.95231	(09031219)	464543.41
3807721.91	22.53098	(09011918)		
464563.41	3807721.91	20.31046	(09011918)	464583.41
3807721.91	17.80749	(09011918)		
464603.41	3807721.91	16.09098	(09030119)	464623.41
3807721.91	16.76815	(09030119)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 , L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 , L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 , L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464643.41	3807721.91	14.34213	(09030119)	464663.41
3807721.91	12.19851	(09030119)		
464683.41	3807721.91	11.84744	(09030119)	464703.41
3807721.91	9.30499	(09030119)		
464723.41	3807721.91	9.29718	(09030119)	464743.41
3807721.91	9.26307	(09030119)		
464763.41	3807721.91	9.20629	(09030119)	464783.41
3807721.91	9.12628	(09030119)		
464803.41	3807721.91	9.02487	(09030119)	464823.41
3807721.91	9.13073	(09031219)		
464843.41	3807721.91	9.21137	(09031219)	464863.41
3807721.91	9.26438	(09031219)		
464883.41	3807721.91	9.29060	(09031219)	464903.41
3807721.91	9.30811	(10020118)		
464923.41	3807721.91	9.38502	(10020118)	464943.41
3807721.91	9.43567	(10020118)		
464963.41	3807721.91	9.46073	(10020118)	464983.41
3807721.91	9.46081	(10020118)		
465003.41	3807721.91	9.43695	(10020118)	465023.41
3807721.91	9.39075	(10020118)		
465043.41	3807721.91	9.32308	(10020118)	465063.41
3807721.91	9.23564	(10020118)		
465083.41	3807721.91	9.13032	(10020118)	465103.41
3807721.91	9.00913	(10020118)		
465123.41	3807721.91	8.87542	(10020118)	465143.41

3807721.91	8.72614	(10020118)		
465163.41	3807721.91	8.56448	(10020118)	465183.41
3807721.91	8.39507	(10020118)		
465203.41	3807721.91	8.21466	(10020118)	465223.41
3807721.91	8.02552	(10020118)		
465243.41	3807721.91	7.82963	(10020118)	465263.41
3807721.91	7.62873	(10020118)		
465283.41	3807721.91	7.42446	(10020118)	465303.41
3807721.91	7.21977	(10020118)		
465323.41	3807721.91	7.01074	(10020118)	465343.41
3807721.91	6.80018	(10020118)		
465363.41	3807721.91	6.59209	(10020118)	465383.41
3807721.91	6.38257	(10020118)		
464543.41	3807741.91	18.38856	(09011918)	464563.41
3807741.91	18.80061	(09011918)		
464583.41	3807741.91	16.43380	(09011918)	464603.41
3807741.91	17.20537	(09030119)		
464623.41	3807741.91	17.64874	(09030119)	464643.41
3807741.91	14.42165	(09030119)		
464663.41	3807741.91	12.31852	(09030119)	464683.41
3807741.91	9.67320	(09030119)		
464703.41	3807741.91	9.65998	(09030119)	464723.41
3807741.91	9.61956	(09030119)		
464743.41	3807741.91	9.55369	(09030119)	464763.41
3807741.91	9.46531	(09030119)		
464783.41	3807741.91	9.41290	(09031219)	464803.41
3807741.91	9.51822	(09031219)		
464823.41	3807741.91	9.59478	(09031219)	464843.41
3807741.91	9.64035	(09031219)		
464863.41	3807741.91	9.65709	(09031219)	464883.41
3807741.91	9.71128	(10020118)		
464903.41	3807741.91	9.78025	(10020118)	464923.41
3807741.91	9.82115	(10020118)		
464943.41	3807741.91	9.83512	(10020118)	464963.41
3807741.91	9.82272	(10020118)		
464983.41	3807741.91	9.78585	(10020118)	465003.41
3807741.91	9.72308	(10020118)		
465023.41	3807741.91	9.63950	(10020118)	465043.41
3807741.91	9.53672	(10020118)		
465063.41	3807741.91	9.41249	(10020118)	465083.41
3807741.91	9.27470	(10020118)		
465103.41	3807741.91	9.12342	(10020118)	465123.41
3807741.91	8.95769	(10020118)		
465143.41	3807741.91	8.77746	(10020118)	465163.41
3807741.91	8.58636	(10020118)		
465183.41	3807741.91	8.39001	(10020118)	465203.41
3807741.91	8.18721	(10020118)		
465223.41	3807741.91	7.97806	(10020118)	465243.41
3807741.91	7.75979	(10020118)		
465263.41	3807741.91	7.54172	(10020118)	465283.41

```

^ *** AERMOD - VERSION 19191 ***      *** C:\Users\apol1\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 ***      ***
***      16:42:19

```

PAGE 453

```
*** MODELOPTs:      RegDFault  CONC  ELEV  URBAN
```

VALUES FOR SOURCE GROUP:		*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
IDLE	***	
	INCLUDING SOURCE(S):	L0005936 , L0005937
, L0005938	, L0005939 , L0005940	
	L0005941 , L0005942	, L0005943 , L0005944 , L0005945
, L0005946	, L0005947 , L0005948	
	L0005949 , L0005950	, L0005951 , L0005952 , L0005953
, L0005954	, L0005955 , L0005956	
	L0005957 , L0005958	, L0005959 , L0005960 , L0005961
, L0005962	, L0005963 , . . .	

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM 10 IN MICROGRAMS/M**3

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465383.41	3807741.91	6.21611	(10020118)	464543.41
3807761.91	11.62114 (09011918)			
464563.41	3807761.91	14.75262	(09011918)	464583.41
3807761.91	14.04140 (09011918)			
464603.41	3807761.91	15.03027	(09030119)	464623.41
3807761.91	15.00122 (09030119)			
464643.41	3807761.91	12.66349	(09030119)	464663.41
3807761.91	10.06467 (09030119)			
464683.41	3807761.91	10.04671	(09030119)	464703.41
3807761.91	9.99824 (09030119)			
464723.41	3807761.91	9.92464	(09030119)	464743.41
3807761.91	9.82529 (09030119)			
464763.41	3807761.91	9.82843	(09031219)	464783.41
3807761.91	9.93124 (09031219)			
464803.41	3807761.91	10.00164	(09031219)	464823.41
3807761.91	10.03863 (09031219)			

464843.41	3807761.91	10.04588	(10020118)	464863.41
3807761.91	10.13611	(10020118)		
464883.41	3807761.91	10.19727	(10020118)	464903.41
3807761.91	10.22725	(10020118)		
464923.41	3807761.91	10.22831	(10020118)	464943.41
3807761.91	10.20206	(10020118)		
464963.41	3807761.91	10.14941	(10020118)	464983.41
3807761.91	10.07264	(10020118)		
465003.41	3807761.91	9.97060	(10020118)	465023.41
3807761.91	9.84607	(10020118)		
465043.41	3807761.91	9.70329	(10020118)	465063.41
3807761.91	9.54752	(10020118)		
465083.41	3807761.91	9.37724	(10020118)	465103.41
3807761.91	9.19296	(10020118)		
465123.41	3807761.91	8.99217	(10020118)	465143.41
3807761.91	8.78490	(10020118)		
465163.41	3807761.91	8.57026	(10020118)	465183.41
3807761.91	8.34429	(10020118)		
465203.41	3807761.91	8.11758	(10020118)	465223.41
3807761.91	7.88873	(10020118)		
465243.41	3807761.91	7.65633	(10020118)	465263.41
3807761.91	7.42294	(10020118)		
465283.41	3807761.91	7.18824	(10020118)	465303.41
3807761.91	6.94910	(10020118)		
465323.41	3807761.91	6.71465	(10020118)	465343.41
3807761.91	6.48310	(10020118)		
465363.41	3807761.91	6.25015	(10020118)	465383.41
3807761.91	6.02466	(10020118)		
464543.41	3807781.91	11.32391	(09011918)	464563.41
3807781.91	10.36171	(09011918)		
464583.41	3807781.91	10.35409	(09030119)	464603.41
3807781.91	10.43269	(09030119)		
464623.41	3807781.91	10.47530	(09030119)	464643.41
3807781.91	10.48433	(09030119)		
464663.41	3807781.91	10.46166	(09030119)	464683.41
3807781.91	10.40704	(09030119)		
464703.41	3807781.91	10.32009	(09030119)	464723.41
3807781.91	10.20689	(09030119)		
464743.41	3807781.91	10.27276	(09031219)	464763.41
3807781.91	10.37055	(09031219)		
464783.41	3807781.91	10.43306	(09031219)	464803.41
3807781.91	10.46112	(09031219)		
464823.41	3807781.91	10.50645	(10020118)	464843.41
3807781.91	10.58848	(10020118)		
464863.41	3807781.91	10.63783	(10020118)	464883.41
3807781.91	10.65514	(10020118)		
464903.41	3807781.91	10.64174	(10020118)	464923.41
3807781.91	10.59912	(10020118)		
464943.41	3807781.91	10.52890	(10020118)	464963.41
3807781.91	10.43265	(10020118)		

464983.41	3807781.91	10.31273	(10020118)	465003.41
3807781.91	10.17106	(10020118)		
465023.41	3807781.91	10.00759	(10020118)	465043.41
3807781.91	9.82648	(10020118)		
465063.41	3807781.91	9.63604	(10020118)	465083.41
3807781.91	9.42992	(10020118)		
465103.41	3807781.91	9.21148	(10020118)	465123.41
3807781.91	8.98382	(10020118)		
465143.41	3807781.91	8.74821	(10020118)	465163.41
3807781.91	8.50652	(10020118)		
465183.41	3807781.91	8.26051	(10020118)	465203.41
3807781.91	8.01400	(10020118)		
465223.41	3807781.91	7.76602	(10020118)	465243.41
3807781.91	7.51403	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 454

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3807781.91	7.26502	(10020118)	465283.41
3807781.91	7.01805	(10020118)		
465303.41	3807781.91	6.77035	(10020118)	465323.41
3807781.91	6.52542	(10020118)		
465343.41	3807781.91	6.28414	(10020118)	465363.41
3807781.91	6.04730	(10020118)		
465383.41	3807781.91	5.81742	(10020118)	464543.41

3807801.91	10.96843	(09011918)		
464563.41	3807801.91	10.81909	(09030119)	464583.41
3807801.91	10.90150	(09030119)		
464603.41	3807801.91	10.94175	(09030119)	464623.41
3807801.91	10.94194	(09030119)		
464643.41	3807801.91	10.90504	(09030119)	464663.41
3807801.91	10.83983	(09030119)		
464683.41	3807801.91	10.74442	(09030119)	464703.41
3807801.91	10.61798	(09031219)		
464723.41	3807801.91	10.74695	(09031219)	464743.41
3807801.91	10.83803	(09031219)		
464763.41	3807801.91	10.89295	(09031219)	464783.41
3807801.91	10.90939	(09031219)		
464803.41	3807801.91	10.99606	(10020118)	464823.41
3807801.91	11.06727	(10020118)		
464843.41	3807801.91	11.10408	(10020118)	464863.41
3807801.91	11.10668	(10020118)		
464883.41	3807801.91	11.07600	(10020118)	464903.41
3807801.91	11.01495	(10020118)		
464923.41	3807801.91	10.92454	(10020118)	464943.41
3807801.91	10.80809	(10020118)		
464963.41	3807801.91	10.66618	(10020118)	464983.41
3807801.91	10.50108	(10020118)		
465003.41	3807801.91	10.31902	(10020118)	465023.41
3807801.91	10.11707	(10020118)		
465043.41	3807801.91	9.89940	(10020118)	465063.41
3807801.91	9.67250	(10020118)		
465083.41	3807801.91	9.43168	(10020118)	465103.41
3807801.91	9.18132	(10020118)		
465123.41	3807801.91	8.92798	(10020118)	465143.41
3807801.91	8.66595	(10020118)		
465163.41	3807801.91	8.39980	(10020118)	465183.41
3807801.91	8.13698	(10020118)		
465203.41	3807801.91	7.87203	(10020118)	465223.41
3807801.91	7.60603	(10020118)		
465243.41	3807801.91	7.33752	(10020118)	465263.41
3807801.91	7.07550	(10020118)		
465283.41	3807801.91	6.81843	(10020118)	465303.41
3807801.91	6.56395	(10020118)		
465323.41	3807801.91	6.31101	(10020118)	465343.41
3807801.91	6.06291	(10020118)		
465363.41	3807801.91	5.82506	(10020118)	465383.41
3807801.91	5.66594	(10102019)		
464543.41	3807821.91	11.27218	(09030119)	464563.41
3807821.91	11.37538	(09030119)		
464583.41	3807821.91	11.43299	(09030119)	464603.41
3807821.91	11.43389	(09030119)		
464623.41	3807821.91	11.38875	(09030119)	464643.41
3807821.91	11.30699	(09030119)		
464663.41	3807821.91	11.19398	(09030119)	464683.41

3807821.91	11.12900	(09031219)	
464703.41	3807821.91	11.25329	(09031219) 464723.41
3807821.91	11.33830	(09031219)	
464743.41	3807821.91	11.38267	(09031219) 464763.41
3807821.91	11.41928	(10020118)	
464783.41	3807821.91	11.51678	(10020118) 464803.41
3807821.91	11.57538	(10020118)	
464823.41	3807821.91	11.59774	(10020118) 464843.41
3807821.91	11.58243	(10020118)	
464863.41	3807821.91	11.53250	(10020118) 464883.41
3807821.91	11.45054	(10020118)	
464903.41	3807821.91	11.33809	(10020118) 464923.41
3807821.91	11.19829	(10020118)	
464943.41	3807821.91	11.03137	(10020118) 464963.41
3807821.91	10.84334	(10020118)	
464983.41	3807821.91	10.63637	(10020118) 465003.41
3807821.91	10.40800	(10020118)	
465023.41	3807821.91	10.16837	(10020118) 465043.41
3807821.91	9.91733	(10020118)	
465063.41	3807821.91	9.65123	(10020118) 465083.41
3807821.91	9.38105	(10020118)	
465103.41	3807821.91	9.10578	(10020118) 465123.41
3807821.91	8.82091	(10020118)	

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 455

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

	465143.41	3807821.91	8.53765	(10020118)	465163.41
3807821.91	8.25557	(10020118)			
	465183.41	3807821.91	7.97441	(10020118)	465203.41
3807821.91	7.68983	(10020118)			
	465223.41	3807821.91	7.40649	(10020118)	465243.41
3807821.91	7.13153	(10020118)			
	465263.41	3807821.91	6.86140	(10020118)	465283.41
3807821.91	6.59531	(10020118)			
	465303.41	3807821.91	6.32950	(10020118)	465323.41
3807821.91	6.07348	(10020118)			
	465343.41	3807821.91	5.89297	(10102019)	465363.41
3807821.91	5.74368	(10102019)			
	465383.41	3807821.91	5.59123	(10102019)	464543.41
3807841.91	11.81845	(09030119)			
	464563.41	3807841.91	11.87918	(09030119)	464583.41
3807841.91	11.92076	(09030119)			
	464603.41	3807841.91	11.90068	(09030119)	464623.41
3807841.91	11.81431	(09030119)			
	464643.41	3807841.91	11.68461	(09030119)	464663.41
3807841.91	11.68304	(09031219)			
	464683.41	3807841.91	11.80001	(09031219)	464723.41
3807841.91	11.90380	(09031219)			
	464743.41	3807841.91	11.98579	(10020118)	464763.41
3807841.91	12.07136	(10020118)			
	464783.41	3807841.91	12.11570	(10020118)	464803.41
3807841.91	12.11956	(10020118)			
	464823.41	3807841.91	12.08445	(10020118)	464843.41
3807841.91	12.01272	(10020118)			
	464863.41	3807841.91	11.90684	(10020118)	464883.41
3807841.91	11.76942	(10020118)			
	464903.41	3807841.91	11.60289	(10020118)	464923.41
3807841.91	11.41062	(10020118)			
	464943.41	3807841.91	11.19533	(10020118)	464963.41
3807841.91	10.95970	(10020118)			
	464983.41	3807841.91	10.70711	(10020118)	465003.41
3807841.91	10.44048	(10020118)			
	465023.41	3807841.91	10.16185	(10020118)	465043.41
3807841.91	9.87385	(10020118)			
	465063.41	3807841.91	9.57896	(10020118)	465083.41
3807841.91	9.27871	(10020118)			
	465103.41	3807841.91	8.97525	(10020118)	465123.41
3807841.91	8.67056	(10020118)			
	465143.41	3807841.91	8.36565	(10020118)	465163.41
3807841.91	8.06287	(10020118)			
	465183.41	3807841.91	7.76658	(10020118)	465203.41
3807841.91	7.47116	(10020118)			
	465223.41	3807841.91	7.17897	(10020118)	465243.41
3807841.91	6.89189	(10020118)			

465263.41	3807841.91	6.61375	(10020118)	465283.41
3807841.91	6.34301	(10020118)		
465303.41	3807841.91	6.13602	(10102019)	465323.41
3807841.91	5.97527	(10102019)		
465343.41	3807841.91	5.81575	(10102019)	465363.41
3807841.91	5.65450	(10102019)		
465383.41	3807841.91	5.49506	(10102019)	464503.41
3807861.91	12.24655	(09030119)		
464523.41	3807861.91	12.30892	(09030119)	464543.41
3807861.91	12.34016	(09030119)		
464563.41	3807861.91	12.34520	(09030119)	464583.41
3807861.91	12.35405	(09030119)		
464603.41	3807861.91	12.30901	(09030119)	464723.41
3807861.91	12.59124	(10020118)		
464743.41	3807861.91	12.66248	(10020118)	464763.41
3807861.91	12.68800	(10020118)		
464783.41	3807861.91	12.67201	(10020118)	464803.41
3807861.91	12.61466	(10020118)		
464823.41	3807861.91	12.51728	(10020118)	464843.41
3807861.91	12.38471	(10020118)		
464863.41	3807861.91	12.21880	(10020118)	464883.41
3807861.91	12.02417	(10020118)		
464903.41	3807861.91	11.80211	(10020118)	464923.41
3807861.91	11.55575	(10020118)		
464943.41	3807861.91	11.29298	(10020118)	464963.41
3807861.91	11.01058	(10020118)		
464983.41	3807861.91	10.71378	(10020118)	465003.41
3807861.91	10.41037	(10020118)		
465023.41	3807861.91	10.09495	(10020118)	465043.41
3807861.91	9.77275	(10020118)		
465063.41	3807861.91	9.45133	(10020118)	465083.41
3807861.91	9.12407	(10020118)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 456

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465103.41	3807861.91	8.79592	(10020118)	465123.41
3807861.91	8.47395	(10020118)		
465143.41	3807861.91	8.15079	(10020118)	465163.41
3807861.91	7.83096	(10020118)		
465183.41	3807861.91	7.52092	(10020118)	465203.41
3807861.91	7.21781	(10020118)		
465223.41	3807861.91	6.92072	(10020118)	465243.41
3807861.91	6.62539	(10020118)		
465263.41	3807861.91	6.39427	(10102019)	465283.41
3807861.91	6.22296	(10102019)		
465303.41	3807861.91	6.05138	(10102019)	465323.41
3807861.91	5.88211	(10102019)		
465343.41	3807861.91	5.71418	(10102019)	465363.41
3807861.91	5.54383	(10102019)		
465383.41	3807861.91	5.37869	(10102019)	464503.41
3807881.91	12.90657	(09030119)		
464523.41	3807881.91	12.91041	(09030119)	464543.41
3807881.91	12.88477	(09030119)		
464723.41	3807881.91	13.29315	(10020118)	464743.41
3807881.91	13.29773	(10020118)		
464763.41	3807881.91	13.25558	(10020118)	464783.41
3807881.91	13.17196	(10020118)		
464803.41	3807881.91	13.04782	(10020118)	464823.41
3807881.91	12.88501	(10020118)		
464843.41	3807881.91	12.68793	(10020118)	464863.41
3807881.91	12.46104	(10020118)		
464883.41	3807881.91	12.20523	(10020118)	464903.41
3807881.91	11.92819	(10020118)		
464923.41	3807881.91	11.63290	(10020118)	464943.41
3807881.91	11.31674	(10020118)		
464963.41	3807881.91	10.99204	(10020118)	464983.41
3807881.91	10.65868	(10020118)		
465003.41	3807881.91	10.31251	(10020118)	465023.41
3807881.91	9.96639	(10020118)		
465043.41	3807881.91	9.61904	(10020118)	465063.41
3807881.91	9.26527	(10020118)		
465083.41	3807881.91	8.91782	(10020118)	465103.41
3807881.91	8.57453	(10020118)		
465123.41	3807881.91	8.22954	(10020118)	465143.41

3807881.91	7.89505	(10020118)		
465163.41	3807881.91	7.56825	(10020118)	465183.41
3807881.91	7.24301	(10020118)		
465203.41	3807881.91	6.93167	(10020118)	465223.41
3807881.91	6.67435	(10102019)		
465243.41	3807881.91	6.48946	(10102019)	465263.41
3807881.91	6.30653	(10102019)		
465283.41	3807881.91	6.12444	(10102019)	465303.41
3807881.91	5.93899	(10102019)		
465323.41	3807881.91	5.76072	(10102019)	465343.41
3807881.91	5.58699	(10102019)		
465363.41	3807881.91	5.41547	(10102019)	465383.41
3807881.91	5.24376	(10102019)		
464723.41	3807901.91	13.94978	(10020118)	464743.41
3807901.91	13.87681	(10020118)		
464763.41	3807901.91	13.76222	(10020118)	464783.41
3807901.91	13.60452	(10020118)		
464803.41	3807901.91	13.40812	(10020118)	464823.41
3807901.91	13.17665	(10020118)		
464843.41	3807901.91	12.91404	(10020118)	464863.41
3807901.91	12.62545	(10020118)		
464883.41	3807901.91	12.31066	(10020118)	464903.41
3807901.91	11.97679	(10020118)		
464923.41	3807901.91	11.62943	(10020118)	464943.41
3807901.91	11.27081	(10020118)		
464963.41	3807901.91	10.90691	(10020118)	464983.41
3807901.91	10.53728	(10020118)		
465003.41	3807901.91	10.15673	(10020118)	465023.41
3807901.91	9.77829	(10020118)		
465043.41	3807901.91	9.40303	(10020118)	465063.41
3807901.91	9.03126	(10020118)		
465083.41	3807901.91	8.66394	(10020118)	465103.41
3807901.91	8.30273	(10020118)		
465123.41	3807901.91	7.94910	(10020118)	465143.41
3807901.91	7.60340	(10020118)		
465163.41	3807901.91	7.26673	(10020118)	465183.41
3807901.91	6.97403	(10102019)		
465203.41	3807901.91	6.77490	(10102019)	465223.41
3807901.91	6.57782	(10102019)		
465243.41	3807901.91	6.37906	(10102019)	465263.41
3807901.91	6.18579	(10102019)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 457

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: IDLE ***

INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465283.41	3807901.91	5.99621	(10102019)	465303.41
3807901.91	5.80659	(10102019)		
465323.41	3807901.91	5.62030	(10102019)	465343.41
3807901.91	5.43838	(10102019)		
465363.41	3807901.91	5.26363	(10102019)	465383.41
3807901.91	5.09059	(10102019)		
464723.41	3807921.91	14.54097	(10020118)	464743.41
3807921.91	14.38592	(10020118)		
464763.41	3807921.91	14.19132	(10020118)	464783.41
3807921.91	13.95576	(10020118)		
464803.41	3807921.91	13.68476	(10020118)	464823.41
3807921.91	13.38295	(10020118)		
464843.41	3807921.91	13.05426	(10020118)	464863.41
3807921.91	12.70380	(10020118)		
464883.41	3807921.91	12.33124	(10020118)	464903.41
3807921.91	11.94368	(10020118)		
464923.41	3807921.91	11.54771	(10020118)	464943.41
3807921.91	11.15167	(10020118)		
464963.41	3807921.91	10.75046	(10020118)	464983.41
3807921.91	10.34628	(10020118)		
465003.41	3807921.91	9.93673	(10020118)	465023.41
3807921.91	9.53156	(10020118)		
465043.41	3807921.91	9.13339	(10020118)	465063.41
3807921.91	8.74732	(10020118)		
465083.41	3807921.91	8.36477	(10020118)	465103.41
3807921.91	7.99057	(10020118)		
465123.41	3807921.91	7.63158	(10020118)	465143.41
3807921.91	7.30270	(10102019)		
465163.41	3807921.91	7.08248	(10102019)	465183.41
3807921.91	6.86908	(10102019)		

465203.41	3807921.91	6.65923	(10102019)	465223.41
3807921.91	6.45168	(10102019)		
465243.41	3807921.91	6.24170	(10102019)	465263.41
3807921.91	6.03894	(10102019)		
465283.41	3807921.91	5.84227	(10102019)	465303.41
3807921.91	5.65109	(10102019)		
465323.41	3807921.91	5.46000	(10102019)	465343.41
3807921.91	5.27267	(10102019)		
465363.41	3807921.91	5.09517	(10102019)	465383.41
3807921.91	4.92134	(10102019)		
464723.41	3807941.91	15.03805	(10020118)	464743.41
3807941.91	14.80892	(10020118)		
464763.41	3807941.91	14.52842	(10020118)	464783.41
3807941.91	14.21316	(10020118)		
464803.41	3807941.91	13.86681	(10020118)	464823.41
3807941.91	13.49508	(10020118)		
464843.41	3807941.91	13.10063	(10020118)	464863.41
3807941.91	12.68679	(10020118)		
464883.41	3807941.91	12.25757	(10020118)	464903.41
3807941.91	11.82586	(10020118)		
464923.41	3807941.91	11.39283	(10020118)	464943.41
3807941.91	10.95915	(10020118)		
464963.41	3807941.91	10.52081	(10020118)	464983.41
3807941.91	10.08278	(10020118)		
465003.41	3807941.91	9.64875	(10020118)	465023.41
3807941.91	9.22868	(10020118)		
465043.41	3807941.91	8.81933	(10020118)	465063.41
3807941.91	8.41335	(10020118)		
465083.41	3807941.91	8.02402	(10020118)	465103.41
3807941.91	7.66032	(10102019)		
465123.41	3807941.91	7.42026	(10102019)	465143.41
3807941.91	7.18769	(10102019)		
465163.41	3807941.91	6.95931	(10102019)	465183.41
3807941.91	6.72839	(10102019)		
465203.41	3807941.91	6.50741	(10102019)	465223.41
3807941.91	6.29293	(10102019)		
465243.41	3807941.91	6.08193	(10102019)	465263.41
3807941.91	5.87141	(10102019)		
465283.41	3807941.91	5.66540	(10102019)	465303.41
3807941.91	5.47072	(10102019)		
465323.41	3807941.91	5.28032	(10102019)	465343.41
3807941.91	5.09521	(10102019)		
465363.41	3807941.91	4.91620	(10102019)	465383.41
3807941.91	4.73840	(10102019)		
465403.41	3807941.91	4.56511	(10102019)	465423.41
3807941.91	4.40151	(10102019)		
465443.41	3807941.91	4.24379	(10102019)	465463.41
3807941.91	4.09272	(10102019)		
465483.41	3807941.91	3.94463	(10102019)	465503.41
3807941.91	3.80223	(10102019)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 458

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
-	-	-	-	-
-	-	-	-	-
465523.41	3807941.91	3.66422	(10102019)	465543.41
3807941.91	3.53727	(09010519)		
465563.41	3807941.91	3.51327	(09010519)	465583.41
3807941.91	3.49035	(09010519)		
465603.41	3807941.91	3.46777	(09010519)	465623.41
3807941.91	3.44188	(09010519)		
465643.41	3807941.91	3.41507	(09010519)	465663.41
3807941.91	3.39112	(09010519)		
465683.41	3807941.91	3.36450	(09010519)	465703.41
3807941.91	3.33727	(09010519)		
464723.41	3807961.91	15.39787	(10020118)	464743.41
3807961.91	15.11639	(10020118)		
464763.41	3807961.91	14.76132	(10020118)	464783.41
3807961.91	14.36640	(10020118)		
464803.41	3807961.91	13.94560	(10020118)	464823.41
3807961.91	13.50438	(10020118)		
464843.41	3807961.91	13.04861	(10020118)	464863.41
3807961.91	12.58089	(10020118)		
464883.41	3807961.91	12.10245	(10020118)	464903.41
3807961.91	11.62867	(10020118)		
464923.41	3807961.91	11.15841	(10020118)	464943.41

3807961.91	10.68715	(10020118)		
464963.41	3807961.91	10.22266	(10020118)	464983.41
3807961.91	9.76555	(10020118)		
465003.41	3807961.91	9.31334	(10020118)	465023.41
3807961.91	8.88003	(10020118)		
465043.41	3807961.91	8.46089	(10020118)	465063.41
3807961.91	8.04633	(10102019)		
465083.41	3807961.91	7.78789	(10102019)	465103.41
3807961.91	7.53432	(10102019)		
465123.41	3807961.91	7.28468	(10102019)	465143.41
3807961.91	7.03890	(10102019)		
465163.41	3807961.91	6.79779	(10102019)	465183.41
3807961.91	6.56204	(10102019)		
465203.41	3807961.91	6.33137	(10102019)	465223.41
3807961.91	6.10709	(10102019)		
465243.41	3807961.91	5.89268	(10102019)	465263.41
3807961.91	5.68118	(10102019)		
465283.41	3807961.91	5.47506	(10102019)	465303.41
3807961.91	5.27830	(10102019)		
465323.41	3807961.91	5.08463	(10102019)	465343.41
3807961.91	4.89653	(10102019)		
465363.41	3807961.91	4.71781	(10102019)	465383.41
3807961.91	4.54274	(10102019)		
465403.41	3807961.91	4.37253	(10102019)	465423.41
3807961.91	4.20797	(10102019)		
465443.41	3807961.91	4.05154	(10102019)	465463.41
3807961.91	3.90607	(10102019)		
465483.41	3807961.91	3.76320	(09010519)	465503.41
3807961.91	3.73708	(09010519)		
465523.41	3807961.91	3.71106	(09010519)	465543.41
3807961.91	3.68253	(09010519)		
465563.41	3807961.91	3.65567	(09010519)	465583.41
3807961.91	3.62894	(09010519)		
465603.41	3807961.91	3.59961	(09010519)	465623.41
3807961.91	3.57033	(09010519)		
465643.41	3807961.91	3.54104	(09010519)	465663.41
3807961.91	3.51143	(09010519)		
465683.41	3807961.91	3.48196	(09010519)	465703.41
3807961.91	3.45307	(09010519)		
464743.41	3807981.91	15.28551	(10020118)	464763.41
3807981.91	14.87034	(10020118)		
464783.41	3807981.91	14.40441	(10020118)	464803.41
3807981.91	13.91442	(10020118)		
464823.41	3807981.91	13.40524	(10020118)	464843.41
3807981.91	12.89297	(10020118)		
464863.41	3807981.91	12.37938	(10020118)	464883.41
3807981.91	11.85759	(10020118)		
464903.41	3807981.91	11.34702	(10020118)	464923.41
3807981.91	10.84533	(10020118)		
464943.41	3807981.91	10.34548	(10020118)	464963.41

```

3807981.91      9.86107 (10020118)
      464983.41  3807981.91      9.39051 (10020118)      465003.41
3807981.91      8.92852 (10020118)
      465023.41  3807981.91      8.48586 (10020118)      465043.41
3807981.91      8.19552 (10102019)
      465063.41  3807981.91      7.91689 (10102019)      465083.41
3807981.91      7.64088 (10102019)
      465103.41  3807981.91      7.37102 (10102019)      465123.41
3807981.91      7.11553 (10102019)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 459

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***
      INCLUDING SOURCE(S):      L0005936      , L0005937
, L0005938      , L0005939      , L0005940      ,
      L0005941      , L0005942      , L0005943      , L0005944      , L0005945
, L0005946      , L0005947      , L0005948      ,
      L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
      L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807981.91	6.85867	(10102019)	465163.41
3807981.91	6.60617	(10102019)		
465183.41	3807981.91	6.36703	(10102019)	465203.41
3807981.91	6.13025	(10102019)		
465223.41	3807981.91	5.89992	(10102019)	465243.41
3807981.91	5.68285	(10102019)		
465263.41	3807981.91	5.47240	(10102019)	465283.41
3807981.91	5.26835	(10102019)		
465303.41	3807981.91	5.06964	(10102019)	465323.41
3807981.91	4.87441	(10102019)		
465343.41	3807981.91	4.68547	(10102019)	465363.41
3807981.91	4.50706	(10102019)		

465383.41	3807981.91	4.33596	(10102019)	465403.41
3807981.91	4.17072 (10102019)			
465423.41	3807981.91	4.00729	(10102019)	465443.41
3807981.91	3.97524 (09010519)			
465463.41	3807981.91	3.95308	(09010519)	465483.41
3807981.91	3.91845 (09010519)			
465503.41	3807981.91	3.88716	(09010519)	465523.41
3807981.91	3.85710 (09010519)			
465543.41	3807981.91	3.82585	(09010519)	465563.41
3807981.91	3.79529 (09010519)			
465583.41	3807981.91	3.76410	(09010519)	465603.41
3807981.91	3.72895 (09010519)			
465623.41	3807981.91	3.69630	(09010519)	465643.41
3807981.91	3.66421 (09010519)			
465663.41	3807981.91	3.62914	(09010519)	465683.41
3807981.91	3.59746 (09010519)			
465703.41	3807981.91	3.56716	(09010519)	464763.41
3808001.91	14.83299 (10020118)			
464783.41	3808001.91	14.31245	(10020118)	464803.41
3808001.91	13.76447 (10020118)			
464823.41	3808001.91	13.19428	(10020118)	464843.41
3808001.91	12.63255 (10020118)			
464863.41	3808001.91	12.07668	(10020118)	464883.41
3808001.91	11.51800 (10020118)			
464903.41	3808001.91	10.97831	(10020118)	464923.41
3808001.91	10.45459 (10020118)			
464943.41	3808001.91	9.94369	(10020118)	464963.41
3808001.91	9.44287 (10020118)			
464983.41	3808001.91	8.95780	(10020118)	465003.41
3808001.91	8.62922 (10102019)			
465023.41	3808001.91	8.32736	(10102019)	465043.41
3808001.91	8.02944 (10102019)			
465063.41	3808001.91	7.74385	(10102019)	465083.41
3808001.91	7.45830 (10102019)			
465103.41	3808001.91	7.17843	(10102019)	465123.41
3808001.91	6.91451 (10102019)			
465143.41	3808001.91	6.65094	(10102019)	465163.41
3808001.91	6.39198 (10102019)			
465183.41	3808001.91	6.14198	(10102019)	465203.41
3808001.91	5.90499 (10102019)			
465223.41	3808001.91	5.67843	(10102019)	465243.41
3808001.91	5.46042 (10102019)			
465263.41	3808001.91	5.24988	(10102019)	465283.41
3808001.91	5.04551 (10102019)			
465303.41	3808001.91	4.84285	(10102019)	465323.41
3808001.91	4.65172 (10102019)			
465343.41	3808001.91	4.46878	(10102019)	465363.41
3808001.91	4.28838 (10102019)			
465383.41	3808001.91	4.24485	(09010519)	465403.41
3808001.91	4.21124 (09010519)			

465423.41	3808001.91	4.17657	(09010519)	465443.41
3808001.91	4.14231	(09010519)		
465463.41	3808001.91	4.10952	(09010519)	465483.41
3808001.91	4.07417	(09010519)		
465503.41	3808001.91	4.03943	(09010519)	465523.41
3808001.91	4.00393	(09010519)		
465543.41	3808001.91	3.96382	(09010519)	465563.41
3808001.91	3.92751	(09010519)		
465583.41	3808001.91	3.89301	(09010519)	465603.41
3808001.91	3.85770	(09010519)		
465623.41	3808001.91	3.81948	(09010519)	465643.41
3808001.91	3.78085	(09010519)		
465663.41	3808001.91	3.74600	(09010519)	465683.41
3808001.91	3.71195	(09010519)		
465703.41	3808001.91	3.67742	(09010519)	464763.41
3808021.91	14.62598	(10020118)		
464783.41	3808021.91	14.05994	(10020118)	464803.41
3808021.91	13.47510	(10020118)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 460

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	12.87019	(10020118)	464843.41
3808021.91	12.27257	(10020118)		
464863.41	3808021.91	11.68436	(10020118)	464883.41

3808021.91	11.10511	(10020118)		
464903.41	3808021.91	10.54161	(10020118)	464923.41
3808021.91	9.99716	(10020118)		
464943.41	3808021.91	9.47747	(10020118)	464963.41
3808021.91	9.10184	(10102019)		
464983.41	3808021.91	8.77339	(10102019)	465003.41
3808021.91	8.45037	(10102019)		
465023.41	3808021.91	8.13489	(10102019)	465043.41
3808021.91	7.82687	(10102019)		
465063.41	3808021.91	7.52629	(10102019)	465083.41
3808021.91	7.23437	(10102019)		
465103.41	3808021.91	6.95122	(10102019)	465123.41
3808021.91	6.67637	(10102019)		
465143.41	3808021.91	6.41076	(10102019)	465163.41
3808021.91	6.15351	(10102019)		
465183.41	3808021.91	5.90075	(10102019)	465203.41
3808021.91	5.66375	(10102019)		
465223.41	3808021.91	5.43771	(10102019)	465243.41
3808021.91	5.21619	(10102019)		
465263.41	3808021.91	5.00622	(10102019)	465283.41
3808021.91	4.80527	(10102019)		
465303.41	3808021.91	4.60904	(10102019)	465323.41
3808021.91	4.55024	(09010519)		
465343.41	3808021.91	4.50748	(09010519)	465363.41
3808021.91	4.46477	(09010519)		
465383.41	3808021.91	4.42459	(09010519)	465403.41
3808021.91	4.38474	(09010519)		
465423.41	3808021.91	4.34141	(09010519)	465443.41
3808021.91	4.30077	(09010519)		
465463.41	3808021.91	4.26671	(09010519)	465483.41
3808021.91	4.22354	(09010519)		
465503.41	3808021.91	4.18308	(09010519)	465523.41
3808021.91	4.14327	(09010519)		
465543.41	3808021.91	4.10087	(09010519)	465563.41
3808021.91	4.05848	(09010519)		
465583.41	3808021.91	4.01696	(09010519)	465603.41
3808021.91	3.97855	(09010519)		
465623.41	3808021.91	3.93814	(09010519)	465643.41
3808021.91	3.89761	(09010519)		
465663.41	3808021.91	3.85994	(09010519)	465683.41
3808021.91	3.82022	(09010519)		
465703.41	3808021.91	3.77987	(09010519)	464783.41
3808041.91	13.66881	(10020118)		
464803.41	3808041.91	13.05846	(10020118)	464823.41
3808041.91	12.43628	(10020118)		
464843.41	3808041.91	11.81630	(10020118)	464863.41
3808041.91	11.20836	(10020118)		
464883.41	3808041.91	10.61773	(10020118)	464903.41
3808041.91	10.04136	(10020118)		
464923.41	3808041.91	9.61086	(10102019)	464943.41

3808041.91	9.25652	(10102019)		
464963.41	3808041.91	8.90913	(10102019)	464983.41
3808041.91	8.56765	(10102019)		
465003.41	3808041.91	8.22520	(10102019)	465023.41
3808041.91	7.89838	(10102019)		
465043.41	3808041.91	7.58313	(10102019)	465063.41
3808041.91	7.27222	(10102019)		
465083.41	3808041.91	6.97588	(10102019)	465103.41
3808041.91	6.69085	(10102019)		
465123.41	3808041.91	6.41077	(10102019)	465143.41
3808041.91	6.14506	(10102019)		
465163.41	3808041.91	5.89044	(10102019)	465183.41
3808041.91	5.64088	(10102019)		
465203.41	3808041.91	5.40497	(10102019)	465223.41
3808041.91	5.17955	(10102019)		
465243.41	3808041.91	4.95897	(10102019)	465263.41
3808041.91	4.88508	(09010519)		
465283.41	3808041.91	4.83884	(09010519)	465303.41
3808041.91	4.79384	(09010519)		
465323.41	3808041.91	4.74398	(09010519)	465343.41
3808041.91	4.69279	(09010519)		
465363.41	3808041.91	4.64597	(09010519)	465383.41
3808041.91	4.60021	(09010519)		
465403.41	3808041.91	4.55399	(09010519)	465423.41
3808041.91	4.50244	(09010519)		
465443.41	3808041.91	4.45549	(09010519)	465463.41
3808041.91	4.41932	(09010519)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 461

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465483.41	3808041.91	4.36856 (09010519)	465503.41
3808041.91	4.32137 (09010519)		
465523.41	3808041.91	4.27632 (09010519)	465543.41
3808041.91	4.23269 (09010519)		
465563.41	3808041.91	4.18531 (09010519)	465583.41
3808041.91	4.13756 (09010519)		
465603.41	3808041.91	4.09504 (09010519)	465623.41
3808041.91	4.05285 (09010519)		
465643.41	3808041.91	4.01080 (09010519)	465663.41
3808041.91	3.96802 (09010519)		
465683.41	3808041.91	3.92285 (09010519)	465703.41
3808041.91	3.87785 (09010519)		
464803.41	3808061.91	12.53848 (10020118)	464823.41
3808061.91	11.89533 (10020118)		
464843.41	3808061.91	11.26759 (10020118)	464863.41
3808061.91	10.65681 (10020118)		
464883.41	3808061.91	10.17906 (10102019)	464903.41
3808061.91	9.78701 (10102019)		
464923.41	3808061.91	9.40354 (10102019)	464943.41
3808061.91	9.03083 (10102019)		
464963.41	3808061.91	8.66813 (10102019)	464983.41
3808061.91	8.31413 (10102019)		
465003.41	3808061.91	7.96188 (10102019)	465023.41
3808061.91	7.62219 (10102019)		
465043.41	3808061.91	7.29640 (10102019)	465063.41
3808061.91	6.98939 (10102019)		
465083.41	3808061.91	6.68845 (10102019)	465103.41
3808061.91	6.39808 (10102019)		
465123.41	3808061.91	6.12570 (10102019)	465143.41
3808061.91	5.85933 (10102019)		
465163.41	3808061.91	5.60304 (10102019)	465183.41
3808061.91	5.36348 (10102019)		
465203.41	3808061.91	5.26873 (09010519)	465223.41
3808061.91	5.20923 (09010519)		
465243.41	3808061.91	5.15558 (09010519)	465263.41
3808061.91	5.09706 (09010519)		
465283.41	3808061.91	5.03787 (09010519)	465303.41
3808061.91	4.98571 (09010519)		
465323.41	3808061.91	4.93262 (09010519)	465343.41
3808061.91	4.87830 (09010519)		
465363.41	3808061.91	4.81857 (09010519)	465383.41
3808061.91	4.76476 (09010519)		
465403.41	3808061.91	4.71347 (09010519)	465423.41
3808061.91	4.66154 (09010519)		

465443.41	3808061.91	4.61075	(09010519)	465463.41
3808061.91	4.56232	(09010519)		
465483.41	3808061.91	4.51138	(09010519)	465503.41
3808061.91	4.45703	(09010519)		
465523.41	3808061.91	4.40261	(09010519)	465543.41
3808061.91	4.35443	(09010519)		
465563.41	3808061.91	4.30600	(09010519)	465583.41
3808061.91	4.25784	(09010519)		
465603.41	3808061.91	4.21107	(09010519)	465623.41
3808061.91	4.16479	(09010519)		
465643.41	3808061.91	4.11794	(09010519)	465663.41
3808061.91	4.06667	(09010519)		
465683.41	3808061.91	4.01943	(09010519)	465703.41
3808061.91	3.97457	(09010519)		
464823.41	3808081.91	11.28516	(10020118)	464843.41
3808081.91	10.76329	(10102019)		
464863.41	3808081.91	10.34261	(10102019)	464883.41
3808081.91	9.93127	(10102019)		
464903.41	3808081.91	9.52973	(10102019)	464923.41
3808081.91	9.13728	(10102019)		
464943.41	3808081.91	8.75112	(10102019)	464963.41
3808081.91	8.37363	(10102019)		
464983.41	3808081.91	8.00787	(10102019)	465003.41
3808081.91	7.65610	(10102019)		
465023.41	3808081.91	7.31401	(10102019)	465043.41
3808081.91	6.98552	(10102019)		
465063.41	3808081.91	6.67978	(10102019)	465083.41
3808081.91	6.37960	(10102019)		
465103.41	3808081.91	6.08979	(10102019)	465123.41
3808081.91	5.81677	(10102019)		
465143.41	3808081.91	5.70095	(09010519)	465163.41
3808081.91	5.63447	(09010519)		
465183.41	3808081.91	5.56753	(09010519)	465203.41
3808081.91	5.50103	(09010519)		
465223.41	3808081.91	5.43490	(09010519)	465243.41
3808081.91	5.36857	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 462

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,

```

          L0005949      , L0005950      , L0005951      , L0005952      , L0005953
, L0005954      , L0005955      , L0005956      ,
          L0005957      , L0005958      , L0005959      , L0005960      , L0005961
, L0005962      , L0005963      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3808081.91	5.30291	(09010519)	465283.41
3808081.91	5.23876	(09010519)		
465303.41	3808081.91	5.17903	(09010519)	465323.41
3808081.91	5.11607	(09010519)		
465343.41	3808081.91	5.05216	(09010519)	465363.41
3808081.91	4.98914	(09010519)		
465383.41	3808081.91	4.92994	(09010519)	465403.41
3808081.91	4.87187	(09010519)		
465423.41	3808081.91	4.81031	(09010519)	465443.41
3808081.91	4.75265	(09010519)		
465463.41	3808081.91	4.70343	(09010519)	465483.41
3808081.91	4.64394	(09010519)		
465503.41	3808081.91	4.58545	(09010519)	465523.41
3808081.91	4.52783	(09010519)		
465543.41	3808081.91	4.47058	(09010519)	465563.41
3808081.91	4.41711	(09010519)		
465583.41	3808081.91	4.36565	(09010519)	465603.41
3808081.91	4.31483	(09010519)		
465623.41	3808081.91	4.26464	(09010519)	465643.41
3808081.91	4.21442	(09010519)		
465663.41	3808081.91	4.16200	(09010519)	465683.41
3808081.91	4.11276	(09010519)		
465703.41	3808081.91	4.06463	(09010519)	464843.41
3808101.91	10.47974	(10102019)		
464863.41	3808101.91	10.04007	(10102019)	464883.41
3808101.91	9.62180	(10102019)		
464903.41	3808101.91	9.21233	(10102019)	464923.41
3808101.91	8.81242	(10102019)		
464943.41	3808101.91	8.41830	(10102019)	464963.41
3808101.91	8.03325	(10102019)		
464983.41	3808101.91	7.66225	(10102019)	465003.41
3808101.91	7.31278	(10102019)		
465023.41	3808101.91	6.97377	(10102019)	465043.41
3808101.91	6.64901	(10102019)		
465063.41	3808101.91	6.34436	(10102019)	465083.41

3808101.91	6.19912	(09010519)		
465103.41	3808101.91	6.11567	(09010519)	465123.41
3808101.91	6.03417	(09010519)		
465143.41	3808101.91	5.95903	(09010519)	465163.41
3808101.91	5.88540	(09010519)		
465183.41	3808101.91	5.80270	(09010519)	465203.41
3808101.91	5.72670	(09010519)		
465223.41	3808101.91	5.65319	(09010519)	465243.41
3808101.91	5.57476	(09010519)		
465263.41	3808101.91	5.50298	(09010519)	465283.41
3808101.91	5.43454	(09010519)		
465303.41	3808101.91	5.36499	(09010519)	465323.41
3808101.91	5.29178	(09010519)		
465343.41	3808101.91	5.21867	(09010519)	465363.41
3808101.91	5.15167	(09010519)		
465383.41	3808101.91	5.08671	(09010519)	465403.41
3808101.91	5.02196	(09010519)		
465423.41	3808101.91	4.95156	(09010519)	465443.41
3808101.91	4.88732	(09010519)		
465463.41	3808101.91	4.83643	(09010519)	465483.41
3808101.91	4.76890	(09010519)		
465503.41	3808101.91	4.70617	(09010519)	465523.41
3808101.91	4.64518	(09010519)		
465543.41	3808101.91	4.58061	(09010519)	465563.41
3808101.91	4.52193	(09010519)		
465583.41	3808101.91	4.46632	(09010519)	465603.41
3808101.91	4.41150	(09010519)		
465623.41	3808101.91	4.35749	(09010519)	465643.41
3808101.91	4.30403	(09010519)		
465663.41	3808101.91	4.25010	(09010519)	465683.41
3808101.91	4.19804	(09010519)		
465703.41	3808101.91	4.14611	(09010519)	464863.41
3808121.91	9.69641	(10102019)		
464883.41	3808121.91	9.26611	(10102019)	464903.41
3808121.91	8.84129	(10102019)		
464923.41	3808121.91	8.42920	(10102019)	464943.41
3808121.91	8.03317	(10102019)		
464963.41	3808121.91	7.65343	(10102019)	464983.41
3808121.91	7.28931	(10102019)		
465003.41	3808121.91	6.93521	(10102019)	465023.41
3808121.91	6.76171	(09010519)		
465043.41	3808121.91	6.67218	(09010519)	465063.41
3808121.91	6.57571	(09010519)		
465083.41	3808121.91	6.47869	(09010519)	465103.41
3808121.91	6.38332	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 , L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 , L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 , L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465123.41	3808121.91	6.29774	(09010519)	465143.41
3808121.91	6.21393	(09010519)		
465163.41	3808121.91	6.12943	(09010519)	465183.41
3808121.91	6.03593	(09010519)		
465203.41	3808121.91	5.94445	(09010519)	465223.41
3808121.91	5.85623	(09010519)		
465243.41	3808121.91	5.77640	(09010519)	465263.41
3808121.91	5.69861	(09010519)		
465283.41	3808121.91	5.62062	(09010519)	465303.41
3808121.91	5.53560	(09010519)		
465323.41	3808121.91	5.45743	(09010519)	465343.41
3808121.91	5.38176	(09010519)		
465363.41	3808121.91	5.30051	(09010519)	465383.41
3808121.91	5.22711	(09010519)		
465403.41	3808121.91	5.15743	(09010519)	465423.41
3808121.91	5.08770	(09010519)		
465443.41	3808121.91	5.01997	(09010519)	465463.41
3808121.91	4.95563	(09010519)		
465483.41	3808121.91	4.88894	(09010519)	465503.41
3808121.91	4.81887	(09010519)		
465523.41	3808121.91	4.74916	(09010519)	465543.41
3808121.91	4.68595	(09010519)		
465563.41	3808121.91	4.62473	(09010519)	465583.41
3808121.91	4.56491	(09010519)		
465603.41	3808121.91	4.50606	(09010519)	465623.41
3808121.91	4.44818	(09010519)		

465643.41	3808121.91	4.39003	(09010519)	465663.41
3808121.91	4.32725	(09010519)		
465683.41	3808121.91	4.27013	(09010519)	465703.41
3808121.91	4.21613	(09010519)		
464883.41	3808141.91	8.83961	(10102019)	464903.41
3808141.91	8.42131	(10102019)		
464923.41	3808141.91	8.01464	(10102019)	464943.41
3808141.91	7.62137	(10102019)		
464963.41	3808141.91	7.41317	(09010519)	464983.41
3808141.91	7.30736	(09010519)		
465003.41	3808141.91	7.19175	(09010519)	465023.41
3808141.91	7.08546	(09010519)		
465043.41	3808141.91	6.98218	(09010519)	465063.41
3808141.91	6.86943	(09010519)		
465083.41	3808141.91	6.75767	(09010519)	465103.41
3808141.91	6.64947	(09010519)		
465123.41	3808141.91	6.55357	(09010519)	465143.41
3808141.91	6.45426	(09010519)		
465163.41	3808141.91	6.35448	(09010519)	465183.41
3808141.91	6.25659	(09010519)		
465203.41	3808141.91	6.15587	(09010519)	465223.41
3808141.91	6.05671	(09010519)		
465243.41	3808141.91	5.96958	(09010519)	465263.41
3808141.91	5.87940	(09010519)		
465283.41	3808141.91	5.78897	(09010519)	465303.41
3808141.91	5.70048	(09010519)		
465323.41	3808141.91	5.61322	(09010519)	465343.41
3808141.91	5.52753	(09010519)		
465363.41	3808141.91	5.44377	(09010519)	465383.41
3808141.91	5.36530	(09010519)		
465403.41	3808141.91	5.28888	(09010519)	465423.41
3808141.91	5.20912	(09010519)		
465443.41	3808141.91	5.13456	(09010519)	465463.41
3808141.91	5.06338	(09010519)		
465483.41	3808141.91	4.99329	(09010519)	465503.41
3808141.91	4.92121	(09010519)		
465523.41	3808141.91	4.84904	(09010519)	465543.41
3808141.91	4.77782	(09010519)		
465563.41	3808141.91	4.71138	(09010519)	465583.41
3808141.91	4.64770	(09010519)		
465603.41	3808141.91	4.58516	(09010519)	465623.41
3808141.91	4.52374	(09010519)		
465643.41	3808141.91	4.46266	(09010519)	465663.41
3808141.91	4.39947	(09010519)		
465683.41	3808141.91	4.33725	(09010519)	465703.41
3808141.91	4.27696	(09010519)		
464883.41	3808161.91	8.36272	(10102019)	464903.41
3808161.91	8.13181	(09010519)		
464923.41	3808161.91	8.02029	(09010519)	464943.41
3808161.91	7.89661	(09010519)		

464963.41	3808161.91	7.77401	(09010519)	464983.41
3808161.91	7.65087	(09010519)		
465003.41	3808161.91	7.52054	(09010519)	465023.41
3808161.91	7.39714	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 464

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465043.41	3808161.91	7.27653	(09010519)	465063.41
3808161.91	7.14876	(09010519)		
465083.41	3808161.91	7.02464	(09010519)	465103.41
3808161.91	6.90500	(09010519)		
465123.41	3808161.91	6.79428	(09010519)	465143.41
3808161.91	6.67981	(09010519)		
465163.41	3808161.91	6.56640	(09010519)	465183.41
3808161.91	6.46178	(09010519)		
465203.41	3808161.91	6.35357	(09010519)	465223.41
3808161.91	6.24646	(09010519)		
465243.41	3808161.91	6.14793	(09010519)	465263.41
3808161.91	6.04593	(09010519)		
465283.41	3808161.91	5.94503	(09010519)	465303.41
3808161.91	5.85242	(09010519)		
465323.41	3808161.91	5.75646	(09010519)	465343.41
3808161.91	5.66155	(09010519)		
465363.41	3808161.91	5.57463	(09010519)	465383.41

3808161.91	5.49086	(09010519)	
465403.41	3808161.91	5.40806	(09010519) 465423.41
3808161.91	5.31946	(09010519)	
465443.41	3808161.91	5.23862	(09010519) 465463.41
3808161.91	5.16205	(09010519)	
465483.41	3808161.91	5.08524	(09010519) 465503.41
3808161.91	5.01138	(09010519)	
465523.41	3808161.91	4.93807	(09010519) 465543.41
3808161.91	4.85969	(09010519)	
465563.41	3808161.91	4.78843	(09010519) 465583.41
3808161.91	4.72108	(09010519)	
465603.41	3808161.91	4.65504	(09010519) 465623.41
3808161.91	4.58905	(09010519)	
465643.41	3808161.91	4.52424	(09010519) 465663.41
3808161.91	4.46203	(09010519)	
465683.41	3808161.91	4.39632	(09010519) 465703.41
3808161.91	4.33081	(09010519)	
464903.41	3808181.91	8.52391	(09010519) 464923.41
3808181.91	8.39380	(09010519)	
464943.41	3808181.91	8.25055	(09010519) 464963.41
3808181.91	8.10945	(09010519)	
464983.41	3808181.91	7.97015	(09010519) 465003.41
3808181.91	7.83170	(09010519)	
465023.41	3808181.91	7.68874	(09010519) 465043.41
3808181.91	7.54475	(09010519)	
465063.41	3808181.91	7.40161	(09010519) 465083.41
3808181.91	7.27006	(09010519)	
465103.41	3808181.91	7.14367	(09010519) 465123.41
3808181.91	7.01095	(09010519)	
465143.41	3808181.91	6.88828	(09010519) 465163.41
3808181.91	6.76998	(09010519)	
465183.41	3808181.91	6.64555	(09010519) 465203.41
3808181.91	6.53084	(09010519)	
465223.41	3808181.91	6.42033	(09010519) 465243.41
3808181.91	6.30388	(09010519)	
465263.41	3808181.91	6.19677	(09010519) 465283.41
3808181.91	6.09367	(09010519)	
465303.41	3808181.91	5.98479	(09010519) 465323.41
3808181.91	5.88486	(09010519)	
465343.41	3808181.91	5.78871	(09010519) 465363.41
3808181.91	5.68697	(09010519)	
465383.41	3808181.91	5.59506	(09010519) 465403.41
3808181.91	5.50812	(09010519)	
465423.41	3808181.91	5.42180	(09010519) 465443.41
3808181.91	5.33839	(09010519)	
465463.41	3808181.91	5.25559	(09010519) 465483.41
3808181.91	5.16687	(09010519)	
465503.41	3808181.91	5.08638	(09010519) 465523.41
3808181.91	5.01053	(09010519)	
465543.41	3808181.91	4.93489	(09010519) 465563.41

3808181.91	4.86193	(09010519)		
465583.41	3808181.91	4.79095	(09010519)	465603.41
3808181.91	4.72144	(09010519)		
465623.41	3808181.91	4.64796	(09010519)	465643.41
3808181.91	4.57497	(09010519)		
465663.41	3808181.91	4.51001	(09010519)	465683.41
3808181.91	4.44559	(09010519)		
465703.41	3808181.91	4.38095	(09010519)	464923.41
3808201.91	8.73163	(09010519)		
464943.41	3808201.91	8.57912	(09010519)	464963.41
3808201.91	8.42280	(09010519)		
464983.41	3808201.91	8.26654	(09010519)	465003.41
3808201.91	8.11362	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 465

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465023.41	3808201.91	7.95348	(09010519)	465043.41
3808201.91	7.79315	(09010519)		
465063.41	3808201.91	7.64380	(09010519)	465083.41
3808201.91	7.49733	(09010519)		
465103.41	3808201.91	7.35418	(09010519)	465123.41
3808201.91	7.21547	(09010519)		
465143.41	3808201.91	7.07948	(09010519)	465163.41
3808201.91	6.94686	(09010519)		

465183.41	3808201.91	6.81797	(09010519)	465203.41
3808201.91	6.69184 (09010519)			
465223.41	3808201.91	6.56885	(09010519)	465243.41
3808201.91	6.44936 (09010519)			
465263.41	3808201.91	6.33241	(09010519)	465283.41
3808201.91	6.21837 (09010519)			
465303.41	3808201.91	6.10757	(09010519)	465323.41
3808201.91	5.99912 (09010519)			
465343.41	3808201.91	5.89335	(09010519)	465363.41
3808201.91	5.79058 (09010519)			
465383.41	3808201.91	5.68996	(09010519)	465403.41
3808201.91	5.59275 (09010519)			
465423.41	3808201.91	5.50332	(09010519)	465443.41
3808201.91	5.41592 (09010519)			
465463.41	3808201.91	5.32963	(09010519)	465483.41
3808201.91	5.24074 (09010519)			
465503.41	3808201.91	5.15766	(09010519)	465523.41
3808201.91	5.07813 (09010519)			
465543.41	3808201.91	5.00038	(09010519)	465563.41
3808201.91	4.92067 (09010519)			
465583.41	3808201.91	4.84221	(09010519)	465603.41
3808201.91	4.76974 (09010519)			
465623.41	3808201.91	4.69568	(09010519)	465643.41
3808201.91	4.62276 (09010519)			
465663.41	3808201.91	4.55511	(09010519)	465683.41
3808201.91	4.48567 (09010519)			
465703.41	3808201.91	4.41647	(09010519)	464943.41
3808221.91	8.87930 (09010519)			
464963.41	3808221.91	8.70954	(09010519)	464983.41
3808221.91	8.53627 (09010519)			
465003.41	3808221.91	8.36741	(09010519)	465023.41
3808221.91	8.19356 (09010519)			
465043.41	3808221.91	8.02181	(09010519)	465063.41
3808221.91	7.86324 (09010519)			
465083.41	3808221.91	7.69961	(09010519)	465103.41
3808221.91	7.53913 (09010519)			
465123.41	3808221.91	7.39679	(09010519)	465143.41
3808221.91	7.24949 (09010519)			
465163.41	3808221.91	7.10382	(09010519)	465183.41
3808221.91	6.96994 (09010519)			
465203.41	3808221.91	6.83318	(09010519)	465223.41
3808221.91	6.69898 (09010519)			
465243.41	3808221.91	6.57589	(09010519)	465263.41
3808221.91	6.44988 (09010519)			
465283.41	3808221.91	6.32615	(09010519)	465303.41
3808221.91	6.21286 (09010519)			
465323.41	3808221.91	6.09664	(09010519)	465343.41
3808221.91	5.98246 (09010519)			
465363.41	3808221.91	5.87807	(09010519)	465383.41
3808221.91	5.77075 (09010519)			

465403.41	3808221.91	5.66565	(09010519)	465423.41
3808221.91	5.57182	(09010519)		
465443.41	3808221.91	5.48027	(09010519)	465463.41
3808221.91	5.39092	(09010519)		
465483.41	3808221.91	5.30372	(09010519)	465503.41
3808221.91	5.21707	(09010519)		
465523.41	3808221.91	5.13236	(09010519)	465543.41
3808221.91	5.05131	(09010519)		
465563.41	3808221.91	4.96634	(09010519)	465583.41
3808221.91	4.88237	(09010519)		
465603.41	3808221.91	4.80722	(09010519)	465623.41
3808221.91	4.73246	(09010519)		
465643.41	3808221.91	4.65930	(09010519)	465663.41
3808221.91	4.58926	(09010519)		
465683.41	3808221.91	4.51569	(09010519)	465703.41
3808221.91	4.44262	(09010519)		
464963.41	3808241.91	8.96541	(09010519)	464983.41
3808241.91	8.77589	(09010519)		
465003.41	3808241.91	8.59183	(09010519)	465023.41
3808241.91	8.41115	(09010519)		
465043.41	3808241.91	8.23307	(09010519)	465063.41
3808241.91	8.04925	(09010519)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 466

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 , L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 , L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 , L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -					
	465083.41	3808241.91	7.86947	(09010519)	465103.41
3808241.91		7.69716	(09010519)		
	465123.41	3808241.91	7.54481	(09010519)	465143.41
3808241.91		7.39499	(09010519)		
	465163.41	3808241.91	7.24700	(09010519)	465183.41
3808241.91		7.09325	(09010519)		
	465203.41	3808241.91	6.95206	(09010519)	465223.41
3808241.91		6.81687	(09010519)		
	465243.41	3808241.91	6.67598	(09010519)	465263.41
3808241.91		6.54680	(09010519)		
	465283.41	3808241.91	6.42310	(09010519)	465303.41
3808241.91		6.29379	(09010519)		
	465323.41	3808241.91	6.17539	(09010519)	465343.41
3808241.91		6.06200	(09010519)		
	465363.41	3808241.91	5.94311	(09010519)	465383.41
3808241.91		5.83439	(09010519)		
	465403.41	3808241.91	5.73229	(09010519)	465423.41
3808241.91		5.63423	(09010519)		
	465443.41	3808241.91	5.53867	(09010519)	465463.41
3808241.91		5.44555	(09010519)		
	465483.41	3808241.91	5.35477	(09010519)	465503.41
3808241.91		5.25952	(09010519)		
	465523.41	3808241.91	5.16540	(09010519)	465543.41
3808241.91		5.08168	(09010519)		
	465563.41	3808241.91	4.99903	(09010519)	465583.41
3808241.91		4.91810	(09010519)		
	465603.41	3808241.91	4.84040	(09010519)	465623.41
3808241.91		4.75868	(09010519)		
	465643.41	3808241.91	4.67782	(09010519)	465663.41
3808241.91		4.60589	(09010519)		
	465683.41	3808241.91	4.53479	(09010519)	465703.41
3808241.91		4.46370	(09010519)		
	464983.41	3808261.91	8.94635	(09010519)	465003.41
3808261.91		8.76155	(09010519)		
	465023.41	3808261.91	8.57443	(09010519)	465043.41
3808261.91		8.38753	(09010519)		
	465063.41	3808261.91	8.19921	(09010519)	465083.41
3808261.91		8.01704	(09010519)		
	465103.41	3808261.91	7.84049	(09010519)	465123.41
3808261.91		7.66851	(09010519)		
	465143.41	3808261.91	7.50890	(09010519)	465163.41
3808261.91		7.35555	(09010519)		
	465183.41	3808261.91	7.20049	(09010519)	465203.41
3808261.91		7.04952	(09010519)		
	465223.41	3808261.91	6.90323	(09010519)	465243.41
3808261.91		6.76192	(09010519)		
	465263.41	3808261.91	6.63013	(09010519)	465283.41
3808261.91		6.50199	(09010519)		
	465303.41	3808261.91	6.36500	(09010519)	465323.41

3808261.91	6.23676	(09010519)		
465343.41	3808261.91	6.11497	(09010519)	465363.41
3808261.91	5.99718	(09010519)		
465383.41	3808261.91	5.88237	(09010519)	465403.41
3808261.91	5.77191	(09010519)		
465423.41	3808261.91	5.67047	(09010519)	465443.41
3808261.91	5.57174	(09010519)		
465463.41	3808261.91	5.47582	(09010519)	465483.41
3808261.91	5.38222	(09010519)		
465503.41	3808261.91	5.28716	(09010519)	465523.41
3808261.91	5.19395	(09010519)		
465543.41	3808261.91	5.10769	(09010519)	465563.41
3808261.91	5.01966	(09010519)		
465583.41	3808261.91	4.93329	(09010519)	465603.41
3808261.91	4.85364	(09010519)		
465623.41	3808261.91	4.77500	(10032206)	465643.41
3808261.91	4.70284	(10032206)		
465663.41	3808261.91	4.63192	(10032206)	465683.41
3808261.91	4.56615	(10032206)		
465703.41	3808261.91	4.50256	(10032206)	465003.41
3808281.91	8.88792	(09010519)		
465023.41	3808281.91	8.69570	(09010519)	465043.41
3808281.91	8.50365	(09010519)		
465063.41	3808281.91	8.31078	(09010519)	465083.41
3808281.91	8.12979	(09010519)		
465103.41	3808281.91	7.95411	(09010519)	465123.41
3808281.91	7.76827	(09010519)		
465143.41	3808281.91	7.59878	(09010519)	465163.41
3808281.91	7.43931	(09010519)		
465183.41	3808281.91	7.28202	(09010519)	465203.41
3808281.91	7.12255	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 467

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM ₁₀ IN MICROGRAMS/M**3			
**					
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	
Y-COORD (M)	CONC	(YYMMDDHH)			

465223.41	3808281.91	6.96751	(09010519)	465243.41	
3808281.91	6.82851	(09010519)			
465263.41	3808281.91	6.69158	(09010519)	465283.41	
3808281.91	6.55585	(09010519)			
465303.41	3808281.91	6.41395	(09010519)	465323.41	
3808281.91	6.27847	(09010519)			
465343.41	3808281.91	6.14988	(09010519)	465363.41	
3808281.91	6.03258	(09010519)			
465383.41	3808281.91	5.91266	(09010519)	465403.41	
3808281.91	5.79526	(09010519)			
465423.41	3808281.91	5.68827	(09010519)	465443.41	
3808281.91	5.59382	(10032206)			
465463.41	3808281.91	5.50938	(10032206)	465483.41	
3808281.91	5.42314	(10032206)			
465503.41	3808281.91	5.33901	(10032206)	465523.41	
3808281.91	5.25659	(10032206)			
465543.41	3808281.91	5.17429	(10032206)	465563.41	
3808281.91	5.08932	(10032206)			
465583.41	3808281.91	5.00599	(10032206)	465603.41	
3808281.91	4.93196	(10032206)			
465623.41	3808281.91	4.85823	(10032206)	465643.41	
3808281.91	4.78456	(10032206)			
465663.41	3808281.91	4.70744	(10032206)	465683.41	
3808281.91	4.63645	(10032206)			
465703.41	3808281.91	4.56952	(10032206)	465003.41	
3808301.91	8.97893	(09010519)			
465023.41	3808301.91	8.78460	(09010519)	465043.41	
3808301.91	8.59455	(09010519)			
465063.41	3808301.91	8.37721	(09010519)	465083.41	
3808301.91	8.19454	(09010519)			
465103.41	3808301.91	8.02596	(09010519)	465123.41	
3808301.91	7.84581	(09010519)			
465143.41	3808301.91	7.67363	(09010519)	465163.41	
3808301.91	7.50534	(09010519)			
465183.41	3808301.91	7.32967	(09010519)	465203.41	
3808301.91	7.16896	(09010519)			
465223.41	3808301.91	7.01838	(09010519)	465243.41	
3808301.91	6.87446	(09010519)			
465263.41	3808301.91	6.73904	(10032206)	465283.41	
3808301.91	6.60333	(10032206)			

465303.41	3808301.91	6.46973	(10032206)	465323.41
3808301.91	6.34932	(10032206)		
465343.41	3808301.91	6.23496	(10032206)	465363.41
3808301.91	6.11461	(10032206)		
465383.41	3808301.91	6.00512	(10032206)	465403.41
3808301.91	5.90048	(10032206)		
465423.41	3808301.91	5.78997	(10032206)	465443.41
3808301.91	5.69103	(10032206)		
465463.41	3808301.91	5.61566	(10032206)	465483.41
3808301.91	5.52495	(10032206)		
465503.41	3808301.91	5.43656	(10032206)	465523.41
3808301.91	5.34865	(10032206)		
465543.41	3808301.91	5.25471	(10032206)	465563.41
3808301.91	5.16886	(10032206)		
465583.41	3808301.91	5.08815	(10032206)	465603.41
3808301.91	5.01079	(10032206)		
465623.41	3808301.91	4.92900	(10032206)	465643.41
3808301.91	4.84785	(10032206)		
465663.41	3808301.91	4.77477	(10032206)	465683.41
3808301.91	4.69852	(10032206)		
465703.41	3808301.91	4.62339	(10032206)	465043.41
3808321.91	8.63373	(09010519)		
465063.41	3808321.91	8.43347	(10032206)	465083.41
3808321.91	8.26323	(10032206)		
465103.41	3808321.91	8.09948	(10032206)	465123.41
3808321.91	7.93254	(10032206)		
465143.41	3808321.91	7.77104	(10032206)	465163.41
3808321.91	7.61303	(10032206)		
465183.41	3808321.91	7.45313	(10032206)	465203.41
3808321.91	7.30428	(10032206)		
465223.41	3808321.91	7.16124	(10032206)	465243.41
3808321.91	7.01498	(10032206)		
465263.41	3808321.91	6.86830	(10032206)	465283.41
3808321.91	6.72522	(10032206)		
465303.41	3808321.91	6.59364	(10032206)	465323.41
3808321.91	6.46564	(10032206)		
465343.41	3808321.91	6.34156	(10032206)	465363.41
3808321.91	6.22172	(10032206)		
465383.41	3808321.91	6.10501	(10032206)	465403.41
3808321.91	5.99177	(10032206)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 468

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***

INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465423.41	3808321.91	5.88230	(10032206)	465443.41
3808321.91	5.78075	(10032206)		
465463.41	3808321.91	5.69402	(10032206)	465483.41
3808321.91	5.59967	(10032206)		
465503.41	3808321.91	5.50784	(10032206)	465523.41
3808321.91	5.41732	(10032206)		
465543.41	3808321.91	5.32448	(10032206)	465563.41
3808321.91	5.23811	(10032206)		
465583.41	3808321.91	5.15470	(10032206)	465603.41
3808321.91	5.06852	(10032206)		
465623.41	3808321.91	4.98497	(10032206)	465643.41
3808321.91	4.90377	(10032206)		
465663.41	3808321.91	4.82419	(10032206)	465683.41
3808321.91	4.74698	(10032206)		
465703.41	3808321.91	4.67190	(10032206)	465083.41
3808341.91	8.44217	(10032206)		
465103.41	3808341.91	8.26058	(10032206)	465123.41
3808341.91	8.08919	(10032206)		
465143.41	3808341.91	7.92028	(10032206)	465163.41
3808341.91	7.75582	(10032206)		
465183.41	3808341.91	7.59685	(10032206)	465203.41
3808341.91	7.44062	(10032206)		
465223.41	3808341.91	7.28660	(10032206)	465243.41
3808341.91	7.12891	(10032206)		
465263.41	3808341.91	6.97380	(10032206)	465283.41
3808341.91	6.82535	(10032206)		
465303.41	3808341.91	6.69312	(10032206)	465323.41
3808341.91	6.55576	(10032206)		
465343.41	3808341.91	6.42152	(10032206)	465363.41
3808341.91	6.30494	(10032206)		
465383.41	3808341.91	6.18333	(10032206)	465403.41

3808341.91	6.06312	(10032206)		
465423.41	3808341.91	5.95410	(10032206)	465443.41
3808341.91	5.85003	(10032206)		
465463.41	3808341.91	5.75422	(10032206)	465483.41
3808341.91	5.65681	(10032206)		
465503.41	3808341.91	5.56207	(10032206)	465523.41
3808341.91	5.46954	(10032206)		
465543.41	3808341.91	5.37745	(10032206)	465563.41
3808341.91	5.28953	(10032206)		
465583.41	3808341.91	5.20289	(10032206)	465603.41
3808341.91	5.11094	(10032206)		
465623.41	3808341.91	5.02630	(10032206)	465643.41
3808341.91	4.94494	(10032206)		
465663.41	3808341.91	4.86011	(10032206)	465683.41
3808341.91	4.78209	(10032206)		
465703.41	3808341.91	4.70706	(10032206)	465103.41
3808361.91	8.38448	(10032206)		
465123.41	3808361.91	8.22072	(10032206)	465143.41
3808361.91	8.04895	(10032206)		
465163.41	3808361.91	7.87708	(10032206)	465183.41
3808361.91	7.71117	(10032206)		
465203.41	3808361.91	7.53981	(10032206)	465223.41
3808361.91	7.37167	(10032206)		
465243.41	3808361.91	7.22051	(10032206)	465263.41
3808361.91	7.06393	(10032206)		
465283.41	3808361.91	6.90811	(10032206)	465303.41
3808361.91	6.75935	(10032206)		
465323.41	3808361.91	6.61420	(10032206)	465343.41
3808361.91	6.47588	(10032206)		
465363.41	3808361.91	6.35599	(10032206)	465383.41
3808361.91	6.23803	(10032206)		
465403.41	3808361.91	6.12128	(10032206)	465423.41
3808361.91	5.99861	(10032206)		
465443.41	3808361.91	5.88888	(10032206)	465463.41
3808361.91	5.80502	(10032206)		
465483.41	3808361.91	5.70486	(10032206)	465503.41
3808361.91	5.60752	(10032206)		
465523.41	3808361.91	5.51097	(10032206)	465543.41
3808361.91	5.40818	(10032206)		
465563.41	3808361.91	5.31553	(10032206)	465583.41
3808361.91	5.22875	(10032206)		
465603.41	3808361.91	5.14271	(10032206)	465623.41
3808361.91	5.05343	(10032206)		
465643.41	3808361.91	4.96557	(10032206)	465663.41
3808361.91	4.88654	(10032206)		
465683.41	3808361.91	4.80430	(10032206)	465703.41
3808361.91	4.72328	(10032206)		
465183.41	3808381.91	7.76238	(10032206)	465203.41
3808381.91	7.58847	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 469

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***
INCLUDING SOURCE(S): L0005936 , L0005937
, L0005938 , L0005939 , L0005940 ,
L0005941 , L0005942 , L0005943 , L0005944 , L0005945
, L0005946 , L0005947 , L0005948 ,
L0005949 , L0005950 , L0005951 , L0005952 , L0005953
, L0005954 , L0005955 , L0005956 ,
L0005957 , L0005958 , L0005959 , L0005960 , L0005961
, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808381.91	7.42087	(10032206)	465243.41
3808381.91	7.25809	(10032206)		
465263.41	3808381.91	7.09535	(10032206)	465283.41
3808381.91	6.93686	(10032206)		
465303.41	3808381.91	6.79219	(10032206)	465323.41
3808381.91	6.64589	(10032206)		
465343.41	3808381.91	6.50452	(10032206)	465363.41
3808381.91	6.38225	(10032206)		
465383.41	3808381.91	6.26375	(10032206)	465403.41
3808381.91	6.14765	(10032206)		
465423.41	3808381.91	6.02873	(10032206)	465443.41
3808381.91	5.91862	(10032206)		
465463.41	3808381.91	5.82463	(10032206)	465483.41
3808381.91	5.72275	(10032206)		
465503.41	3808381.91	5.62380	(10032206)	465523.41
3808381.91	5.52647	(10032206)		
465543.41	3808381.91	5.42687	(10032206)	465563.41
3808381.91	5.32980	(10032206)		
465583.41	3808381.91	5.23665	(10032206)	465603.41
3808381.91	5.15127	(10032206)		
465623.41	3808381.91	5.06429	(10032206)	465643.41
3808381.91	4.97797	(10032206)		

465663.41	3808381.91	4.89352	(10032206)	465683.41
3808381.91	4.81172	(10032206)		
465703.41	3808381.91	4.73229	(10032206)	465303.41
3808401.91	6.79037	(10032206)		
465323.41	3808401.91	6.64746	(10032206)	465343.41
3808401.91	6.50722	(10032206)		
465363.41	3808401.91	6.38353	(10032206)	465383.41
3808401.91	6.26371	(10032206)		
465403.41	3808401.91	6.14761	(10032206)	465423.41
3808401.91	6.03506	(10032206)		
465443.41	3808401.91	5.92591	(10032206)	465463.41
3808401.91	5.82024	(10032206)		
465483.41	3808401.91	5.71746	(10032206)	465503.41
3808401.91	5.61768	(10032206)		
465523.41	3808401.91	5.52077	(10032206)	465543.41
3808401.91	5.42663	(10032206)		
465563.41	3808401.91	5.32801	(10032206)	465583.41
3808401.91	5.23095	(10032206)		
465603.41	3808401.91	5.14491	(10032206)	465623.41
3808401.91	5.05960	(10032206)		
465643.41	3808401.91	4.97468	(10032206)	465663.41
3808401.91	4.88624	(10032206)		
465683.41	3808401.91	4.80504	(10032206)	465703.41
3808401.91	4.72705	(10032206)		
465323.41	3808421.91	6.61444	(10032206)	465343.41
3808421.91	6.48414	(10032206)		
465363.41	3808421.91	6.36001	(10032206)	465383.41
3808421.91	6.23981	(10032206)		
465403.41	3808421.91	6.12337	(10032206)	465423.41
3808421.91	6.01053	(10032206)		
465443.41	3808421.91	5.90113	(10032206)	465463.41
3808421.91	5.79503	(10032206)		
465483.41	3808421.91	5.69209	(10032206)	465503.41
3808421.91	5.59218	(10032206)		
465523.41	3808421.91	5.49517	(10032206)	465543.41
3808421.91	5.40095	(10032206)		
465563.41	3808421.91	5.30823	(10032206)	465583.41
3808421.91	5.21777	(10032206)		
465603.41	3808421.91	5.13134	(10032206)	465623.41
3808421.91	5.04026	(10032206)		
465643.41	3808421.91	4.95017	(10032206)	465663.41
3808421.91	4.86930	(10032206)		
465683.41	3808421.91	4.78517	(10032206)	465703.41
3808421.91	4.70235	(10032206)		
465323.41	3808441.91	6.56267	(10032206)	465343.41
3808441.91	6.43669	(10032206)		
465363.41	3808441.91	6.32266	(10032206)	465383.41
3808441.91	6.20580	(10032206)		
465403.41	3808441.91	6.08945	(10032206)	465423.41
3808441.91	5.97672	(10032206)		

465443.41	3808441.91	5.86746	(10032206)	465463.41
3808441.91	5.76152	(10032206)		
465483.41	3808441.91	5.65875	(10032206)	465503.41
3808441.91	5.55902	(10032206)		
465523.41	3808441.91	5.46221	(10032206)	465543.41
3808441.91	5.36820	(10032206)		
465563.41	3808441.91	5.27688	(10032206)	465583.41
3808441.91	5.18814	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 470

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465603.41	3808441.91	5.10187	(10032206)	465623.41
3808441.91	5.00991	(10032206)		
465643.41	3808441.91	4.91774	(10032206)	465663.41
3808441.91	4.83278	(10032206)		
465683.41	3808441.91	4.75054	(10032206)	465703.41
3808441.91	4.67178	(10032206)		
465343.41	3808461.91	6.36316	(10032206)	465363.41
3808461.91	6.25596	(10032206)		
465383.41	3808461.91	6.14409	(10032206)	465403.41
3808461.91	6.03165	(10032206)		
465423.41	3808461.91	5.91993	(10032206)	465443.41
3808461.91	5.81164	(10032206)		
465463.41	3808461.91	5.70688	(10032206)	465483.41

3808461.91	5.60504	(10032206)		
465503.41	3808461.91	5.50815	(10032206)	465523.41
3808461.91	5.41423	(10032206)		
465543.41	3808461.91	5.32096	(10032206)	465563.41
3808461.91	5.23037	(10032206)		
465583.41	3808461.91	5.14234	(10032206)	465603.41
3808461.91	5.05677	(10032206)		
465623.41	3808461.91	4.96556	(10032206)	465643.41
3808461.91	4.87308	(10032206)		
465663.41	3808461.91	4.78323	(10032206)	465683.41
3808461.91	4.70389	(10032206)		
465703.41	3808461.91	4.62991	(10032206)	465343.41
3808481.91	6.26242	(10032206)		
465363.41	3808481.91	6.14535	(10032206)	465383.41
3808481.91	6.04077	(10032206)		
465403.41	3808481.91	5.94050	(10032206)	465423.41
3808481.91	5.83097	(10032206)		
465443.41	3808481.91	5.72480	(10032206)	465463.41
3808481.91	5.62186	(10032206)		
465483.41	3808481.91	5.52199	(10032206)	465503.41
3808481.91	5.43347	(10032206)		
465523.41	3808481.91	5.34879	(10032206)	465543.41
3808481.91	5.25687	(10032206)		
465563.41	3808481.91	5.16758	(10032206)	465583.41
3808481.91	5.08082	(10032206)		
465603.41	3808481.91	4.99647	(10032206)	465623.41
3808481.91	4.90654	(10032206)		
465643.41	3808481.91	4.81535	(10032206)	465663.41
3808481.91	4.72674	(10032206)		
465683.41	3808481.91	4.64851	(10032206)	465703.41
3808481.91	4.57425	(10032206)		
465463.41	3808501.91	5.52915	(10032206)	465483.41
3808501.91	5.42378	(10032206)		
465503.41	3808501.91	5.33666	(10032206)	465523.41
3808501.91	5.25605	(10032206)		
465543.41	3808501.91	5.16638	(10032206)	465563.41
3808501.91	5.08367	(10032206)		
465583.41	3808501.91	5.00309	(10032206)	465603.41
3808501.91	4.91425	(10032206)		
465623.41	3808501.91	4.82834	(10032206)	465643.41
3808501.91	4.74402	(10032206)		
465663.41	3808501.91	4.65712	(10032206)	465683.41
3808501.91	4.58043	(10032206)		
465703.41	3808501.91	4.50731	(10032206)	465523.41
3808521.91	5.14455	(10032206)		
465543.41	3808521.91	5.05777	(10032206)	465563.41
3808521.91	4.98203	(10032206)		
465583.41	3808521.91	4.90800	(10032206)	465603.41
3808521.91	4.81815	(10032206)		
465623.41	3808521.91	4.73583	(10032206)	465643.41

3808521.91	4.65686	(10032206)		
465663.41	3808521.91	4.57435	(10032206)	465683.41
3808521.91	4.49880	(10032206)		
465703.41	3808521.91	4.42627	(10032206)	464239.31
3809562.31	10.27605	(10022820)		
464277.31	3809562.31	10.50543	(10022820)	463745.31
3809591.37	9.05840	(09040203)		
463783.31	3809591.37	9.59852	(09011307)	463821.31
3809591.37	10.12670	(09011307)		
463859.31	3809591.37	10.45671	(09011307)	463897.31
3809591.37	10.48815	(09011307)		
463935.31	3809591.37	10.62452	(09011120)	464239.31
3809591.37	9.81722	(10022820)		
464277.31	3809591.37	10.09614	(10022820)	463745.31
3809620.43	8.64141	(09040203)		
463783.31	3809620.43	9.24102	(09011307)	463821.31
3809620.43	9.76392	(09011307)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 471

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463859.31	3809620.43	10.02443	(09011307)	463897.31
3809620.43	10.02908	(09011307)		
463935.31	3809620.43	10.17970	(09011120)	463973.31
3809620.43	10.52859	(09011120)		

464011.31	3809620.43	10.52293	(09011120)	464049.31
3809620.43	10.16999	(09011120)		
464087.31	3809620.43	9.53662	(09011120)	464125.31
3809620.43	9.54791	(10010907)		
464163.31	3809620.43	9.68793	(10010907)	464201.31
3809620.43	9.54827	(10010907)		
464239.31	3809620.43	9.35938	(10022820)	464277.31
3809620.43	9.68916	(10022820)		
463745.31	3809649.49	8.24225	(09040203)	463783.31
3809649.49	8.92962	(09011307)		
463821.31	3809649.49	9.39638	(09011307)	463859.31
3809649.49	9.62277	(09011307)		
463897.31	3809649.49	9.59908	(09011307)	463935.31
3809649.49	9.73177	(09011120)		
463973.31	3809649.49	10.04206	(09011120)	464011.31
3809649.49	10.09312	(09011120)		
464049.31	3809649.49	9.82801	(09011120)	464087.31
3809649.49	9.24847	(09011120)		
464125.31	3809649.49	9.17804	(10010907)	464163.31
3809649.49	9.34096	(10010907)		
464201.31	3809649.49	9.27687	(10010907)	464239.31
3809649.49	8.98597	(10010907)		
464277.31	3809649.49	9.29728	(10022820)	464315.31
3809649.49	9.43131	(10022820)		
464353.31	3809649.49	9.36845	(10022820)	464391.31
3809649.49	9.09163	(09031705)		
464429.31	3809649.49	8.84558	(09031705)	464467.31
3809649.49	8.73454	(09040202)		
464505.31	3809649.49	8.48752	(09040202)	463745.31
3809678.55	7.91703	(09011307)		
463783.31	3809678.55	8.57743	(09011307)	463821.31
3809678.55	9.05463	(09011307)		
463859.31	3809678.55	9.23056	(09011307)	463897.31
3809678.55	9.19626	(09011307)		
463935.31	3809678.55	9.32942	(09031206)	463973.31
3809678.55	9.65160	(09011120)		
464011.31	3809678.55	9.69183	(09011120)	464049.31
3809678.55	9.50259	(09011120)		
464087.31	3809678.55	9.01104	(09011120)	464125.31
3809678.55	8.82423	(10010907)		
464163.31	3809678.55	9.02357	(10010907)	464201.31
3809678.55	9.01876	(10010907)		
464239.31	3809678.55	8.75317	(10010907)	464277.31
3809678.55	8.91116	(10022820)		
464315.31	3809678.55	9.10716	(10022820)	464353.31
3809678.55	9.11224	(10022820)		
464391.31	3809678.55	8.89473	(10022820)	464429.31
3809678.55	8.64662	(09031705)		
464467.31	3809678.55	8.49592	(09040202)	464505.31
3809678.55	8.30016	(09040202)		

463745.31	3809707.61	7.65168	(09011307)	463783.31
3809707.61	8.25314	(09011307)		
463821.31	3809707.61	8.68790	(09011307)	463859.31
3809707.61	8.88301	(09011307)		
463897.31	3809707.61	8.82250	(09011307)	463935.31
3809707.61	8.95404	(09031206)		
463973.31	3809707.61	9.28498	(09011120)	464011.31
3809707.61	9.34869	(09011120)		
464049.31	3809707.61	9.19377	(09011120)	464087.31
3809707.61	8.75648	(09011120)		
464125.31	3809707.61	8.48731	(10010907)	464163.31
3809707.61	8.73203	(10010907)		
464201.31	3809707.61	8.73252	(10010907)	464239.31
3809707.61	8.53274	(10010907)		
464277.31	3809707.61	8.54126	(10022820)	464315.31
3809707.61	8.79975	(10022820)		
464353.31	3809707.61	8.82523	(10022820)	464391.31
3809707.61	8.68161	(10022820)		
464429.31	3809707.61	8.42952	(09031705)	464467.31
3809707.61	8.22421	(09040202)		
464505.31	3809707.61	8.11919	(09040202)	463745.31
3809736.67	7.43326	(09011307)		
463783.31	3809736.67	7.95579	(09011307)	463821.31
3809736.67	8.31803	(09011307)		
463859.31	3809736.67	8.50752	(09011307)	463897.31
3809736.67	8.46694	(09011307)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 472

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)

463935.31	3809736.67	8.57112 (09031206)	463973.31
3809736.67	8.93201 (09011120)		
464011.31	3809736.67	9.05872 (09011120)	464049.31
3809736.67	8.90150 (09011120)		
464087.31	3809736.67	8.53386 (09011120)	464125.31
3809736.67	8.18154 (10010907)		
464163.31	3809736.67	8.45261 (10010907)	464201.31
3809736.67	8.47517 (10010907)		
464239.31	3809736.67	8.32871 (10010907)	464277.31
3809736.67	8.19812 (10022820)		
464315.31	3809736.67	8.46966 (10022820)	464353.31
3809736.67	8.55991 (10022820)		
464391.31	3809736.67	8.46772 (10022820)	464429.31
3809736.67	8.21114 (09031705)		
464467.31	3809736.67	8.00934 (09031705)	464505.31
3809736.67	7.92841 (09040202)		
463745.31	3809765.73	7.23345 (09011307)	463783.31
3809765.73	7.70634 (09011307)		
463821.31	3809765.73	8.01653 (09011307)	463859.31
3809765.73	8.16673 (09011307)		
463897.31	3809765.73	8.13352 (09011307)	463935.31
3809765.73	8.21595 (09031206)		
463973.31	3809765.73	8.51881 (09011120)	464011.31
3809765.73	8.74051 (09011120)		
464049.31	3809765.73	8.65467 (09011120)	464087.31
3809765.73	8.30918 (09011120)		
464125.31	3809765.73	7.89501 (10010907)	464163.31
3809765.73	8.18258 (10010907)		
464201.31	3809765.73	8.23674 (10010907)	464239.31
3809765.73	8.13048 (10010907)		
464277.31	3809765.73	7.87073 (10022820)	464315.31
3809765.73	8.16143 (10022820)		
464353.31	3809765.73	8.30412 (10022820)	464391.31
3809765.73	8.24402 (10022820)		
464429.31	3809765.73	8.03542 (10022820)	464467.31
3809765.73	7.86091 (09031705)		
464505.31	3809765.73	7.70646 (09040202)	463745.31
3809794.79	7.04533 (09011307)		
463783.31	3809794.79	7.45790 (09011307)	463821.31
3809794.79	7.73676 (09011307)		
463859.31	3809794.79	7.84361 (09011307)	463897.31
3809794.79	7.79482 (09011307)		
463935.31	3809794.79	7.87728 (09031206)	463973.31
3809794.79	8.15675 (09011120)		
464011.31	3809794.79	8.36833 (09011120)	464049.31

3809794.79	8.40092	(09011120)		
464087.31	3809794.79	8.09722	(09011120)	464125.31
3809794.79	7.61664	(09102505)		
464163.31	3809794.79	7.89503	(10010907)	464201.31
3809794.79	8.00269	(10010907)		
464239.31	3809794.79	7.91580	(10010907)	464277.31
3809794.79	7.66082	(10010907)		
464315.31	3809794.79	7.86659	(10022820)	464353.31
3809794.79	8.02504	(10022820)		
464391.31	3809794.79	8.03118	(10022820)	464429.31
3809794.79	7.88602	(10022820)		
464467.31	3809794.79	7.67835	(09031705)	464505.31
3809794.79	7.49015	(09040202)		
463745.31	3809823.85	6.86661	(09011307)	463783.31
3809823.85	7.22706	(09011307)		
463821.31	3809823.85	7.44231	(09011307)	463859.31
3809823.85	7.53952	(09011307)		
463897.31	3809823.85	7.46677	(09011307)	463935.31
3809823.85	7.54973	(09031206)		
463973.31	3809823.85	7.82224	(09011120)	464011.31
3809823.85	8.00663	(09011120)		
464049.31	3809823.85	8.06332	(09011120)	464087.31
3809823.85	7.86814	(09011120)		
464125.31	3809823.85	7.43842	(09102505)	464163.31
3809823.85	7.62964	(10010907)		
464201.31	3809823.85	7.75190	(10010907)	464239.31
3809823.85	7.71198	(10010907)		
464277.31	3809823.85	7.49922	(10010907)	464315.31
3809823.85	7.55913	(10022820)		
464353.31	3809823.85	7.76090	(10022820)	464391.31
3809823.85	7.81447	(10022820)		
464429.31	3809823.85	7.70364	(10022820)	464467.31
3809823.85	7.49593	(09031705)		
464505.31	3809823.85	7.29295	(09031705)	463745.31
3809852.91	6.71039	(09011307)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 473

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953

, L0005954 , L0005955 , L0005956 ,
 , L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463783.31	3809852.91	7.04159	(09011307)	463821.31
3809852.91	7.19819	(09011307)		
463859.31	3809852.91	7.26649	(09011307)	463897.31
3809852.91	7.16339	(09011307)		
463935.31	3809852.91	7.24590	(09031206)	463973.31
3809852.91	7.50664	(09011120)		
464011.31	3809852.91	7.67488	(09011120)	464049.31
3809852.91	7.72191	(09011120)		
464087.31	3809852.91	7.56940	(09011120)	464125.31
3809852.91	7.20420	(09011120)		
464163.31	3809852.91	7.32276	(10010907)	464201.31
3809852.91	7.47182	(10010907)		
464239.31	3809852.91	7.47736	(10010907)	464277.31
3809852.91	7.31540	(10010907)		
464315.31	3809852.91	7.26568	(10022820)	464353.31
3809852.91	7.49041	(10022820)		
464391.31	3809852.91	7.58513	(10022820)	464429.31
3809852.91	7.52443	(10022820)		
464467.31	3809852.91	7.31097	(10022820)	464505.31
3809852.91	7.15371	(09031705)		
463745.31	3809881.97	6.57059	(09011307)	463783.31
3809881.97	6.86185	(09011307)		
463821.31	3809881.97	6.99977	(09011307)	463859.31
3809881.97	7.02758	(09011307)		
463897.31	3809881.97	6.89779	(09011307)	463935.31
3809881.97	6.96235	(09031206)		
463973.31	3809881.97	7.21852	(09011120)	464011.31
3809881.97	7.38611	(09011120)		
464049.31	3809881.97	7.41812	(09011120)	464087.31
3809881.97	7.26737	(09011120)		
464125.31	3809881.97	6.94360	(09011120)	464163.31
3809881.97	6.98527	(10010907)		
464201.31	3809881.97	7.18662	(10010907)	464239.31
3809881.97	7.21828	(10010907)		
464277.31	3809881.97	7.11214	(10010907)	464315.31
3809881.97	6.97461	(10022820)		

464353.31	3809881.97	7.23035	(10022820)	464391.31
3809881.97	7.36510	(10022820)		
464429.31	3809881.97	7.34340	(10022820)	464467.31
3809881.97	7.17291	(10022820)		
464505.31	3809881.97	7.01751	(09031705)	463745.31
3809911.03	6.42159	(09011307)		
463783.31	3809911.03	6.67726	(09011307)	463821.31
3809911.03	6.81585	(09011307)		
463859.31	3809911.03	6.81623	(09011307)	463897.31
3809911.03	6.67720	(09011307)		
463935.31	3809911.03	6.72507	(09031206)	463973.31
3809911.03	6.94873	(09011120)		
464011.31	3809911.03	7.11228	(09011120)	464049.31
3809911.03	7.15142	(09011120)		
464087.31	3809911.03	7.01356	(09011120)	464125.31
3809911.03	6.71246	(09011120)		
464163.31	3809911.03	6.69713	(10010907)	464201.31
3809911.03	6.93215	(10010907)		
464239.31	3809911.03	6.99234	(10010907)	464277.31
3809911.03	6.92844	(10010907)		
464315.31	3809911.03	6.71441	(10010907)	464353.31
3809911.03	6.97284	(10022820)		
464391.31	3809911.03	7.13705	(10022820)	464429.31
3809911.03	7.15402	(10022820)		
464467.31	3809911.03	7.04305	(10022820)	464505.31
3809911.03	6.85932	(09031705)		
463745.31	3809940.09	6.26817	(09011307)	463783.31
3809940.09	6.50042	(09011307)		
463821.31	3809940.09	6.63401	(09011307)	463859.31
3809940.09	6.61906	(09011307)		
463897.31	3809940.09	6.48186	(09011307)	463935.31
3809940.09	6.52976	(09031206)		
463973.31	3809940.09	6.71921	(09011120)	464011.31
3809940.09	6.84884	(09011120)		
464049.31	3809940.09	6.88300	(09011120)	464087.31
3809940.09	6.76013	(09011120)		
464125.31	3809940.09	6.49240	(09011120)	464163.31
3809940.09	6.43590	(10010907)		
464201.31	3809940.09	6.70459	(10010907)	464239.31
3809940.09	6.80123	(10010907)		
464277.31	3809940.09	6.75457	(10010907)	464315.31
3809940.09	6.57944	(10010907)		
464353.31	3809940.09	6.72122	(10022820)	464391.31
3809940.09	6.91113	(10022820)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: IDLE ***
INCLUDING SOURCE(S): L0005936 , L0005937
, L0005938 , L0005939 , L0005940 ,
L0005941 , L0005942 , L0005943 , L0005944 , L0005945
, L0005946 , L0005947 , L0005948 ,
L0005949 , L0005950 , L0005951 , L0005952 , L0005953
, L0005954 , L0005955 , L0005956 ,
L0005957 , L0005958 , L0005959 , L0005960 , L0005961
, L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464429.31	3809940.09	6.97367	(10022820)	464467.31
3809940.09	6.89327	(10022820)		
464505.31	3809940.09	6.69890	(09031705)	463745.31
3809969.15	6.17099	(09011307)		
463783.31	3809969.15	6.35225	(09011307)	463821.31
3809969.15	6.45567	(09011307)		
463859.31	3809969.15	6.43569	(09011307)	463897.31
3809969.15	6.29570	(09011307)		
463935.31	3809969.15	6.34601	(09031206)	463973.31
3809969.15	6.51801	(09011120)		
464011.31	3809969.15	6.62630	(09011120)	464049.31
3809969.15	6.62828	(09011120)		
464087.31	3809969.15	6.52248	(09011120)	464125.31
3809969.15	6.29666	(09011120)		
464163.31	3809969.15	6.17722	(10010907)	464201.31
3809969.15	6.47130	(10010907)		
464239.31	3809969.15	6.61584	(10010907)	464277.31
3809969.15	6.59137	(10010907)		
464315.31	3809969.15	6.44809	(10010907)	464353.31
3809969.15	6.49250	(10022820)		
464391.31	3809969.15	6.70512	(10022820)	464429.31
3809969.15	6.78830	(10022820)		
464467.31	3809969.15	6.73624	(10022820)	464505.31
3809969.15	6.58613	(10022820)		
463745.31	3809998.21	6.13612	(09011307)	463783.31
3809998.21	6.25233	(09011307)		
463821.31	3809998.21	6.31268	(09011307)	463859.31

3809998.21	6.27316 (09011307)		
463897.31	3809998.21	6.12939 (09011307)	463935.31
3809998.21	6.17068 (09031206)		
463973.31	3809998.21	6.32464 (09011120)	464011.31
3809998.21	6.43681 (09011120)		
464049.31	3809998.21	6.43414 (09011120)	464087.31
3809998.21	6.32712 (09011120)		
464125.31	3809998.21	6.12800 (09011120)	464163.31
3809998.21	5.94573 (10010907)		
464201.31	3809998.21	6.24256 (10010907)	464239.31
3809998.21	6.41069 (10010907)		
464277.31	3809998.21	6.43658 (10010907)	464315.31
3809998.21	6.31660 (10010907)		
464353.31	3809998.21	6.25580 (10022820)	464391.31
3809998.21	6.48767 (10022820)		
464429.31	3809998.21	6.59487 (10022820)	464467.31
3809998.21	6.59166 (10022820)		
464505.31	3809998.21	6.46594 (10022820)	463745.31
3810027.27	6.10585 (09011307)		
463783.31	3810027.27	6.18557 (09011307)	463821.31
3810027.27	6.20262 (09011307)		
463859.31	3810027.27	6.13759 (09011307)	463897.31
3810027.27	5.98598 (09011307)		
463935.31	3810027.27	6.01143 (09031206)	463973.31
3810027.27	6.15191 (09011120)		
464011.31	3810027.27	6.26349 (09011120)	464049.31
3810027.27	6.26461 (09011120)		
464087.31	3810027.27	6.14961 (09011120)	464125.31
3810027.27	5.95237 (09011120)		
464163.31	3810027.27	5.72272 (10010907)	464201.31
3810027.27	6.02813 (10010907)		
464239.31	3810027.27	6.20125 (10010907)	464277.31
3810027.27	6.26105 (10010907)		
464315.31	3810027.27	6.18654 (10010907)	464353.31
3810027.27	6.02023 (10022820)		
464391.31	3810027.27	6.26829 (10022820)	464429.31
3810027.27	6.41184 (10022820)		
464467.31	3810027.27	6.43467 (10022820)	464505.31
3810027.27	6.33667 (10022820)		
463745.31	3810056.33	6.08423 (09011307)	463783.31
3810056.33	6.12789 (09011307)		
463821.31	3810056.33	6.09930 (09011307)	463859.31
3810056.33	6.01784 (09011307)		
463897.31	3810056.33	5.84912 (09011307)	463935.31
3810056.33	5.87305 (09031206)		
463973.31	3810056.33	5.99458 (09011120)	464011.31
3810056.33	6.09938 (09011120)		
464049.31	3810056.33	6.09258 (09011120)	464087.31
3810056.33	5.98745 (09011120)		
464125.31	3810056.33	5.78617 (09011120)	464163.31

3810056.33 5.56154 (09102505)
 464201.31 3810056.33 5.80647 (10010907) 464239.31
 3810056.33 6.00672 (10010907)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 475

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464277.31	3810056.33	6.07797	(10010907)	464315.31
3810056.33	6.03889	(10010907)		
464353.31	3810056.33	5.88824	(10010907)	464391.31
3810056.33	6.07114	(10022820)		
464429.31	3810056.33	6.22927	(10022820)	464467.31
3810056.33	6.26800	(10022820)		
464505.31	3810056.33	6.20865	(10022820)	463745.31
3810085.39	6.06102	(09011307)		
463783.31	3810085.39	6.07473	(09011307)	463821.31
3810085.39	6.01441	(09011307)		
463859.31	3810085.39	5.90582	(09011307)	463897.31
3810085.39	5.72487	(09011307)		
463935.31	3810085.39	5.74948	(09031206)	463973.31
3810085.39	5.84905	(09011120)		
464011.31	3810085.39	5.93990	(09011120)	464049.31
3810085.39	5.92016	(09011120)		
464087.31	3810085.39	5.82772	(09011120)	464125.31
3810085.39	5.63946	(09011120)		

464163.31	3810085.39	5.41028	(09102505)	464201.31
3810085.39	5.58606 (10010907)			
464239.31	3810085.39	5.80371	(10010907)	464277.31
3810085.39	5.90176 (10010907)			
464315.31	3810085.39	5.88685	(10010907)	464353.31
3810085.39	5.76231 (10010907)			
464391.31	3810085.39	5.85370	(10022820)	464429.31
3810085.39	6.02965 (10022820)			
464467.31	3810085.39	6.09913	(10022820)	464505.31
3810085.39	6.06347 (10022820)			
463745.31	3810114.45	6.00151	(09011307)	463783.31
3810114.45	6.04281 (09011307)			
463821.31	3810114.45	5.95130	(09011307)	463859.31
3810114.45	5.83326 (09011307)			
463897.31	3810114.45	5.62385	(09011307)	463935.31
3810114.45	5.63692 (09031206)			
463973.31	3810114.45	5.70948	(09011120)	464011.31
3810114.45	5.79447 (09011120)			
464049.31	3810114.45	5.77160	(09011120)	464087.31
3810114.45	5.67771 (09011120)			
464125.31	3810114.45	5.49064	(09011120)	464163.31
3810114.45	5.25836 (09102505)			
464201.31	3810114.45	5.36659	(10010907)	464239.31
3810114.45	5.60643 (10010907)			
464277.31	3810114.45	5.72863	(10010907)	464315.31
3810114.45	5.72104 (10010907)			
464353.31	3810114.45	5.60945	(10010907)	464391.31
3810114.45	5.59740 (10022820)			
464429.31	3810114.45	5.81235	(10022820)	464467.31
3810114.45	5.90331 (10022820)			
464505.31	3810114.45	5.91509	(10022820)	463745.31
3810143.51	5.90285 (09011307)			
463783.31	3810143.51	5.97128	(09011307)	463821.31
3810143.51	5.92639 (09011307)			
463859.31	3810143.51	5.78223	(09011307)	463897.31
3810143.51	5.52733 (09011307)			
463935.31	3810143.51	5.51799	(09031206)	463973.31
3810143.51	5.56201 (09011120)			
464011.31	3810143.51	5.65731	(09011120)	464049.31
3810143.51	5.63501 (09011120)			
464087.31	3810143.51	5.52740	(09011120)	464125.31
3810143.51	5.35124 (09011120)			
464163.31	3810143.51	5.12557	(09102505)	464201.31
3810143.51	5.16778 (10010907)			
464239.31	3810143.51	5.39742	(10010907)	464277.31
3810143.51	5.55323 (10010907)			
464315.31	3810143.51	5.56579	(10010907)	464353.31
3810143.51	5.45816 (10010907)			
464391.31	3810143.51	5.36477	(10022820)	464429.31
3810143.51	5.58716 (10022820)			

464467.31	3810143.51	5.72602	(10022820)	464505.31
3810143.51	5.76762	(10022820)		
464383.78	3807479.29	33.96254	(10112518)	464355.03
3807405.24	27.92836	(10112518)		
464402.07	3807352.10	28.55462	(10112518)	464367.23
3807296.35	22.53910	(09121017)		
464358.52	3807237.99	21.01335	(09121017)	464385.52
3807161.33	19.54658	(09121017)		
463132.27	3810926.37	3.52346	(10021119)	463237.82
3811199.31	2.99400	(10011006)		
464944.35	3809244.89	9.11743	(10012420)	465700.32
3809255.46	5.22235	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 476

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: IDLE ***
 INCLUDING SOURCE(S): L0005936 , L0005937
 , L0005938 , L0005939 , L0005940 ,
 L0005941 , L0005942 , L0005943 , L0005944 , L0005945
 , L0005946 , L0005947 , L0005948 ,
 L0005949 , L0005950 , L0005951 , L0005952 , L0005953
 , L0005954 , L0005955 , L0005956 ,
 L0005957 , L0005958 , L0005959 , L0005960 , L0005961
 , L0005962 , L0005963 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465716.18	3808536.49	4.32066	(09031319)	465544.37
3808533.85	5.07095	(09031319)		
465420.13	3808486.27	5.82637	(10032206)	465348.77
3808491.56	6.17567	(10032206)		
465317.05	3808443.98	6.59746	(10032206)	465327.62
3808406.97	6.61183	(10032206)		
465108.23	3808369.97	8.38123	(10032206)	464999.86
3808301.24	9.01390	(09010519)		
464722.31	3807973.48	15.55304	(10020118)	464717.03

3807836.03	11.73011	(09031219)		
464344.33	3807936.47	43.80399	(09011918)	464349.61
3807780.52	18.76199	(09011918)		
464386.62	3807785.81	18.10259	(09011918)	464521.43
3807859.82	12.24092	(09030119)		
464537.28	3807719.72	23.34167	(09011918)	464426.27
3807613.99	35.00163	(09011918)		
464368.43	3807532.62	34.60094	(10112518)	464324.60
3807121.91	22.40798	(09123118)		
464123.31	3807123.54	21.64749	(09123118)	463930.13
3806909.26	18.94384	(09111519)		
463831.11	3806906.01	13.66586	(09120318)	463821.36
3806720.95	11.61349	(09120318)		
463727.21	3806727.44	11.16527	(10102005)	463598.97
3806334.59	9.52853	(09032718)		
463001.06	3806361.54	6.29274	(09120319)	

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 477

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
462160.55	3809377.75	20.43421	(10021620)	462051.48
3809270.62	16.11425	(10021620)		
462014.47	3809029.10	8.67193	(09020119)	462010.58
3808855.75	6.07768	(09020119)		

461936.56	3808886.92	6.76395	(09020119)	461936.56
3808997.94	8.21800 (09020119)			
461909.30	3808768.10	5.41850	(10021207)	461835.28
3808894.71	6.99562 (09020119)			
461845.02	3808995.99	8.00689	(09020119)	461833.33
3809114.80	7.64178 (09020119)			
461843.07	3809210.24	12.41218	(10021620)	461809.96
3809297.89	16.40482 (10021620)			
461856.71	3809385.54	16.11964	(10021620)	461841.13
3809482.92	10.06286 (09021520)			
462004.74	3809379.69	18.25685	(10021620)	461763.22
3808793.43	5.53757 (09020119)			
461753.48	3808699.93	4.88061	(10021207)	461835.28
3808686.30	5.73045 (10021207)			
461823.60	3808579.17	5.89737	(10021207)	461761.27
3808585.02	5.73716 (10021207)			
462301.19	3807807.15	3.02886	(09122018)	462304.78
3807868.16	3.10030 (09122018)			
462216.84	3807882.52	3.08261	(09122018)	462116.34
3807886.11	3.01383 (09122018)			
462114.55	3807789.20	2.91169	(09122018)	462012.25
3807887.90	2.92050 (09111518)			
462008.66	3807975.84	3.36120	(09111518)	461917.14
3807972.25	3.50488 (09020118)			
461922.52	3808187.60	5.68069	(10021207)	461908.17
3808288.10	5.86188 (10021207)			
461848.94	3808377.83	5.70574	(10021207)	461831.00
3808494.48	5.76293 (10021207)			
462421.43	3808393.98	6.92469	(10021207)	462459.11
3808501.66	7.63079 (10021207)			
462437.58	3808580.62	7.62977	(10021207)	462654.73
3809189.00	12.44168 (09020119)			
462559.49	3809194.32	12.30441	(09020119)	465763.86
3807935.19	5.11059 (09011918)			
465819.84	3807935.19	5.07778	(09011918)	465875.82
3807935.19	5.01038 (09011918)			
465931.80	3807935.19	4.88392	(09011918)	465987.78
3807935.19	4.70328 (09011918)			
466043.76	3807935.19	4.45218	(09011918)	466099.74
3807935.19	4.13070 (09011918)			
466155.72	3807935.19	3.73091	(09011918)	466211.70
3807935.19	3.34099 (10020118)			
466267.68	3807935.19	3.22819	(10020118)	466323.66
3807935.19	3.07090 (10020118)			
466379.64	3807935.19	2.95253	(10020118)	466435.62
3807935.19	2.84848 (10020118)			
466491.60	3807935.19	2.75120	(10020118)	466547.58
3807935.19	2.65313 (10020118)			
466603.56	3807935.19	2.60856	(10020118)	466659.54
3807935.19	2.55440 (10020118)			

466715.52	3807935.19	2.48997	(10020118)	466771.50
3807935.19	2.44808	(10020118)		
466827.48	3807935.19	2.36632	(10020118)	466883.46
3807935.19	2.35199	(10020118)		
465763.86	3808001.41	5.24034	(09011918)	465819.84
3808001.41	5.17948	(09011918)		
465875.82	3808001.41	5.06398	(09011918)	465931.80
3808001.41	4.89443	(09011918)		
465987.78	3808001.41	4.65890	(09011918)	466043.76
3808001.41	4.34673	(09011918)		
466099.74	3808001.41	3.96121	(09011918)	466155.72
3808001.41	3.53193	(10020118)		
466211.70	3808001.41	3.42393	(10020118)	466267.68
3808001.41	3.25798	(10020118)		
466323.66	3808001.41	3.09868	(10020118)	466379.64
3808001.41	2.95312	(10020118)		
466435.62	3808001.41	2.84177	(10020118)	466491.60
3808001.41	2.77102	(10020118)		
466547.58	3808001.41	2.70019	(10020118)	466603.56
3808001.41	2.66122	(10020118)		
466659.54	3808001.41	2.61501	(10020118)	466715.52
3808001.41	2.54812	(10020118)		
466771.50	3808001.41	2.49389	(10020118)	466827.48
3808001.41	2.44523	(10020118)		
466883.46	3808001.41	2.41693	(10020118)	465763.86
3808067.63	5.35624	(09011918)		
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15				
Industrial Park\I15 Industrial *** 05/09/22				
*** AERMET - VERSION 14134 *** ***				
*** 16:42:19				

PAGE 478

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)

465819.84	3808067.63	5.25759	(09011918)	465875.82
3808067.63	5.09483 (09011918)			
465931.80	3808067.63	4.87036	(09011918)	465987.78
3808067.63	4.57651 (09011918)			
466043.76	3808067.63	4.19399	(09011918)	466099.74
3808067.63	3.74620 (09011918)			
466155.72	3808067.63	3.50498	(10020118)	466211.70
3808067.63	3.32369 (10020118)			
466267.68	3808067.63	3.18048	(10020118)	466323.66
3808067.63	3.02861 (10020118)			
466379.64	3808067.63	2.91771	(10020118)	466435.62
3808067.63	2.85444 (10020118)			
466491.60	3808067.63	2.78092	(10020118)	466547.58
3808067.63	2.74571 (10020118)			
466603.56	3808067.63	2.70181	(10020118)	466659.54
3808067.63	2.64627 (10020118)			
466715.52	3808067.63	2.61564	(10020118)	466771.50
3808067.63	2.55610 (10020118)			
466827.48	3808067.63	2.50430	(10020118)	466883.46
3808067.63	2.46095 (10020118)			
465763.86	3808133.85	5.45709	(09011918)	465819.84
3808133.85	5.30463 (09011918)			
465875.82	3808133.85	5.08930	(09011918)	465931.80
3808133.85	4.80785 (09011918)			
465987.78	3808133.85	4.44512	(09011918)	466043.76
3808133.85	3.99998 (09011918)			
466099.74	3808133.85	3.62858	(10020118)	466155.72
3808133.85	3.40777 (10020118)			
466211.70	3808133.85	3.25190	(10020118)	466267.68
3808133.85	3.12595 (10020118)			
466323.66	3808133.85	2.99520	(10020118)	466379.64
3808133.85	2.93119 (10020118)			
466435.62	3808133.85	2.86773	(10020118)	466491.60
3808133.85	2.82638 (10020118)			
466547.58	3808133.85	2.78856	(10020118)	466603.56
3808133.85	2.75101 (10020118)			
466659.54	3808133.85	2.71315	(10020118)	466715.52
3808133.85	2.65266 (10020118)			
466771.50	3808133.85	2.59124	(10020118)	466827.48
3808133.85	2.54026 (10020118)			
466883.46	3808133.85	2.48211	(10020118)	465763.86
3808200.07	5.52855 (09011918)			
465819.84	3808200.07	5.32407	(09011918)	465875.82
3808200.07	5.05006 (09011918)			
465931.80	3808200.07	4.69811	(09011918)	465987.78

3808200.07	4.26137	(09011918)		
466043.76	3808200.07	3.73131	(09011918)	466099.74
3808200.07	3.48490	(10020118)		
466155.72	3808200.07	3.31060	(10020118)	466211.70
3808200.07	3.16863	(10020118)		
466267.68	3808200.07	3.07803	(10020118)	466323.66
3808200.07	3.00921	(10020118)		
466379.64	3808200.07	2.96052	(10020118)	466435.62
3808200.07	2.91261	(10020118)		
466491.60	3808200.07	2.87987	(10020118)	466547.58
3808200.07	2.84076	(10020118)		
466603.56	3808200.07	2.80259	(10020118)	466659.54
3808200.07	2.75151	(10020118)		
466715.52	3808200.07	2.68474	(10020118)	466771.50
3808200.07	2.61865	(10020118)		
466827.48	3808200.07	2.55019	(10020118)	466883.46
3808200.07	2.47592	(10020118)		
465763.86	3808266.29	5.56567	(09011918)	465819.84
3808266.29	5.30232	(09011918)		
465875.82	3808266.29	4.96319	(09011918)	465931.80
3808266.29	4.53793	(09011918)		
465987.78	3808266.29	4.00652	(09011918)	466043.76
3808266.29	3.54244	(10020118)		
466099.74	3808266.29	3.37415	(10020118)	466155.72
3808266.29	3.24819	(10020118)		
466211.70	3808266.29	3.16644	(10020118)	466267.68
3808266.29	3.10107	(10020118)		
466323.66	3808266.29	3.04799	(10020118)	466379.64
3808266.29	3.00390	(10020118)		
466435.62	3808266.29	2.97048	(10020118)	466491.60
3808266.29	2.93460	(10020118)		
466547.58	3808266.29	2.89521	(10020118)	466603.56
3808266.29	2.84153	(10020118)		
466659.54	3808266.29	2.77145	(10020118)	466715.52
3808266.29	2.69548	(10020118)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 479

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510

, L0006511 , L0006512 , L0006513 ,
 , L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466771.50	3808266.29	2.61715	(10020118)	466827.48
3808266.29	2.53183	(10020118)		
466883.46	3808266.29	2.44130	(10020118)	465763.86
3808332.51	5.55751	(09011918)		
465819.84	3808332.51	5.23798	(09011918)	465875.82
3808332.51	4.82631	(09011918)		
465931.80	3808332.51	4.30015	(09011918)	465987.78
3808332.51	3.70747	(09030119)		
466043.76	3808332.51	3.46497	(09030119)	466099.74
3808332.51	3.32810	(10020118)		
466155.72	3808332.51	3.26785	(10020118)	466211.70
3808332.51	3.19928	(10020118)		
466267.68	3808332.51	3.15708	(10020118)	466323.66
3808332.51	3.10898	(10020118)		
466379.64	3808332.51	3.07806	(10020118)	466435.62
3808332.51	3.03521	(10020118)		
466491.60	3808332.51	2.98591	(10020118)	466547.58
3808332.51	2.93346	(10020118)		
466603.56	3808332.51	2.85610	(10020118)	466659.54
3808332.51	2.77261	(10020118)		
466715.52	3808332.51	2.68240	(10020118)	466771.50
3808332.51	2.58454	(10020118)		
466827.48	3808332.51	2.48291	(10020118)	466883.46
3808332.51	2.37689	(10020118)		
465763.86	3808398.73	5.52445	(09011918)	465819.84
3808398.73	5.13418	(09011918)		
465875.82	3808398.73	4.60965	(09011918)	465931.80
3808398.73	4.00063	(09011918)		
465987.78	3808398.73	3.63412	(09030119)	466043.76
3808398.73	3.44077	(10020118)		
466099.74	3808398.73	3.35898	(10020118)	466155.72
3808398.73	3.31232	(10020118)		
466211.70	3808398.73	3.27374	(10020118)	466267.68
3808398.73	3.22856	(10020118)		
466323.66	3808398.73	3.18653	(10020118)	466379.64
3808398.73	3.14224	(10020118)		

466435.62	3808398.73	3.08405	(10020118)	466491.60
3808398.73	3.02200	(10020118)		
466547.58	3808398.73	2.93972	(10020118)	466603.56
3808398.73	2.84648	(10020118)		
466659.54	3808398.73	2.74370	(10020118)	466715.52
3808398.73	2.63452	(10020118)		
466771.50	3808398.73	2.52074	(10020118)	466827.48
3808398.73	2.40293	(10020118)		
466883.46	3808398.73	2.28269	(10020118)	465763.86
3808464.95	5.44199	(09011918)		
465819.84	3808464.95	4.95418	(09011918)	465875.82
3808464.95	4.34652	(09011918)		
465931.80	3808464.95	3.66339	(09011918)	465987.78
3808464.95	3.56298	(10020118)		
466043.76	3808464.95	3.48929	(10020118)	466099.74
3808464.95	3.44390	(10020118)		
466155.72	3808464.95	3.40753	(10020118)	466211.70
3808464.95	3.37175	(10020118)		
466267.68	3808464.95	3.31237	(10020118)	466323.66
3808464.95	3.26206	(10020118)		
466379.64	3808464.95	3.19358	(10020118)	466435.62
3808464.95	3.12008	(10020118)		
466491.60	3808464.95	3.02252	(10020118)	466547.58
3808464.95	2.91874	(10020118)		
466603.56	3808464.95	2.80183	(10020118)	466659.54
3808464.95	2.67935	(10020118)		
466715.52	3808464.95	2.55266	(10020118)	466771.50
3808464.95	2.42298	(10020118)		
466827.48	3808464.95	2.30847	(10102019)	466883.46
3808464.95	2.22705	(10102019)		
465763.86	3808531.17	5.30435	(09011918)	465819.84
3808531.17	4.69597	(09011918)		
465875.82	3808531.17	3.99030	(09011918)	465931.80
3808531.17	3.69140	(10020118)		
465987.78	3808531.17	3.64752	(10020118)	466043.76
3808531.17	3.60112	(10020118)		
466099.74	3808531.17	3.55985	(10020118)	466155.72
3808531.17	3.51343	(10020118)		
466211.70	3808531.17	3.46252	(10020118)	466267.68
3808531.17	3.39089	(10020118)		
466323.66	3808531.17	3.31289	(10020118)	466379.64
3808531.17	3.21811	(10020118)		
466435.62	3808531.17	3.10725	(10020118)	466491.60
3808531.17	2.98827	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466547.58	3808531.17	2.85617	(10020118)	466603.56
3808531.17	2.71911	(10020118)		
466659.54	3808531.17	2.57849	(10020118)	466715.52
3808531.17	2.44801	(10102019)		
466771.50	3808531.17	2.35747	(10102019)	466827.48
3808531.17	2.26511	(10102019)		
466883.46	3808531.17	2.17064	(10102019)	465763.86
3808597.39	5.07612	(09011918)		
465819.84	3808597.39	4.37553	(09011918)	465875.82
3808597.39	3.95632	(09030119)		
465931.80	3808597.39	3.83294	(10020118)	465987.78
3808597.39	3.78171	(10020118)		
466043.76	3808597.39	3.73004	(10020118)	466099.74
3808597.39	3.67034	(10020118)		
466155.72	3808597.39	3.60518	(10020118)	466211.70
3808597.39	3.52739	(10020118)		
466267.68	3808597.39	3.44180	(10020118)	466323.66
3808597.39	3.31941	(10020118)		
466379.64	3808597.39	3.19104	(10020118)	466435.62
3808597.39	3.05470	(10020118)		
466491.60	3808597.39	2.90668	(10020118)	466547.58
3808597.39	2.75421	(10020118)		
466603.56	3808597.39	2.60439	(10102019)	466659.54
3808597.39	2.50379	(10102019)		
466715.52	3808597.39	2.40065	(10102019)	466771.50
3808597.39	2.29569	(10102019)		
466827.48	3808597.39	2.18983	(10102019)	466883.46

3808597.39	2.08482 (10102019)		
465763.86	3808663.61	4.75020 (09011918)	465819.84
3808663.61	4.23826 (09030119)		
465875.82	3808663.61	4.02959 (10020118)	465931.80
3808663.61	3.97465 (10020118)		
465987.78	3808663.61	3.92147 (10020118)	466043.76
3808663.61	3.84400 (10020118)		
466099.74	3808663.61	3.75915 (10020118)	466155.72
3808663.61	3.67085 (10020118)		
466211.70	3808663.61	3.56371 (10020118)	466267.68
3808663.61	3.42676 (10020118)		
466323.66	3808663.61	3.27537 (10020118)	466379.64
3808663.61	3.11664 (10020118)		
466435.62	3808663.61	2.95185 (10020118)	466491.60
3808663.61	2.78207 (10020118)		
466547.58	3808663.61	2.66657 (10102019)	466603.56
3808663.61	2.55122 (10102019)		
466659.54	3808663.61	2.43406 (10102019)	466715.52
3808663.61	2.31642 (10102019)		
466771.50	3808663.61	2.19897 (10102019)	466827.48
3808663.61	2.08416 (10102019)		
466883.46	3808663.61	1.96937 (10102019)	465763.86
3808729.83	4.40020 (09011918)		
465819.84	3808729.83	4.66694 (09030119)	465875.82
3808729.83	4.27374 (09030119)		
465931.80	3808729.83	4.13037 (10020118)	465987.78
3808729.83	4.02063 (10020118)		
466043.76	3808729.83	3.92662 (10020118)	466099.74
3808729.83	3.82330 (10020118)		
466155.72	3808729.83	3.68736 (10020118)	466211.70
3808729.83	3.52970 (10020118)		
466267.68	3808729.83	3.35581 (10020118)	466323.66
3808729.83	3.17505 (10020118)		
466379.64	3808729.83	2.98950 (10020118)	466435.62
3808729.83	2.84922 (10102019)		
466491.60	3808729.83	2.72140 (10102019)	466547.58
3808729.83	2.59025 (10102019)		
466603.56	3808729.83	2.45851 (10102019)	466659.54
3808729.83	2.32993 (10102019)		
466715.52	3808729.83	2.20018 (10102019)	466771.50
3808729.83	2.07308 (10102019)		
466827.48	3808729.83	1.94992 (10102019)	466883.46
3808729.83	1.82989 (10102019)		
465763.86	3808796.05	4.52001 (10020118)	465819.84
3808796.05	4.72532 (09030119)		
465875.82	3808796.05	4.38630 (10020118)	465931.80
3808796.05	4.29488 (10020118)		
465987.78	3808796.05	4.11909 (10020118)	466043.76
3808796.05	3.97146 (10020118)		
466099.74	3808796.05	3.80739 (10020118)	466155.72

3808796.05 3.62754 (10020118)
 466211.70 3808796.05 3.43409 (10020118) 466267.68
 3808796.05 3.22846 (10020118)
 ^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 481

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
466323.66	3808796.05	3.05814	(10102019)	466379.64
3808796.05	2.91282 (10102019)			
466435.62	3808796.05	2.76707	(10102019)	466491.60
3808796.05	2.61913 (10102019)			
466547.58	3808796.05	2.47241	(10102019)	466603.56
3808796.05	2.32927 (10102019)			
466659.54	3808796.05	2.18763	(10102019)	466715.52
3808796.05	2.05072 (10102019)			
466771.50	3808796.05	1.91815	(10102019)	466827.48
3808796.05	1.79150 (09010519)			
466883.46	3808796.05	1.77936	(09010519)	465763.86
3808862.27	4.75924 (10020118)			
465819.84	3808862.27	4.59206	(10020118)	465875.82
3808862.27	4.44945 (10020118)			
465931.80	3808862.27	4.32113	(10020118)	465987.78
3808862.27	4.13918 (10020118)			
466043.76	3808862.27	3.93921	(10020118)	466099.74
3808862.27	3.72678 (10020118)			

466155.72	3808862.27	3.50674	(10020118)	466211.70
3808862.27	3.29828 (10102019)			
466267.68	3808862.27	3.13430	(10102019)	466323.66
3808862.27	2.96725 (10102019)			
466379.64	3808862.27	2.80112	(10102019)	466435.62
3808862.27	2.63612 (10102019)			
466491.60	3808862.27	2.47402	(10102019)	466547.58
3808862.27	2.31616 (10102019)			
466603.56	3808862.27	2.16244	(10102019)	466659.54
3808862.27	2.05475 (09010519)			
466715.52	3808862.27	2.03508	(09010519)	466771.50
3808862.27	2.01481 (09010519)			
466827.48	3808862.27	1.99424	(09010519)	466883.46
3808862.27	1.97254 (09010519)			
465763.86	3808928.49	5.01648	(10020118)	465819.84
3808928.49	4.79573 (10020118)			
465875.82	3808928.49	4.55685	(10020118)	465931.80
3808928.49	4.31474 (10020118)			
465987.78	3808928.49	4.07177	(10020118)	466043.76
3808928.49	3.82132 (10020118)			
466099.74	3808928.49	3.58104	(10102019)	466155.72
3808928.49	3.39163 (10102019)			
466211.70	3808928.49	3.20107	(10102019)	466267.68
3808928.49	3.01074 (10102019)			
466323.66	3808928.49	2.82241	(10102019)	466379.64
3808928.49	2.63792 (10102019)			
466435.62	3808928.49	2.46053	(10102019)	466491.60
3808928.49	2.37469 (09010519)			
466547.58	3808928.49	2.34685	(09010519)	466603.56
3808928.49	2.31999 (09010519)			
466659.54	3808928.49	2.28960	(09010519)	466715.52
3808928.49	2.25942 (09010519)			
466771.50	3808928.49	2.22745	(09010519)	466827.48
3808928.49	2.19666 (09010519)			
466883.46	3808928.49	2.16378	(09010519)	465763.86
3808994.71	5.05626 (10020118)			
465819.84	3808994.71	4.77809	(10020118)	465875.82
3808994.71	4.49971 (10020118)			
465931.80	3808994.71	4.21895	(10020118)	465987.78
3808994.71	3.92576 (10020118)			
466043.76	3808994.71	3.69288	(10102019)	466099.74
3808994.71	3.47604 (10102019)			
466155.72	3808994.71	3.25646	(10102019)	466211.70
3808994.71	3.04155 (10102019)			
466267.68	3808994.71	2.83133	(10102019)	466323.66
3808994.71	2.77420 (09010519)			
466379.64	3808994.71	2.73359	(09010519)	466435.62
3808994.71	2.69184 (09010519)			
466491.60	3808994.71	2.65092	(09010519)	466547.58
3808994.71	2.61038 (09010519)			

466603.56	3808994.71	2.56684	(09010519)	466659.54
3808994.71	2.52197	(09010519)		
466715.52	3808994.71	2.48094	(09010519)	466771.50
3808994.71	2.43540	(09010519)		
466827.48	3808994.71	2.38994	(09010519)	466883.46
3808994.71	2.34707	(09010519)		
465763.86	3809060.93	5.00778	(10020118)	465819.84
3809060.93	4.68260	(10020118)		
465875.82	3809060.93	4.35570	(10020118)	465931.80
3809060.93	4.05174	(10102019)		
465987.78	3809060.93	3.79951	(10102019)	466043.76
3809060.93	3.54919	(10102019)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 482

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	3.34041	(09010519)	466155.72
3809060.93	3.28346	(09010519)		
466211.70	3809060.93	3.22368	(09010519)	466267.68
3809060.93	3.16407	(09010519)		
466323.66	3809060.93	3.10329	(09010519)	466379.64
3809060.93	3.04187	(09010519)		
466435.62	3809060.93	2.98325	(09010519)	466491.60
3809060.93	2.92368	(09010519)		
466547.58	3809060.93	2.86199	(09010519)	466603.56

3809060.93	2.80215 (09010519)		
466659.54	3809060.93	2.74527 (09010519)	466715.52
3809060.93	2.68464 (09010519)		
466771.50	3809060.93	2.62530 (09010519)	466827.48
3809060.93	2.56800 (09010519)		
466883.46	3809060.93	2.51235 (09010519)	465763.86
3809127.15	4.87339 (10020118)		
465819.84	3809127.15	4.50308 (10020118)	465875.82
3809127.15	4.19301 (10102019)		
465931.80	3809127.15	4.03350 (09010519)	465987.78
3809127.15	3.94846 (09010519)		
466043.76	3809127.15	3.85643 (09010519)	466099.74
3809127.15	3.76367 (09010519)		
466155.72	3809127.15	3.67441 (09010519)	466211.70
3809127.15	3.59525 (09010519)		
466267.68	3809127.15	3.51136 (09010519)	466323.66
3809127.15	3.42606 (09010519)		
466379.64	3809127.15	3.33951 (09010519)	466435.62
3809127.15	3.25617 (09010519)		
466491.60	3809127.15	3.17429 (09010519)	466547.58
3809127.15	3.09447 (09010519)		
466603.56	3809127.15	3.01737 (09010519)	466659.54
3809127.15	2.93903 (09010519)		
466715.52	3809127.15	2.86429 (09010519)	466771.50
3809127.15	2.79095 (09010519)		
466827.48	3809127.15	2.71868 (09010519)	466883.46
3809127.15	2.65104 (09010519)		
465763.86	3809193.37	5.17469 (09010519)	465819.84
3809193.37	5.03973 (09010519)		
465875.82	3809193.37	4.80576 (09010519)	465931.80
3809193.37	4.58078 (09010519)		
465987.78	3809193.37	4.44447 (09010519)	466043.76
3809193.37	4.29595 (09010519)		
466099.74	3809193.37	4.17396 (09010519)	466155.72
3809193.37	4.04981 (09010519)		
466211.70	3809193.37	3.93618 (09010519)	466267.68
3809193.37	3.82495 (09010519)		
466323.66	3809193.37	3.71372 (09010519)	466379.64
3809193.37	3.60458 (09010519)		
466435.62	3809193.37	3.49535 (09010519)	466491.60
3809193.37	3.39115 (09010519)		
466547.58	3809193.37	3.29049 (09010519)	466603.56
3809193.37	3.19522 (09010519)		
466659.54	3809193.37	3.09954 (09010519)	466715.52
3809193.37	3.01015 (09010519)		
466771.50	3809193.37	2.92116 (09010519)	466827.48
3809193.37	2.83749 (09010519)		
466883.46	3809193.37	2.75577 (09010519)	465763.86
3809259.59	5.75604 (09010519)		
465819.84	3809259.59	5.52414 (09010519)	465875.82

3809259.59	5.28384	(09010519)		
465931.80	3809259.59	5.09626	(09010519)	465987.78
3809259.59	4.90426	(09010519)		
466043.76	3809259.59	4.71644	(09010519)	466099.74
3809259.59	4.53872	(09010519)		
466155.72	3809259.59	4.38457	(09010519)	466211.70
3809259.59	4.23598	(09010519)		
466267.68	3809259.59	4.09298	(09010519)	466323.66
3809259.59	3.94730	(09010519)		
466379.64	3809259.59	3.81121	(09010519)	466435.62
3809259.59	3.68154	(09010519)		
466491.60	3809259.59	3.55442	(09010519)	466547.58
3809259.59	3.43717	(09010519)		
466603.56	3809259.59	3.32149	(09010519)	466659.54
3809259.59	3.21118	(09010519)		
466715.52	3809259.59	3.10964	(09010519)	466771.50
3809259.59	3.00766	(09010519)		
466827.48	3809259.59	2.91216	(09010519)	466883.46
3809259.59	2.82015	(09010519)		
464503.41	3807141.91	2.81370	(09123118)	464523.41
3807141.91	2.85858	(09123118)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 483

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -
 - - - - -

464543.41	3807141.91	2.88050	(09123118)	464563.41
3807141.91	2.89582	(09123118)		
464583.41	3807141.91	2.93767	(09123118)	464603.41
3807141.91	2.96036	(09123118)		
464623.41	3807141.91	2.97608	(09123118)	464643.41
3807141.91	3.05289	(09031218)		
464663.41	3807141.91	3.13496	(09031218)	464683.41
3807141.91	3.20735	(09031218)		
464703.41	3807141.91	3.28746	(09031218)	464723.41
3807141.91	3.34552	(09031218)		
464743.41	3807141.91	3.38952	(09031218)	464763.41
3807141.91	3.43200	(09031218)		
464783.41	3807141.91	3.46471	(09031218)	464803.41
3807141.91	3.49368	(09031218)		
464823.41	3807141.91	3.53780	(09031218)	464843.41
3807141.91	3.56118	(09031218)		
464863.41	3807141.91	3.57345	(09031218)	464883.41
3807141.91	3.58734	(09031218)		
464903.41	3807141.91	3.61036	(09031218)	464923.41
3807141.91	3.63248	(09031218)		
464503.41	3807161.91	2.82603	(09123118)	464523.41
3807161.91	2.87110	(09123118)		
464543.41	3807161.91	2.89291	(09123118)	464563.41
3807161.91	2.90800	(09123118)		
464583.41	3807161.91	2.94991	(09123118)	464603.41
3807161.91	2.98754	(09123118)		
464623.41	3807161.91	3.02812	(09031218)	464643.41
3807161.91	3.10683	(09031218)		
464663.41	3807161.91	3.19262	(09031218)	464683.41
3807161.91	3.27508	(09031218)		
464703.41	3807161.91	3.33307	(09031218)	464723.41
3807161.91	3.38122	(09031218)		
464743.41	3807161.91	3.42579	(09031218)	464763.41
3807161.91	3.48640	(09031218)		
464783.41	3807161.91	3.52248	(09031218)	464803.41
3807161.91	3.54568	(09031218)		
464823.41	3807161.91	3.56726	(09031218)	464843.41
3807161.91	3.58187	(09031218)		
464863.41	3807161.91	3.59607	(09031218)	464883.41
3807161.91	3.62812	(09031218)		
464903.41	3807161.91	3.64273	(09031218)	464923.41
3807161.91	3.65187	(09031218)		
464503.41	3807181.91	2.86185	(09123118)	464523.41
3807181.91	2.88968	(09123118)		
464543.41	3807181.91	2.91744	(09123118)	464563.41
3807181.91	2.94401	(09123118)		
464583.41	3807181.91	2.96824	(09123118)	464603.41
3807181.91	3.00278	(09123118)		
464623.41	3807181.91	3.08278	(09031218)	464643.41
3807181.91	3.15463	(09031218)		

464663.41	3807181.91	3.23892	(09031218)	464683.41
3807181.91	3.32132	(09031218)		
464703.41	3807181.91	3.37197	(09031218)	464723.41
3807181.91	3.42674	(09031218)		
464743.41	3807181.91	3.47972	(09031218)	464763.41
3807181.91	3.52557	(09031218)		
464783.41	3807181.91	3.55529	(09031218)	464803.41
3807181.91	3.57790	(09031218)		
464823.41	3807181.91	3.60926	(09031218)	464843.41
3807181.91	3.62587	(09031218)		
464863.41	3807181.91	3.63597	(09031218)	464883.41
3807181.91	3.65504	(09031218)		
464903.41	3807181.91	3.67223	(09031218)	464923.41
3807181.91	3.68713	(09031218)		
464503.41	3807201.91	2.89569	(09123118)	464523.41
3807201.91	2.90742	(09123118)		
464543.41	3807201.91	2.94073	(09123118)	464563.41
3807201.91	2.97897	(09123118)		
464583.41	3807201.91	2.99338	(09123118)	464603.41
3807201.91	3.03722	(09031218)		
464623.41	3807201.91	3.13215	(09031218)	464643.41
3807201.91	3.20640	(09031218)		
464663.41	3807201.91	3.28617	(09031218)	464683.41
3807201.91	3.36170	(09031218)		
464703.41	3807201.91	3.41513	(09031218)	464723.41
3807201.91	3.47507	(09031218)		
464743.41	3807201.91	3.53006	(09031218)	464763.41
3807201.91	3.55805	(09031218)		
464783.41	3807201.91	3.58474	(09031218)	464803.41
3807201.91	3.61162	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 484

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3807201.91	3.64917	(09031218)	464843.41
3807201.91	3.67049	(09031218)		
464863.41	3807201.91	3.68136	(09031218)	464883.41
3807201.91	3.68501	(09031218)		
464903.41	3807201.91	3.70182	(09031218)	464923.41
3807201.91	3.72040	(09031218)		
464503.41	3807221.91	2.94649	(09032718)	464523.41
3807221.91	2.92021	(09123118)		
464543.41	3807221.91	2.95349	(09123118)	464563.41
3807221.91	2.99586	(09123118)		
464583.41	3807221.91	3.03331	(09123118)	464603.41
3807221.91	3.10277	(09031218)		
464623.41	3807221.91	3.18281	(09031218)	464643.41
3807221.91	3.27431	(09031218)		
464663.41	3807221.91	3.34429	(09031218)	464683.41
3807221.91	3.40347	(09031218)		
464703.41	3807221.91	3.47534	(09031218)	464723.41
3807221.91	3.52490	(09031218)		
464743.41	3807221.91	3.55941	(09031218)	464763.41
3807221.91	3.58461	(09031218)		
464783.41	3807221.91	3.62325	(09031218)	464803.41
3807221.91	3.66144	(09031218)		
464823.41	3807221.91	3.67653	(09031218)	464843.41
3807221.91	3.70287	(09031218)		
464863.41	3807221.91	3.72761	(09031218)	464883.41
3807221.91	3.72970	(09031218)		
464903.41	3807221.91	3.73317	(09031218)	464923.41
3807221.91	3.73952	(09031218)		
464503.41	3807241.91	3.00300	(09032718)	464523.41
3807241.91	2.95423	(09123118)		
464543.41	3807241.91	2.98135	(09123118)	464563.41
3807241.91	3.00919	(09123118)		
464583.41	3807241.91	3.06871	(09031218)	464603.41
3807241.91	3.15486	(09031218)		
464623.41	3807241.91	3.22906	(09031218)	464643.41
3807241.91	3.32198	(09031218)		
464663.41	3807241.91	3.39884	(09031218)	464683.41
3807241.91	3.46324	(09031218)		
464703.41	3807241.91	3.51990	(09031218)	464723.41
3807241.91	3.55925	(09031218)		
464743.41	3807241.91	3.59039	(09031218)	464763.41

3807241.91	3.63003	(09031218)		
464783.41	3807241.91	3.66336	(09031218)	464803.41
3807241.91	3.69139	(09031218)		
464823.41	3807241.91	3.71650	(09031218)	464843.41
3807241.91	3.73690	(09031218)		
464863.41	3807241.91	3.75114	(09031218)	464883.41
3807241.91	3.75227	(09031218)		
464903.41	3807241.91	3.76186	(09031218)	464923.41
3807241.91	3.77398	(09031218)		
464503.41	3807261.91	3.05936	(09032718)	464523.41
3807261.91	2.98665	(09123118)		
464543.41	3807261.91	3.00798	(09123118)	464563.41
3807261.91	3.02198	(09123118)		
464583.41	3807261.91	3.11957	(09031218)	464603.41
3807261.91	3.20659	(09031218)		
464623.41	3807261.91	3.28174	(09031218)	464643.41
3807261.91	3.36549	(09031218)		
464663.41	3807261.91	3.44767	(09031218)	464683.41
3807261.91	3.51943	(09031218)		
464703.41	3807261.91	3.55746	(09031218)	464723.41
3807261.91	3.59334	(09031218)		
464743.41	3807261.91	3.62867	(09031218)	464763.41
3807261.91	3.67465	(09031218)		
464783.41	3807261.91	3.70271	(09031218)	464803.41
3807261.91	3.72298	(09031218)		
464823.41	3807261.91	3.75444	(09031218)	464843.41
3807261.91	3.77041	(09031218)		
464863.41	3807261.91	3.77689	(09031218)	464883.41
3807261.91	3.77715	(09031218)		
464903.41	3807261.91	3.79430	(09031218)	464923.41
3807261.91	3.81319	(09031218)		
464503.41	3807281.91	3.11366	(09032718)	464523.41
3807281.91	3.00001	(09123118)		
464543.41	3807281.91	3.02111	(09123118)	464563.41
3807281.91	3.06314	(09031218)		
464583.41	3807281.91	3.16900	(09031218)	464603.41
3807281.91	3.26678	(09031218)		
464623.41	3807281.91	3.35289	(09031218)	464643.41
3807281.91	3.41292	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 485

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494

, L0006495	, L0006496	, L0006497	,			
	L0006498	, L0006499	, L0006500	, L0006501	, L0006502	
, L0006503	, L0006504	, L0006505	,			
	L0006506	, L0006507	, L0006508	, L0006509	, L0006510	
, L0006511	, L0006512	, L0006513	,			
	L0006514	, L0006515	, L0006516	, L0006517	, L0006518	
, L0006519	, L0006520	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464663.41	3807281.91	3.48499	(09031218)	464683.41
3807281.91	3.55394	(09031218)		
464703.41	3807281.91	3.58873	(09031218)	464723.41
3807281.91	3.63683	(09031218)		
464743.41	3807281.91	3.68393	(09031218)	464763.41
3807281.91	3.70580	(09031218)		
464783.41	3807281.91	3.73894	(09031218)	464803.41
3807281.91	3.77066	(09031218)		
464823.41	3807281.91	3.78010	(09031218)	464843.41
3807281.91	3.80128	(09031218)		
464863.41	3807281.91	3.82142	(09031218)	464883.41
3807281.91	3.82042	(09031218)		
464903.41	3807281.91	3.83586	(09031218)	464923.41
3807281.91	3.85302	(09031218)		
464503.41	3807301.91	3.19014	(09032718)	464523.41
3807301.91	3.02467	(09032718)		
464543.41	3807301.91	3.04716	(09123118)	464563.41
3807301.91	3.13431	(09031218)		
464583.41	3807301.91	3.22246	(09031218)	464603.41
3807301.91	3.31481	(09031218)		
464623.41	3807301.91	3.40094	(09031218)	464643.41
3807301.91	3.45312	(09031218)		
464663.41	3807301.91	3.52076	(09031218)	464683.41
3807301.91	3.58696	(09031218)		
464703.41	3807301.91	3.61861	(09031218)	464723.41
3807301.91	3.66723	(09031218)		
464743.41	3807301.91	3.71805	(09031218)	464763.41
3807301.91	3.75034	(09031218)		
464783.41	3807301.91	3.77686	(09031218)	464803.41
3807301.91	3.79594	(09031218)		
464823.41	3807301.91	3.79991	(09031218)	464843.41
3807301.91	3.82147	(09031218)		

464863.41	3807301.91	3.84658	(09031218)	464883.41
3807301.91	3.85853	(09031218)		
464903.41	3807301.91	3.86824	(09031218)	464923.41
3807301.91	3.87462	(09031218)		
464503.41	3807321.91	3.26518	(09032718)	464523.41
3807321.91	3.08607	(09032718)		
464543.41	3807321.91	3.10061	(09031218)	464563.41
3807321.91	3.20310	(09031218)		
464583.41	3807321.91	3.27377	(09031218)	464603.41
3807321.91	3.35848	(09031218)		
464623.41	3807321.91	3.44167	(09031218)	464643.41
3807321.91	3.49027	(09031218)		
464663.41	3807321.91	3.55500	(09031218)	464683.41
3807321.91	3.61956	(09031218)		
464703.41	3807321.91	3.65498	(09031218)	464723.41
3807321.91	3.69908	(09031218)		
464743.41	3807321.91	3.74472	(09031218)	464763.41
3807321.91	3.79070	(09031218)		
464783.41	3807321.91	3.80983	(09031218)	464803.41
3807321.91	3.81604	(09031218)		
464823.41	3807321.91	3.82477	(09031218)	464843.41
3807321.91	3.84746	(09031218)		
464863.41	3807321.91	3.87283	(09031218)	464883.41
3807321.91	3.89082	(09031218)		
464903.41	3807321.91	3.89441	(09031218)	464923.41
3807321.91	3.89245	(09031218)		
464503.41	3807341.91	3.32037	(09032718)	464523.41
3807341.91	3.14313	(09032718)		
464543.41	3807341.91	3.15227	(09031218)	464563.41
3807341.91	3.25193	(09031218)		
464583.41	3807341.91	3.31890	(09031218)	464603.41
3807341.91	3.40052	(09031218)		
464623.41	3807341.91	3.48078	(09031218)	464643.41
3807341.91	3.52585	(09031218)		
464663.41	3807341.91	3.58773	(09031218)	464683.41
3807341.91	3.65395	(09031218)		
464703.41	3807341.91	3.71026	(09031218)	464723.41
3807341.91	3.74345	(09031218)		
464743.41	3807341.91	3.76789	(09031218)	464763.41
3807341.91	3.81225	(09031218)		
464783.41	3807341.91	3.82982	(09031218)	464803.41
3807341.91	3.83848	(09031218)		
464823.41	3807341.91	3.86632	(09031218)	464843.41
3807341.91	3.89258	(09031218)		
464863.41	3807341.91	3.91299	(09031218)	464883.41
3807341.91	3.91337	(09031218)		
464903.41	3807341.91	3.91159	(09031218)	464923.41
3807341.91	3.91274	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 486

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464503.41	3807361.91	3.37855	(09032718)	464523.41
3807361.91	3.22029	(09032718)		
464543.41	3807361.91	3.21581	(09031218)	464563.41
3807361.91	3.29917	(09031218)		
464583.41	3807361.91	3.36240	(09031218)	464603.41
3807361.91	3.44093	(09031218)		
464623.41	3807361.91	3.52144	(09031218)	464643.41
3807361.91	3.58183	(09031218)		
464663.41	3807361.91	3.63463	(09031218)	464683.41
3807361.91	3.68336	(09031218)		
464703.41	3807361.91	3.74214	(09031218)	464723.41
3807361.91	3.78392	(09031218)		
464743.41	3807361.91	3.81424	(09031218)	464763.41
3807361.91	3.83899	(09031218)		
464783.41	3807361.91	3.86076	(09031218)	464803.41
3807361.91	3.88230	(09031218)		
464823.41	3807361.91	3.91148	(09031218)	464843.41
3807361.91	3.92745	(09031218)		
464863.41	3807361.91	3.93476	(09031218)	464883.41
3807361.91	3.93172	(09031218)		
464903.41	3807361.91	3.93756	(09031218)	464923.41
3807361.91	3.94669	(09031218)		
464503.41	3807381.91	3.44540	(09032718)	464523.41

3807381.91	3.29843	(09032718)		
464543.41	3807381.91	3.27722	(09031218)	464563.41
3807381.91	3.34577	(09031218)		
464583.41	3807381.91	3.41196	(09031218)	464603.41
3807381.91	3.48551	(09031218)		
464623.41	3807381.91	3.56009	(09031218)	464643.41
3807381.91	3.63493	(09031218)		
464663.41	3807381.91	3.68390	(09031218)	464683.41
3807381.91	3.72076	(09031218)		
464703.41	3807381.91	3.76978	(09031218)	464723.41
3807381.91	3.81841	(09031218)		
464743.41	3807381.91	3.85834	(09031218)	464763.41
3807381.91	3.87157	(09031218)		
464783.41	3807381.91	3.89504	(09031218)	464803.41
3807381.91	3.92135	(09031218)		
464823.41	3807381.91	3.94901	(09031218)	464843.41
3807381.91	3.95523	(09031218)		
464863.41	3807381.91	3.95289	(09031218)	464883.41
3807381.91	3.95479	(09031218)		
464903.41	3807381.91	3.96652	(09031218)	464923.41
3807381.91	3.97923	(09031218)		
464503.41	3807401.91	3.53131	(09032718)	464523.41
3807401.91	3.36426	(09032718)		
464543.41	3807401.91	3.32498	(09031218)	464563.41
3807401.91	3.39382	(09031218)		
464583.41	3807401.91	3.48031	(09031218)	464603.41
3807401.91	3.54280	(09031218)		
464623.41	3807401.91	3.59453	(09031218)	464643.41
3807401.91	3.66680	(09031218)		
464663.41	3807401.91	3.72960	(09031218)	464683.41
3807401.91	3.77967	(09031218)		
464703.41	3807401.91	3.80235	(09031218)	464723.41
3807401.91	3.84109	(09031218)		
464743.41	3807401.91	3.88355	(09031218)	464763.41
3807401.91	3.91733	(09031218)		
464783.41	3807401.91	3.93123	(09031218)	464803.41
3807401.91	3.93941	(09031218)		
464823.41	3807401.91	3.96670	(09031218)	464843.41
3807401.91	3.97277	(09031218)		
464863.41	3807401.91	3.97358	(09031218)	464883.41
3807401.91	3.99160	(09031218)		
464903.41	3807401.91	3.99731	(09031218)	464923.41
3807401.91	4.00096	(09031218)		
464503.41	3807421.91	3.59327	(09032718)	464523.41
3807421.91	3.42424	(09032718)		
464543.41	3807421.91	3.38323	(09031218)	464563.41
3807421.91	3.46144	(09031218)		
464583.41	3807421.91	3.53163	(09031218)	464603.41
3807421.91	3.59604	(09031218)		
464623.41	3807421.91	3.65378	(09031218)	464643.41


```

3807421.91      3.70399 (09031218)
      464663.41  3807421.91      3.76102 (09031218)      464683.41
3807421.91      3.81542 (09031218)
      464703.41  3807421.91      3.84986 (09031218)      464723.41
3807421.91      3.87834 (09031218)
      464743.41  3807421.91      3.90457 (09031218)      464763.41
3807421.91      3.94162 (09031218)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
***
16:42:19

```

PAGE 487

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
                        INCLUDING SOURCE(S):      L0006493      , L0006494
, L0006495      , L0006496      , L0006497      ,
      L0006498      , L0006499      , L0006500      , L0006501      , L0006502
, L0006503      , L0006504      , L0006505      ,
      L0006506      , L0006507      , L0006508      , L0006509      , L0006510
, L0006511      , L0006512      , L0006513      ,
      L0006514      , L0006515      , L0006516      , L0006517      , L0006518
, L0006519      , L0006520      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464783.41	3807421.91	3.96419	(09031218)	464803.41
3807421.91	3.97828	(09031218)		
464823.41	3807421.91	3.98945	(09031218)	464843.41
3807421.91	3.99996	(09031218)		
464863.41	3807421.91	4.00943	(09031218)	464883.41
3807421.91	4.01763	(09031218)		
464903.41	3807421.91	4.02636	(09031218)	464923.41
3807421.91	4.03519	(09031218)		
464503.41	3807441.91	3.64983	(09032718)	464523.41
3807441.91	3.49063	(09032718)		
464543.41	3807441.91	3.44467	(09031218)	464563.41
3807441.91	3.52656	(09031218)		
464583.41	3807441.91	3.58351	(09031218)	464603.41
3807441.91	3.64897	(09031218)		

464623.41	3807441.91	3.71076	(09031218)	464643.41
3807441.91	3.74744	(09031218)		
464663.41	3807441.91	3.79413	(09031218)	464683.41
3807441.91	3.84304	(09031218)		
464703.41	3807441.91	3.89290	(09031218)	464723.41
3807441.91	3.91816	(09031218)		
464743.41	3807441.91	3.93379	(09031218)	464763.41
3807441.91	3.96265	(09031218)		
464783.41	3807441.91	3.99227	(09031218)	464803.41
3807441.91	4.01450	(09031218)		
464823.41	3807441.91	4.01149	(09031218)	464843.41
3807441.91	4.02614	(09031218)		
464863.41	3807441.91	4.04288	(09031218)	464883.41
3807441.91	4.04007	(09031218)		
464903.41	3807441.91	4.05269	(09031218)	464923.41
3807441.91	4.06770	(09031218)		
464503.41	3807461.91	3.70947	(09032718)	464523.41
3807461.91	3.57771	(09032718)		
464543.41	3807461.91	3.50802	(09031218)	464563.41
3807461.91	3.57121	(09031218)		
464583.41	3807461.91	3.65022	(09031218)	464603.41
3807461.91	3.70391	(09031218)		
464623.41	3807461.91	3.74630	(09031218)	464643.41
3807461.91	3.80614	(09031218)		
464663.41	3807461.91	3.84112	(09031218)	464683.41
3807461.91	3.86689	(09031218)		
464703.41	3807461.91	3.91516	(09031218)	464723.41
3807461.91	3.95478	(09031218)		
464743.41	3807461.91	3.98340	(09031218)	464763.41
3807461.91	3.98879	(09031218)		
464783.41	3807461.91	4.01062	(09031218)	464803.41
3807461.91	4.03264	(09031218)		
464823.41	3807461.91	4.02966	(09031218)	464843.41
3807461.91	4.04462	(09031218)		
464863.41	3807461.91	4.06189	(09031218)	464883.41
3807461.91	4.05978	(09031218)		
464903.41	3807461.91	4.07326	(09031218)	464923.41
3807461.91	4.08925	(09031218)		
464503.41	3807481.91	3.76503	(09032718)	464523.41
3807481.91	3.64221	(09032718)		
464543.41	3807481.91	3.56739	(09031218)	464563.41
3807481.91	3.63709	(09031218)		
464583.41	3807481.91	3.69865	(09031218)	464603.41
3807481.91	3.75458	(09031218)		
464623.41	3807481.91	3.80405	(09031218)	464643.41
3807481.91	3.84625	(09031218)		
464663.41	3807481.91	3.88397	(09031218)	464683.41
3807481.91	3.91650	(09031218)		
464703.41	3807481.91	3.94331	(09031218)	464723.41
3807481.91	3.97830	(09031218)		

464743.41	3807481.91	4.00885	(09031218)	464763.41
3807481.91	4.00894	(09031218)		
464783.41	3807481.91	4.02899	(09031218)	464803.41
3807481.91	4.05097	(09031218)		
464823.41	3807481.91	4.04818	(09031218)	464843.41
3807481.91	4.06359	(09031218)		
464863.41	3807481.91	4.08359	(09031218)	464883.41
3807481.91	4.09365	(09031218)		
464903.41	3807481.91	4.10333	(09031218)	464923.41
3807481.91	4.11326	(09031218)		
464503.41	3807501.91	3.83102	(09032718)	464523.41
3807501.91	3.71238	(09032718)		
464543.41	3807501.91	3.62645	(09031218)	464563.41
3807501.91	3.70019	(09031218)		
464583.41	3807501.91	3.74774	(09031218)	464603.41
3807501.91	3.80498	(09031218)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 488

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494

, L0006495	, L0006496	, L0006497	,			
	L0006498	, L0006499	, L0006500	, L0006501	, L0006502	
, L0006503	, L0006504	, L0006505	,			
	L0006506	, L0006507	, L0006508	, L0006509	, L0006510	
, L0006511	, L0006512	, L0006513	,			
	L0006514	, L0006515	, L0006516	, L0006517	, L0006518	
, L0006519	, L0006520	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	3.85883	(09031218)	464643.41
3807501.91	3.88726	(09031218)		
464663.41	3807501.91	3.92670	(09031218)	464683.41
3807501.91	3.96381	(09031218)		
464703.41	3807501.91	3.97807	(09031218)	464723.41

3807501.91	4.00406 (09031218)		
464743.41	3807501.91	4.02905 (09031218)	464763.41
3807501.91	4.03491 (09031218)		
464783.41	3807501.91	4.05255 (09031218)	464803.41
3807501.91	4.07044 (09031218)		
464823.41	3807501.91	4.07331 (09031218)	464843.41
3807501.91	4.08732 (09031218)		
464863.41	3807501.91	4.10561 (09031218)	464883.41
3807501.91	4.12646 (09031218)		
464903.41	3807501.91	4.13309 (09031218)	464923.41
3807501.91	4.13789 (09031218)		
464503.41	3807521.91	3.92434 (09032718)	464523.41
3807521.91	3.80971 (09032718)		
464543.41	3807521.91	3.68756 (09031218)	464563.41
3807521.91	3.74136 (09031218)		
464583.41	3807521.91	3.81260 (09031218)	464603.41
3807521.91	3.85754 (09031218)		
464623.41	3807521.91	3.89145 (09031218)	464643.41
3807521.91	3.94400 (09031218)		
464663.41	3807521.91	3.97166 (09031218)	464683.41
3807521.91	3.99027 (09031218)		
464703.41	3807521.91	4.02766 (09031218)	464723.41
3807521.91	4.04322 (09031218)		
464743.41	3807521.91	4.05215 (09031218)	464763.41
3807521.91	4.07905 (09031218)		
464783.41	3807521.91	4.08808 (09031218)	464803.41
3807521.91	4.09287 (09031218)		
464823.41	3807521.91	4.11401 (09031218)	464843.41
3807521.91	4.12132 (09031218)		
464863.41	3807521.91	4.12664 (09031218)	464883.41
3807521.91	4.14848 (09031218)		
464903.41	3807521.91	4.15618 (09031218)	464923.41
3807521.91	4.16206 (09031218)		
464503.41	3807541.91	4.01466 (09032718)	464523.41
3807541.91	3.88375 (09032718)		
464543.41	3807541.91	3.74436 (09031218)	464563.41
3807541.91	3.80528 (09031218)		
464583.41	3807541.91	3.85814 (09031218)	464603.41
3807541.91	3.90570 (09031218)		
464623.41	3807541.91	3.94717 (09031218)	464643.41
3807541.91	3.98181 (09031218)		
464663.41	3807541.91	4.01256 (09031218)	464683.41
3807541.91	4.03877 (09031218)		
464703.41	3807541.91	4.05995 (09031218)	464723.41
3807541.91	4.07892 (09031218)		
464743.41	3807541.91	4.09516 (09031218)	464763.41
3807541.91	4.10834 (09031218)		
464783.41	3807541.91	4.11031 (09031218)	464803.41
3807541.91	4.11279 (09031218)		
464823.41	3807541.91	4.13801 (09031218)	464843.41

3807541.91	4.15343	(09031218)		
464863.41	3807541.91	4.16436	(09031218)	464883.41
3807541.91	4.17506	(09031218)		
464903.41	3807541.91	4.18698	(09031218)	464923.41
3807541.91	4.19960	(09031218)		
464503.41	3807561.91	4.09609	(09032718)	464523.41
3807561.91	3.95806	(09032718)		
464543.41	3807561.91	3.81092	(09032718)	464563.41
3807561.91	3.86622	(09031218)		
464583.41	3807561.91	3.90450	(09031218)	464603.41
3807561.91	3.95367	(09031218)		
464623.41	3807561.91	3.99984	(09031218)	464643.41
3807561.91	4.02070	(09031218)		
464663.41	3807561.91	4.05347	(09031218)	464683.41
3807561.91	4.08445	(09031218)		
464703.41	3807561.91	4.09356	(09031218)	464723.41
3807561.91	4.11491	(09031218)		
464743.41	3807561.91	4.13486	(09031218)	464763.41
3807561.91	4.13224	(09031218)		
464783.41	3807561.91	4.13385	(09031218)	464803.41
3807561.91	4.14048	(09031218)		
464823.41	3807561.91	4.16036	(09031218)	464843.41
3807561.91	4.18253	(09031218)		
464863.41	3807561.91	4.20055	(09031218)	464883.41
3807561.91	4.20191	(09031218)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 489

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
464903.41	3807561.91	4.21776 (09031218)	464923.41
3807561.91	4.23661 (09031218)		
464503.41	3807581.91	4.15542 (09032718)	464523.41
3807581.91	4.04968 (09032718)		
464543.41	3807581.91	3.89658 (09032718)	464563.41
3807581.91	3.90401 (09031218)		
464583.41	3807581.91	3.96742 (09031218)	464603.41
3807581.91	4.00396 (09031218)		
464623.41	3807581.91	4.02998 (09031218)	464643.41
3807581.91	4.07560 (09031218)		
464663.41	3807581.91	4.09674 (09031218)	464683.41
3807581.91	4.10971 (09031218)		
464703.41	3807581.91	4.14179 (09031218)	464723.41
3807581.91	4.15323 (09031218)		
464743.41	3807581.91	4.15432 (09031218)	464763.41
3807581.91	4.15187 (09031218)		
464783.41	3807581.91	4.16709 (09031218)	464803.41
3807581.91	4.18544 (09031218)		
464823.41	3807581.91	4.18769 (09031218)	464843.41
3807581.91	4.20509 (09031218)		
464863.41	3807581.91	4.22423 (09031218)	464883.41
3807581.91	4.22671 (09031218)		
464903.41	3807581.91	4.24377 (09031218)	464923.41
3807581.91	4.26578 (09031218)		
464503.41	3807601.91	4.24421 (09032718)	464523.41
3807601.91	4.14846 (09032718)		
464543.41	3807601.91	3.99702 (09032718)	464563.41
3807601.91	3.96590 (09031218)		
464583.41	3807601.91	4.01027 (09031218)	464603.41
3807601.91	4.04982 (09031218)		
464623.41	3807601.91	4.08379 (09031218)	464643.41
3807601.91	4.11154 (09031218)		
464663.41	3807601.91	4.13609 (09031218)	464683.41
3807601.91	4.15682 (09031218)		
464703.41	3807601.91	4.17334 (09031218)	464723.41
3807601.91	4.17648 (09031218)		
464743.41	3807601.91	4.17699 (09031218)	464763.41
3807601.91	4.19075 (09031218)		
464783.41	3807601.91	4.20277 (09031218)	464803.41
3807601.91	4.21406 (09031218)		
464823.41	3807601.91	4.22653 (09031218)	464843.41
3807601.91	4.23853 (09031218)		
464863.41	3807601.91	4.25076 (09031218)	464883.41
3807601.91	4.26459 (09031218)		
464903.41	3807601.91	4.27858 (09031218)	464923.41
3807601.91	4.29432 (09031218)		

464503.41	3807621.91	4.33955	(09032718)	464523.41
3807621.91	4.24068	(09032718)		
464543.41	3807621.91	4.09065	(09032718)	464563.41
3807621.91	4.02464	(09031218)		
464583.41	3807621.91	4.05412	(09031218)	464603.41
3807621.91	4.09560	(09031218)		
464623.41	3807621.91	4.13454	(09031218)	464643.41
3807621.91	4.14877	(09031218)		
464663.41	3807621.91	4.17561	(09031218)	464683.41
3807621.91	4.20016	(09031218)		
464703.41	3807621.91	4.19863	(09031218)	464723.41
3807621.91	4.20096	(09031218)		
464743.41	3807621.91	4.20816	(09031218)	464763.41
3807621.91	4.22965	(09031218)		
464783.41	3807621.91	4.23872	(09031218)	464803.41
3807621.91	4.24531	(09031218)		
464823.41	3807621.91	4.26449	(09031218)	464843.41
3807621.91	4.27458	(09031218)		
464863.41	3807621.91	4.28351	(09031218)	464883.41
3807621.91	4.30290	(09031218)		
464903.41	3807621.91	4.31567	(09031218)	464923.41
3807621.91	4.32790	(09031218)		
464503.41	3807641.91	4.43241	(09032718)	464523.41
3807641.91	4.31018	(09032718)		
464543.41	3807641.91	4.15530	(09032718)	464563.41
3807641.91	4.05939	(09031218)		
464583.41	3807641.91	4.11511	(09031218)	464603.41
3807641.91	4.14386	(09031218)		
464623.41	3807641.91	4.16282	(09031218)	464643.41
3807641.91	4.20200	(09031218)		
464663.41	3807641.91	4.21759	(09031218)	464683.41
3807641.91	4.22068	(09031218)		
464703.41	3807641.91	4.21889	(09031218)	464723.41
3807641.91	4.23613	(09031218)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 490

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,

L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464743.41	3807641.91	4.25624	(09031218)	464763.41
3807641.91	4.25751	(09031218)		
464783.41	3807641.91	4.27302	(09031218)	464803.41
3807641.91	4.29054	(09031218)		
464823.41	3807641.91	4.29399	(09031218)	464843.41
3807641.91	4.30963	(09031218)		
464863.41	3807641.91	4.32743	(09031218)	464883.41
3807641.91	4.33496	(09031218)		
464903.41	3807641.91	4.35226	(09031218)	464923.41
3807641.91	4.37137	(09031218)		
464503.41	3807661.91	4.53003	(09032718)	464523.41
3807661.91	4.40669	(09032718)		
464543.41	3807661.91	4.25401	(09032718)	464563.41
3807661.91	4.11928	(09031218)		
464583.41	3807661.91	4.15562	(09031218)	464603.41
3807661.91	4.18775	(09031218)		
464623.41	3807661.91	4.21493	(09031218)	464643.41
3807661.91	4.23664	(09031218)		
464663.41	3807661.91	4.25590	(09031218)	464683.41
3807661.91	4.26954	(09031218)		
464703.41	3807661.91	4.26663	(09031218)	464723.41
3807661.91	4.27387	(09031218)		
464743.41	3807661.91	4.28569	(09031218)	464763.41
3807661.91	4.29824	(09031218)		
464783.41	3807661.91	4.30976	(09031218)	464803.41
3807661.91	4.32114	(09031218)		
464823.41	3807661.91	4.33404	(09031218)	464843.41
3807661.91	4.34692	(09031218)		
464863.41	3807661.91	4.36033	(09031218)	464883.41
3807661.91	4.37540	(09031218)		
464903.41	3807661.91	4.39078	(09031218)	464923.41
3807661.91	4.40677	(09031218)		
464503.41	3807681.91	4.62980	(09032718)	464523.41
3807681.91	4.51144	(09032718)		
464543.41	3807681.91	4.36296	(09032718)	464563.41
3807681.91	4.18772	(09031218)		
464583.41	3807681.91	4.20058	(09031218)	464603.41

3807681.91	4.23171	(09031218)		
464623.41	3807681.91	4.26405	(09031218)	464643.41
3807681.91	4.27277	(09031218)		
464663.41	3807681.91	4.29456	(09031218)	464683.41
3807681.91	4.31576	(09031218)		
464703.41	3807681.91	4.31825	(09031218)	464723.41
3807681.91	4.31686	(09031218)		
464743.41	3807681.91	4.31792	(09031218)	464763.41
3807681.91	4.33785	(09031218)		
464783.41	3807681.91	4.34695	(09031218)	464803.41
3807681.91	4.35438	(09031218)		
464823.41	3807681.91	4.37345	(09031218)	464843.41
3807681.91	4.38484	(09031218)		
464863.41	3807681.91	4.39559	(09031218)	464883.41
3807681.91	4.41554	(09031218)		
464903.41	3807681.91	4.43001	(09031218)	464923.41
3807681.91	4.44417	(09031218)		
464523.41	3807701.91	4.61649	(09032718)	464543.41
3807701.91	4.47252	(09032718)		
464563.41	3807701.91	4.29890	(09032718)	464583.41
3807701.91	4.26802	(09031218)		
464603.41	3807701.91	4.27827	(09031218)	464623.41
3807701.91	4.29121	(09031218)		
464643.41	3807701.91	4.32460	(09031218)	464663.41
3807701.91	4.33576	(09031218)		
464683.41	3807701.91	4.34100	(09031218)	464703.41
3807701.91	4.36483	(09031218)		
464723.41	3807701.91	4.36849	(09031218)	464743.41
3807701.91	4.36593	(09031218)		
464763.41	3807701.91	4.36765	(09031218)	464783.41
3807701.91	4.38287	(09031218)		
464803.41	3807701.91	4.40023	(09031218)	464823.41
3807701.91	4.40566	(09031218)		
464843.41	3807701.91	4.42211	(09031218)	464863.41
3807701.91	4.44058	(09031218)		
464883.41	3807701.91	4.45061	(09031218)	464903.41
3807701.91	4.46900	(09031218)		
464923.41	3807701.91	4.48888	(09031218)	464543.41
3807721.91	4.56750	(09032718)		
464563.41	3807721.91	4.37867	(09032718)	464583.41
3807721.91	4.30158	(09031218)		
464603.41	3807721.91	4.30577	(09031218)	464623.41
3807721.91	4.31398	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
464643.41	3807721.91	4.35190 (09031218)	464663.41
3807721.91	4.37364 (09031218)		
464683.41	3807721.91	4.38653 (09031218)	464703.41
3807721.91	4.39698 (09031218)		
464723.41	3807721.91	4.39732 (09031218)	464743.41
3807721.91	4.39706 (09031218)		
464763.41	3807721.91	4.40933 (09031218)	464783.41
3807721.91	4.42118 (09031218)		
464803.41	3807721.91	4.43338 (09031218)	464823.41
3807721.91	4.44729 (09031218)		
464843.41	3807721.91	4.46150 (09031218)	464863.41
3807721.91	4.47642 (09031218)		
464883.41	3807721.91	4.49291 (09031218)	464903.41
3807721.91	4.50979 (09031218)		
464923.41	3807721.91	4.52723 (09031218)	464943.41
3807721.91	4.54571 (09031218)		
464963.41	3807721.91	4.56429 (09031218)	464983.41
3807721.91	4.58300 (09031218)		
465003.41	3807721.91	4.60213 (09031218)	465023.41
3807721.91	4.62098 (09031218)		
465043.41	3807721.91	4.63957 (09031218)	465063.41
3807721.91	4.65808 (09031218)		
465083.41	3807721.91	4.67604 (09031218)	465103.41
3807721.91	4.69315 (09031218)		
465123.41	3807721.91	4.70791 (09031218)	465143.41
3807721.91	4.72387 (09031218)		
465163.41	3807721.91	4.73978 (09031218)	465183.41
3807721.91	4.75233 (09031218)		

465203.41	3807721.91	4.76644	(09031218)	465223.41
3807721.91	4.78154	(09031218)		
465243.41	3807721.91	4.79683	(09031218)	465263.41
3807721.91	4.81183	(09031218)		
465283.41	3807721.91	4.82604	(09031218)	465303.41
3807721.91	4.83672	(09031218)		
465323.41	3807721.91	4.85084	(09031218)	465343.41
3807721.91	4.86607	(09031218)		
465363.41	3807721.91	4.87660	(09031218)	465383.41
3807721.91	4.89095	(09031218)		
464543.41	3807741.91	4.68669	(09032718)	464563.41
3807741.91	4.47432	(09032718)		
464583.41	3807741.91	4.34104	(09031218)	464603.41
3807741.91	4.34108	(09031218)		
464623.41	3807741.91	4.34809	(09031218)	464643.41
3807741.91	4.38490	(09031218)		
464663.41	3807741.91	4.41207	(09031218)	464683.41
3807741.91	4.42886	(09031218)		
464703.41	3807741.91	4.42427	(09031218)	464723.41
3807741.91	4.42482	(09031218)		
464743.41	3807741.91	4.43103	(09031218)	464763.41
3807741.91	4.45016	(09031218)		
464783.41	3807741.91	4.46011	(09031218)	464803.41
3807741.91	4.46911	(09031218)		
464823.41	3807741.91	4.48851	(09031218)	464843.41
3807741.91	4.49949	(09031218)		
464863.41	3807741.91	4.51050	(09031218)	464883.41
3807741.91	4.53438	(09031218)		
464903.41	3807741.91	4.54985	(09031218)	464923.41
3807741.91	4.56457	(09031218)		
464943.41	3807741.91	4.58828	(09031218)	464963.41
3807741.91	4.60585	(09031218)		
464983.41	3807741.91	4.62254	(09031218)	465003.41
3807741.91	4.64522	(09031218)		
465023.41	3807741.91	4.66396	(09031218)	465043.41
3807741.91	4.68170	(09031218)		
465063.41	3807741.91	4.70130	(09031218)	465083.41
3807741.91	4.71833	(09031218)		
465103.41	3807741.91	4.73373	(09031218)	465123.41
3807741.91	4.74913	(09031218)		
465143.41	3807741.91	4.76639	(09031218)	465163.41
3807741.91	4.78342	(09031218)		
465183.41	3807741.91	4.79756	(09031218)	465203.41
3807741.91	4.81028	(09031218)		
465223.41	3807741.91	4.82265	(09031218)	465243.41
3807741.91	4.83997	(09031218)		
465263.41	3807741.91	4.85325	(09031218)	465283.41
3807741.91	4.86425	(09031218)		
465303.41	3807741.91	4.87654	(09031218)	465323.41
3807741.91	4.89349	(09031218)		

465343.41 3807741.91 4.91149 (09031218) 465363.41
 3807741.91 4.92489 (09031218)
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 492

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465383.41	3807741.91	4.93697	(09031218)	464543.41
3807761.91	4.87140	(09032718)		
464563.41	3807761.91	4.63229	(09032718)	464583.41
3807761.91	4.41596	(09031218)		
464603.41	3807761.91	4.40437	(09031218)	464623.41
3807761.91	4.40979	(09031218)		
464643.41	3807761.91	4.44351	(09031218)	464663.41
3807761.91	4.45306	(09031218)		
464683.41	3807761.91	4.45166	(09031218)	464703.41
3807761.91	4.44788	(09031218)		
464723.41	3807761.91	4.46196	(09031218)	464743.41
3807761.91	4.47935	(09031218)		
464763.41	3807761.91	4.48254	(09031218)	464783.41
3807761.91	4.49815	(09031218)		
464803.41	3807761.91	4.51589	(09031218)	464823.41
3807761.91	4.52387	(09031218)		
464843.41	3807761.91	4.53238	(09031218)	464863.41
3807761.91	4.54463	(09031218)		
464883.41	3807761.91	4.56997	(09031218)	464903.41

3807761.91	4.58653 (09031218)		
464923.41	3807761.91	4.60207 (09031218)	464943.41
3807761.91	4.62699 (09031218)		
464963.41	3807761.91	4.64520 (09031218)	464983.41
3807761.91	4.66222 (09031218)		
465003.41	3807761.91	4.68582 (09031218)	465023.41
3807761.91	4.70723 (09031218)		
465043.41	3807761.91	4.72671 (09031218)	465063.41
3807761.91	4.74369 (09031218)		
465083.41	3807761.91	4.75958 (09031218)	465103.41
3807761.91	4.77514 (09031218)		
465123.41	3807761.91	4.79400 (09031218)	465143.41
3807761.91	4.80980 (09031218)		
465163.41	3807761.91	4.82449 (09031218)	465183.41
3807761.91	4.84176 (09031218)		
465203.41	3807761.91	4.85597 (09031218)	465223.41
3807761.91	4.86837 (09031218)		
465243.41	3807761.91	4.88076 (09031218)	465263.41
3807761.91	4.89187 (09031218)		
465283.41	3807761.91	4.90358 (09031218)	465303.41
3807761.91	4.92286 (09031218)		
465323.41	3807761.91	4.93758 (09031218)	465343.41
3807761.91	4.95140 (09031218)		
465363.41	3807761.91	4.97170 (09031218)	465383.41
3807761.91	4.98647 (09031218)		
464543.41	3807781.91	5.07054 (09032718)	464563.41
3807781.91	4.83209 (09032718)		
464583.41	3807781.91	4.59812 (09032718)	464603.41
3807781.91	4.51459 (09031218)		
464623.41	3807781.91	4.49293 (09031218)	464643.41
3807781.91	4.48496 (09031218)		
464663.41	3807781.91	4.49117 (09031218)	464683.41
3807781.91	4.49958 (09031218)		
464703.41	3807781.91	4.49555 (09031218)	464723.41
3807781.91	4.50169 (09031218)		
464743.41	3807781.91	4.51286 (09031218)	464763.41
3807781.91	4.52564 (09031218)		
464783.41	3807781.91	4.53851 (09031218)	464803.41
3807781.91	4.55050 (09031218)		
464823.41	3807781.91	4.55747 (09031218)	464843.41
3807781.91	4.57229 (09031218)		
464863.41	3807781.91	4.59049 (09031218)	464883.41
3807781.91	4.60901 (09031218)		
464903.41	3807781.91	4.62851 (09031218)	464923.41
3807781.91	4.64842 (09031218)		
464943.41	3807781.91	4.66827 (09031218)	464963.41
3807781.91	4.68849 (09031218)		
464983.41	3807781.91	4.70860 (09031218)	465003.41
3807781.91	4.72827 (09031218)		
465023.41	3807781.91	4.74958 (09031218)	465043.41

3807781.91	4.76972	(09031218)		
465063.41	3807781.91	4.78594	(09031218)	465083.41
3807781.91	4.80310	(09031218)		
465103.41	3807781.91	4.82044	(09031218)	465123.41
3807781.91	4.83707	(09031218)		
465143.41	3807781.91	4.85330	(09031218)	465163.41
3807781.91	4.86908	(09031218)		
465183.41	3807781.91	4.88436	(09031218)	465203.41
3807781.91	4.89780	(09031218)		
465223.41	3807781.91	4.91024	(09031218)	465243.41
3807781.91	4.92541	(09031218)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 493

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3807781.91	4.93813	(09031218)	465283.41
3807781.91	4.94972	(09031218)		
465303.41	3807781.91	4.96524	(09031218)	465323.41
3807781.91	4.98145	(09031218)		
465343.41	3807781.91	4.99807	(09031218)	465363.41
3807781.91	5.01476	(09031218)		
465383.41	3807781.91	5.02850	(09031218)	464543.41
3807801.91	5.26004	(09032718)		
464563.41	3807801.91	5.03782	(09032718)	464583.41
3807801.91	4.80098	(09032718)		

464603.41	3807801.91	4.61652	(09031218)	464623.41
3807801.91	4.56893	(09031218)		
464643.41	3807801.91	4.52890	(09031218)	464663.41
3807801.91	4.53002	(09031218)		
464683.41	3807801.91	4.54448	(09031218)	464703.41
3807801.91	4.54047	(09031218)		
464723.41	3807801.91	4.54195	(09031218)	464743.41
3807801.91	4.54918	(09031218)		
464763.41	3807801.91	4.56814	(09031218)	464783.41
3807801.91	4.57714	(09031218)		
464803.41	3807801.91	4.58380	(09031218)	464823.41
3807801.91	4.59540	(09031218)		
464843.41	3807801.91	4.61511	(09031218)	464863.41
3807801.91	4.63617	(09031218)		
464883.41	3807801.91	4.65165	(09031218)	464903.41
3807801.91	4.67284	(09031218)		
464923.41	3807801.91	4.69472	(09031218)	464943.41
3807801.91	4.71232	(09031218)		
464963.41	3807801.91	4.73362	(09031218)	464983.41
3807801.91	4.75500	(09031218)		
465003.41	3807801.91	4.77285	(09031218)	465023.41
3807801.91	4.79299	(09031218)		
465043.41	3807801.91	4.81278	(09031218)	465063.41
3807801.91	4.82957	(09031218)		
465083.41	3807801.91	4.84784	(09031218)	465103.41
3807801.91	4.86567	(09031218)		
465123.41	3807801.91	4.88095	(09031218)	465143.41
3807801.91	4.89743	(09031218)		
465163.41	3807801.91	4.91354	(09031218)	465183.41
3807801.91	4.92671	(09031218)		
465203.41	3807801.91	4.93964	(09031218)	465223.41
3807801.91	4.95323	(09031218)		
465243.41	3807801.91	4.97021	(09031218)	465263.41
3807801.91	4.98391	(09031218)		
465283.41	3807801.91	4.99571	(09031218)	465303.41
3807801.91	5.00877	(09031218)		
465323.41	3807801.91	5.02622	(09031218)	465343.41
3807801.91	5.04436	(09031218)		
465363.41	3807801.91	5.05683	(09031218)	465383.41
3807801.91	5.07039	(09031218)		
464543.41	3807821.91	5.42572	(09032718)	464563.41
3807821.91	5.23184	(09032718)		
464583.41	3807821.91	4.97770	(09032718)	464603.41
3807821.91	4.68811	(09031218)		
464623.41	3807821.91	4.62446	(09031218)	464643.41
3807821.91	4.58461	(09031218)		
464663.41	3807821.91	4.57143	(09031218)	464683.41
3807821.91	4.56988	(09031218)		
464703.41	3807821.91	4.56713	(09031218)	464723.41
3807821.91	4.58102	(09031218)		

464743.41	3807821.91	4.59820	(09031218)	464763.41
3807821.91	4.60371	(09031218)		
464783.41	3807821.91	4.60981	(09031218)	464803.41
3807821.91	4.62003	(09031218)		
464823.41	3807821.91	4.64351	(09031218)	464843.41
3807821.91	4.65992	(09031218)		
464863.41	3807821.91	4.67594	(09031218)	464883.41
3807821.91	4.69996	(09031218)		
464903.41	3807821.91	4.71878	(09031218)	464923.41
3807821.91	4.73703	(09031218)		
464943.41	3807821.91	4.76057	(09031218)	464963.41
3807821.91	4.78006	(09031218)		
464983.41	3807821.91	4.79864	(09031218)	465003.41
3807821.91	4.82060	(09031218)		
465023.41	3807821.91	4.83923	(09031218)	465043.41
3807821.91	4.85674	(09031218)		
465063.41	3807821.91	4.87648	(09031218)	465083.41
3807821.91	4.89347	(09031218)		
465103.41	3807821.91	4.90935	(09031218)	465123.41
3807821.91	4.92699	(09031218)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 494

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807821.91	4.94238	(09031218)	465163.41

3807821.91	4.95622 (09031218)		
465183.41	3807821.91	4.96853 (09031218)	465203.41
3807821.91	4.98403 (09031218)		
465223.41	3807821.91	5.00034 (09031218)	465243.41
3807821.91	5.01318 (09031218)		
465263.41	3807821.91	5.02500 (09031218)	465283.41
3807821.91	5.03745 (09031218)		
465303.41	3807821.91	5.05691 (09031218)	465323.41
3807821.91	5.07239 (09031218)		
465343.41	3807821.91	5.08573 (09031218)	465363.41
3807821.91	5.09780 (09031218)		
465383.41	3807821.91	5.11647 (09031218)	464543.41
3807841.91	5.60514 (09032718)		
464563.41	3807841.91	5.43954 (09032718)	464583.41
3807841.91	5.17986 (09032718)		
464603.41	3807841.91	4.87334 (09032718)	464623.41
3807841.91	4.70019 (09031218)		
464643.41	3807841.91	4.66166 (09031218)	464663.41
3807841.91	4.63520 (09031218)		
464683.41	3807841.91	4.61802 (09031218)	464723.41
3807841.91	4.62261 (09031218)		
464743.41	3807841.91	4.63287 (09031218)	464763.41
3807841.91	4.63713 (09031218)		
464783.41	3807841.91	4.65045 (09031218)	464803.41
3807841.91	4.66769 (09031218)		
464823.41	3807841.91	4.68541 (09031218)	464843.41
3807841.91	4.70445 (09031218)		
464863.41	3807841.91	4.72417 (09031218)	464883.41
3807841.91	4.74412 (09031218)		
464903.41	3807841.91	4.76474 (09031218)	464923.41
3807841.91	4.78551 (09031218)		
464943.41	3807841.91	4.80606 (09031218)	464963.41
3807841.91	4.82663 (09031218)		
464983.41	3807841.91	4.84686 (09031218)	465003.41
3807841.91	4.86646 (09031218)		
465023.41	3807841.91	4.88566 (09031218)	465043.41
3807841.91	4.90423 (09031218)		
465063.41	3807841.91	4.92205 (09031218)	465083.41
3807841.91	4.93933 (09031218)		
465103.41	3807841.91	4.95599 (09031218)	465123.41
3807841.91	4.97199 (09031218)		
465143.41	3807841.91	4.98760 (09031218)	465163.41
3807841.91	5.00265 (09031218)		
465183.41	3807841.91	5.01563 (09031218)	465203.41
3807841.91	5.02953 (09031218)		
465223.41	3807841.91	5.04436 (09031218)	465243.41
3807841.91	5.05962 (09031218)		
465263.41	3807841.91	5.07300 (09031218)	465283.41
3807841.91	5.08552 (09031218)		
465303.41	3807841.91	5.10167 (09031218)	465323.41

3807841.91	5.11529	(09031218)		
465343.41	3807841.91	5.12835	(09031218)	465363.41
3807841.91	5.14636	(09031218)		
465383.41	3807841.91	5.16414	(09031218)	464503.41
3807861.91	5.89099	(09032718)		
464523.41	3807861.91	5.84486	(09032718)	464543.41
3807861.91	5.74981	(09032718)		
464563.41	3807861.91	5.60623	(09032718)	464583.41
3807861.91	5.37568	(09032718)		
464603.41	3807861.91	5.08004	(09032718)	464723.41
3807861.91	4.66201	(09031218)		
464743.41	3807861.91	4.66527	(09031218)	464763.41
3807861.91	4.67110	(09031218)		
464783.41	3807861.91	4.69155	(09031218)	464803.41
3807861.91	4.71484	(09031218)		
464823.41	3807861.91	4.72919	(09031218)	464843.41
3807861.91	4.75019	(09031218)		
464863.41	3807861.91	4.77219	(09031218)	464883.41
3807861.91	4.78984	(09031218)		
464903.41	3807861.91	4.81176	(09031218)	464923.41
3807861.91	4.83395	(09031218)		
464943.41	3807861.91	4.85282	(09031218)	464963.41
3807861.91	4.87410	(09031218)		
464983.41	3807861.91	4.89506	(09031218)	465003.41
3807861.91	4.91334	(09031218)		
465023.41	3807861.91	4.93284	(09031218)	465043.41
3807861.91	4.95175	(09031218)		
465063.41	3807861.91	4.96848	(09031218)	465083.41
3807861.91	4.98586	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 495

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

465103.41	3807861.91	5.00267	(09031218)	465123.41	
3807861.91	5.01777	(09031218)			
465143.41	3807861.91	5.03350	(09031218)	465163.41	
3807861.91	5.04898	(09031218)			
465183.41	3807861.91	5.06320	(09031218)	465203.41	
3807861.91	5.07649	(09031218)			
465223.41	3807861.91	5.08950	(09031218)	465243.41	
3807861.91	5.10631	(09031218)			
465263.41	3807861.91	5.12064	(09031218)	465283.41	
3807861.91	5.13354	(09031218)			
465303.41	3807861.91	5.14763	(09031218)	465323.41	
3807861.91	5.16076	(09031218)			
465343.41	3807861.91	5.17451	(09031218)	465363.41	
3807861.91	5.19557	(09031218)			
465383.41	3807861.91	5.21256	(09031218)	464503.41	
3807881.91	5.98010	(09032718)			
464523.41	3807881.91	5.93847	(09032718)	464543.41	
3807881.91	5.84960	(09032718)			
464723.41	3807881.91	4.69424	(09031218)	464743.41	
3807881.91	4.69913	(09031218)			
464763.41	3807881.91	4.70650	(09031218)	464783.41	
3807881.91	4.72858	(09031218)			
464803.41	3807881.91	4.75528	(09031218)	464823.41	
3807881.91	4.77931	(09031218)			
464843.41	3807881.91	4.79776	(09031218)	464863.41	
3807881.91	4.81594	(09031218)			
464883.41	3807881.91	4.84011	(09031218)	464903.41	
3807881.91	4.86024	(09031218)			
464923.41	3807881.91	4.87977	(09031218)	464943.41	
3807881.91	4.90279	(09031218)			
464963.41	3807881.91	4.92270	(09031218)	464983.41	
3807881.91	4.94169	(09031218)			
465003.41	3807881.91	4.96254	(09031218)	465023.41	
3807881.91	4.98095	(09031218)			
465043.41	3807881.91	4.99831	(09031218)	465063.41	
3807881.91	5.01669	(09031218)			
465083.41	3807881.91	5.03319	(09031218)	465103.41	
3807881.91	5.04874	(09031218)			
465123.41	3807881.91	5.06515	(09031218)	465143.41	
3807881.91	5.08019	(09031218)			
465163.41	3807881.91	5.09461	(09031218)	465183.41	
3807881.91	5.11013	(09031218)			

465203.41	3807881.91	5.12460	(09031218)	465223.41
3807881.91	5.13817	(09031218)		
465243.41	3807881.91	5.15173	(09031218)	465263.41
3807881.91	5.16455	(09031218)		
465283.41	3807881.91	5.17803	(09031218)	465303.41
3807881.91	5.19775	(09031218)		
465323.41	3807881.91	5.21336	(09031218)	465343.41
3807881.91	5.22716	(09031218)		
465363.41	3807881.91	5.24172	(09031218)	465383.41
3807881.91	5.26300	(09031218)		
464723.41	3807901.91	4.74619	(09031218)	464743.41
3807901.91	4.73635	(09031218)		
464763.41	3807901.91	4.75556	(09031218)	464783.41
3807901.91	4.77456	(09031218)		
464803.41	3807901.91	4.79561	(09031218)	464823.41
3807901.91	4.82277	(09031218)		
464843.41	3807901.91	4.84175	(09031218)	464863.41
3807901.91	4.85983	(09031218)		
464883.41	3807901.91	4.88623	(09031218)	464903.41
3807901.91	4.90899	(09031218)		
464923.41	3807901.91	4.93028	(09031218)	464943.41
3807901.91	4.95112	(09031218)		
464963.41	3807901.91	4.97006	(09031218)	464983.41
3807901.91	4.98842	(09031218)		
465003.41	3807901.91	5.01027	(09031218)	465023.41
3807901.91	5.02944	(09031218)		
465043.41	3807901.91	5.04732	(09031218)	465063.41
3807901.91	5.06443	(09031218)		
465083.41	3807901.91	5.08093	(09031218)	465103.41
3807901.91	5.09686	(09031218)		
465123.41	3807901.91	5.11227	(09031218)	465143.41
3807901.91	5.12735	(09031218)		
465163.41	3807901.91	5.14220	(09031218)	465183.41
3807901.91	5.15692	(09031218)		
465203.41	3807901.91	5.17104	(09031218)	465223.41
3807901.91	5.18461	(09031218)		
465243.41	3807901.91	5.20016	(09031218)	465263.41
3807901.91	5.21448	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 496

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,

	L0006498	,	L0006499	,	L0006500	,	L0006501	,	L0006502
, L0006503	, L0006504	,	L0006505	,					
	L0006506	,	L0006507	,	L0006508	,	L0006509	,	L0006510
, L0006511	, L0006512	,	L0006513	,					
	L0006514	,	L0006515	,	L0006516	,	L0006517	,	L0006518
, L0006519	, L0006520	,	. . .	,					

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
465283.41	3807901.91	5.22824	(09031218)	465303.41
3807901.91	5.24519	(09031218)		
465323.41	3807901.91	5.26383	(09031218)	465343.41
3807901.91	5.28421	(09031218)		
465363.41	3807901.91	5.29853	(09031218)	465383.41
3807901.91	5.31682	(09031218)		
464723.41	3807921.91	4.80541	(09031218)	464743.41
3807921.91	4.78556	(09031218)		
464763.41	3807921.91	4.80612	(09031218)	464783.41
3807921.91	4.82315	(09031218)		
464803.41	3807921.91	4.84110	(09031218)	464823.41
3807921.91	4.86655	(09031218)		
464843.41	3807921.91	4.88735	(09031218)	464863.41
3807921.91	4.90788	(09031218)		
464883.41	3807921.91	4.93468	(09031218)	464903.41
3807921.91	4.95878	(09031218)		
464923.41	3807921.91	4.98076	(09031218)	464943.41
3807921.91	4.99959	(09031218)		
464963.41	3807921.91	5.01832	(09031218)	464983.41
3807921.91	5.03747	(09031218)		
465003.41	3807921.91	5.05927	(09031218)	465023.41
3807921.91	5.07868	(09031218)		
465043.41	3807921.91	5.09648	(09031218)	465063.41
3807921.91	5.11297	(09031218)		
465083.41	3807921.91	5.12939	(09031218)	465103.41
3807921.91	5.14519	(09031218)		
465123.41	3807921.91	5.16017	(09031218)	465143.41
3807921.91	5.17521	(09031218)		
465163.41	3807921.91	5.19001	(09031218)	465183.41
3807921.91	5.20453	(09031218)		
465203.41	3807921.91	5.21845	(09031218)	465223.41
3807921.91	5.23218	(09031218)		
465243.41	3807921.91	5.24897	(09031218)	465263.41

3807921.91	5.26475	(09031218)		
465283.41	3807921.91	5.28106	(09031218)	465303.41
3807921.91	5.29545	(09031218)		
465323.41	3807921.91	5.31652	(09031218)	465343.41
3807921.91	5.33908	(09031218)		
465363.41	3807921.91	5.35415	(09031218)	465383.41
3807921.91	5.36926	(09031218)		
464723.41	3807941.91	4.86728	(09031218)	464743.41
3807941.91	4.85387	(09031218)		
464763.41	3807941.91	4.85357	(09031218)	464783.41
3807941.91	4.87172	(09031218)		
464803.41	3807941.91	4.89611	(09031218)	464823.41
3807941.91	4.91366	(09031218)		
464843.41	3807941.91	4.93763	(09031218)	464863.41
3807941.91	4.96349	(09031218)		
464883.41	3807941.91	4.98859	(09031218)	464903.41
3807941.91	5.00984	(09031218)		
464923.41	3807941.91	5.02954	(09031218)	464943.41
3807941.91	5.04801	(09031218)		
464963.41	3807941.91	5.06922	(09031218)	464983.41
3807941.91	5.09077	(09031218)		
465003.41	3807941.91	5.11074	(09031218)	465023.41
3807941.91	5.12871	(09031218)		
465043.41	3807941.91	5.14571	(09031218)	465063.41
3807941.91	5.16263	(09031218)		
465083.41	3807941.91	5.17859	(09031218)	465103.41
3807941.91	5.19384	(09031218)		
465123.41	3807941.91	5.20903	(09031218)	465143.41
3807941.91	5.22380	(09031218)		
465163.41	3807941.91	5.23830	(09031218)	465183.41
3807941.91	5.25305	(09031218)		
465203.41	3807941.91	5.26798	(09031218)	465223.41
3807941.91	5.28261	(09031218)		
465243.41	3807941.91	5.29722	(09031218)	465263.41
3807941.91	5.31613	(09031218)		
465283.41	3807941.91	5.33845	(09031218)	465303.41
3807941.91	5.35438	(09031218)		
465323.41	3807941.91	5.37144	(09031218)	465343.41
3807941.91	5.38725	(09031218)		
465363.41	3807941.91	5.40190	(09031218)	465383.41
3807941.91	5.41996	(09031218)		
465403.41	3807941.91	5.43733	(09031218)	465423.41
3807941.91	5.45018	(09031218)		
465443.41	3807941.91	5.46029	(09031218)	465463.41
3807941.91	5.46577	(09031218)		
465483.41	3807941.91	5.46987	(09031218)	465503.41
3807941.91	5.46889	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 497

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465523.41	3807941.91	5.46466	(09031218)	465543.41
3807941.91	5.45800	(09031218)		
465563.41	3807941.91	5.44132	(09031218)	465583.41
3807941.91	5.41634	(09031218)		
465603.41	3807941.91	5.38296	(09031218)	465623.41
3807941.91	5.34303	(09031218)		
465643.41	3807941.91	5.29408	(09031218)	465663.41
3807941.91	5.23396	(09031218)		
465683.41	3807941.91	5.16336	(09031218)	465703.41
3807941.91	5.13356	(09011918)		
464723.41	3807961.91	4.91830	(09031218)	464743.41
3807961.91	4.91548	(09031218)		
464763.41	3807961.91	4.91107	(09031218)	464783.41
3807961.91	4.92256	(09031218)		
464803.41	3807961.91	4.94426	(09031218)	464823.41
3807961.91	4.96718	(09031218)		
464843.41	3807961.91	4.98976	(09031218)	464863.41
3807961.91	5.01306	(09031218)		
464883.41	3807961.91	5.03878	(09031218)	464903.41
3807961.91	5.05993	(09031218)		
464923.41	3807961.91	5.07950	(09031218)	464943.41
3807961.91	5.10094	(09031218)		
464963.41	3807961.91	5.12133	(09031218)	464983.41
3807961.91	5.14123	(09031218)		

465003.41	3807961.91	5.16136	(09031218)	465023.41
3807961.91	5.17891	(09031218)		
465043.41	3807961.91	5.19515	(09031218)	465063.41
3807961.91	5.21261	(09031218)		
465083.41	3807961.91	5.22842	(09031218)	465103.41
3807961.91	5.24363	(09031218)		
465123.41	3807961.91	5.25847	(09031218)	465143.41
3807961.91	5.27308	(09031218)		
465163.41	3807961.91	5.28764	(09031218)	465183.41
3807961.91	5.30233	(09031218)		
465203.41	3807961.91	5.31835	(09031218)	465223.41
3807961.91	5.33689	(09031218)		
465243.41	3807961.91	5.35251	(09031218)	465263.41
3807961.91	5.37069	(09031218)		
465283.41	3807961.91	5.38940	(09031218)	465303.41
3807961.91	5.40535	(09031218)		
465323.41	3807961.91	5.42258	(09031218)	465343.41
3807961.91	5.44019	(09031218)		
465363.41	3807961.91	5.45572	(09031218)	465383.41
3807961.91	5.47193	(09031218)		
465403.41	3807961.91	5.48768	(09031218)	465423.41
3807961.91	5.50246	(09031218)		
465443.41	3807961.91	5.51253	(09031218)	465463.41
3807961.91	5.51379	(09031218)		
465483.41	3807961.91	5.51985	(09031218)	465503.41
3807961.91	5.51793	(09031218)		
465523.41	3807961.91	5.51013	(09031218)	465543.41
3807961.91	5.49811	(09031218)		
465563.41	3807961.91	5.47747	(09031218)	465583.41
3807961.91	5.44893	(09031218)		
465603.41	3807961.91	5.41360	(09031218)	465623.41
3807961.91	5.36959	(09031218)		
465643.41	3807961.91	5.31463	(09031218)	465663.41
3807961.91	5.24923	(09031218)		
465683.41	3807961.91	5.17313	(09031218)	465703.41
3807961.91	5.17536	(09011918)		
464743.41	3807981.91	4.96805	(09031218)	464763.41
3807981.91	4.97128	(09031218)		
464783.41	3807981.91	4.97835	(09031218)	464803.41
3807981.91	4.99507	(09031218)		
464823.41	3807981.91	5.02276	(09031218)	464843.41
3807981.91	5.04421	(09031218)		
464863.41	3807981.91	5.06469	(09031218)	464883.41
3807981.91	5.09065	(09031218)		
464903.41	3807981.91	5.11199	(09031218)	464923.41
3807981.91	5.13184	(09031218)		
464943.41	3807981.91	5.15435	(09031218)	464963.41
3807981.91	5.17419	(09031218)		
464983.41	3807981.91	5.19277	(09031218)	465003.41
3807981.91	5.21236	(09031218)		

465023.41	3807981.91	5.22971	(09031218)	465043.41
3807981.91	5.24589	(09031218)		
465063.41	3807981.91	5.26295	(09031218)	465083.41
3807981.91	5.27902	(09031218)		
465103.41	3807981.91	5.29378	(09031218)	465123.41
3807981.91	5.30863	(09031218)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 498

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494

, L0006495	, L0006496	, L0006497	,
	L0006498	, L0006499	, L0006500 , L0006501 , L0006502
, L0006503	, L0006504	, L0006505	,
	L0006506	, L0006507	, L0006508 , L0006509 , L0006510
, L0006511	, L0006512	, L0006513	,
	L0006514	, L0006515	, L0006516 , L0006517 , L0006518
, L0006519	, L0006520	, . . .	,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465143.41	3807981.91	5.32321	(09031218)	465163.41
3807981.91	5.33736	(09031218)		
465183.41	3807981.91	5.35246	(09031218)	465203.41
3807981.91	5.37167	(09031218)		
465223.41	3807981.91	5.39077	(09031218)	465243.41
3807981.91	5.40746	(09031218)		
465263.41	3807981.91	5.42371	(09031218)	465283.41
3807981.91	5.43969	(09031218)		
465303.41	3807981.91	5.45625	(09031218)	465323.41
3807981.91	5.47475	(09031218)		
465343.41	3807981.91	5.49306	(09031218)	465363.41
3807981.91	5.51091	(09031218)		
465383.41	3807981.91	5.52630	(09031218)	465403.41
3807981.91	5.54021	(09031218)		
465423.41	3807981.91	5.55373	(09031218)	465443.41

3807981.91	5.56302 (09031218)		
465463.41	3807981.91	5.56373 (09031218)	465483.41
3807981.91	5.56833 (09031218)		
465503.41	3807981.91	5.56470 (09031218)	465523.41
3807981.91	5.55437 (09031218)		
465543.41	3807981.91	5.53801 (09031218)	465563.41
3807981.91	5.51377 (09031218)		
465583.41	3807981.91	5.48181 (09031218)	465603.41
3807981.91	5.44362 (09031218)		
465623.41	3807981.91	5.39366 (09031218)	465643.41
3807981.91	5.33373 (09031218)		
465663.41	3807981.91	5.26227 (09031218)	465683.41
3807981.91	5.21704 (09011918)		
465703.41	3807981.91	5.21553 (09011918)	464763.41
3808001.91	5.02731 (09031218)		
464783.41	3808001.91	5.03918 (09031218)	464803.41
3808001.91	5.05332 (09031218)		
464823.41	3808001.91	5.07925 (09031218)	464843.41
3808001.91	5.10084 (09031218)		
464863.41	3808001.91	5.12202 (09031218)	464883.41
3808001.91	5.14611 (09031218)		
464903.41	3808001.91	5.16752 (09031218)	464923.41
3808001.91	5.18764 (09031218)		
464943.41	3808001.91	5.20704 (09031218)	464963.41
3808001.91	5.22757 (09031218)		
464983.41	3808001.91	5.24728 (09031218)	465003.41
3808001.91	5.26442 (09031218)		
465023.41	3808001.91	5.28216 (09031218)	465043.41
3808001.91	5.29919 (09031218)		
465063.41	3808001.91	5.31419 (09031218)	465083.41
3808001.91	5.33003 (09031218)		
465103.41	3808001.91	5.34522 (09031218)	465123.41
3808001.91	5.35902 (09031218)		
465143.41	3808001.91	5.37388 (09031218)	465163.41
3808001.91	5.38868 (09031218)		
465183.41	3808001.91	5.40815 (09031218)	465203.41
3808001.91	5.42668 (09031218)		
465223.41	3808001.91	5.44287 (09031218)	465243.41
3808001.91	5.45898 (09031218)		
465263.41	3808001.91	5.47473 (09031218)	465283.41
3808001.91	5.49094 (09031218)		
465303.41	3808001.91	5.51022 (09031218)	465323.41
3808001.91	5.52809 (09031218)		
465343.41	3808001.91	5.54664 (09031218)	465363.41
3808001.91	5.56412 (09031218)		
465383.41	3808001.91	5.57987 (09031218)	465403.41
3808001.91	5.59374 (09031218)		
465423.41	3808001.91	5.60503 (09031218)	465443.41
3808001.91	5.61289 (09031218)		
465463.41	3808001.91	5.61585 (09031218)	465483.41

3808001.91	5.61513	(09031218)		
465503.41	3808001.91	5.60845	(09031218)	465523.41
3808001.91	5.59593	(09031218)		
465543.41	3808001.91	5.57931	(09031218)	465563.41
3808001.91	5.55197	(09031218)		
465583.41	3808001.91	5.51595	(09031218)	465603.41
3808001.91	5.47092	(09031218)		
465623.41	3808001.91	5.41619	(09031218)	465643.41
3808001.91	5.35005	(09031218)		
465663.41	3808001.91	5.27474	(09031218)	465683.41
3808001.91	5.25838	(09011918)		
465703.41	3808001.91	5.25646	(09011918)	464763.41
3808021.91	5.05449	(09031218)		
464783.41	3808021.91	5.08982	(09031218)	464803.41
3808021.91	5.11423	(09031218)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 499

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	5.13520	(09031218)	464843.41
3808021.91	5.15662	(09031218)		
464863.41	3808021.91	5.17824	(09031218)	464883.41
3808021.91	5.20043	(09031218)		
464903.41	3808021.91	5.22216	(09031218)	464923.41
3808021.91	5.24317	(09031218)		

464943.41	3808021.91	5.26287	(09031218)	464963.41
3808021.91	5.28204	(09031218)		
464983.41	3808021.91	5.30073	(09031218)	465003.41
3808021.91	5.31865	(09031218)		
465023.41	3808021.91	5.33560	(09031218)	465043.41
3808021.91	5.35178	(09031218)		
465063.41	3808021.91	5.36738	(09031218)	465083.41
3808021.91	5.38238	(09031218)		
465103.41	3808021.91	5.39697	(09031218)	465123.41
3808021.91	5.41144	(09031218)		
465143.41	3808021.91	5.42584	(09031218)	465163.41
3808021.91	5.44051	(09031218)		
465183.41	3808021.91	5.46179	(09031218)	465203.41
3808021.91	5.47937	(09031218)		
465223.41	3808021.91	5.49532	(09031218)	465243.41
3808021.91	5.51160	(09031218)		
465263.41	3808021.91	5.52856	(09031218)	465283.41
3808021.91	5.54558	(09031218)		
465303.41	3808021.91	5.56382	(09031218)	465323.41
3808021.91	5.58328	(09031218)		
465343.41	3808021.91	5.60113	(09031218)	465363.41
3808021.91	5.61796	(09031218)		
465383.41	3808021.91	5.63345	(09031218)	465403.41
3808021.91	5.64671	(09031218)		
465423.41	3808021.91	5.65722	(09031218)	465443.41
3808021.91	5.66413	(09031218)		
465463.41	3808021.91	5.66517	(09031218)	465483.41
3808021.91	5.66358	(09031218)		
465503.41	3808021.91	5.65494	(09031218)	465523.41
3808021.91	5.63941	(09031218)		
465543.41	3808021.91	5.61793	(09031218)	465563.41
3808021.91	5.58665	(09031218)		
465583.41	3808021.91	5.54611	(09031218)	465603.41
3808021.91	5.49689	(09031218)		
465623.41	3808021.91	5.43697	(09031218)	465643.41
3808021.91	5.36628	(09031218)		
465663.41	3808021.91	5.30175	(09011918)	465683.41
3808021.91	5.30430	(09011918)		
465703.41	3808021.91	5.30412	(09011918)	464783.41
3808041.91	5.10517	(09031218)		
464803.41	3808041.91	5.15415	(09031218)	464823.41
3808041.91	5.18584	(09031218)		
464843.41	3808041.91	5.21097	(09031218)	464863.41
3808041.91	5.23398	(09031218)		
464883.41	3808041.91	5.25599	(09031218)	464903.41
3808041.91	5.27763	(09031218)		
464923.41	3808041.91	5.29831	(09031218)	464943.41
3808041.91	5.31851	(09031218)		
464963.41	3808041.91	5.33699	(09031218)	464983.41
3808041.91	5.35434	(09031218)		

465003.41	3808041.91	5.37322	(09031218)	465023.41
3808041.91	5.38980	(09031218)		
465043.41	3808041.91	5.40534	(09031218)	465063.41
3808041.91	5.42102	(09031218)		
465083.41	3808041.91	5.43570	(09031218)	465103.41
3808041.91	5.44984	(09031218)		
465123.41	3808041.91	5.46451	(09031218)	465143.41
3808041.91	5.47883	(09031218)		
465163.41	3808041.91	5.49438	(09031218)	465183.41
3808041.91	5.51631	(09031218)		
465203.41	3808041.91	5.53271	(09031218)	465223.41
3808041.91	5.54865	(09031218)		
465243.41	3808041.91	5.56498	(09031218)	465263.41
3808041.91	5.58357	(09031218)		
465283.41	3808041.91	5.60182	(09031218)	465303.41
3808041.91	5.61996	(09031218)		
465323.41	3808041.91	5.63840	(09031218)	465343.41
3808041.91	5.65592	(09031218)		
465363.41	3808041.91	5.67280	(09031218)	465383.41
3808041.91	5.68796	(09031218)		
465403.41	3808041.91	5.70057	(09031218)	465423.41
3808041.91	5.71038	(09031218)		
465443.41	3808041.91	5.71560	(09031218)	465463.41
3808041.91	5.71507	(09031218)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 500

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
-------------	-------------	------	------------	-------------

Y-COORD (M)	CONC	(YYMMDDHH)	
465483.41	3808041.91	5.71232	(09031218) 465503.41
3808041.91	5.70082	(09031218)	
465523.41	3808041.91	5.68229	(09031218) 465543.41
3808041.91	5.65594	(09031218)	
465563.41	3808041.91	5.62024	(09031218) 465583.41
3808041.91	5.57399	(09031218)	
465603.41	3808041.91	5.52046	(09031218) 465623.41
3808041.91	5.45637	(09031218)	
465643.41	3808041.91	5.38121	(09031218) 465663.41
3808041.91	5.34725	(09011918)	
465683.41	3808041.91	5.35081	(09011918) 465703.41
3808041.91	5.34922	(09011918)	
464803.41	3808061.91	5.17915	(09031218) 464823.41
3808061.91	5.22329	(09031218)	
464843.41	3808061.91	5.25976	(09031218) 464863.41
3808061.91	5.28885	(09031218)	
464883.41	3808061.91	5.31205	(09031218) 464903.41
3808061.91	5.33401	(09031218)	
464923.41	3808061.91	5.35484	(09031218) 464943.41
3808061.91	5.37411	(09031218)	
464963.41	3808061.91	5.39151	(09031218) 464983.41
3808061.91	5.40797	(09031218)	
465003.41	3808061.91	5.42750	(09031218) 465023.41
3808061.91	5.44472	(09031218)	
465043.41	3808061.91	5.46036	(09031218) 465063.41
3808061.91	5.47510	(09031218)	
465083.41	3808061.91	5.48978	(09031218) 465103.41
3808061.91	5.50406	(09031218)	
465123.41	3808061.91	5.51818	(09031218) 465143.41
3808061.91	5.53500	(09031218)	
465163.41	3808061.91	5.55510	(09031218) 465183.41
3808061.91	5.57144	(09031218)	
465203.41	3808061.91	5.58674	(09031218) 465223.41
3808061.91	5.60237	(09031218)	
465243.41	3808061.91	5.62007	(09031218) 465263.41
3808061.91	5.63859	(09031218)	
465283.41	3808061.91	5.65576	(09031218) 465303.41
3808061.91	5.67564	(09031218)	
465323.41	3808061.91	5.69450	(09031218) 465343.41
3808061.91	5.71234	(09031218)	
465363.41	3808061.91	5.72851	(09031218) 465383.41
3808061.91	5.74292	(09031218)	
465403.41	3808061.91	5.75545	(09031218) 465423.41
3808061.91	5.76388	(09031218)	
465443.41	3808061.91	5.76808	(09031218) 465463.41
3808061.91	5.76707	(09031218)	
465483.41	3808061.91	5.75969	(09031218) 465503.41

3808061.91	5.74490	(09031218)		
465523.41	3808061.91	5.72089	(09031218)	465543.41
3808061.91	5.69143	(09031218)		
465563.41	3808061.91	5.65241	(09031218)	465583.41
3808061.91	5.60357	(09031218)		
465603.41	3808061.91	5.54482	(09031218)	465623.41
3808061.91	5.47515	(09031218)		
465643.41	3808061.91	5.39396	(09031218)	465663.41
3808061.91	5.39956	(09011918)		
465683.41	3808061.91	5.39745	(09011918)	465703.41
3808061.91	5.38861	(09011918)		
464823.41	3808081.91	5.26269	(09031218)	464843.41
3808081.91	5.30227	(09031218)		
464863.41	3808081.91	5.33565	(09031218)	464883.41
3808081.91	5.36575	(09031218)		
464903.41	3808081.91	5.39128	(09031218)	464923.41
3808081.91	5.41184	(09031218)		
464943.41	3808081.91	5.43005	(09031218)	464963.41
3808081.91	5.44821	(09031218)		
464983.41	3808081.91	5.46604	(09031218)	465003.41
3808081.91	5.48280	(09031218)		
465023.41	3808081.91	5.49994	(09031218)	465043.41
3808081.91	5.51575	(09031218)		
465063.41	3808081.91	5.52945	(09031218)	465083.41
3808081.91	5.54430	(09031218)		
465103.41	3808081.91	5.55894	(09031218)	465123.41
3808081.91	5.57546	(09031218)		
465143.41	3808081.91	5.59444	(09031218)	465163.41
3808081.91	5.61120	(09031218)		
465183.41	3808081.91	5.62605	(09031218)	465203.41
3808081.91	5.64173	(09031218)		
465223.41	3808081.91	5.65828	(09031218)	465243.41
3808081.91	5.67664	(09031218)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 501

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518

, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3808081.91	5.69451	(09031218)	465283.41
3808081.91	5.71320	(09031218)		
465303.41	3808081.91	5.73312	(09031218)	465323.41
3808081.91	5.75167	(09031218)		
465343.41	3808081.91	5.76885	(09031218)	465363.41
3808081.91	5.78528	(09031218)		
465383.41	3808081.91	5.79956	(09031218)	465403.41
3808081.91	5.81083	(09031218)		
465423.41	3808081.91	5.81626	(09031218)	465443.41
3808081.91	5.81836	(09031218)		
465463.41	3808081.91	5.81713	(09031218)	465483.41
3808081.91	5.80663	(09031218)		
465503.41	3808081.91	5.78820	(09031218)	465523.41
3808081.91	5.76117	(09031218)		
465543.41	3808081.91	5.72544	(09031218)	465563.41
3808081.91	5.68171	(09031218)		
465583.41	3808081.91	5.62909	(09031218)	465603.41
3808081.91	5.56566	(09031218)		
465623.41	3808081.91	5.49094	(09031218)	465643.41
3808081.91	5.44552	(09011918)		
465663.41	3808081.91	5.44646	(09011918)	465683.41
3808081.91	5.43992	(09011918)		
465703.41	3808081.91	5.43194	(09011918)	464843.41
3808101.91	5.33984	(09031218)		
464863.41	3808101.91	5.37907	(09031218)	464883.41
3808101.91	5.42003	(09031218)		
464903.41	3808101.91	5.44950	(09031218)	464923.41
3808101.91	5.47016	(09031218)		
464943.41	3808101.91	5.48784	(09031218)	464963.41
3808101.91	5.50641	(09031218)		
464983.41	3808101.91	5.52447	(09031218)	465003.41
3808101.91	5.53977	(09031218)		
465023.41	3808101.91	5.55591	(09031218)	465043.41
3808101.91	5.57152	(09031218)		
465063.41	3808101.91	5.58495	(09031218)	465083.41
3808101.91	5.60003	(09031218)		
465103.41	3808101.91	5.61600	(09031218)	465123.41
3808101.91	5.63688	(09031218)		

465143.41	3808101.91	5.65253	(09031218)	465163.41
3808101.91	5.66726	(09031218)		
465183.41	3808101.91	5.68168	(09031218)	465203.41
3808101.91	5.69899	(09031218)		
465223.41	3808101.91	5.71642	(09031218)	465243.41
3808101.91	5.73289	(09031218)		
465263.41	3808101.91	5.75214	(09031218)	465283.41
3808101.91	5.77236	(09031218)		
465303.41	3808101.91	5.79181	(09031218)	465323.41
3808101.91	5.80988	(09031218)		
465343.41	3808101.91	5.82676	(09031218)	465363.41
3808101.91	5.84285	(09031218)		
465383.41	3808101.91	5.85674	(09031218)	465403.41
3808101.91	5.86670	(09031218)		
465423.41	3808101.91	5.86847	(09031218)	465443.41
3808101.91	5.86785	(09031218)		
465463.41	3808101.91	5.86730	(09031218)	465483.41
3808101.91	5.85262	(09031218)		
465503.41	3808101.91	5.83069	(09031218)	465523.41
3808101.91	5.80159	(09031218)		
465543.41	3808101.91	5.75761	(09031218)	465563.41
3808101.91	5.70837	(09031218)		
465583.41	3808101.91	5.65127	(09031218)	465603.41
3808101.91	5.58297	(09031218)		
465623.41	3808101.91	5.50303	(09031218)	465643.41
3808101.91	5.49907	(09011918)		
465663.41	3808101.91	5.50057	(09011918)	465683.41
3808101.91	5.49015	(09011918)		
465703.41	3808101.91	5.47496	(09011918)	464863.41
3808121.91	5.44400	(09031218)		
464883.41	3808121.91	5.48299	(09031218)	464903.41
3808121.91	5.50897	(09031218)		
464923.41	3808121.91	5.53016	(09031218)	464943.41
3808121.91	5.54887	(09031218)		
464963.41	3808121.91	5.56583	(09031218)	464983.41
3808121.91	5.58184	(09031218)		
465003.41	3808121.91	5.59919	(09031218)	465023.41
3808121.91	5.61413	(09031218)		
465043.41	3808121.91	5.62795	(09031218)	465063.41
3808121.91	5.64337	(09031218)		
465083.41	3808121.91	5.66021	(09031218)	465103.41
3808121.91	5.67926	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***
INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465123.41	3808121.91	5.69516 (09031218)	465143.41
3808121.91	5.70952 (09031218)		
465163.41	3808121.91	5.72382 (09031218)	465183.41
3808121.91	5.73980 (09031218)		
465203.41	3808121.91	5.75639 (09031218)	465223.41
3808121.91	5.77231 (09031218)		
465243.41	3808121.91	5.79218 (09031218)	465263.41
3808121.91	5.81245 (09031218)		
465283.41	3808121.91	5.83231 (09031218)	465303.41
3808121.91	5.85153 (09031218)		
465323.41	3808121.91	5.86990 (09031218)	465343.41
3808121.91	5.88733 (09031218)		
465363.41	3808121.91	5.89813 (09031218)	465383.41
3808121.91	5.90992 (09031218)		
465403.41	3808121.91	5.91980 (09031218)	465423.41
3808121.91	5.92379 (09031218)		
465443.41	3808121.91	5.92262 (09031218)	465463.41
3808121.91	5.91597 (09031218)		
465483.41	3808121.91	5.89988 (09031218)	465503.41
3808121.91	5.87383 (09031218)		
465523.41	3808121.91	5.83552 (09031218)	465543.41
3808121.91	5.79271 (09031218)		
465563.41	3808121.91	5.74062 (09031218)	465583.41
3808121.91	5.67790 (09031218)		
465603.41	3808121.91	5.60360 (09031218)	465623.41
3808121.91	5.54697 (09011918)		
465643.41	3808121.91	5.55022 (09011918)	465663.41
3808121.91	5.55304 (09011918)		
465683.41	3808121.91	5.54203 (09011918)	465703.41

3808121.91	5.52242	(09011918)		
464883.41	3808141.91	5.53741	(09031218)	464903.41
3808141.91	5.56916	(09031218)		
464923.41	3808141.91	5.59085	(09031218)	464943.41
3808141.91	5.60876	(09031218)		
464963.41	3808141.91	5.62445	(09031218)	464983.41
3808141.91	5.63912	(09031218)		
465003.41	3808141.91	5.65746	(09031218)	465023.41
3808141.91	5.67172	(09031218)		
465043.41	3808141.91	5.68432	(09031218)	465063.41
3808141.91	5.70089	(09031218)		
465083.41	3808141.91	5.71955	(09031218)	465103.41
3808141.91	5.73895	(09031218)		
465123.41	3808141.91	5.75330	(09031218)	465143.41
3808141.91	5.76749	(09031218)		
465163.41	3808141.91	5.78254	(09031218)	465183.41
3808141.91	5.79854	(09031218)		
465203.41	3808141.91	5.81637	(09031218)	465223.41
3808141.91	5.83288	(09031218)		
465243.41	3808141.91	5.85338	(09031218)	465263.41
3808141.91	5.87307	(09031218)		
465283.41	3808141.91	5.89251	(09031218)	465303.41
3808141.91	5.91265	(09031218)		
465323.41	3808141.91	5.93011	(09031218)	465343.41
3808141.91	5.94534	(09031218)		
465363.41	3808141.91	5.95769	(09031218)	465383.41
3808141.91	5.96946	(09031218)		
465403.41	3808141.91	5.97725	(09031218)	465423.41
3808141.91	5.97665	(09031218)		
465443.41	3808141.91	5.97202	(09031218)	465463.41
3808141.91	5.96224	(09031218)		
465483.41	3808141.91	5.94413	(09031218)	465503.41
3808141.91	5.91441	(09031218)		
465523.41	3808141.91	5.87697	(09031218)	465543.41
3808141.91	5.82818	(09031218)		
465563.41	3808141.91	5.77109	(09031218)	465583.41
3808141.91	5.70379	(09031218)		
465603.41	3808141.91	5.62449	(09031218)	465623.41
3808141.91	5.61134	(09011918)		
465643.41	3808141.91	5.60552	(09011918)	465663.41
3808141.91	5.60047	(09011918)		
465683.41	3808141.91	5.59130	(09011918)	465703.41
3808141.91	5.56950	(09011918)		
464883.41	3808161.91	5.58586	(09031218)	464903.41
3808161.91	5.62922	(09031218)		
464923.41	3808161.91	5.65255	(09031218)	464943.41
3808161.91	5.66981	(09031218)		
464963.41	3808161.91	5.68480	(09031218)	464983.41
3808161.91	5.69863	(09031218)		
465003.41	3808161.91	5.71592	(09031218)	465023.41

3808161.91 5.73004 (09031218)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 503

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
, L0006495 , L0006496 , L0006497 ,
L0006498 , L0006499 , L0006500 , L0006501 , L0006502
, L0006503 , L0006504 , L0006505 ,
L0006506 , L0006507 , L0006508 , L0006509 , L0006510
, L0006511 , L0006512 , L0006513 ,
L0006514 , L0006515 , L0006516 , L0006517 , L0006518
, L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465043.41	3808161.91	5.74311	(09031218)	465063.41
3808161.91	5.75983 (09031218)			
465083.41	3808161.91	5.77978	(09031218)	465103.41
3808161.91	5.79850 (09031218)			
465123.41	3808161.91	5.81223	(09031218)	465143.41
3808161.91	5.82676 (09031218)			
465163.41	3808161.91	5.84197	(09031218)	465183.41
3808161.91	5.85985 (09031218)			
465203.41	3808161.91	5.87726	(09031218)	465223.41
3808161.91	5.89528 (09031218)			
465243.41	3808161.91	5.91530	(09031218)	465263.41
3808161.91	5.93479 (09031218)			
465283.41	3808161.91	5.95452	(09031218)	465303.41
3808161.91	5.97491 (09031218)			
465323.41	3808161.91	5.99125	(09031218)	465343.41
3808161.91	6.00367 (09031218)			
465363.41	3808161.91	6.01774	(09031218)	465383.41
3808161.91	6.03015 (09031218)			
465403.41	3808161.91	6.03579	(09031218)	465423.41
3808161.91	6.02803 (09031218)			

465443.41	3808161.91	6.01945	(09031218)	465463.41
3808161.91	6.00759	(09031218)		
465483.41	3808161.91	5.98841	(09031218)	465503.41
3808161.91	5.95766	(09031218)		
465523.41	3808161.91	5.91572	(09031218)	465543.41
3808161.91	5.85816	(09031218)		
465563.41	3808161.91	5.79563	(09031218)	465583.41
3808161.91	5.72343	(09031218)		
465603.41	3808161.91	5.67250	(09011918)	465623.41
3808161.91	5.67146	(09011918)		
465643.41	3808161.91	5.66460	(09011918)	465663.41
3808161.91	5.64995	(09011918)		
465683.41	3808161.91	5.63351	(09011918)	465703.41
3808161.91	5.61395	(09011918)		
464903.41	3808181.91	5.68641	(09031218)	464923.41
3808181.91	5.71448	(09031218)		
464943.41	3808181.91	5.73293	(09031218)	464963.41
3808181.91	5.74906	(09031218)		
464983.41	3808181.91	5.76312	(09031218)	465003.41
3808181.91	5.77597	(09031218)		
465023.41	3808181.91	5.79117	(09031218)	465043.41
3808181.91	5.80697	(09031218)		
465063.41	3808181.91	5.82675	(09031218)	465083.41
3808181.91	5.84529	(09031218)		
465103.41	3808181.91	5.85860	(09031218)	465123.41
3808181.91	5.87235	(09031218)		
465143.41	3808181.91	5.88723	(09031218)	465163.41
3808181.91	5.90443	(09031218)		
465183.41	3808181.91	5.92069	(09031218)	465203.41
3808181.91	5.93893	(09031218)		
465223.41	3808181.91	5.95847	(09031218)	465243.41
3808181.91	5.97824	(09031218)		
465263.41	3808181.91	5.99868	(09031218)	465283.41
3808181.91	6.01956	(09031218)		
465303.41	3808181.91	6.03534	(09031218)	465323.41
3808181.91	6.05263	(09031218)		
465343.41	3808181.91	6.06849	(09031218)	465363.41
3808181.91	6.07403	(09031218)		
465383.41	3808181.91	6.08141	(09031218)	465403.41
3808181.91	6.08701	(09031218)		
465423.41	3808181.91	6.08460	(09031218)	465443.41
3808181.91	6.07610	(09031218)		
465463.41	3808181.91	6.06254	(09031218)	465483.41
3808181.91	6.02899	(09031218)		
465503.41	3808181.91	5.99138	(09031218)	465523.41
3808181.91	5.94755	(09031218)		
465543.41	3808181.91	5.89145	(09031218)	465563.41
3808181.91	5.82552	(09031218)		
465583.41	3808181.91	5.74680	(09031218)	465603.41
3808181.91	5.72393	(09011918)		

465623.41	3808181.91	5.72518	(09011918)	465643.41
3808181.91	5.71502	(09011918)		
465663.41	3808181.91	5.69727	(09011918)	465683.41
3808181.91	5.67232	(09011918)		
465703.41	3808181.91	5.65027	(09011918)	464923.41
3808201.91	5.76810	(09031218)		
464943.41	3808201.91	5.79395	(09031218)	464963.41
3808201.91	5.82145	(09111519)		
464983.41	3808201.91	5.85219	(09111519)	465003.41
3808201.91	5.84357	(09111519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 504

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465023.41	3808201.91	5.85542	(09031218)	465043.41
3808201.91	5.87507	(09031218)		
465063.41	3808201.91	5.89218	(09031218)	465083.41
3808201.91	5.90653	(09031218)		
465103.41	3808201.91	5.91990	(09031218)	465123.41
3808201.91	5.93405	(09031218)		
465143.41	3808201.91	5.95037	(09031218)	465163.41
3808201.91	5.96642	(09031218)		
465183.41	3808201.91	5.98376	(09031218)	465203.41
3808201.91	6.00222	(09031218)		
465223.41	3808201.91	6.02165	(09031218)	465243.41

3808201.91	6.04306	(09031218)	
465263.41	3808201.91	6.06308	(09031218) 465283.41
3808201.91	6.08240	(09031218)	
465303.41	3808201.91	6.10046	(09031218) 465323.41
3808201.91	6.11694	(09031218)	
465343.41	3808201.91	6.12855	(09031218) 465363.41
3808201.91	6.13597	(09031218)	
465383.41	3808201.91	6.14112	(09031218) 465403.41
3808201.91	6.13906	(09031218)	
465423.41	3808201.91	6.13769	(09031218) 465443.41
3808201.91	6.12810	(09031218)	
465463.41	3808201.91	6.10816	(09031218) 465483.41
3808201.91	6.07483	(09031218)	
465503.41	3808201.91	6.03528	(09031218) 465523.41
3808201.91	5.98660	(09031218)	
465543.41	3808201.91	5.92613	(09031218) 465563.41
3808201.91	5.85404	(09031218)	
465583.41	3808201.91	5.78706	(09011918) 465603.41
3808201.91	5.78312	(09011918)	
465623.41	3808201.91	5.77480	(09011918) 465643.41
3808201.91	5.76653	(09011918)	
465663.41	3808201.91	5.74432	(09011918) 465683.41
3808201.91	5.72085	(09011918)	
465703.41	3808201.91	5.68272	(09011918) 464943.41
3808221.91	5.90972	(09111519)	
464963.41	3808221.91	5.94442	(09111519) 464983.41
3808221.91	5.97353	(09111519)	
465003.41	3808221.91	5.96207	(09111519) 465023.41
3808221.91	5.94595	(09111519)	
465043.41	3808221.91	5.94293	(09031218) 465063.41
3808221.91	5.95617	(09031218)	
465083.41	3808221.91	5.96869	(09031218) 465103.41
3808221.91	5.98217	(09031218)	
465123.41	3808221.91	5.99830	(09031218) 465143.41
3808221.91	6.01353	(09031218)	
465163.41	3808221.91	6.02933	(09031218) 465183.41
3808221.91	6.04832	(09031218)	
465203.41	3808221.91	6.06699	(09031218) 465223.41
3808221.91	6.08703	(09031218)	
465243.41	3808221.91	6.10930	(09031218) 465263.41
3808221.91	6.12878	(09031218)	
465283.41	3808221.91	6.14600	(09031218) 465303.41
3808221.91	6.16655	(09031218)	
465323.41	3808221.91	6.18073	(09031218) 465343.41
3808221.91	6.18829	(09031218)	
465363.41	3808221.91	6.20205	(09031218) 465383.41
3808221.91	6.20030	(09031218)	
465403.41	3808221.91	6.19135	(09031218) 465423.41
3808221.91	6.18819	(09031218)	
465443.41	3808221.91	6.17623	(09031218) 465463.41

3808221.91	6.15466	(09031218)		
465483.41	3808221.91	6.12276	(09031218)	465503.41
3808221.91	6.08006	(09031218)		
465523.41	3808221.91	6.02543	(09031218)	465543.41
3808221.91	5.95917	(09031218)		
465563.41	3808221.91	5.87445	(09031218)	465583.41
3808221.91	5.84968	(09011918)		
465603.41	3808221.91	5.84313	(09011918)	465623.41
3808221.91	5.83507	(09011918)		
465643.41	3808221.91	5.81577	(09011918)	465663.41
3808221.91	5.78884	(09011918)		
465683.41	3808221.91	5.75486	(09011918)	465703.41
3808221.91	5.71406	(09011918)		
464963.41	3808241.91	6.07206	(09111519)	464983.41
3808241.91	6.09945	(09111519)		
465003.41	3808241.91	6.08505	(09111519)	465023.41
3808241.91	6.03369	(09111519)		
465043.41	3808241.91	6.00739	(09031218)	465063.41
3808241.91	6.01915	(09031218)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 505

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465083.41	3808241.91	6.03093	(09031218)	465103.41
3808241.91	6.04138	(09031218)		

465123.41	3808241.91	6.06001	(09031218)	465143.41
3808241.91	6.07786	(09031218)		
465163.41	3808241.91	6.09587	(09031218)	465183.41
3808241.91	6.11393	(09031218)		
465203.41	3808241.91	6.13417	(09031218)	465223.41
3808241.91	6.15604	(09031218)		
465243.41	3808241.91	6.17388	(09031218)	465263.41
3808241.91	6.19513	(09031218)		
465283.41	3808241.91	6.21657	(09031218)	465303.41
3808241.91	6.22950	(09031218)		
465323.41	3808241.91	6.24413	(09031218)	465343.41
3808241.91	6.26015	(09031218)		
465363.41	3808241.91	6.25836	(09031218)	465383.41
3808241.91	6.25890	(09031218)		
465403.41	3808241.91	6.25836	(09031218)	465423.41
3808241.91	6.25141	(09031218)		
465443.41	3808241.91	6.23515	(09031218)	465463.41
3808241.91	6.20879	(09031218)		
465483.41	3808241.91	6.17162	(09031218)	465503.41
3808241.91	6.11963	(09031218)		
465523.41	3808241.91	6.04636	(09031218)	465543.41
3808241.91	5.97572	(09031218)		
465563.41	3808241.91	5.90227	(09011918)	465583.41
3808241.91	5.90482	(09011918)		
465603.41	3808241.91	5.89466	(09011918)	465623.41
3808241.91	5.88274	(09011918)		
465643.41	3808241.91	5.85646	(09011918)	465663.41
3808241.91	5.82573	(09011918)		
465683.41	3808241.91	5.78609	(09011918)	465703.41
3808241.91	5.74467	(09011918)		
464983.41	3808261.91	6.31526	(09111519)	465003.41
3808261.91	6.26715	(09111519)		
465023.41	3808261.91	6.19258	(09111519)	465043.41
3808261.91	6.09093	(09111519)		
465063.41	3808261.91	6.08081	(09031218)	465083.41
3808261.91	6.09391	(09031218)		
465103.41	3808261.91	6.10768	(09031218)	465123.41
3808261.91	6.12191	(09031218)		
465143.41	3808261.91	6.14111	(09031218)	465163.41
3808261.91	6.16159	(09031218)		
465183.41	3808261.91	6.18213	(09031218)	465203.41
3808261.91	6.20213	(09031218)		
465223.41	3808261.91	6.22279	(09031218)	465243.41
3808261.91	6.24377	(09031218)		
465263.41	3808261.91	6.26740	(09031218)	465283.41
3808261.91	6.28950	(09031218)		
465303.41	3808261.91	6.30133	(09031218)	465323.41
3808261.91	6.31355	(09031218)		
465343.41	3808261.91	6.32116	(09031218)	465363.41
3808261.91	6.32454	(09031218)		

465383.41	3808261.91	6.32376	(09031218)	465403.41
3808261.91	6.31013	(09031218)		
465423.41	3808261.91	6.30095	(09031218)	465443.41
3808261.91	6.28187	(09031218)		
465463.41	3808261.91	6.25252	(09031218)	465483.41
3808261.91	6.21139	(09031218)		
465503.41	3808261.91	6.15184	(09031218)	465523.41
3808261.91	6.08421	(09031218)		
465543.41	3808261.91	6.00727	(09031218)	465563.41
3808261.91	5.97334	(09011918)		
465583.41	3808261.91	5.96420	(09011918)	465603.41
3808261.91	5.95072	(09011918)		
465623.41	3808261.91	5.92894	(09011918)	465643.41
3808261.91	5.90436	(09011918)		
465663.41	3808261.91	5.86372	(09011918)	465683.41
3808261.91	5.81992	(09011918)		
465703.41	3808261.91	5.76715	(09011918)	465003.41
3808281.91	6.44429	(09111519)		
465023.41	3808281.91	6.35772	(09111519)	465043.41
3808281.91	6.23842	(09111519)		
465063.41	3808281.91	6.13318	(09031218)	465083.41
3808281.91	6.15496	(09031218)		
465103.41	3808281.91	6.17514	(09031218)	465123.41
3808281.91	6.18820	(09031218)		
465143.41	3808281.91	6.20736	(09031218)	465163.41
3808281.91	6.23002	(09031218)		
465183.41	3808281.91	6.25189	(09031218)	465203.41
3808281.91	6.27167	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 506

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
-----	-----	-----	-----
465223.41	3808281.91	6.29105 (09031218)	465243.41
3808281.91	6.31724 (09031218)		
465263.41	3808281.91	6.34101 (09031218)	465283.41
3808281.91	6.36285 (09031218)		
465303.41	3808281.91	6.37243 (09031218)	465323.41
3808281.91	6.38140 (09031218)		
465343.41	3808281.91	6.38383 (09031218)	465363.41
3808281.91	6.39433 (09031218)		
465383.41	3808281.91	6.38228 (09031218)	465403.41
3808281.91	6.35963 (09031218)		
465423.41	3808281.91	6.34406 (09031218)	465443.41
3808281.91	6.32124 (09031218)		
465463.41	3808281.91	6.29390 (09031218)	465483.41
3808281.91	6.24885 (09031218)		
465503.41	3808281.91	6.19125 (09031218)	465523.41
3808281.91	6.12119 (09031218)		
465543.41	3808281.91	6.03662 (09031218)	465563.41
3808281.91	6.02906 (09011918)		
465583.41	3808281.91	6.01588 (09011918)	465603.41
3808281.91	5.99882 (09011918)		
465623.41	3808281.91	5.97796 (09011918)	465643.41
3808281.91	5.94297 (09011918)		
465663.41	3808281.91	5.89511 (09011918)	465683.41
3808281.91	5.85593 (09011918)		
465703.41	3808281.91	5.79677 (09011918)	465003.41
3808301.91	6.59658 (09111519)		
465023.41	3808301.91	6.49840 (09111519)	465043.41
3808301.91	6.35329 (09111519)		
465063.41	3808301.91	6.24018 (09111519)	465083.41
3808301.91	6.20162 (09031218)		
465103.41	3808301.91	6.23908 (09031218)	465123.41
3808301.91	6.25939 (09031218)		
465143.41	3808301.91	6.28127 (09031218)	465163.41
3808301.91	6.30286 (09031218)		
465183.41	3808301.91	6.31981 (09031218)	465203.41
3808301.91	6.34215 (09031218)		
465223.41	3808301.91	6.36776 (09031218)	465243.41
3808301.91	6.39358 (09031218)		
465263.41	3808301.91	6.41512 (09031218)	465283.41
3808301.91	6.42820 (09031218)		
465303.41	3808301.91	6.43825 (09031218)	465323.41
3808301.91	6.44937 (09031218)		
465343.41	3808301.91	6.46197 (09031218)	465363.41

3808301.91	6.44742	(09031218)		
465383.41	3808301.91	6.43674	(09031218)	465403.41
3808301.91	6.42738	(09031218)		
465423.41	3808301.91	6.37808	(09031218)	465443.41
3808301.91	6.34277	(09031218)		
465463.41	3808301.91	6.34839	(09031218)	465483.41
3808301.91	6.29699	(09031218)		
465503.41	3808301.91	6.23259	(09031218)	465523.41
3808301.91	6.15540	(09031218)		
465543.41	3808301.91	6.09320	(09011918)	465563.41
3808301.91	6.08325	(09011918)		
465583.41	3808301.91	6.07062	(09011918)	465603.41
3808301.91	6.04847	(09011918)		
465623.41	3808301.91	6.01860	(09011918)	465643.41
3808301.91	5.97429	(09011918)		
465663.41	3808301.91	5.92601	(09011918)	465683.41
3808301.91	5.87866	(09011918)		
465703.41	3808301.91	5.80528	(09011918)	465043.41
3808321.91	6.49311	(09111519)		
465063.41	3808321.91	6.32598	(09111519)	465083.41
3808321.91	6.26281	(09031218)		
465103.41	3808321.91	6.29877	(09031218)	465123.41
3808321.91	6.32378	(09031218)		
465143.41	3808321.91	6.34866	(09031218)	465163.41
3808321.91	6.37272	(09031218)		
465183.41	3808321.91	6.39386	(09031218)	465203.41
3808321.91	6.41924	(09031218)		
465223.41	3808321.91	6.44517	(09031218)	465243.41
3808321.91	6.46824	(09031218)		
465263.41	3808321.91	6.48381	(09031218)	465283.41
3808321.91	6.49798	(09031218)		
465303.41	3808321.91	6.51246	(09031218)	465323.41
3808321.91	6.52460	(09031218)		
465343.41	3808321.91	6.52321	(09031218)	465363.41
3808321.91	6.51374	(09031218)		
465383.41	3808321.91	6.50136	(09031218)	465403.41
3808321.91	6.47096	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 507

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502

```

, L0006503      , L0006504      , L0006505      ,
                  L0006506      , L0006507      , L0006508      , L0006509      , L0006510
, L0006511      , L0006512      , L0006513      ,
                  L0006514      , L0006515      , L0006516      , L0006517      , L0006518
, L0006519      , L0006520      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465423.41	3808321.91	6.43129	(09031218)	465443.41
3808321.91	6.39845	(09031218)		
465463.41	3808321.91	6.38379	(09031218)	465483.41
3808321.91	6.32818	(09031218)		
465503.41	3808321.91	6.25903	(09031218)	465523.41
3808321.91	6.17326	(09031218)		
465543.41	3808321.91	6.15295	(09011918)	465563.41
3808321.91	6.14295	(09011918)		
465583.41	3808321.91	6.12879	(09011918)	465603.41
3808321.91	6.09664	(09011918)		
465623.41	3808321.91	6.05781	(09011918)	465643.41
3808321.91	6.02147	(09011918)		
465663.41	3808321.91	5.96411	(09011918)	465683.41
3808321.91	5.89729	(09011918)		
465703.41	3808321.91	5.82825	(09011918)	465083.41
3808341.91	6.32780	(09031218)		
465103.41	3808341.91	6.35610	(09031218)	465123.41
3808341.91	6.38920	(09031218)		
465143.41	3808341.91	6.41761	(09031218)	465163.41
3808341.91	6.44479	(09031218)		
465183.41	3808341.91	6.47196	(09031218)	465203.41
3808341.91	6.49793	(09031218)		
465223.41	3808341.91	6.52401	(09031218)	465243.41
3808341.91	6.54285	(09031218)		
465263.41	3808341.91	6.56055	(09031218)	465283.41
3808341.91	6.56952	(09031218)		
465303.41	3808341.91	6.59240	(09031218)	465323.41
3808341.91	6.58892	(09031218)		
465343.41	3808341.91	6.57688	(09031218)	465363.41
3808341.91	6.58335	(09031218)		
465383.41	3808341.91	6.55706	(09031218)	465403.41
3808341.91	6.51552	(09031218)		
465423.41	3808341.91	6.48580	(09031218)	465443.41
3808341.91	6.44938	(09031218)		

465463.41	3808341.91	6.41393	(09031218)	465483.41
3808341.91	6.35357	(09031218)		
465503.41	3808341.91	6.27920	(09031218)	465523.41
3808341.91	6.22594	(09011918)		
465543.41	3808341.91	6.21918	(09011918)	465563.41
3808341.91	6.20247	(09011918)		
465583.41	3808341.91	6.17830	(09011918)	465603.41
3808341.91	6.13876	(09011918)		
465623.41	3808341.91	6.10787	(09011918)	465643.41
3808341.91	6.05303	(09011918)		
465663.41	3808341.91	5.98342	(09011918)	465683.41
3808341.91	5.92054	(09011918)		
465703.41	3808341.91	5.84088	(09011918)	465103.41
3808361.91	6.41846	(09123118)		
465123.41	3808361.91	6.46714	(09031218)	465143.41
3808361.91	6.49930	(09031218)		
465163.41	3808361.91	6.52622	(09031218)	465183.41
3808361.91	6.55324	(09031218)		
465203.41	3808361.91	6.57756	(09031218)	465223.41
3808361.91	6.59770	(09031218)		
465243.41	3808361.91	6.62385	(09031218)	465263.41
3808361.91	6.64658	(09031218)		
465283.41	3808361.91	6.65757	(09031218)	465303.41
3808361.91	6.65587	(09031218)		
465323.41	3808361.91	6.64203	(09031218)	465343.41
3808361.91	6.61306	(09031218)		
465363.41	3808361.91	6.61861	(09031218)	465383.41
3808361.91	6.60826	(09031218)		
465403.41	3808361.91	6.58470	(09031218)	465423.41
3808361.91	6.51190	(09031218)		
465443.41	3808361.91	6.46255	(09031218)	465463.41
3808361.91	6.46786	(09031218)		
465483.41	3808361.91	6.40006	(09031218)	465503.41
3808361.91	6.31781	(09031218)		
465523.41	3808361.91	6.29385	(09011918)	465543.41
3808361.91	6.27182	(09011918)		
465563.41	3808361.91	6.24972	(09011918)	465583.41
3808361.91	6.22089	(09011918)		
465603.41	3808361.91	6.18041	(09011918)	465623.41
3808361.91	6.14081	(09011918)		
465643.41	3808361.91	6.07258	(09011918)	465663.41
3808361.91	6.00873	(09011918)		
465683.41	3808361.91	5.93366	(09011918)	465703.41
3808361.91	5.83968	(09011918)		
465183.41	3808381.91	6.62198	(09031218)	465203.41
3808381.91	6.64845	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808381.91	6.67206	(09031218)	465243.41
3808381.91	6.69331	(09031218)		
465263.41	3808381.91	6.70538	(09031218)	465283.41
3808381.91	6.70290	(09031218)		
465303.41	3808381.91	6.70502	(09031218)	465323.41
3808381.91	6.68084	(09031218)		
465343.41	3808381.91	6.64180	(09031218)	465363.41
3808381.91	6.64776	(09031218)		
465383.41	3808381.91	6.64232	(09031218)	465403.41
3808381.91	6.62027	(09031218)		
465423.41	3808381.91	6.56423	(09031218)	465443.41
3808381.91	6.51742	(09031218)		
465463.41	3808381.91	6.49329	(09031218)	465483.41
3808381.91	6.42082	(09031218)		
465503.41	3808381.91	6.36236	(09011918)	465523.41
3808381.91	6.35205	(09011918)		
465543.41	3808381.91	6.32949	(09011918)	465563.41
3808381.91	6.31095	(09011918)		
465583.41	3808381.91	6.26926	(09011918)	465603.41
3808381.91	6.22641	(09011918)		
465623.41	3808381.91	6.16953	(09011918)	465643.41
3808381.91	6.10631	(09011918)		
465663.41	3808381.91	6.02872	(09011918)	465683.41
3808381.91	5.94265	(09011918)		
465703.41	3808381.91	5.87145	(09011918)	465303.41

3808401.91	6.71445 (09031218)		
465323.41	3808401.91	6.69604 (09031218)	465343.41
3808401.91	6.65379 (09031218)		
465363.41	3808401.91	6.66230 (09031218)	465383.41
3808401.91	6.65831 (09031218)		
465403.41	3808401.91	6.64117 (09031218)	465423.41
3808401.91	6.61026 (09031218)		
465443.41	3808401.91	6.56503 (09031218)	465463.41
3808401.91	6.50589 (09031218)		
465483.41	3808401.91	6.43462 (09011918)	465503.41
3808401.91	6.43150 (09011918)		
465523.41	3808401.91	6.41970 (09011918)	465543.41
3808401.91	6.39844 (09011918)		
465563.41	3808401.91	6.35620 (09011918)	465583.41
3808401.91	6.30322 (09011918)		
465603.41	3808401.91	6.25540 (09011918)	465623.41
3808401.91	6.20339 (09011918)		
465643.41	3808401.91	6.12877 (09011918)	465663.41
3808401.91	6.03770 (09011918)		
465683.41	3808401.91	5.97356 (09011918)	465703.41
3808401.91	5.87436 (09011918)		
465323.41	3808421.91	6.65038 (09031218)	465343.41
3808421.91	6.66000 (09031218)		
465363.41	3808421.91	6.66832 (09031218)	465383.41
3808421.91	6.66348 (09031218)		
465403.41	3808421.91	6.64487 (09031218)	465423.41
3808421.91	6.61190 (09031218)		
465443.41	3808421.91	6.56403 (09031218)	465463.41
3808421.91	6.50078 (09031218)		
465483.41	3808421.91	6.47994 (09011918)	465503.41
3808421.91	6.47491 (09011918)		
465523.41	3808421.91	6.46027 (09011918)	465543.41
3808421.91	6.43544 (09011918)		
465563.41	3808421.91	6.39976 (09011918)	465583.41
3808421.91	6.35071 (09011918)		
465603.41	3808421.91	6.29515 (09011918)	465623.41
3808421.91	6.22649 (09011918)		
465643.41	3808421.91	6.13652 (09011918)	465663.41
3808421.91	6.05511 (09011918)		
465683.41	3808421.91	5.97708 (09011918)	465703.41
3808421.91	5.85860 (09011918)		
465323.41	3808441.91	6.61592 (09031218)	465343.41
3808441.91	6.64958 (09031218)		
465363.41	3808441.91	6.71901 (09031218)	465383.41
3808441.91	6.73209 (09031218)		
465403.41	3808441.91	6.70762 (09031218)	465423.41
3808441.91	6.66824 (09031218)		
465443.41	3808441.91	6.61346 (09031218)	465463.41
3808441.91	6.55292 (09011918)		
465483.41	3808441.91	6.55228 (09011918)	465503.41

3808441.91 6.54202 (09011918)
 465523.41 3808441.91 6.52142 (09011918) 465543.41
 3808441.91 6.49004 (09011918)
 465563.41 3808441.91 6.44772 (09011918) 465583.41
 3808441.91 6.39460 (09011918)
 ▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 509

*** MODELOPTs: RegDFault CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465603.41	3808441.91	6.33106	(09011918)	465623.41
3808441.91	6.25411 (09011918)			
465643.41	3808441.91	6.18017	(09011918)	465663.41
3808441.91	6.08209 (09011918)			
465683.41	3808441.91	5.97371	(09011918)	465703.41
3808441.91	5.86086 (09011918)			
465343.41	3808461.91	6.62869	(09120417)	465363.41
3808461.91	6.74470 (09031218)			
465383.41	3808461.91	6.77429	(09031218)	465403.41
3808461.91	6.76161 (09031218)			
465423.41	3808461.91	6.71708	(09031218)	465443.41
3808461.91	6.65645 (09031218)			
465463.41	3808461.91	6.63312	(09011918)	465483.41
3808461.91	6.62811 (09011918)			
465503.41	3808461.91	6.61819	(09011918)	465523.41
3808461.91	6.58567 (09011918)			

465543.41	3808461.91	6.54646	(09011918)	465563.41
3808461.91	6.49600	(09011918)		
465583.41	3808461.91	6.43463	(09011918)	465603.41
3808461.91	6.36289	(09011918)		
465623.41	3808461.91	6.28013	(09011918)	465643.41
3808461.91	6.20164	(09011918)		
465663.41	3808461.91	6.08013	(09011918)	465683.41
3808461.91	5.97208	(09011918)		
465703.41	3808461.91	5.86778	(09011918)	465343.41
3808481.91	6.64368	(09120417)		
465363.41	3808481.91	6.66675	(09120417)	465383.41
3808481.91	6.69995	(09120417)		
465403.41	3808481.91	6.74786	(09031218)	465423.41
3808481.91	6.70149	(09031218)		
465443.41	3808481.91	6.66298	(09011918)	465463.41
3808481.91	6.66694	(09011918)		
465483.41	3808481.91	6.66001	(09011918)	465503.41
3808481.91	6.66753	(09011918)		
465523.41	3808481.91	6.64693	(09011918)	465543.41
3808481.91	6.59939	(09011918)		
465563.41	3808481.91	6.54042	(09011918)	465583.41
3808481.91	6.47054	(09011918)		
465603.41	3808481.91	6.39045	(09011918)	465623.41
3808481.91	6.30181	(09011918)		
465643.41	3808481.91	6.21914	(09011918)	465663.41
3808481.91	6.09386	(09011918)		
465683.41	3808481.91	5.97863	(09011918)	465703.41
3808481.91	5.86710	(09011918)		
465463.41	3808501.91	6.75633	(09011918)	465483.41
3808501.91	6.71186	(09011918)		
465503.41	3808501.91	6.72362	(09011918)	465523.41
3808501.91	6.69308	(09011918)		
465543.41	3808501.91	6.63970	(09011918)	465563.41
3808501.91	6.58062	(09011918)		
465583.41	3808501.91	6.50755	(09011918)	465603.41
3808501.91	6.41563	(09011918)		
465623.41	3808501.91	6.31515	(09011918)	465643.41
3808501.91	6.23197	(09011918)		
465663.41	3808501.91	6.10279	(09011918)	465683.41
3808501.91	5.98018	(09011918)		
465703.41	3808501.91	5.86004	(09011918)	465523.41
3808521.91	6.74269	(09011918)		
465543.41	3808521.91	6.68580	(09011918)	465563.41
3808521.91	6.60701	(09011918)		
465583.41	3808521.91	6.53187	(09011918)	465603.41
3808521.91	6.42869	(09011918)		
465623.41	3808521.91	6.35074	(09011918)	465643.41
3808521.91	6.23490	(09011918)		
465663.41	3808521.91	6.10527	(09011918)	465683.41
3808521.91	5.98388	(09011918)		

465703.41	3808521.91	5.84081	(09011918)	464239.31
3809562.31	69.08712	(09010419)		
464277.31	3809562.31	68.77206	(09010419)	463745.31
3809591.37	50.83993	(10020606)		
463783.31	3809591.37	53.59003	(09041719)	463821.31
3809591.37	53.91049	(09041719)		
463859.31	3809591.37	57.57168	(09041719)	463897.31
3809591.37	65.99768	(09041719)		
463935.31	3809591.37	67.41824	(09041719)	464239.31
3809591.37	45.84373	(09010419)		
464277.31	3809591.37	45.10250	(09010419)	463745.31
3809620.43	32.39697	(10021420)		
463783.31	3809620.43	37.09570	(10021420)	463821.31
3809620.43	40.49299	(10020606)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 510

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463859.31	3809620.43	42.50211	(09041719)	463897.31
3809620.43	47.15731	(09041719)		
463935.31	3809620.43	51.25464	(09041719)	463973.31
3809620.43	51.14817	(09041719)		
464011.31	3809620.43	48.80436	(09041719)	464049.31
3809620.43	44.15696	(09041719)		
464087.31	3809620.43	40.33389	(09010419)	464125.31

3809620.43	38.62977	(09010419)		
464163.31	3809620.43	37.39752	(09010419)	464201.31
3809620.43	35.94789	(09010419)		
464239.31	3809620.43	35.48439	(09010419)	464277.31
3809620.43	34.93956	(09010419)		
463745.31	3809649.49	23.94168	(10031906)	463783.31
3809649.49	27.09810	(10031906)		
463821.31	3809649.49	31.27087	(10020606)	463859.31
3809649.49	34.96827	(10020606)		
463897.31	3809649.49	36.62106	(10020606)	463935.31
3809649.49	38.22715	(10020606)		
463973.31	3809649.49	37.50200	(09041719)	464011.31
3809649.49	37.69082	(09041719)		
464049.31	3809649.49	36.64559	(09041719)	464087.31
3809649.49	33.57640	(09041719)		
464125.31	3809649.49	32.82465	(09010419)	464163.31
3809649.49	31.26560	(09010419)		
464201.31	3809649.49	30.44303	(09010419)	464239.31
3809649.49	29.84822	(09010419)		
464277.31	3809649.49	29.12918	(09010419)	464315.31
3809649.49	28.45450	(09010419)		
464353.31	3809649.49	28.26427	(09010419)	464391.31
3809649.49	28.01103	(09010419)		
464429.31	3809649.49	27.78287	(09010419)	464467.31
3809649.49	27.62422	(09010419)		
464505.31	3809649.49	27.57202	(09010419)	463745.31
3809678.55	19.82704	(09022206)		
463783.31	3809678.55	20.20112	(09022407)	463821.31
3809678.55	23.24012	(10031906)		
463859.31	3809678.55	26.02176	(10020606)	463897.31
3809678.55	30.25124	(10020606)		
463935.31	3809678.55	32.34606	(10020606)	463973.31
3809678.55	31.39590	(10020606)		
464011.31	3809678.55	29.22708	(10020606)	464049.31
3809678.55	29.79028	(09120320)		
464087.31	3809678.55	29.10070	(09120320)	464125.31
3809678.55	28.19883	(09120320)		
464163.31	3809678.55	26.94007	(09120320)	464201.31
3809678.55	26.49148	(09010419)		
464239.31	3809678.55	25.57131	(09010419)	464277.31
3809678.55	24.96546	(09010419)		
464315.31	3809678.55	24.50029	(09010419)	464353.31
3809678.55	24.24246	(09010419)		
464391.31	3809678.55	24.02377	(09010419)	464429.31
3809678.55	23.59050	(09010419)		
464467.31	3809678.55	23.60006	(09010419)	464505.31
3809678.55	23.27038	(09010419)		
463745.31	3809707.61	17.04294	(09022407)	463783.31
3809707.61	17.49753	(09022407)		
463821.31	3809707.61	18.02435	(09022407)	463859.31

3809707.61	20.04018	(10031906)		
463897.31	3809707.61	22.89203	(10030307)	463935.31
3809707.61	26.76638	(10020606)		
463973.31	3809707.61	27.61820	(10020606)	464011.31
3809707.61	26.91652	(10020606)		
464049.31	3809707.61	26.51299	(10020606)	464087.31
3809707.61	24.87158	(10020606)		
464125.31	3809707.61	24.26231	(09120320)	464163.31
3809707.61	24.02339	(09120320)		
464201.31	3809707.61	23.33248	(09120320)	464239.31
3809707.61	22.71769	(09120320)		
464277.31	3809707.61	22.00744	(09120320)	464315.31
3809707.61	21.63340	(09120320)		
464353.31	3809707.61	21.11469	(09120320)	464391.31
3809707.61	20.95521	(09120320)		
464429.31	3809707.61	20.61351	(09120320)	464467.31
3809707.61	20.50487	(09120320)		
464505.31	3809707.61	20.35819	(09120320)	463745.31
3809736.67	15.17952	(09022407)		
463783.31	3809736.67	15.44477	(09022407)	463821.31
3809736.67	15.76248	(09022407)		
463859.31	3809736.67	16.18291	(09022407)	463897.31
3809736.67	17.34479	(10031906)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 511

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

463935.31	3809736.67	19.95438	(10030307)		463973.31
3809736.67	22.72431	(10020606)			
464011.31	3809736.67	24.31050	(10020606)		464049.31
3809736.67	24.16109	(10020606)			
464087.31	3809736.67	23.74018	(10020606)		464125.31
3809736.67	22.53143	(10020606)			
464163.31	3809736.67	21.46150	(10021420)		464201.31
3809736.67	20.42689	(09120320)			
464239.31	3809736.67	20.25667	(09120320)		464277.31
3809736.67	19.57770	(09120320)			
464315.31	3809736.67	19.24926	(09120320)		464353.31
3809736.67	18.87976	(09120320)			
464391.31	3809736.67	18.70826	(09120320)		464429.31
3809736.67	18.35227	(09120320)			
464467.31	3809736.67	18.18928	(09120320)		464505.31
3809736.67	18.11304	(09120320)			
463745.31	3809765.73	13.71042	(09022407)		463783.31
3809765.73	13.89726	(09022407)			
463821.31	3809765.73	14.09568	(09022407)		463859.31
3809765.73	14.38838	(09022407)			
463897.31	3809765.73	14.72877	(09022407)		463935.31
3809765.73	14.88633	(09022407)			
463973.31	3809765.73	16.85108	(10031906)		464011.31
3809765.73	20.11687	(10020606)			
464049.31	3809765.73	21.61455	(10020606)		464087.31
3809765.73	21.77921	(10020606)			
464125.31	3809765.73	21.57314	(10020606)		464163.31
3809765.73	20.71982	(10020606)			
464201.31	3809765.73	19.27113	(10021420)		464239.31
3809765.73	18.66796	(10021420)			
464277.31	3809765.73	17.79180	(10021420)		464315.31
3809765.73	17.19643	(10021420)			
464353.31	3809765.73	16.92356	(10021420)		464391.31
3809765.73	16.56167	(10021420)			
464429.31	3809765.73	16.36896	(10021420)		464467.31
3809765.73	16.37123	(09120320)			
464505.31	3809765.73	16.10431	(10021420)		463745.31
3809794.79	12.49833	(09022407)			
463783.31	3809794.79	12.57428	(09022407)		463821.31
3809794.79	12.72476	(09022407)			
463859.31	3809794.79	12.89503	(09022407)		463897.31
3809794.79	13.15139	(09022407)			
463935.31	3809794.79	13.27358	(09022407)		463973.31
3809794.79	13.39503	(09022407)			
464011.31	3809794.79	15.83977	(10031906)		464049.31
3809794.79	18.51038	(09021907)			
464087.31	3809794.79	19.18272	(10020606)		464125.31
3809794.79	19.46581	(10020606)			

464163.31	3809794.79	19.15513	(10020606)	464201.31
3809794.79	18.29373	(10020606)		
464239.31	3809794.79	17.33978	(10021420)	464277.31
3809794.79	16.71520	(10021420)		
464315.31	3809794.79	16.12442	(10021420)	464353.31
3809794.79	15.67278	(10021420)		
464391.31	3809794.79	15.33946	(10021420)	464429.31
3809794.79	15.21254	(10021420)		
464467.31	3809794.79	14.95268	(10021420)	464505.31
3809794.79	14.79318	(10021420)		
463745.31	3809823.85	11.46879	(09022407)	463783.31
3809823.85	11.46314	(09022407)		
463821.31	3809823.85	11.47937	(09022407)	463859.31
3809823.85	11.63032	(09022407)		
463897.31	3809823.85	11.79204	(09022407)	463935.31
3809823.85	11.88830	(09022407)		
463973.31	3809823.85	12.01260	(09022407)	464011.31
3809823.85	12.19656	(09022407)		
464049.31	3809823.85	15.34217	(10031906)	464087.31
3809823.85	16.96728	(10030307)		
464125.31	3809823.85	17.02879	(10020606)	464163.31
3809823.85	17.19302	(10020606)		
464201.31	3809823.85	16.55726	(10020606)	464239.31
3809823.85	15.95415	(10020606)		
464277.31	3809823.85	15.58647	(10021420)	464315.31
3809823.85	14.90602	(10021420)		
464353.31	3809823.85	14.48139	(10021420)	464391.31
3809823.85	14.26337	(10021420)		
464429.31	3809823.85	13.97350	(10021420)	464467.31
3809823.85	13.71974	(10021420)		
464505.31	3809823.85	13.51033	(10021420)	463745.31
3809852.91	10.61408	(09022407)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 512

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463783.31	3809852.91	10.58740	(09022407)	463821.31
3809852.91	10.49079	(09022407)		
463859.31	3809852.91	10.57317	(09022407)	463897.31
3809852.91	10.63574	(09022407)		
463935.31	3809852.91	10.70778	(09022407)	463973.31
3809852.91	10.82288	(09022407)		
464011.31	3809852.91	10.95005	(09022407)	464049.31
3809852.91	11.22924	(09022206)		
464087.31	3809852.91	13.77745	(10031906)	464125.31
3809852.91	15.03363	(10030307)		
464163.31	3809852.91	14.73950	(09021907)	464201.31
3809852.91	14.16857	(09021907)		
464239.31	3809852.91	14.07904	(10020606)	464277.31
3809852.91	13.87013	(10021420)		
464315.31	3809852.91	13.68149	(10021420)	464353.31
3809852.91	13.08089	(10021420)		
464391.31	3809852.91	12.87751	(10021420)	464429.31
3809852.91	12.74127	(10021420)		
464467.31	3809852.91	12.49628	(10021420)	464505.31
3809852.91	12.36767	(10021420)		
463745.31	3809881.97	9.88151	(09022407)	463783.31
3809881.97	9.80490	(09022407)		
463821.31	3809881.97	9.69909	(09022407)	463859.31
3809881.97	9.69131	(09022407)		
463897.31	3809881.97	9.67477	(09022407)	463935.31
3809881.97	9.68663	(09022407)		
463973.31	3809881.97	9.80809	(09022407)	464011.31
3809881.97	9.95124	(09022206)		
464049.31	3809881.97	10.24930	(09022206)	464087.31
3809881.97	10.47160	(09022206)		
464125.31	3809881.97	11.45569	(10012420)	464163.31
3809881.97	12.01989	(10031906)		
464201.31	3809881.97	12.26403	(10031906)	464239.31
3809881.97	12.11095	(10030307)		
464277.31	3809881.97	12.04551	(10030307)	464315.31
3809881.97	11.99381	(09021907)		
464353.31	3809881.97	11.63750	(10021420)	464391.31
3809881.97	11.72741	(10021420)		
464429.31	3809881.97	11.60381	(10021420)	464467.31

3809881.97	11.36484	(10021420)		
464505.31	3809881.97	11.25138	(10021420)	463745.31
3809911.03	9.18800	(09022407)		
463783.31	3809911.03	9.07572	(09022407)	463821.31
3809911.03	9.00179	(09022407)		
463859.31	3809911.03	8.94133	(09022407)	463897.31
3809911.03	8.89346	(09022407)		
463935.31	3809911.03	8.85489	(09022407)	463973.31
3809911.03	8.92204	(09022407)		
464011.31	3809911.03	9.05960	(09022206)	464049.31
3809911.03	9.38533	(09022206)		
464087.31	3809911.03	9.62431	(09022206)	464125.31
3809911.03	9.79710	(09022206)		
464163.31	3809911.03	9.90430	(09022206)	464201.31
3809911.03	10.37621	(10012420)		
464239.31	3809911.03	10.46186	(10031906)	464277.31
3809911.03	10.98580	(10031906)		
464315.31	3809911.03	10.98263	(10030307)	464353.31
3809911.03	10.89179	(10030307)		
464391.31	3809911.03	10.80480	(10030307)	464429.31
3809911.03	10.67823	(10030307)		
464467.31	3809911.03	10.60211	(10030307)	464505.31
3809911.03	10.42657	(10031906)		
463745.31	3809940.09	8.53927	(09022407)	463783.31
3809940.09	8.41873	(09022407)		
463821.31	3809940.09	8.35918	(09022407)	463859.31
3809940.09	8.27621	(09022407)		
463897.31	3809940.09	8.22434	(09022407)	463935.31
3809940.09	8.23713	(10022819)		
463973.31	3809940.09	8.32629	(10022819)	464011.31
3809940.09	8.39608	(10022819)		
464049.31	3809940.09	8.58568	(09021807)	464087.31
3809940.09	8.81791	(09022206)		
464125.31	3809940.09	9.02939	(09022206)	464163.31
3809940.09	9.20986	(09022206)		
464201.31	3809940.09	9.35357	(09022206)	464239.31
3809940.09	9.69811	(10012420)		
464277.31	3809940.09	9.73406	(10012420)	464315.31
3809940.09	10.09396	(10031906)		
464353.31	3809940.09	10.18115	(10031906)	464391.31
3809940.09	10.12852	(10031906)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 513

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
464429.31	3809940.09	10.08521 (10030307)	464467.31
3809940.09	9.82483 (10031906)		
464505.31	3809940.09	9.71924 (10031906)	463745.31
3809969.15	8.04923 (09022407)		
463783.31	3809969.15	7.86479 (09022407)	463821.31
3809969.15	7.76753 (09022407)		
463859.31	3809969.15	7.68416 (09022407)	463897.31
3809969.15	7.67896 (10022819)		
463935.31	3809969.15	7.74608 (10022819)	463973.31
3809969.15	7.83875 (10022819)		
464011.31	3809969.15	7.87367 (10022819)	464049.31
3809969.15	7.96053 (10022819)		
464087.31	3809969.15	8.09839 (10022819)	464125.31
3809969.15	8.33748 (09022206)		
464163.31	3809969.15	8.55244 (09022206)	464201.31
3809969.15	8.73805 (09022206)		
464239.31	3809969.15	8.86076 (09022206)	464277.31
3809969.15	9.05206 (09022206)		
464315.31	3809969.15	9.21534 (10012420)	464353.31
3809969.15	9.63849 (10031906)		
464391.31	3809969.15	9.61555 (10031906)	464429.31
3809969.15	9.31816 (10031906)		
464467.31	3809969.15	9.10117 (10031906)	464505.31
3809969.15	9.08514 (10012420)		
463745.31	3809998.21	7.68742 (09022407)	463783.31
3809998.21	7.43200 (09022407)		
463821.31	3809998.21	7.32494 (09021807)	463859.31
3809998.21	7.28386 (09021807)		
463897.31	3809998.21	7.28228 (09021807)	463935.31
3809998.21	7.28788 (10022819)		

463973.31	3809998.21	7.38327	(10022819)	464011.31
3809998.21	7.44154	(10022819)		
464049.31	3809998.21	7.51283	(10022819)	464087.31
3809998.21	7.62234	(10022819)		
464125.31	3809998.21	7.78669	(10022819)	464163.31
3809998.21	7.96020	(09022206)		
464201.31	3809998.21	8.15850	(09022206)	464239.31
3809998.21	8.30608	(09022206)		
464277.31	3809998.21	8.40905	(09022206)	464315.31
3809998.21	8.59836	(09022206)		
464353.31	3809998.21	8.79477	(10012420)	464391.31
3809998.21	8.75881	(10012420)		
464429.31	3809998.21	8.67381	(10012420)	464467.31
3809998.21	8.62648	(10012420)		
464505.31	3809998.21	8.59404	(09022206)	463745.31
3810027.27	7.44825	(09021807)		
463783.31	3810027.27	7.21407	(09021807)	463821.31
3810027.27	7.06207	(09021807)		
463859.31	3810027.27	6.97869	(09021807)	463897.31
3810027.27	6.95463	(09021807)		
463935.31	3810027.27	6.91250	(09021807)	463973.31
3810027.27	6.98191	(10022819)		
464011.31	3810027.27	7.05450	(10022819)	464049.31
3810027.27	7.13136	(10022819)		
464087.31	3810027.27	7.20521	(10022819)	464125.31
3810027.27	7.33598	(10022819)		
464163.31	3810027.27	7.49793	(10022819)	464201.31
3810027.27	7.62936	(10022819)		
464239.31	3810027.27	7.77238	(09022206)	464277.31
3810027.27	7.90511	(09022206)		
464315.31	3810027.27	7.99909	(09022206)	464353.31
3810027.27	8.18678	(09022206)		
464391.31	3810027.27	8.19222	(09022206)	464429.31
3810027.27	8.19770	(09022206)		
464467.31	3810027.27	8.15049	(09022206)	464505.31
3810027.27	8.14578	(09022206)		
463745.31	3810056.33	7.25133	(09021807)	463783.31
3810056.33	7.02278	(09021807)		
463821.31	3810056.33	6.81894	(09021807)	463859.31
3810056.33	6.71412	(09021807)		
463897.31	3810056.33	6.65198	(09021807)	463935.31
3810056.33	6.59923	(09021807)		
463973.31	3810056.33	6.61735	(10022819)	464011.31
3810056.33	6.69278	(10022819)		
464049.31	3810056.33	6.75494	(10022819)	464087.31
3810056.33	6.83423	(10022819)		
464125.31	3810056.33	6.92697	(10022819)	464163.31
3810056.33	7.08335	(10022819)		
464201.31	3810056.33	7.21644	(10022819)	464239.31
3810056.33	7.32256	(10022819)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 514

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK1I1 ***
 INCLUDING SOURCE(S): L0006493 , L0006494
 , L0006495 , L0006496 , L0006497 ,
 L0006498 , L0006499 , L0006500 , L0006501 , L0006502
 , L0006503 , L0006504 , L0006505 ,
 L0006506 , L0006507 , L0006508 , L0006509 , L0006510
 , L0006511 , L0006512 , L0006513 ,
 L0006514 , L0006515 , L0006516 , L0006517 , L0006518
 , L0006519 , L0006520 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464277.31	3810056.33	7.41607	(09022206)	464315.31
3810056.33	7.53570	(09022206)		
464353.31	3810056.33	7.63332	(09022206)	464391.31
3810056.33	7.81105	(09022206)		
464429.31	3810056.33	7.72467	(09022206)	464467.31
3810056.33	7.73215	(09022206)		
464505.31	3810056.33	7.74104	(09022206)	463745.31
3810085.39	8.67553	(10022820)		
463783.31	3810085.39	6.82775	(09021807)	463821.31
3810085.39	6.61042	(09021807)		
463859.31	3810085.39	6.47003	(09021807)	463897.31
3810085.39	6.38262	(09021807)		
463935.31	3810085.39	6.32466	(09021807)	463973.31
3810085.39	6.30342	(09021807)		
464011.31	3810085.39	6.34416	(10022819)	464049.31
3810085.39	6.38532	(10022819)		
464087.31	3810085.39	6.47873	(10022819)	464125.31
3810085.39	6.57299	(10022819)		
464163.31	3810085.39	6.69746	(10022819)	464201.31
3810085.39	6.82320	(10022819)		
464239.31	3810085.39	6.94373	(10022819)	464277.31

3810085.39	7.02817	(10022819)		
464315.31	3810085.39	7.09916	(10022819)	464353.31
3810085.39	7.19824	(09022206)		
464391.31	3810085.39	7.27830	(09022206)	464429.31
3810085.39	7.31859	(09022206)		
464467.31	3810085.39	7.34015	(09022206)	464505.31
3810085.39	7.34689	(09022206)		
463745.31	3810114.45	9.92853	(10022820)	463783.31
3810114.45	6.64175	(09021807)		
463821.31	3810114.45	6.43169	(09021807)	463859.31
3810114.45	6.29412	(09021807)		
463897.31	3810114.45	6.16096	(09021807)	463935.31
3810114.45	6.07783	(09021807)		
463973.31	3810114.45	6.02199	(10050705)	464011.31
3810114.45	6.02440	(10022819)		
464049.31	3810114.45	6.06633	(10022819)	464087.31
3810114.45	6.14947	(10022819)		
464125.31	3810114.45	6.22643	(10022819)	464163.31
3810114.45	6.32669	(10022819)		
464201.31	3810114.45	6.44340	(10022819)	464239.31
3810114.45	6.59283	(10022819)		
464277.31	3810114.45	6.69305	(10022819)	464315.31
3810114.45	6.74063	(10022819)		
464353.31	3810114.45	6.77810	(10022819)	464391.31
3810114.45	6.83590	(09022206)		
464429.31	3810114.45	6.91174	(09022206)	464467.31
3810114.45	6.93895	(09022206)		
464505.31	3810114.45	6.97658	(09022206)	463745.31
3810143.51	9.73055	(10022820)		
463783.31	3810143.51	6.40205	(09021807)	463821.31
3810143.51	6.28737	(09021807)		
463859.31	3810143.51	6.14179	(09021807)	463897.31
3810143.51	5.94944	(09021807)		
463935.31	3810143.51	5.83337	(10050705)	463973.31
3810143.51	5.74827	(10050705)		
464011.31	3810143.51	5.73432	(10050705)	464049.31
3810143.51	5.77161	(10022819)		
464087.31	3810143.51	5.82493	(10022819)	464125.31
3810143.51	5.90656	(10022819)		
464163.31	3810143.51	6.00584	(10022819)	464201.31
3810143.51	6.11021	(10022819)		
464239.31	3810143.51	6.23394	(10022819)	464277.31
3810143.51	6.37215	(10022819)		
464315.31	3810143.51	6.42238	(10022819)	464353.31
3810143.51	6.42675	(10022819)		
464391.31	3810143.51	6.46524	(10022819)	464429.31
3810143.51	6.50859	(09022206)		
464467.31	3810143.51	6.57844	(09022206)	464505.31
3810143.51	6.62955	(09022206)		
464383.78	3807479.29	4.19730	(09032718)	464355.03

3807405.24	4.05893	(09032718)		
464402.07	3807352.10		3.88306	(09032718) 464367.23
3807296.35	3.83033	(09032718)		
464358.52	3807237.99		3.65898	(09032718) 464385.52
3807161.33	3.45734	(09032718)		
463132.27	3810926.37		2.97127	(09012007) 463237.82
3811199.31	2.56023	(09022207)		
464944.35	3809244.89		16.08584	(09032718) 465700.32
3809255.46	6.07464	(09010519)		
▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15				
Industrial Park\I15 Industrial *** 05/09/22				
*** AERMET - VERSION 14134 ***				
*** 16:42:19				

PAGE 515

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK1I1 ***

INCLUDING SOURCE(S):				L0006493	, L0006494
, L0006495	, L0006496	, L0006497	,		
	L0006498	, L0006499	, L0006500	, L0006501	, L0006502
, L0006503	, L0006504	, L0006505	,		
	L0006506	, L0006507	, L0006508	, L0006509	, L0006510
, L0006511	, L0006512	, L0006513	,		
	L0006514	, L0006515	, L0006516	, L0006517	, L0006518
, L0006519	, L0006520	, . . .	,		

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465716.18	3808536.49	5.71490	(09011918)	465544.37
3808533.85	6.68532	(09011918)		
465420.13	3808486.27	6.70226	(09031218)	465348.77
3808491.56	6.66351	(09120417)		
465317.05	3808443.98	6.60363	(09031218)	465327.62
3808406.97	6.67645	(09031218)		
465108.23	3808369.97	6.47572	(09123118)	464999.86
3808301.24	6.60021	(09111519)		
464722.31	3807973.48	4.93077	(09031218)	464717.03
3807836.03	4.60505	(09031218)		
464344.33	3807936.47	4.74366	(09032718)	464349.61
3807780.52	5.41831	(09032718)		

464386.62	3807785.81	5.57659	(09032718)	464521.43
3807859.82	5.84105 (09032718)			
464537.28	3807719.72	4.61047	(09032718)	464426.27
3807613.99	4.61233 (09032718)			
464368.43	3807532.62	4.38330	(09032718)	464324.60
3807121.91	3.51442 (09032718)			
464123.31	3807123.54	3.37863	(09032718)	463930.13
3806909.26	2.72499 (09032718)			
463831.11	3806906.01	2.80600	(09032718)	463821.36
3806720.95	2.46738 (09032718)			
463727.21	3806727.44	2.50773	(09032718)	463598.97
3806334.59	2.14803 (09032718)			
463001.06	3806361.54	1.99539	(09032718)	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 516

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
462160.55	3809377.75	4.98152	(09022407)	462051.48
3809270.62	4.95222 (09022407)			
462014.47	3809029.10	5.21046	(10042219)	462010.58
3808855.75	5.64256 (10042219)			
461936.56	3808886.92	5.50897	(10042219)	461936.56
3808997.94	5.71135 (10042219)			
461909.30	3808768.10	4.33961	(10042219)	461835.28

3808894.71	5.40532 (10042219)		
461845.02	3808995.99	5.41872 (10042219)	461833.33
3809114.80	4.88049 (10042219)		
461843.07	3809210.24	4.52802 (09022407)	461809.96
3809297.89	4.60748 (09022407)		
461856.71	3809385.54	4.35938 (09022407)	461841.13
3809482.92	4.21056 (09022407)		
462004.74	3809379.69	4.73848 (09022407)	461763.22
3808793.43	3.85595 (10042219)		
461753.48	3808699.93	2.75650 (09021520)	461835.28
3808686.30	2.92217 (09021520)		
461823.60	3808579.17	4.65495 (09021520)	461761.27
3808585.02	4.38715 (09021520)		
462301.19	3807807.15	9.47306 (09020119)	462304.78
3807868.16	11.59748 (09020119)		
462216.84	3807882.52	11.86265 (09020119)	462116.34
3807886.11	11.57864 (09020119)		
462114.55	3807789.20	9.43046 (09020119)	462012.25
3807887.90	11.08260 (09020119)		
462008.66	3807975.84	10.59823 (09020119)	461917.14
3807972.25	9.78951 (09020119)		
461922.52	3808187.60	18.56369 (10021620)	461908.17
3808288.10	14.83195 (10021620)		
461848.94	3808377.83	9.64149 (09021520)	461831.00
3808494.48	6.64379 (09021520)		
462421.43	3808393.98	14.17170 (10021620)	462459.11
3808501.66	9.66904 (09021520)		
462437.58	3808580.62	6.84771 (09021520)	462654.73
3809189.00	6.71444 (09031106)		
462559.49	3809194.32	6.63640 (09022407)	465763.86
3807935.19	3.80987 (09010519)		
465819.84	3807935.19	3.70674 (09010519)	465875.82
3807935.19	3.60477 (09010519)		
465931.80	3807935.19	3.50602 (09010519)	465987.78
3807935.19	3.40922 (09010519)		
466043.76	3807935.19	3.31496 (09010519)	466099.74
3807935.19	3.22331 (09010519)		
466155.72	3807935.19	3.13433 (09010519)	466211.70
3807935.19	3.04795 (09010519)		
466267.68	3807935.19	2.96448 (09010519)	466323.66
3807935.19	2.88146 (09010519)		
466379.64	3807935.19	2.80378 (09010519)	466435.62
3807935.19	2.72862 (09010519)		
466491.60	3807935.19	2.65602 (09010519)	466547.58
3807935.19	2.58031 (09010519)		
466603.56	3807935.19	2.51161 (09010519)	466659.54
3807935.19	2.44531 (09010519)		
466715.52	3807935.19	2.38146 (09010519)	466771.50
3807935.19	2.31918 (09010519)		
466827.48	3807935.19	2.25696 (09010519)	466883.46

3807935.19	2.19873	(09010519)		
465763.86	3808001.41	4.15430	(09010519)	465819.84
3808001.41	4.01825	(09010519)		
465875.82	3808001.41	3.88634	(09010519)	465931.80
3808001.41	3.75954	(09010519)		
465987.78	3808001.41	3.64125	(09010519)	466043.76
3808001.41	3.52090	(09010519)		
466099.74	3808001.41	3.41464	(09010519)	466155.72
3808001.41	3.30737	(09010519)		
466211.70	3808001.41	3.20511	(09010519)	466267.68
3808001.41	3.10620	(09010519)		
466323.66	3808001.41	3.01072	(09010519)	466379.64
3808001.41	2.91921	(09010519)		
466435.62	3808001.41	2.83143	(09010519)	466491.60
3808001.41	2.74721	(09010519)		
466547.58	3808001.41	2.66470	(09010519)	466603.56
3808001.41	2.58792	(09010519)		
466659.54	3808001.41	2.51434	(09010519)	466715.52
3808001.41	2.43773	(09010519)		
466771.50	3808001.41	2.36994	(09010519)	466827.48
3808001.41	2.30418	(09010519)		
466883.46	3808001.41	2.23876	(09010519)	465763.86
3808067.63	4.42149	(09010519)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 517

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465819.84	3808067.63	4.25357	(09010519)	465875.82	
3808067.63	4.09563 (09010519)				
465931.80	3808067.63	3.94554	(09010519)	465987.78	
3808067.63	3.80311 (09010519)				
466043.76	3808067.63	3.66777	(09010519)	466099.74	
3808067.63	3.53913 (09010519)				
466155.72	3808067.63	3.41710	(09010519)	466211.70	
3808067.63	3.30031 (09010519)				
466267.68	3808067.63	3.18934	(09010519)	466323.66	
3808067.63	3.08264 (09010519)				
466379.64	3808067.63	2.98100	(09010519)	466435.62	
3808067.63	2.88793 (09010519)				
466491.60	3808067.63	2.79170	(09010519)	466547.58	
3808067.63	2.70343 (09010519)				
466603.56	3808067.63	2.61924	(09010519)	466659.54	
3808067.63	2.53896 (09010519)				
466715.52	3808067.63	2.46302	(09010519)	466771.50	
3808067.63	2.39029 (09010519)				
466827.48	3808067.63	2.31812	(09010519)	466883.46	
3808067.63	2.24779 (09010519)				
465763.86	3808133.85	4.58460	(09010519)	465819.84	
3808133.85	4.39212 (09010519)				
465875.82	3808133.85	4.21214	(09010519)	465931.80	
3808133.85	4.04283 (09010519)				
465987.78	3808133.85	3.88994	(09010519)	466043.76	
3808133.85	3.73860 (09010519)				
466099.74	3808133.85	3.59593	(09010519)	466155.72	
3808133.85	3.46108 (09010519)				
466211.70	3808133.85	3.33362	(09010519)	466267.68	
3808133.85	3.22298 (10032206)				
466323.66	3808133.85	3.12309	(10032206)	466379.64	
3808133.85	3.02870 (10032206)				
466435.62	3808133.85	2.93813	(10032206)	466491.60	
3808133.85	2.85175 (10032206)				
466547.58	3808133.85	2.76760	(10032206)	466603.56	
3808133.85	2.68847 (10032206)				
466659.54	3808133.85	2.61280	(10032206)	466715.52	
3808133.85	2.53985 (10032206)				
466771.50	3808133.85	2.46618	(10032206)	466827.48	
3808133.85	2.40009 (10032206)				
466883.46	3808133.85	2.33585	(10032206)	465763.86	
3808200.07	4.70047 (10032206)				
465819.84	3808200.07	4.51079	(10032206)	465875.82	
3808200.07	4.33297 (10032206)				
465931.80	3808200.07	4.17277	(10032206)	465987.78	
3808200.07	4.01524 (10032206)				
466043.76	3808200.07	3.86698	(10032206)	466099.74	
3808200.07	3.72705 (10032206)				

466155.72	3808200.07	3.59493	(10032206)	466211.70
3808200.07	3.47006	(10032206)		
466267.68	3808200.07	3.35201	(10032206)	466323.66
3808200.07	3.24537	(10032206)		
466379.64	3808200.07	3.13916	(10032206)	466435.62
3808200.07	3.03825	(10032206)		
466491.60	3808200.07	2.94238	(10032206)	466547.58
3808200.07	2.85122	(10032206)		
466603.56	3808200.07	2.76445	(10032206)	466659.54
3808200.07	2.68179	(10032206)		
466715.52	3808200.07	2.60315	(10032206)	466771.50
3808200.07	2.52690	(10032206)		
466827.48	3808200.07	2.45274	(10032206)	466883.46
3808200.07	2.38423	(10032206)		
465763.86	3808266.29	4.86480	(10032206)	465819.84
3808266.29	4.66389	(10032206)		
465875.82	3808266.29	4.47260	(10032206)	465931.80
3808266.29	4.28920	(10032206)		
465987.78	3808266.29	4.11764	(10032206)	466043.76
3808266.29	3.95688	(10032206)		
466099.74	3808266.29	3.80601	(10032206)	466155.72
3808266.29	3.66421	(10032206)		
466211.70	3808266.29	3.53119	(10032206)	466267.68
3808266.29	3.40851	(10032206)		
466323.66	3808266.29	3.28964	(10032206)	466379.64
3808266.29	3.18168	(10032206)		
466435.62	3808266.29	3.07591	(10032206)	466491.60
3808266.29	2.97280	(10032206)		
466547.58	3808266.29	2.87648	(10032206)	466603.56
3808266.29	2.78507	(10032206)		
466659.54	3808266.29	2.70102	(10032206)	466715.52
3808266.29	2.61677	(10032206)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 518

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM_10		IN MICROGRAMS/M**3	
**					
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	
Y-COORD (M)	CONC	(YYMMDDHH)			

466771.50	3808266.29	2.53921	(10032206)	466827.48	
3808266.29	2.46323	(10032206)			
466883.46	3808266.29	2.39208	(10032206)	465763.86	
3808332.51	4.87575	(10032206)			
465819.84	3808332.51	4.67214	(10032206)	465875.82	
3808332.51	4.46904	(10032206)			
465931.80	3808332.51	4.28001	(10032206)	465987.78	
3808332.51	4.10372	(10032206)			
466043.76	3808332.51	3.93888	(10032206)	466099.74	
3808332.51	3.78472	(10032206)			
466155.72	3808332.51	3.64223	(10032206)	466211.70	
3808332.51	3.50642	(10032206)			
466267.68	3808332.51	3.37814	(10032206)	466323.66	
3808332.51	3.26508	(10032206)			
466379.64	3808332.51	3.15054	(10032206)	466435.62	
3808332.51	3.04219	(10032206)			
466491.60	3808332.51	2.93976	(10032206)	466547.58	
3808332.51	2.84272	(10032206)			
466603.56	3808332.51	2.75741	(10032206)	466659.54	
3808332.51	2.67083	(10032206)			
466715.52	3808332.51	2.58765	(10032206)	466771.50	
3808332.51	2.50378	(10032206)			
466827.48	3808332.51	2.42952	(10032206)	466883.46	
3808332.51	2.35850	(10032206)			
465763.86	3808398.73	4.72579	(10032206)	465819.84	
3808398.73	4.52620	(10032206)			
465875.82	3808398.73	4.32835	(10032206)	465931.80	
3808398.73	4.14526	(10032206)			
465987.78	3808398.73	3.97380	(10032206)	466043.76	
3808398.73	3.81360	(10032206)			
466099.74	3808398.73	3.66828	(10032206)	466155.72	
3808398.73	3.52638	(10032206)			
466211.70	3808398.73	3.39336	(10032206)	466267.68	
3808398.73	3.27812	(10032206)			
466323.66	3808398.73	3.15996	(10032206)	466379.64	
3808398.73	3.04920	(10032206)			
466435.62	3808398.73	2.94806	(10032206)	466491.60	
3808398.73	2.84966	(10032206)			
466547.58	3808398.73	2.75644	(10032206)	466603.56	

3808398.73	2.66879	(10032206)		
466659.54	3808398.73	2.58498	(10032206)	466715.52
3808398.73	2.50392	(10032206)		
466771.50	3808398.73	2.42795	(10032206)	466827.48
3808398.73	2.35480	(10032206)		
466883.46	3808398.73	2.28557	(10032206)	465763.86
3808464.95	4.52497	(09031319)		
465819.84	3808464.95	4.30190	(09031319)	465875.82
3808464.95	4.08506	(09031319)		
465931.80	3808464.95	3.89461	(10032206)	465987.78
3808464.95	3.73924	(10032206)		
466043.76	3808464.95	3.59749	(10032206)	466099.74
3808464.95	3.45801	(10032206)		
466155.72	3808464.95	3.32722	(10032206)	466211.70
3808464.95	3.20457	(10032206)		
466267.68	3808464.95	3.09622	(10032206)	466323.66
3808464.95	2.98701	(10032206)		
466379.64	3808464.95	2.88808	(10032206)	466435.62
3808464.95	2.79112	(10032206)		
466491.60	3808464.95	2.70333	(10032206)	466547.58
3808464.95	2.61571	(10032206)		
466603.56	3808464.95	2.53271	(10032206)	466659.54
3808464.95	2.45401	(10032206)		
466715.52	3808464.95	2.37953	(10032206)	466771.50
3808464.95	2.30875	(10032206)		
466827.48	3808464.95	2.24128	(10032206)	466883.46
3808464.95	2.17705	(10032206)		
465763.86	3808531.17	5.00968	(09031319)	465819.84
3808531.17	4.75774	(09031319)		
465875.82	3808531.17	4.52400	(09031319)	465931.80
3808531.17	4.30660	(09031319)		
465987.78	3808531.17	4.11198	(09031319)	466043.76
3808531.17	3.92626	(09031319)		
466099.74	3808531.17	3.75321	(09031319)	466155.72
3808531.17	3.58762	(09031319)		
466211.70	3808531.17	3.43301	(09031319)	466267.68
3808531.17	3.29301	(09031319)		
466323.66	3808531.17	3.16043	(09031319)	466379.64
3808531.17	3.03261	(09031319)		
466435.62	3808531.17	2.91611	(09031319)	466491.60
3808531.17	2.80142	(09031319)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 519

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466547.58	3808531.17	2.69328	(09031319)	466603.56
3808531.17	2.59113	(09031319)		
466659.54	3808531.17	2.49446	(09031319)	466715.52
3808531.17	2.40356	(09031319)		
466771.50	3808531.17	2.31640	(09031319)	466827.48
3808531.17	2.23565	(09031319)		
466883.46	3808531.17	2.15808	(09031319)	465763.86
3808597.39	5.26730	(09031319)		
465819.84	3808597.39	5.03283	(09031319)	465875.82
3808597.39	4.79915	(09031319)		
465931.80	3808597.39	4.57140	(09031319)	465987.78
3808597.39	4.37567	(09031319)		
466043.76	3808597.39	4.19398	(09031319)	466099.74
3808597.39	4.01455	(09031319)		
466155.72	3808597.39	3.84766	(09031319)	466211.70
3808597.39	3.69114	(09031319)		
466267.68	3808597.39	3.54084	(09031319)	466323.66
3808597.39	3.40618	(09031319)		
466379.64	3808597.39	3.27730	(09031319)	466435.62
3808597.39	3.15075	(09031319)		
466491.60	3808597.39	3.03379	(09031319)	466547.58
3808597.39	2.92152	(09031319)		
466603.56	3808597.39	2.81345	(09031319)	466659.54
3808597.39	2.71099	(09031319)		
466715.52	3808597.39	2.61427	(09031319)	466771.50
3808597.39	2.52232	(09031319)		
466827.48	3808597.39	2.43492	(09031319)	466883.46
3808597.39	2.35421	(09031319)		
465763.86	3808663.61	5.27074	(09031319)	465819.84
3808663.61	5.06671	(09031319)		

465875.82	3808663.61	4.85789	(09031319)	465931.80
3808663.61	4.66034 (09031319)			
465987.78	3808663.61	4.47390	(09031319)	466043.76
3808663.61	4.29641 (09031319)			
466099.74	3808663.61	4.13261	(09031319)	466155.72
3808663.61	3.97200 (09031319)			
466211.70	3808663.61	3.81886	(09031319)	466267.68
3808663.61	3.67437 (09031319)			
466323.66	3808663.61	3.54715	(09031319)	466379.64
3808663.61	3.41639 (09031319)			
466435.62	3808663.61	3.30155	(09031319)	466491.60
3808663.61	3.18274 (09031319)			
466547.58	3808663.61	3.06930	(09031319)	466603.56
3808663.61	2.96144 (09031319)			
466659.54	3808663.61	2.85872	(09031319)	466715.52
3808663.61	2.76174 (09031319)			
466771.50	3808663.61	2.66924	(09031319)	466827.48
3808663.61	2.58541 (09031319)			
466883.46	3808663.61	2.50040	(09031319)	465763.86
3808729.83	5.64752 (09010419)			
465819.84	3808729.83	5.37292	(09010419)	465875.82
3808729.83	5.09258 (09010419)			
465931.80	3808729.83	4.82360	(09010419)	465987.78
3808729.83	4.57110 (09010419)			
466043.76	3808729.83	4.33463	(09010419)	466099.74
3808729.83	4.11210 (09010419)			
466155.72	3808729.83	3.94534	(09031319)	466211.70
3808729.83	3.80973 (09031319)			
466267.68	3808729.83	3.68079	(09031319)	466323.66
3808729.83	3.56692 (09031319)			
466379.64	3808729.83	3.45196	(09031319)	466435.62
3808729.83	3.33835 (09031319)			
466491.60	3808729.83	3.23394	(09031319)	466547.58
3808729.83	3.12826 (09031319)			
466603.56	3808729.83	3.02706	(09031319)	466659.54
3808729.83	2.93826 (09031319)			
466715.52	3808729.83	2.84482	(09031319)	466771.50
3808729.83	2.75593 (09031319)			
466827.48	3808729.83	2.67285	(09031319)	466883.46
3808729.83	2.59108 (09031319)			
465763.86	3808796.05	5.75427	(09010419)	465819.84
3808796.05	5.54262 (09010419)			
465875.82	3808796.05	5.28338	(09010419)	465931.80
3808796.05	5.04783 (09010419)			
465987.78	3808796.05	4.81888	(09010419)	466043.76
3808796.05	4.60109 (09010419)			
466099.74	3808796.05	4.39270	(09010419)	466155.72
3808796.05	4.19359 (09010419)			
466211.70	3808796.05	4.00360	(09010419)	466267.68
3808796.05	3.82221 (09010419)			

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 520

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466323.66	3808796.05	3.65247	(09010419)	466379.64
3808796.05	3.48988	(09010419)		
466435.62	3808796.05	3.33938	(09010419)	466491.60
3808796.05	3.18979	(09010419)		
466547.58	3808796.05	3.09408	(09031319)	466603.56
3808796.05	3.01072	(09031319)		
466659.54	3808796.05	2.92498	(09031319)	466715.52
3808796.05	2.84417	(09031319)		
466771.50	3808796.05	2.76477	(09031319)	466827.48
3808796.05	2.68711	(09031319)		
466883.46	3808796.05	2.61601	(09031319)	465763.86
3808862.27	5.60454	(09120320)		
465819.84	3808862.27	5.38383	(09010419)	465875.82
3808862.27	5.21724	(09010419)		
465931.80	3808862.27	5.03102	(09010419)	465987.78
3808862.27	4.84612	(09010419)		
466043.76	3808862.27	4.66427	(09010419)	466099.74
3808862.27	4.49245	(09010419)		
466155.72	3808862.27	4.31297	(09010419)	466211.70
3808862.27	4.14462	(09010419)		
466267.68	3808862.27	3.98853	(09010419)	466323.66

3808862.27	3.83077 (09010419)		
466379.64	3808862.27	3.68185 (09010419)	466435.62
3808862.27	3.53685 (09010419)		
466491.60	3808862.27	3.39739 (09010419)	466547.58
3808862.27	3.26386 (09010419)		
466603.56	3808862.27	3.13262 (09010419)	466659.54
3808862.27	3.01191 (09010419)		
466715.52	3808862.27	2.89095 (09010419)	466771.50
3808862.27	2.77633 (09010419)		
466827.48	3808862.27	2.66813 (09010419)	466883.46
3808862.27	2.57242 (09031319)		
465763.86	3808928.49	5.49212 (09120320)	465819.84
3808928.49	5.31307 (09120320)		
465875.82	3808928.49	5.13793 (09120320)	465931.80
3808928.49	4.94887 (09120320)		
465987.78	3808928.49	4.75503 (09120320)	466043.76
3808928.49	4.56436 (09120320)		
466099.74	3808928.49	4.40241 (09010419)	466155.72
3808928.49	4.26874 (09010419)		
466211.70	3808928.49	4.13552 (09010419)	466267.68
3808928.49	4.00196 (09010419)		
466323.66	3808928.49	3.86938 (09010419)	466379.64
3808928.49	3.73903 (09010419)		
466435.62	3808928.49	3.61725 (09010419)	466491.60
3808928.49	3.49613 (09010419)		
466547.58	3808928.49	3.37535 (09010419)	466603.56
3808928.49	3.26349 (09010419)		
466659.54	3808928.49	3.14770 (09010419)	466715.52
3808928.49	3.03805 (09010419)		
466771.50	3808928.49	2.92917 (09010419)	466827.48
3808928.49	2.82781 (09010419)		
466883.46	3808928.49	2.72612 (09010419)	465763.86
3808994.71	5.19618 (09120320)		
465819.84	3808994.71	5.06830 (09120320)	465875.82
3808994.71	4.94879 (09120320)		
465931.80	3808994.71	4.83357 (09120320)	465987.78
3808994.71	4.71307 (09120320)		
466043.76	3808994.71	4.56037 (09120320)	466099.74
3808994.71	4.39873 (09120320)		
466155.72	3808994.71	4.23354 (09120320)	466211.70
3808994.71	4.07601 (09120320)		
466267.68	3808994.71	3.91917 (09120320)	466323.66
3808994.71	3.77193 (09010419)		
466379.64	3808994.71	3.67331 (09010419)	466435.62
3808994.71	3.57399 (09010419)		
466491.60	3808994.71	3.47890 (09010419)	466547.58
3808994.71	3.38657 (09010419)		
466603.56	3808994.71	3.28875 (09010419)	466659.54
3808994.71	3.18982 (09010419)		
466715.52	3808994.71	3.10124 (09010419)	466771.50

3808994.71	3.00436	(09010419)		
466827.48	3808994.71	2.90954	(09010419)	466883.46
3808994.71	2.82151	(09010419)		
465763.86	3809060.93	5.32627	(10021420)	465819.84
3809060.93	5.01894	(10021420)		
465875.82	3809060.93	4.72995	(10021420)	465931.80
3809060.93	4.54205	(09120320)		
465987.78	3809060.93	4.46544	(09120320)	466043.76
3809060.93	4.37759	(09120320)		
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15				
Industrial Park\I15 Industrial *** 05/09/22				
*** AERMET - VERSION 14134 *** ***				
*** 16:42:19				

PAGE 521

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012

, L0006013	, L0006014	, L0006015	,	
	L0006016	, L0006017	, L0006018	, L0006019 , L0006020
, L0006021	, L0006022	, L0006023	,	
	L0006024	, L0006025	, L0006026	, L0006027 , L0006028
, L0006029	, L0006030	, L0006031	,	
	L0006032	, L0006033	, L0006034	, L0006035 , L0006036
, L0006037	, L0006038	, . . .	,	

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	4.26030	(09120320)	466155.72
3809060.93	4.14840	(09120320)		
466211.70	3809060.93	4.02800	(09120320)	466267.68
3809060.93	3.90815	(09120320)		
466323.66	3809060.93	3.78549	(09120320)	466379.64
3809060.93	3.66177	(09120320)		
466435.62	3809060.93	3.54480	(09120320)	466491.60
3809060.93	3.42615	(09120320)		
466547.58	3809060.93	3.30383	(09120320)	466603.56
3809060.93	3.21108	(09010419)		
466659.54	3809060.93	3.14279	(09010419)	466715.52
3809060.93	3.06499	(09010419)		

466771.50	3809060.93	2.98784	(09010419)	466827.48
3809060.93	2.91270 (09010419)			
466883.46	3809060.93	2.83893	(09010419)	465763.86
3809127.15	5.44442 (10021420)			
465819.84	3809127.15	5.20860	(10021420)	465875.82
3809127.15	4.97013 (10021420)			
465931.80	3809127.15	4.72135	(10021420)	465987.78
3809127.15	4.47303 (10021420)			
466043.76	3809127.15	4.20966	(10021420)	466099.74
3809127.15	3.96918 (09120320)			
466155.72	3809127.15	3.90221	(09120320)	466211.70
3809127.15	3.84717 (09120320)			
466267.68	3809127.15	3.77447	(09120320)	466323.66
3809127.15	3.69152 (09120320)			
466379.64	3809127.15	3.59964	(09120320)	466435.62
3809127.15	3.50829 (09120320)			
466491.60	3809127.15	3.41445	(09120320)	466547.58
3809127.15	3.31970 (09120320)			
466603.56	3809127.15	3.22563	(09120320)	466659.54
3809127.15	3.12575 (09120320)			
466715.52	3809127.15	3.02894	(09120320)	466771.50
3809127.15	2.93180 (09120320)			
466827.48	3809127.15	2.83418	(09120320)	466883.46
3809127.15	2.77856 (09010419)			
465763.86	3809193.37	5.30792	(10021420)	465819.84
3809193.37	5.17054 (10021420)			
465875.82	3809193.37	5.00112	(10021420)	465931.80
3809193.37	4.81159 (10021420)			
465987.78	3809193.37	4.59499	(10021420)	466043.76
3809193.37	4.35005 (10021420)			
466099.74	3809193.37	4.15199	(10021420)	466155.72
3809193.37	3.94467 (10021420)			
466211.70	3809193.37	3.75123	(10021420)	466267.68
3809193.37	3.55945 (10021420)			
466323.66	3809193.37	3.47605	(09120320)	466379.64
3809193.37	3.42745 (09120320)			
466435.62	3809193.37	3.36718	(09120320)	466491.60
3809193.37	3.30437 (09120320)			
466547.58	3809193.37	3.23742	(09120320)	466603.56
3809193.37	3.16998 (09120320)			
466659.54	3809193.37	3.09379	(09120320)	466715.52
3809193.37	3.01997 (09120320)			
466771.50	3809193.37	2.94018	(09120320)	466827.48
3809193.37	2.86250 (09120320)			
466883.46	3809193.37	2.78247	(09120320)	465763.86
3809259.59	4.95272 (10021420)			
465819.84	3809259.59	4.89886	(10021420)	465875.82
3809259.59	4.80745 (10021420)			
465931.80	3809259.59	4.69391	(10021420)	465987.78
3809259.59	4.54142 (10021420)			

466043.76	3809259.59	4.37603	(10021420)	466099.74
3809259.59	4.20823	(10021420)		
466155.72	3809259.59	4.05785	(10021420)	466211.70
3809259.59	3.90064	(10021420)		
466267.68	3809259.59	3.73896	(10021420)	466323.66
3809259.59	3.56243	(10021420)		
466379.64	3809259.59	3.39165	(10021420)	466435.62
3809259.59	3.22344	(10021420)		
466491.60	3809259.59	3.10256	(09120320)	466547.58
3809259.59	3.06934	(09120320)		
466603.56	3809259.59	3.02559	(09120320)	466659.54
3809259.59	2.97743	(09120320)		
466715.52	3809259.59	2.93045	(09120320)	466771.50
3809259.59	2.87298	(09120320)		
466827.48	3809259.59	2.81539	(09120320)	466883.46
3809259.59	2.75439	(09120320)		
464503.41	3807141.91	18.50882	(09031218)	464523.41
3807141.91	18.75835	(09031218)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 522

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464543.41	3807141.91	19.57052	(09120417)	464563.41
3807141.91	20.31456	(09120417)		
464583.41	3807141.91	20.76575	(09120417)	464603.41

3807141.91	21.13305	(10112518)		
464623.41	3807141.91	21.34486	(10112518)	464643.41
3807141.91	21.19846	(10112518)		
464663.41	3807141.91	20.92841	(10112518)	464683.41
3807141.91	20.46979	(10112518)		
464703.41	3807141.91	19.64970	(10112518)	464723.41
3807141.91	18.81481	(10112518)		
464743.41	3807141.91	19.15978	(09011918)	464763.41
3807141.91	19.52363	(09011918)		
464783.41	3807141.91	19.78093	(09011918)	464803.41
3807141.91	19.85456	(09011918)		
464823.41	3807141.91	19.49018	(09011918)	464843.41
3807141.91	19.17014	(09011918)		
464863.41	3807141.91	18.79229	(09011918)	464883.41
3807141.91	18.19618	(09011918)		
464903.41	3807141.91	17.30865	(09011918)	464923.41
3807141.91	16.27515	(09011918)		
464503.41	3807161.91	19.07464	(09031218)	464523.41
3807161.91	19.41893	(09120417)		
464543.41	3807161.91	20.23170	(09120417)	464563.41
3807161.91	20.93652	(09120417)		
464583.41	3807161.91	21.32866	(09120417)	464603.41
3807161.91	21.52351	(10112518)		
464623.41	3807161.91	21.51303	(10112518)	464643.41
3807161.91	21.44208	(10112518)		
464663.41	3807161.91	20.98901	(10112518)	464683.41
3807161.91	20.27496	(10112518)		
464703.41	3807161.91	19.56021	(10112518)	464723.41
3807161.91	19.26892	(09011918)		
464743.41	3807161.91	19.71958	(09011918)	464763.41
3807161.91	19.73829	(09011918)		
464783.41	3807161.91	19.81593	(09011918)	464803.41
3807161.91	19.82975	(09011918)		
464823.41	3807161.91	19.62814	(09011918)	464843.41
3807161.91	19.29716	(09011918)		
464863.41	3807161.91	18.76133	(09011918)	464883.41
3807161.91	17.79387	(09011918)		
464903.41	3807161.91	16.92345	(09011918)	464923.41
3807161.91	15.99763	(09011918)		
464503.41	3807181.91	19.44903	(09031218)	464523.41
3807181.91	20.09179	(09120417)		
464543.41	3807181.91	20.84438	(09120417)	464563.41
3807181.91	21.43526	(09120417)		
464583.41	3807181.91	21.84849	(10112518)	464603.41
3807181.91	21.97432	(10112518)		
464623.41	3807181.91	21.83571	(10112518)	464643.41
3807181.91	21.69729	(10112518)		
464663.41	3807181.91	21.11543	(10112518)	464683.41
3807181.91	20.25811	(10112518)		
464703.41	3807181.91	19.47510	(10112518)	464723.41

3807181.91	19.78855	(09011918)	
464743.41	3807181.91	20.01877	(09011918) 464763.41
3807181.91	20.08159	(09011918)	
464783.41	3807181.91	20.11201	(09011918) 464803.41
3807181.91	19.99573	(09011918)	
464823.41	3807181.91	19.50884	(09011918) 464843.41
3807181.91	19.01697	(09011918)	
464863.41	3807181.91	18.41951	(09011918) 464883.41
3807181.91	17.52234	(09011918)	
464903.41	3807181.91	16.49585	(09011918) 464923.41
3807181.91	15.43326	(09011918)	
464503.41	3807201.91	19.87128	(09120417) 464523.41
3807201.91	20.77113	(09120417)	
464543.41	3807201.91	21.45468	(09120417) 464563.41
3807201.91	21.90766	(09120417)	
464583.41	3807201.91	22.30171	(10112518) 464603.41
3807201.91	22.37460	(10112518)	
464623.41	3807201.91	22.16478	(10112518) 464643.41
3807201.91	21.85105	(10112518)	
464663.41	3807201.91	21.16630	(10112518) 464683.41
3807201.91	20.23774	(10112518)	
464703.41	3807201.91	19.95481	(09011918) 464723.41
3807201.91	20.22536	(09011918)	
464743.41	3807201.91	20.28544	(09011918) 464763.41
3807201.91	20.45588	(09011918)	
464783.41	3807201.91	20.38879	(09011918) 464803.41
3807201.91	20.06594	(09011918)	
▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15			
Industrial Park\I15 Industrial *** 05/09/22			
*** AERMET - VERSION 14134 ***			
*** 16:42:19			

PAGE 523

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3807201.91	19.33411	(09011918)	464843.41
3807201.91	18.56518	(09011918)		
464863.41	3807201.91	17.86243	(09011918)	464883.41
3807201.91	17.11909	(09011918)		
464903.41	3807201.91	16.04103	(09011918)	464923.41
3807201.91	14.78860	(09011918)		
464503.41	3807221.91	20.59718	(09120417)	464523.41
3807221.91	21.46955	(09120417)		
464543.41	3807221.91	22.10593	(09120417)	464563.41
3807221.91	22.46637	(10112518)		
464583.41	3807221.91	22.61125	(10112518)	464603.41
3807221.91	22.62597	(10112518)		
464623.41	3807221.91	22.42283	(10112518)	464643.41
3807221.91	21.76729	(10112518)		
464663.41	3807221.91	21.03501	(10112518)	464683.41
3807221.91	20.13096	(10112518)		
464703.41	3807221.91	20.32231	(09011918)	464723.41
3807221.91	20.57930	(09011918)		
464743.41	3807221.91	20.77977	(09011918)	464763.41
3807221.91	20.84859	(09011918)		
464783.41	3807221.91	20.45885	(09011918)	464803.41
3807221.91	19.80357	(09011918)		
464823.41	3807221.91	19.26161	(09011918)	464843.41
3807221.91	18.30564	(09011918)		
464863.41	3807221.91	17.24016	(09011918)	464883.41
3807221.91	16.44889	(09011918)		
464903.41	3807221.91	15.47920	(09011918)	464923.41
3807221.91	14.38747	(09011918)		
464503.41	3807241.91	21.32050	(09120417)	464523.41
3807241.91	22.08619	(09120417)		
464543.41	3807241.91	22.67245	(09120417)	464563.41
3807241.91	23.03929	(10112518)		
464583.41	3807241.91	23.04921	(10112518)	464603.41
3807241.91	22.96354	(10112518)		
464623.41	3807241.91	22.66453	(10112518)	464643.41
3807241.91	21.83807	(10112518)		
464663.41	3807241.91	20.87411	(10112518)	464683.41
3807241.91	20.52375	(09011918)		
464703.41	3807241.91	20.82088	(09011918)	464723.41
3807241.91	21.08145	(09011918)		
464743.41	3807241.91	21.18738	(09011918)	464763.41
3807241.91	20.89499	(09011918)		
464783.41	3807241.91	20.41979	(09011918)	464803.41
3807241.91	19.68856	(09011918)		

464823.41	3807241.91	18.85929	(09011918)	464843.41
3807241.91	17.93227	(09011918)		
464863.41	3807241.91	16.85055	(09011918)	464883.41
3807241.91	16.00584	(09011918)		
464903.41	3807241.91	14.90997	(09011918)	464923.41
3807241.91	13.71863	(09011918)		
464503.41	3807261.91	22.04966	(09120417)	464523.41
3807261.91	22.69066	(09120417)		
464543.41	3807261.91	23.22345	(09120417)	464563.41
3807261.91	23.59146	(10112518)		
464583.41	3807261.91	23.49377	(10112518)	464603.41
3807261.91	23.24633	(10112518)		
464623.41	3807261.91	22.77354	(10112518)	464643.41
3807261.91	21.88106	(10112518)		
464663.41	3807261.91	20.71037	(09011918)	464683.41
3807261.91	20.95057	(09011918)		
464703.41	3807261.91	21.35871	(09011918)	464723.41
3807261.91	21.52580	(09011918)		
464743.41	3807261.91	21.41925	(09011918)	464763.41
3807261.91	20.85916	(09011918)		
464783.41	3807261.91	20.21208	(09011918)	464803.41
3807261.91	19.55974	(09011918)		
464823.41	3807261.91	18.48007	(09011918)	464843.41
3807261.91	17.37102	(09011918)		
464863.41	3807261.91	16.47462	(09011918)	464883.41
3807261.91	15.55664	(09011918)		
464903.41	3807261.91	14.27387	(09011918)	464923.41
3807261.91	12.66556	(09011918)		
464503.41	3807281.91	22.78895	(09120417)	464523.41
3807281.91	23.37420	(09120417)		
464543.41	3807281.91	23.83456	(10112518)	464563.41
3807281.91	24.11385	(10112518)		
464583.41	3807281.91	23.89750	(10112518)	464603.41
3807281.91	23.37743	(10112518)		
464623.41	3807281.91	22.61827	(10112518)	464643.41
3807281.91	21.80766	(10112518)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 524

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,

, L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464663.41	3807281.91	21.45352	(09011918)	464683.41
3807281.91	21.60947	(09011918)		
464703.41	3807281.91	21.92479	(09011918)	464723.41
3807281.91	21.76391	(09011918)		
464743.41	3807281.91	21.30038	(09011918)	464763.41
3807281.91	20.92485	(09011918)		
464783.41	3807281.91	20.06961	(09011918)	464803.41
3807281.91	19.04706	(09011918)		
464823.41	3807281.91	18.15062	(09011918)	464843.41
3807281.91	16.94278	(09011918)		
464863.41	3807281.91	15.66621	(09011918)	464883.41
3807281.91	14.73764	(09011918)		
464903.41	3807281.91	13.10874	(09011918)	464923.41
3807281.91	11.86355	(09011918)		
464503.41	3807301.91	23.43508	(09120417)	464523.41
3807301.91	24.01316	(09120417)		
464543.41	3807301.91	24.35223	(10112518)	464563.41
3807301.91	24.42490	(10112518)		
464583.41	3807301.91	24.20209	(10112518)	464603.41
3807301.91	23.56633	(10112518)		
464623.41	3807301.91	22.63451	(10112518)	464643.41
3807301.91	21.82271	(09011918)		
464663.41	3807301.91	22.17593	(09011918)	464683.41
3807301.91	22.23540	(09011918)		
464703.41	3807301.91	22.44484	(09011918)	464723.41
3807301.91	22.11685	(09011918)		
464743.41	3807301.91	21.31466	(09011918)	464763.41
3807301.91	20.62305	(09011918)		
464783.41	3807301.91	19.79313	(09011918)	464803.41
3807301.91	18.74264	(09011918)		
464823.41	3807301.91	17.95289	(09011918)	464843.41
3807301.91	16.66568	(09011918)		
464863.41	3807301.91	14.79237	(09011918)	464883.41
3807301.91	13.61918	(09011918)		
464903.41	3807301.91	12.46360	(09011918)	464923.41

3807301.91	10.96072	(09011918)		
464503.41	3807321.91	24.06398	(09120417)	464523.41
3807321.91	24.63852	(09120417)		
464543.41	3807321.91	24.84337	(10112518)	464563.41
3807321.91	24.69049	(10112518)		
464583.41	3807321.91	24.46084	(10112518)	464603.41
3807321.91	23.72224	(10112518)		
464623.41	3807321.91	22.64630	(10112518)	464643.41
3807321.91	22.60634	(09011918)		
464663.41	3807321.91	22.86960	(09011918)	464683.41
3807321.91	22.80577	(09011918)		
464703.41	3807321.91	22.80299	(09011918)	464723.41
3807321.91	22.36570	(09011918)		
464743.41	3807321.91	21.50959	(09011918)	464763.41
3807321.91	20.38870	(09011918)		
464783.41	3807321.91	19.39604	(09011918)	464803.41
3807321.91	18.61993	(09011918)		
464823.41	3807321.91	17.59411	(09011918)	464843.41
3807321.91	16.20054	(09011918)		
464863.41	3807321.91	14.34811	(09011918)	464883.41
3807321.91	12.97645	(09011918)		
464903.41	3807321.91	11.45943	(09011918)	464923.41
3807321.91	10.58203	(09011918)		
464503.41	3807341.91	24.78381	(09120417)	464523.41
3807341.91	25.27762	(10112518)		
464543.41	3807341.91	25.37317	(10112518)	464563.41
3807341.91	25.08427	(10112518)		
464583.41	3807341.91	24.70324	(10112518)	464603.41
3807341.91	23.80923	(10112518)		
464623.41	3807341.91	22.75432	(09011918)	464643.41
3807341.91	23.36666	(09011918)		
464663.41	3807341.91	23.52557	(09011918)	464683.41
3807341.91	23.28202	(09011918)		
464703.41	3807341.91	22.79904	(09011918)	464723.41
3807341.91	22.32232	(09011918)		
464743.41	3807341.91	21.66550	(09011918)	464763.41
3807341.91	20.42530	(09011918)		
464783.41	3807341.91	19.33470	(09011918)	464803.41
3807341.91	18.34467	(09011918)		
464823.41	3807341.91	16.86941	(09011918)	464843.41
3807341.91	14.89965	(09011918)		
464863.41	3807341.91	13.46199	(09011918)	464883.41
3807341.91	12.22685	(09011918)		
464903.41	3807341.91	11.08947	(09011918)	464923.41
3807341.91	10.14630	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464503.41	3807361.91	25.47203	(09120417)	464523.41
3807361.91	25.75979	(10112518)		
464543.41	3807361.91	25.74636	(10112518)	464563.41
3807361.91	25.42207	(10112518)		
464583.41	3807361.91	24.87762	(10112518)	464603.41
3807361.91	23.82097	(10112518)		
464623.41	3807361.91	23.54394	(09011918)	464643.41
3807361.91	23.86362	(09011918)		
464663.41	3807361.91	23.94872	(09011918)	464683.41
3807361.91	23.74708	(09011918)		
464703.41	3807361.91	23.04805	(09011918)	464723.41
3807361.91	22.19121	(09011918)		
464743.41	3807361.91	21.31013	(09011918)	464763.41
3807361.91	20.26987	(09011918)		
464783.41	3807361.91	18.96173	(09011918)	464803.41
3807361.91	17.60881	(09011918)		
464823.41	3807361.91	15.54605	(09011918)	464843.41
3807361.91	14.22670	(09011918)		
464863.41	3807361.91	12.53120	(09011918)	464883.41
3807361.91	11.61536	(09011918)		
464903.41	3807361.91	10.51777	(09011918)	464923.41
3807361.91	9.44048	(09011918)		
464503.41	3807381.91	26.08711	(09120417)	464523.41
3807381.91	26.18378	(10112518)		
464543.41	3807381.91	26.07222	(10112518)	464563.41
3807381.91	25.68725	(10112518)		

464583.41	3807381.91	24.91350	(10112518)	464603.41
3807381.91	23.94970	(09011918)		
464623.41	3807381.91	24.31142	(09011918)	464643.41
3807381.91	24.31064	(09011918)		
464663.41	3807381.91	24.25390	(09011918)	464683.41
3807381.91	24.01609	(09011918)		
464703.41	3807381.91	23.26632	(09011918)	464723.41
3807381.91	22.13062	(09011918)		
464743.41	3807381.91	20.75275	(09011918)	464763.41
3807381.91	19.78763	(09011918)		
464783.41	3807381.91	18.45087	(09011918)	464803.41
3807381.91	16.44401	(09011918)		
464823.41	3807381.91	14.83891	(09011918)	464843.41
3807381.91	13.10617	(09011918)		
464863.41	3807381.91	12.15894	(09011918)	464883.41
3807381.91	11.13993	(09011918)		
464903.41	3807381.91	9.91123	(09011918)	464923.41
3807381.91	8.70801	(09011918)		
464503.41	3807401.91	26.54320	(10112518)	464523.41
3807401.91	26.65666	(10112518)		
464543.41	3807401.91	26.44967	(10112518)	464563.41
3807401.91	25.85472	(10112518)		
464583.41	3807401.91	24.70013	(10112518)	464603.41
3807401.91	24.64235	(09011918)		
464623.41	3807401.91	25.06948	(09011918)	464643.41
3807401.91	24.93653	(09011918)		
464663.41	3807401.91	24.50865	(09011918)	464683.41
3807401.91	23.87077	(09011918)		
464703.41	3807401.91	23.32004	(09011918)	464723.41
3807401.91	22.18082	(09011918)		
464743.41	3807401.91	20.60152	(09011918)	464763.41
3807401.91	19.08753	(09011918)		
464783.41	3807401.91	17.81037	(09011918)	464803.41
3807401.91	16.14367	(09011918)		
464823.41	3807401.91	14.49212	(09011918)	464843.41
3807401.91	12.75115	(09011918)		
464863.41	3807401.91	11.71097	(09011918)	464883.41
3807401.91	10.28378	(09011918)		
464903.41	3807401.91	9.16475	(09011918)	464923.41
3807401.91	8.21483	(09011918)		
464503.41	3807421.91	27.12810	(10112518)	464523.41
3807421.91	27.12739	(10112518)		
464543.41	3807421.91	26.65361	(10112518)	464563.41
3807421.91	25.76229	(10112518)		
464583.41	3807421.91	24.85400	(09011918)	464603.41
3807421.91	25.31123	(09011918)		
464623.41	3807421.91	25.50146	(09011918)	464643.41
3807421.91	25.41658	(09011918)		
464663.41	3807421.91	24.86405	(09011918)	464683.41
3807421.91	23.93319	(09011918)		

464703.41 3807421.91 22.99265 (09011918) 464723.41
 3807421.91 21.87103 (09011918)
 464743.41 3807421.91 20.44883 (09011918) 464763.41
 3807421.91 18.75146 (09011918)

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 526

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464783.41	3807421.91	16.78090	(09011918)	464803.41
3807421.91	15.38206	(09011918)		
464823.41	3807421.91	13.94822	(09011918)	464843.41
3807421.91	12.13979	(09011918)		
464863.41	3807421.91	10.91499	(09011918)	464883.41
3807421.91	9.70565	(09011918)		
464903.41	3807421.91	8.52558	(09011918)	464923.41
3807421.91	7.42054	(09011918)		
464503.41	3807441.91	27.71002	(10112518)	464523.41
3807441.91	27.48496	(10112518)		
464543.41	3807441.91	26.74027	(10112518)	464563.41
3807441.91	25.59343	(10112518)		
464583.41	3807441.91	25.63375	(09011918)	464603.41
3807441.91	25.91247	(09011918)		
464623.41	3807441.91	25.85202	(09011918)	464643.41
3807441.91	25.72349	(09011918)		
464663.41	3807441.91	25.09171	(09011918)	464683.41

3807441.91	24.06534	(09011918)	
464703.41	3807441.91	22.66246	(09011918) 464723.41
3807441.91	21.30749	(09011918)	
464743.41	3807441.91	20.05026	(09011918) 464763.41
3807441.91	18.37891	(09011918)	
464783.41	3807441.91	16.21345	(09011918) 464803.41
3807441.91	14.00737	(09011918)	
464823.41	3807441.91	12.95763	(09011918) 464843.41
3807441.91	11.52299	(09011918)	
464863.41	3807441.91	10.08436	(09011918) 464883.41
3807441.91	9.16256	(09011918)	
464903.41	3807441.91	7.90160	(09011918) 464923.41
3807441.91	6.86251	(09030119)	
464503.41	3807461.91	28.21398	(10112518) 464523.41
3807461.91	27.58680	(10112518)	
464543.41	3807461.91	26.71273	(10112518) 464563.41
3807461.91	25.88996	(09011918)	
464583.41	3807461.91	26.19788	(09011918) 464603.41
3807461.91	26.40390	(09011918)	
464623.41	3807461.91	26.36990	(09011918) 464643.41
3807461.91	25.70962	(09011918)	
464663.41	3807461.91	25.03264	(09011918) 464683.41
3807461.91	24.13187	(09011918)	
464703.41	3807461.91	22.57887	(09011918) 464723.41
3807461.91	20.81872	(09011918)	
464743.41	3807461.91	19.16143	(09011918) 464763.41
3807461.91	17.70298	(09011918)	
464783.41	3807461.91	15.79699	(09011918) 464803.41
3807461.91	13.60932	(09011918)	
464823.41	3807461.91	12.49308	(09011918) 464843.41
3807461.91	11.05296	(09011918)	
464863.41	3807461.91	9.63690	(09011918) 464883.41
3807461.91	8.69791	(09011918)	
464903.41	3807461.91	7.48812	(09011918) 464923.41
3807461.91	7.22259	(09030119)	
464503.41	3807481.91	28.68506	(10112518) 464523.41
3807481.91	27.81415	(10112518)	
464543.41	3807481.91	26.62206	(10112518) 464563.41
3807481.91	26.57767	(09011918)	
464583.41	3807481.91	26.87607	(09011918) 464603.41
3807481.91	26.84676	(09011918)	
464623.41	3807481.91	26.49028	(09011918) 464643.41
3807481.91	25.83756	(09011918)	
464663.41	3807481.91	24.88383	(09011918) 464683.41
3807481.91	23.67341	(09011918)	
464703.41	3807481.91	22.27616	(09011918) 464723.41
3807481.91	20.47466	(09011918)	
464743.41	3807481.91	18.30437	(09011918) 464763.41
3807481.91	17.01918	(09011918)	
464783.41	3807481.91	15.29894	(09011918) 464803.41

```

3807481.91      13.14671 (09011918)
      464823.41  3807481.91      11.97364 (09011918)      464843.41
3807481.91      10.54065 (09011918)
      464863.41  3807481.91      9.14338 (09011918)      464883.41
3807481.91      7.88262 (09011918)
      464903.41  3807481.91      7.71317 (09030119)      464923.41
3807481.91      7.55277 (09030119)
      464503.41  3807501.91      28.99922 (10112518)      464523.41
3807501.91      27.90233 (10112518)
      464543.41  3807501.91      26.86237 (09011918)      464563.41
3807501.91      27.20498 (09011918)
      464583.41  3807501.91      27.46267 (09011918)      464603.41
3807501.91      27.18395 (09011918)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 527

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	26.51245	(09011918)	464643.41
3807501.91	25.84018	(09011918)		
464663.41	3807501.91	24.62446	(09011918)	464683.41
3807501.91	23.05894	(09011918)		
464703.41	3807501.91	21.70685	(09011918)	464723.41
3807501.91	19.98336	(09011918)		
464743.41	3807501.91	17.87174	(09011918)	464763.41
3807501.91	16.34747	(09011918)		

464783.41	3807501.91	14.66271	(09011918)	464803.41
3807501.91	12.61427	(09011918)		
464823.41	3807501.91	11.35393	(09011918)	464843.41
3807501.91	9.96242	(09011918)		
464863.41	3807501.91	8.57472	(09011918)	464883.41
3807501.91	7.94104	(09030119)		
464903.41	3807501.91	7.81873	(09030119)	464923.41
3807501.91	7.86687	(09030119)		
464503.41	3807521.91	28.98969	(10112518)	464523.41
3807521.91	27.62723	(10112518)		
464543.41	3807521.91	27.63341	(09011918)	464563.41
3807521.91	28.00925	(09011918)		
464583.41	3807521.91	27.73347	(09011918)	464603.41
3807521.91	27.39021	(09011918)		
464623.41	3807521.91	26.76853	(09011918)	464643.41
3807521.91	25.44635	(09011918)		
464663.41	3807521.91	24.17340	(09011918)	464683.41
3807521.91	22.75248	(09011918)		
464703.41	3807521.91	20.84530	(09011918)	464723.41
3807521.91	19.17297	(09011918)		
464743.41	3807521.91	17.25308	(09011918)	464763.41
3807521.91	15.34836	(09011918)		
464783.41	3807521.91	13.77055	(09011918)	464803.41
3807521.91	12.00592	(09011918)		
464823.41	3807521.91	10.41529	(09011918)	464843.41
3807521.91	9.14433	(09011918)		
464863.41	3807521.91	8.66644	(09030119)	464883.41
3807521.91	8.38186	(09030119)		
464903.41	3807521.91	8.20994	(09030119)	464923.41
3807521.91	8.23200	(09030119)		
464503.41	3807541.91	28.87900	(10112518)	464523.41
3807541.91	27.97177	(09011918)		
464543.41	3807541.91	28.37507	(09011918)	464563.41
3807541.91	28.43469	(09011918)		
464583.41	3807541.91	28.15385	(09011918)	464603.41
3807541.91	27.49447	(09011918)		
464623.41	3807541.91	26.50557	(09011918)	464643.41
3807541.91	25.24040	(09011918)		
464663.41	3807541.91	23.65182	(09011918)	464683.41
3807541.91	21.95548	(09011918)		
464703.41	3807541.91	20.18855	(09011918)	464723.41
3807541.91	18.07134	(09011918)		
464743.41	3807541.91	16.30547	(09011918)	464763.41
3807541.91	14.56122	(09011918)		
464783.41	3807541.91	12.72487	(09011918)	464803.41
3807541.91	11.37991	(09011918)		
464823.41	3807541.91	9.75479	(09011918)	464843.41
3807541.91	8.87219	(09030119)		
464863.41	3807541.91	8.76186	(09030119)	464883.41
3807541.91	8.75766	(09030119)		

464903.41	3807541.91	8.37542	(09030119)	464923.41
3807541.91	7.98551	(09030119)		
464503.41	3807561.91	28.73895	(10112518)	464523.41
3807561.91	28.86070	(09011918)		
464543.41	3807561.91	29.02980	(09011918)	464563.41
3807561.91	28.75010	(09011918)		
464583.41	3807561.91	28.43921	(09011918)	464603.41
3807561.91	27.48522	(09011918)		
464623.41	3807561.91	26.04672	(09011918)	464643.41
3807561.91	24.80520	(09011918)		
464663.41	3807561.91	23.05693	(09011918)	464683.41
3807561.91	20.73806	(09011918)		
464703.41	3807561.91	19.11001	(09011918)	464723.41
3807561.91	17.22337	(09011918)		
464743.41	3807561.91	14.83047	(09011918)	464763.41
3807561.91	13.45323	(09011918)		
464783.41	3807561.91	12.04877	(09011918)	464803.41
3807561.91	10.62141	(09011918)		
464823.41	3807561.91	9.34347	(09030119)	464843.41
3807561.91	9.16233	(09030119)		
464863.41	3807561.91	8.73463	(09030119)	464883.41
3807561.91	8.87919	(09030119)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 528

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -	464903.41	3807561.91	8.34117	(09030119)	464923.41
3807561.91	8.05541	(09030119)			
	464503.41	3807581.91	29.26341	(09011918)	464523.41
3807581.91	29.46602	(09011918)			
	464543.41	3807581.91	29.56581	(09011918)	464563.41
3807581.91	29.33701	(09011918)			
	464583.41	3807581.91	28.30403	(09011918)	464603.41
3807581.91	27.24585	(09011918)			
	464623.41	3807581.91	25.95316	(09011918)	464643.41
3807581.91	24.01717	(09011918)			
	464663.41	3807581.91	22.29012	(09011918)	464683.41
3807581.91	20.17686	(09011918)			
	464703.41	3807581.91	18.03097	(09011918)	464723.41
3807581.91	16.24741	(09011918)			
	464743.41	3807581.91	14.23142	(09011918)	464763.41
3807581.91	12.79293	(09011918)			
	464783.41	3807581.91	11.22261	(09011918)	464803.41
3807581.91	9.67774	(09011918)			
	464823.41	3807581.91	9.88111	(09030119)	464843.41
3807581.91	9.69465	(09030119)			
	464863.41	3807581.91	9.16660	(09030119)	464883.41
3807581.91	9.29517	(09030119)			
	464903.41	3807581.91	8.65263	(09030119)	464923.41
3807581.91	8.24128	(09030119)			
	464503.41	3807601.91	29.97721	(09011918)	464523.41
3807601.91	29.77876	(09011918)			
	464543.41	3807601.91	29.67230	(09011918)	464563.41
3807601.91	29.37193	(09011918)			
	464583.41	3807601.91	28.37404	(09011918)	464603.41
3807601.91	26.91672	(09011918)			
	464623.41	3807601.91	25.26857	(09011918)	464643.41
3807601.91	23.46064	(09011918)			
	464663.41	3807601.91	21.12640	(09011918)	464683.41
3807601.91	19.18307	(09011918)			
	464703.41	3807601.91	17.20546	(09011918)	464723.41
3807601.91	15.06302	(09011918)			
	464743.41	3807601.91	13.53386	(09011918)	464763.41
3807601.91	11.88898	(09011918)			
	464783.41	3807601.91	10.34191	(09011918)	464803.41
3807601.91	10.19405	(09030119)			
	464823.41	3807601.91	10.01843	(09030119)	464843.41
3807601.91	9.91391	(09030119)			
	464863.41	3807601.91	9.53314	(09030119)	464883.41
3807601.91	8.93851	(09030119)			
	464903.41	3807601.91	8.69449	(09030119)	464923.41
3807601.91	8.46472	(09030119)			
	464503.41	3807621.91	30.40414	(09011918)	464523.41
3807621.91	30.09545	(09011918)			
	464543.41	3807621.91	29.59339	(09011918)	464563.41

3807621.91	29.16021	(09011918)		
464583.41	3807621.91	28.16129	(09011918)	464603.41
3807621.91	26.49877	(09011918)		
464623.41	3807621.91	24.01878	(09011918)	464643.41
3807621.91	22.34468	(09011918)		
464663.41	3807621.91	20.27761	(09011918)	464683.41
3807621.91	17.48785	(09011918)		
464703.41	3807621.91	15.95187	(09011918)	464723.41
3807621.91	14.33887	(09011918)		
464743.41	3807621.91	12.65512	(09011918)	464763.41
3807621.91	10.87977	(09011918)		
464783.41	3807621.91	10.46144	(09030119)	464803.41
3807621.91	10.59424	(09030119)		
464823.41	3807621.91	10.23695	(09030119)	464843.41
3807621.91	9.85045	(09030119)		
464863.41	3807621.91	9.64859	(09030119)	464883.41
3807621.91	8.97882	(09030119)		
464903.41	3807621.91	8.74172	(09030119)	464923.41
3807621.91	8.46982	(09030119)		
464503.41	3807641.91	30.75971	(09011918)	464523.41
3807641.91	30.56587	(09011918)		
464543.41	3807641.91	30.22568	(09011918)	464563.41
3807641.91	29.38085	(09011918)		
464583.41	3807641.91	27.54269	(09011918)	464603.41
3807641.91	25.85657	(09011918)		
464623.41	3807641.91	23.58802	(09011918)	464643.41
3807641.91	21.22365	(09011918)		
464663.41	3807641.91	19.24237	(09011918)	464683.41
3807641.91	16.90196	(09011918)		
464703.41	3807641.91	15.26326	(09011918)	464723.41
3807641.91	13.39863	(09011918)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 529

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464743.41	3807641.91	11.52630	(09011918)	464763.41
3807641.91	10.90197	(09030119)		
464783.41	3807641.91	10.94257	(09030119)	464803.41
3807641.91	10.58078	(09030119)		
464823.41	3807641.91	10.58590	(09030119)	464843.41
3807641.91	9.83220	(09030119)		
464863.41	3807641.91	9.27971	(09030119)	464883.41
3807641.91	9.10518	(09030119)		
464903.41	3807641.91	8.74494	(09030119)	464923.41
3807641.91	8.79200	(09031219)		
464503.41	3807661.91	30.49780	(09011918)	464523.41
3807661.91	30.45131	(09011918)		
464543.41	3807661.91	29.95031	(09011918)	464563.41
3807661.91	28.91670	(09011918)		
464583.41	3807661.91	27.18166	(09011918)	464603.41
3807661.91	24.67685	(09011918)		
464623.41	3807661.91	22.60266	(09011918)	464643.41
3807661.91	20.40133	(09011918)		
464663.41	3807661.91	17.61703	(09011918)	464683.41
3807661.91	15.68584	(09011918)		
464703.41	3807661.91	14.08585	(09011918)	464723.41
3807661.91	12.36786	(09011918)		
464743.41	3807661.91	11.27101	(09030119)	464763.41
3807661.91	11.08554	(09030119)		
464783.41	3807661.91	10.97370	(09030119)	464803.41
3807661.91	10.55034	(09030119)		
464823.41	3807661.91	9.88715	(09030119)	464843.41
3807661.91	9.60746	(09030119)		
464863.41	3807661.91	9.34153	(09030119)	464883.41
3807661.91	9.06885	(09031219)		
464903.41	3807661.91	9.12873	(09031219)	464923.41
3807661.91	9.16534	(09031219)		
464503.41	3807681.91	28.80927	(09011918)	464523.41
3807681.91	28.77251	(09011918)		
464543.41	3807681.91	28.27615	(09011918)	464563.41
3807681.91	27.34372	(09011918)		
464583.41	3807681.91	26.02279	(09011918)	464603.41
3807681.91	23.89747	(09011918)		
464623.41	3807681.91	20.65929	(09011918)	464643.41
3807681.91	18.88335	(09011918)		

464663.41	3807681.91	16.63234	(09011918)	464683.41
3807681.91	14.39424	(09011918)		
464703.41	3807681.91	12.71921	(09011918)	464723.41
3807681.91	11.50815	(09030119)		
464743.41	3807681.91	11.74774	(09030119)	464763.41
3807681.91	11.35670	(09030119)		
464783.41	3807681.91	10.92561	(09030119)	464803.41
3807681.91	10.69541	(09030119)		
464823.41	3807681.91	9.94303	(09030119)	464843.41
3807681.91	9.66530	(09030119)		
464863.41	3807681.91	9.44757	(09031219)	464883.41
3807681.91	9.48401	(09031219)		
464903.41	3807681.91	9.51344	(09031219)	464923.41
3807681.91	9.55190	(10020118)		
464523.41	3807701.91	28.11380	(09011918)	464543.41
3807701.91	27.37829	(09011918)		
464563.41	3807701.91	26.24320	(09011918)	464583.41
3807701.91	24.76554	(09011918)		
464603.41	3807701.91	22.85429	(09011918)	464623.41
3807701.91	20.07594	(09011918)		
464643.41	3807701.91	17.44222	(09011918)	464663.41
3807701.91	15.34854	(09011918)		
464683.41	3807701.91	13.54657	(09011918)	464703.41
3807701.91	11.43879	(09030119)		
464723.41	3807701.91	11.54526	(09030119)	464743.41
3807701.91	11.76563	(09030119)		
464763.41	3807701.91	11.76895	(09030119)	464783.41
3807701.91	10.92439	(09030119)		
464803.41	3807701.91	10.29941	(09030119)	464823.41
3807701.91	10.08903	(09030119)		
464843.41	3807701.91	9.83105	(09031219)	464863.41
3807701.91	9.85922	(09031219)		
464883.41	3807701.91	9.88060	(09031219)	464903.41
3807701.91	9.95101	(10020118)		
464923.41	3807701.91	10.01168	(10020118)	464543.41
3807721.91	25.22008	(09011918)		
464563.41	3807721.91	24.64172	(09011918)	464583.41
3807721.91	23.14028	(09011918)		
464603.41	3807721.91	21.40046	(09011918)	464623.41
3807721.91	19.41588	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 530

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464643.41	3807721.91	16.55879	(09011918)	464663.41
3807721.91	14.22971	(09011918)		
464683.41	3807721.91	12.15128	(09011918)	464703.41
3807721.91	11.88966	(09030119)		
464723.41	3807721.91	11.68519	(09030119)	464743.41
3807721.91	11.75695	(09030119)		
464763.41	3807721.91	11.01184	(09030119)	464783.41
3807721.91	10.68800	(09030119)		
464803.41	3807721.91	10.37444	(09030119)	464823.41
3807721.91	10.21575	(09031219)		
464843.41	3807721.91	10.25587	(09031219)	464863.41
3807721.91	10.29335	(10020118)		
464883.41	3807721.91	10.37245	(10020118)	464903.41
3807721.91	10.42448	(10020118)		
464923.41	3807721.91	10.44966	(10020118)	464943.41
3807721.91	10.44820	(10020118)		
464963.41	3807721.91	10.42127	(10020118)	464983.41
3807721.91	10.36984	(10020118)		
465003.41	3807721.91	10.29476	(10020118)	465023.41
3807721.91	10.19769	(10020118)		
465043.41	3807721.91	10.08005	(10020118)	465063.41
3807721.91	9.94289	(10020118)		
465083.41	3807721.91	9.78833	(10020118)	465103.41
3807721.91	9.61871	(10020118)		
465123.41	3807721.91	9.43798	(10020118)	465143.41
3807721.91	9.24195	(10020118)		
465163.41	3807721.91	9.03439	(10020118)	465183.41
3807721.91	8.82088	(10020118)		
465203.41	3807721.91	8.59710	(10020118)	465223.41
3807721.91	8.36569	(10020118)		
465243.41	3807721.91	8.12895	(10020118)	465263.41

3807721.91	7.88876	(10020118)		
465283.41	3807721.91	7.64694	(10020118)	465303.41
3807721.91	7.40674	(10020118)		
465323.41	3807721.91	7.16349	(10020118)	465343.41
3807721.91	6.92036	(10020118)		
465363.41	3807721.91	6.68181	(10020118)	465383.41
3807721.91	6.44331	(10020118)		
464543.41	3807741.91	23.39270	(09011918)	464563.41
3807741.91	23.83852	(09011918)		
464583.41	3807741.91	22.29855	(09011918)	464603.41
3807741.91	20.44867	(09011918)		
464623.41	3807741.91	18.37198	(09011918)	464643.41
3807741.91	15.55878	(09011918)		
464663.41	3807741.91	13.06784	(09011918)	464683.41
3807741.91	11.94524	(09030119)		
464703.41	3807741.91	12.13687	(09030119)	464723.41
3807741.91	12.20621	(09030119)		
464743.41	3807741.91	11.94116	(09030119)	464763.41
3807741.91	11.08886	(09030119)		
464783.41	3807741.91	10.75970	(09030119)	464803.41
3807741.91	10.66560	(09031219)		
464823.41	3807741.91	10.67571	(09031219)	464843.41
3807741.91	10.74744	(10020118)		
464863.41	3807741.91	10.81839	(10020118)	464883.41
3807741.91	10.85885	(10020118)		
464903.41	3807741.91	10.87205	(10020118)	464923.41
3807741.91	10.85790	(10020118)		
464943.41	3807741.91	10.81353	(10020118)	464963.41
3807741.91	10.74614	(10020118)		
464983.41	3807741.91	10.65528	(10020118)	465003.41
3807741.91	10.53685	(10020118)		
465023.41	3807741.91	10.40008	(10020118)	465043.41
3807741.91	10.24491	(10020118)		
465063.41	3807741.91	10.06811	(10020118)	465083.41
3807741.91	9.87951	(10020118)		
465103.41	3807741.91	9.67879	(10020118)	465123.41
3807741.91	9.46441	(10020118)		
465143.41	3807741.91	9.23601	(10020118)	465163.41
3807741.91	8.99798	(10020118)		
465183.41	3807741.91	8.75696	(10020118)	465203.41
3807741.91	8.51118	(10020118)		
465223.41	3807741.91	8.26054	(10020118)	465243.41
3807741.91	8.00166	(10020118)		
465263.41	3807741.91	7.74540	(10020118)	465283.41
3807741.91	7.49049	(10020118)		
465303.41	3807741.91	7.23476	(10020118)	465323.41
3807741.91	6.97741	(10020118)		
465343.41	3807741.91	6.72191	(10020118)	465363.41
3807741.91	6.47330	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 531

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465383.41	3807741.91	6.22930	(10020118)	464543.41
3807761.91	16.04169	(09011918)		
464563.41	3807761.91	19.95665	(09011918)	464583.41
3807761.91	20.23467	(09011918)		
464603.41	3807761.91	18.73799	(09011918)	464623.41
3807761.91	16.60367	(09011918)		
464643.41	3807761.91	13.75452	(09011918)	464663.41
3807761.91	12.77109	(09030119)		
464683.41	3807761.91	12.61786	(09030119)	464703.41
3807761.91	12.78098	(09030119)		
464723.41	3807761.91	12.23000	(09030119)	464743.41
3807761.91	11.51639	(09030119)		
464763.41	3807761.91	11.25959	(09030119)	464783.41
3807761.91	11.12260	(09031219)		
464803.41	3807761.91	11.13659	(10020118)	464823.41
3807761.91	11.22842	(10020118)		
464843.41	3807761.91	11.28923	(10020118)	464863.41
3807761.91	11.31905	(10020118)		
464883.41	3807761.91	11.31701	(10020118)	464903.41
3807761.91	11.28664	(10020118)		
464923.41	3807761.91	11.22838	(10020118)	464943.41
3807761.91	11.13987	(10020118)		

464963.41	3807761.91	11.02864	(10020118)	464983.41
3807761.91	10.89463	(10020118)		
465003.41	3807761.91	10.73410	(10020118)	465023.41
3807761.91	10.55320	(10020118)		
465043.41	3807761.91	10.35501	(10020118)	465063.41
3807761.91	10.14605	(10020118)		
465083.41	3807761.91	9.92391	(10020118)	465103.41
3807761.91	9.68886	(10020118)		
465123.41	3807761.91	9.43752	(10020118)	465143.41
3807761.91	9.18212	(10020118)		
465163.41	3807761.91	8.92122	(10020118)	465183.41
3807761.91	8.64982	(10020118)		
465203.41	3807761.91	8.38046	(10020118)	465223.41
3807761.91	8.11115	(10020118)		
465243.41	3807761.91	7.84005	(10020118)	465263.41
3807761.91	7.57001	(10020118)		
465283.41	3807761.91	7.30053	(10020118)	465303.41
3807761.91	7.02798	(10020118)		
465323.41	3807761.91	6.76265	(10020118)	465343.41
3807761.91	6.50232	(10020118)		
465363.41	3807761.91	6.24217	(10020118)	465383.41
3807761.91	6.03327	(10102019)		
464543.41	3807781.91	14.07013	(09011918)	464563.41
3807781.91	13.08456	(09011918)		
464583.41	3807781.91	13.86829	(09011918)	464603.41
3807781.91	14.14271	(09011918)		
464623.41	3807781.91	13.71815	(09011918)	464643.41
3807781.91	12.92540	(09030119)		
464663.41	3807781.91	12.79851	(09030119)	464683.41
3807781.91	12.34350	(09030119)		
464703.41	3807781.91	12.35482	(09030119)	464723.41
3807781.91	11.98327	(09030119)		
464743.41	3807781.91	11.60880	(09030119)	464763.41
3807781.91	11.58290	(09031219)		
464783.41	3807781.91	11.65639	(10020118)	464803.41
3807781.91	11.73838	(10020118)		
464823.41	3807781.91	11.78714	(10020118)	464843.41
3807781.91	11.80245	(10020118)		
464863.41	3807781.91	11.78513	(10020118)	464883.41
3807781.91	11.73653	(10020118)		
464903.41	3807781.91	11.65767	(10020118)	464923.41
3807781.91	11.55041	(10020118)		
464943.41	3807781.91	11.41678	(10020118)	464963.41
3807781.91	11.25848	(10020118)		
464983.41	3807781.91	11.07771	(10020118)	465003.41
3807781.91	10.87684	(10020118)		
465023.41	3807781.91	10.65516	(10020118)	465043.41
3807781.91	10.41690	(10020118)		
465063.41	3807781.91	10.17227	(10020118)	465083.41
3807781.91	9.91288	(10020118)		

465103.41	3807781.91	9.64256	(10020118)	465123.41
3807781.91	9.36489	(10020118)		
465143.41	3807781.91	9.08118	(10020118)	465163.41
3807781.91	8.79340	(10020118)		
465183.41	3807781.91	8.50344	(10020118)	465203.41
3807781.91	8.21555	(10020118)		
465223.41	3807781.91	7.92837	(10020118)	465243.41
3807781.91	7.63885	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 532

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465263.41	3807781.91	7.35488	(10020118)	465283.41
3807781.91	7.07519	(10020118)		
465303.41	3807781.91	6.79661	(10020118)	465323.41
3807781.91	6.52295	(10020118)		
465343.41	3807781.91	6.28075	(10102019)	465363.41
3807781.91	6.11640	(10102019)		
465383.41	3807781.91	5.95484	(10102019)	464543.41
3807801.91	13.88389	(09011918)		
464563.41	3807801.91	12.84726	(09011918)	464583.41
3807801.91	12.27487	(09030119)		
464603.41	3807801.91	12.30751	(09030119)	464623.41
3807801.91	12.44440	(09030119)		
464643.41	3807801.91	12.82033	(09030119)	464663.41

3807801.91	12.72258	(09030119)		
464683.41	3807801.91	12.40109	(09030119)	464703.41
3807801.91	12.30139	(09030119)		
464723.41	3807801.91	12.10231	(09031219)	464743.41
3807801.91	12.12282	(09031219)		
464763.41	3807801.91	12.20933	(10020118)	464783.41
3807801.91	12.27973	(10020118)		
464803.41	3807801.91	12.31433	(10020118)	464823.41
3807801.91	12.31343	(10020118)		
464843.41	3807801.91	12.27749	(10020118)	464863.41
3807801.91	12.20793	(10020118)		
464883.41	3807801.91	12.10827	(10020118)	464903.41
3807801.91	11.97746	(10020118)		
464923.41	3807801.91	11.81857	(10020118)	464943.41
3807801.91	11.63715	(10020118)		
464963.41	3807801.91	11.43049	(10020118)	464983.41
3807801.91	11.20260	(10020118)		
465003.41	3807801.91	10.96021	(10020118)	465023.41
3807801.91	10.69892	(10020118)		
465043.41	3807801.91	10.42342	(10020118)	465063.41
3807801.91	10.14137	(10020118)		
465083.41	3807801.91	9.84660	(10020118)	465103.41
3807801.91	9.54426	(10020118)		
465123.41	3807801.91	9.24197	(10020118)	465143.41
3807801.91	8.93255	(10020118)		
465163.41	3807801.91	8.62130	(10020118)	465183.41
3807801.91	8.31665	(10020118)		
465203.41	3807801.91	8.01198	(10020118)	465223.41
3807801.91	7.70842	(10020118)		
465243.41	3807801.91	7.40423	(10020118)	465263.41
3807801.91	7.10945	(10020118)		
465283.41	3807801.91	6.82213	(10020118)	465303.41
3807801.91	6.54780	(10102019)		
465323.41	3807801.91	6.37109	(10102019)	465343.41
3807801.91	6.19449	(10102019)		
465363.41	3807801.91	6.02397	(10102019)	465383.41
3807801.91	5.85361	(10102019)		
464543.41	3807821.91	13.61723	(09011918)	464563.41
3807821.91	12.79941	(09030119)		
464583.41	3807821.91	12.85561	(09030119)	464603.41
3807821.91	12.85254	(09030119)		
464623.41	3807821.91	12.79276	(09030119)	464643.41
3807821.91	12.94495	(09030119)		
464663.41	3807821.91	12.93522	(09030119)	464683.41
3807821.91	12.81950	(09030119)		
464703.41	3807821.91	12.68160	(09031219)	464723.41
3807821.91	12.68835	(10020118)		
464743.41	3807821.91	12.79831	(10020118)	464763.41
3807821.91	12.85500	(10020118)		
464783.41	3807821.91	12.87313	(10020118)	464803.41

3807821.91	12.85339	(10020118)		
464823.41	3807821.91	12.79584	(10020118)	464843.41
3807821.91	12.70418	(10020118)		
464863.41	3807821.91	12.57983	(10020118)	464883.41
3807821.91	12.42197	(10020118)		
464903.41	3807821.91	12.23794	(10020118)	464923.41
3807821.91	12.02887	(10020118)		
464943.41	3807821.91	11.79272	(10020118)	464963.41
3807821.91	11.53923	(10020118)		
464983.41	3807821.91	11.26885	(10020118)	465003.41
3807821.91	10.97802	(10020118)		
465023.41	3807821.91	10.67869	(10020118)	465043.41
3807821.91	10.37028	(10020118)		
465063.41	3807821.91	10.04794	(10020118)	465083.41
3807821.91	9.72478	(10020118)		
465103.41	3807821.91	9.39917	(10020118)	465123.41
3807821.91	9.06548	(10020118)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 533

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807821.91	8.73677	(10020118)	465163.41
3807821.91	8.41216	(10020118)		
465183.41	3807821.91	8.09111	(10020118)	465203.41
3807821.91	7.76851	(10020118)		

465223.41	3807821.91	7.44961	(10020118)	465243.41
3807821.91	7.14222 (10020118)			
465263.41	3807821.91	6.84218	(10020118)	465283.41
3807821.91	6.64582 (10102019)			
465303.41	3807821.91	6.45517	(10102019)	465323.41
3807821.91	6.26971 (10102019)			
465343.41	3807821.91	6.08796	(10102019)	465363.41
3807821.91	5.90885 (10102019)			
465383.41	3807821.91	5.72759	(10102019)	464543.41
3807841.91	13.28215 (09030119)			
464563.41	3807841.91	13.33981	(09030119)	464583.41
3807841.91	13.38889 (09030119)			
464603.41	3807841.91	13.36261	(09030119)	464623.41
3807841.91	13.26311 (09030119)			
464643.41	3807841.91	13.10348	(09030119)	464663.41
3807841.91	13.17952 (09031219)			
464683.41	3807841.91	13.22765	(09031219)	464723.41
3807841.91	13.42647 (10020118)			
464743.41	3807841.91	13.46689	(10020118)	464763.41
3807841.91	13.46591 (10020118)			
464783.41	3807841.91	13.42416	(10020118)	464803.41
3807841.91	13.34324 (10020118)			
464823.41	3807841.91	13.22539	(10020118)	464843.41
3807841.91	13.07251 (10020118)			
464863.41	3807841.91	12.88746	(10020118)	464883.41
3807841.91	12.67325 (10020118)			
464903.41	3807841.91	12.43248	(10020118)	464923.41
3807841.91	12.16821 (10020118)			
464943.41	3807841.91	11.88367	(10020118)	464963.41
3807841.91	11.58128 (10020118)			
464983.41	3807841.91	11.26406	(10020118)	465003.41
3807841.91	10.93516 (10020118)			
465023.41	3807841.91	10.59665	(10020118)	465043.41
3807841.91	10.25129 (10020118)			
465063.41	3807841.91	9.90176	(10020118)	465083.41
3807841.91	9.54956 (10020118)			
465103.41	3807841.91	9.19695	(10020118)	465123.41
3807841.91	8.84599 (10020118)			
465143.41	3807841.91	8.49760	(10020118)	465163.41
3807841.91	8.15425 (10020118)			
465183.41	3807841.91	7.82068	(10020118)	465203.41
3807841.91	7.49031 (10020118)			
465223.41	3807841.91	7.16573	(10020118)	465243.41
3807841.91	6.93111 (10102019)			
465263.41	3807841.91	6.73285	(10102019)	465283.41
3807841.91	6.53675 (10102019)			
465303.41	3807841.91	6.33897	(10102019)	465323.41
3807841.91	6.14620 (10102019)			
465343.41	3807841.91	5.95648	(10102019)	465363.41
3807841.91	5.76632 (10102019)			

465383.41	3807841.91	5.57974	(10102019)	464503.41
3807861.91	15.29983	(09011918)		
464523.41	3807861.91	14.03143	(09011918)	464543.41
3807861.91	13.84239	(09030119)		
464563.41	3807861.91	13.83763	(09030119)	464583.41
3807861.91	13.85502	(09030119)		
464603.41	3807861.91	13.80945	(09030119)	464723.41
3807861.91	14.11863	(10020118)		
464743.41	3807861.91	14.09542	(10020118)	464763.41
3807861.91	14.02910	(10020118)		
464783.41	3807861.91	13.92086	(10020118)	464803.41
3807861.91	13.77264	(10020118)		
464823.41	3807861.91	13.59007	(10020118)	464843.41
3807861.91	13.37247	(10020118)		
464863.41	3807861.91	13.12410	(10020118)	464883.41
3807861.91	12.85207	(10020118)		
464903.41	3807861.91	12.55380	(10020118)	464923.41
3807861.91	12.23446	(10020118)		
464943.41	3807861.91	11.90226	(10020118)	464963.41
3807861.91	11.55242	(10020118)		
464983.41	3807861.91	11.19064	(10020118)	465003.41
3807861.91	10.82593	(10020118)		
465023.41	3807861.91	10.45129	(10020118)	465043.41
3807861.91	10.07270	(10020118)		
465063.41	3807861.91	9.69882	(10020118)	465083.41
3807861.91	9.32147	(10020118)		
▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15				
Industrial Park\I15 Industrial *** 05/09/22				
*** AERMET - VERSION 14134 ***				
*** 16:42:19				

PAGE 534

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	Y-COORD (M) (YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)
465103.41	3807861.91		8.94621	(10020118)	465123.41
3807861.91	8.58093	(10020118)			
465143.41	3807861.91		8.21693	(10020118)	465163.41
3807861.91	7.85921	(10020118)			
465183.41	3807861.91		7.51478	(10020118)	465203.41
3807861.91	7.24555	(10102019)			
465223.41	3807861.91		7.03290	(10102019)	465243.41
3807861.91	6.81561	(10102019)			
465263.41	3807861.91		6.60549	(10102019)	465283.41
3807861.91	6.40010	(10102019)			
465303.41	3807861.91		6.19617	(10102019)	465323.41
3807861.91	5.99658	(10102019)			
465343.41	3807861.91		5.80011	(10102019)	465363.41
3807861.91	5.60248	(10102019)			
465383.41	3807861.91		5.41220	(10102019)	464503.41
3807881.91	14.98800	(09011918)			
464523.41	3807881.91		14.49402	(09030119)	464543.41
3807881.91	14.44715	(09030119)			
464723.41	3807881.91		14.76467	(10020118)	464743.41
3807881.91	14.66967	(10020118)			
464763.41	3807881.91		14.53108	(10020118)	464783.41
3807881.91	14.35120	(10020118)			
464803.41	3807881.91		14.13205	(10020118)	464823.41
3807881.91	13.87726	(10020118)			
464843.41	3807881.91		13.59434	(10020118)	464863.41
3807881.91	13.28535	(10020118)			
464883.41	3807881.91		12.94856	(10020118)	464903.41
3807881.91	12.59579	(10020118)			
464923.41	3807881.91		12.22797	(10020118)	464943.41
3807881.91	11.84134	(10020118)			
464963.41	3807881.91		11.44994	(10020118)	464983.41
3807881.91	11.05326	(10020118)			
465003.41	3807881.91		10.64580	(10020118)	465023.41
3807881.91	10.24265	(10020118)			
465043.41	3807881.91		9.84181	(10020118)	465063.41
3807881.91	9.43689	(10020118)			
465083.41	3807881.91		9.04247	(10020118)	465103.41
3807881.91	8.65565	(10020118)			
465123.41	3807881.91		8.26962	(10020118)	465143.41
3807881.91	7.89793	(10020118)			
465163.41	3807881.91		7.58349	(10102019)	465183.41
3807881.91	7.34679	(10102019)			
465203.41	3807881.91		7.11847	(10102019)	465223.41
3807881.91	6.89507	(10102019)			
465243.41	3807881.91		6.67351	(10102019)	465263.41

3807881.91	6.45616	(10102019)		
465283.41	3807881.91	6.24162	(10102019)	465303.41
3807881.91	6.02503	(10102019)		
465323.41	3807881.91	5.81831	(10102019)	465343.41
3807881.91	5.61829	(10102019)		
465363.41	3807881.91	5.42224	(10102019)	465383.41
3807881.91	5.22744	(10102019)		
464723.41	3807901.91	15.34762	(10020118)	464743.41
3807901.91	15.17498	(10020118)		
464763.41	3807901.91	14.95781	(10020118)	464783.41
3807901.91	14.70140	(10020118)		
464803.41	3807901.91	14.40929	(10020118)	464823.41
3807901.91	14.08306	(10020118)		
464843.41	3807901.91	13.73329	(10020118)	464863.41
3807901.91	13.36186	(10020118)		
464883.41	3807901.91	12.96541	(10020118)	464903.41
3807901.91	12.55556	(10020118)		
464923.41	3807901.91	12.13565	(10020118)	464943.41
3807901.91	11.70796	(10020118)		
464963.41	3807901.91	11.27909	(10020118)	464983.41
3807901.91	10.84802	(10020118)		
465003.41	3807901.91	10.40822	(10020118)	465023.41
3807901.91	9.97474	(10020118)		
465043.41	3807901.91	9.54845	(10020118)	465063.41
3807901.91	9.12934	(10020118)		
465083.41	3807901.91	8.71821	(10020118)	465103.41
3807901.91	8.31671	(10020118)		
465123.41	3807901.91	7.95107	(10102019)	465143.41
3807901.91	7.69961	(10102019)		
465163.41	3807901.91	7.45055	(10102019)	465183.41
3807901.91	7.20489	(10102019)		
465203.41	3807901.91	6.96635	(10102019)	465223.41
3807901.91	6.73235	(10102019)		
465243.41	3807901.91	6.49845	(10102019)	465263.41
3807901.91	6.27279	(10102019)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 535

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028

, L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465283.41	3807901.91	6.05313	(10102019)	465303.41
3807901.91	5.83517	(10102019)		
465323.41	3807901.91	5.62262	(10102019)	465343.41
3807901.91	5.41652	(10102019)		
465363.41	3807901.91	5.21984	(10102019)	465383.41
3807901.91	5.02643	(10102019)		
464723.41	3807921.91	15.84793	(10020118)	464743.41
3807921.91	15.59632	(10020118)		
464763.41	3807921.91	15.29588	(10020118)	464783.41
3807921.91	14.95989	(10020118)		
464803.41	3807921.91	14.59267	(10020118)	464823.41
3807921.91	14.19621	(10020118)		
464843.41	3807921.91	13.77956	(10020118)	464863.41
3807921.91	13.34568	(10020118)		
464883.41	3807921.91	12.89272	(10020118)	464903.41
3807921.91	12.42976	(10020118)		
464923.41	3807921.91	11.96229	(10020118)	464943.41
3807921.91	11.49987	(10020118)		
464963.41	3807921.91	11.03594	(10020118)	464983.41
3807921.91	10.57270	(10020118)		
465003.41	3807921.91	10.10697	(10020118)	465023.41
3807921.91	9.64987	(10020118)		
465043.41	3807921.91	9.20403	(10020118)	465063.41
3807921.91	8.77482	(10020118)		
465083.41	3807921.91	8.35281	(10102019)	465103.41
3807921.91	8.07841	(10102019)		
465123.41	3807921.91	7.81271	(10102019)	465143.41
3807921.91	7.54572	(10102019)		
465163.41	3807921.91	7.28214	(10102019)	465183.41
3807921.91	7.02894	(10102019)		
465203.41	3807921.91	6.78207	(10102019)	465223.41
3807921.91	6.53993	(10102019)		
465243.41	3807921.91	6.29707	(10102019)	465263.41
3807921.91	6.06432	(10102019)		
465283.41	3807921.91	5.84017	(10102019)	465303.41
3807921.91	5.62383	(10102019)		

465323.41	3807921.91	5.40921	(10102019)	465343.41
3807921.91	5.20029	(10102019)		
465363.41	3807921.91	5.00354	(10102019)	465383.41
3807921.91	4.81215	(10102019)		
464723.41	3807941.91	16.23980	(10020118)	464743.41
3807941.91	15.91317	(10020118)		
464763.41	3807941.91	15.53344	(10020118)	464783.41
3807941.91	15.11638	(10020118)		
464803.41	3807941.91	14.67101	(10020118)	464823.41
3807941.91	14.20825	(10020118)		
464843.41	3807941.91	13.72594	(10020118)	464863.41
3807941.91	13.22912	(10020118)		
464883.41	3807941.91	12.72186	(10020118)	464903.41
3807941.91	12.21710	(10020118)		
464923.41	3807941.91	11.71592	(10020118)	464943.41
3807941.91	11.21856	(10020118)		
464963.41	3807941.91	10.72000	(10020118)	464983.41
3807941.91	10.22553	(10020118)		
465003.41	3807941.91	9.73924	(10020118)	465023.41
3807941.91	9.27207	(10020118)		
465043.41	3807941.91	8.81990	(10020118)	465063.41
3807941.91	8.49267	(10102019)		
465083.41	3807941.91	8.20217	(10102019)	465103.41
3807941.91	7.91730	(10102019)		
465123.41	3807941.91	7.63002	(10102019)	465143.41
3807941.91	7.35424	(10102019)		
465163.41	3807941.91	7.08582	(10102019)	465183.41
3807941.91	6.81686	(10102019)		
465203.41	3807941.91	6.56148	(10102019)	465223.41
3807941.91	6.31551	(10102019)		
465243.41	3807941.91	6.07538	(10102019)	465263.41
3807941.91	5.83765	(10102019)		
465283.41	3807941.91	5.60673	(10102019)	465303.41
3807941.91	5.38991	(10102019)		
465323.41	3807941.91	5.17931	(10102019)	465343.41
3807941.91	4.97592	(10102019)		
465363.41	3807941.91	4.78049	(10102019)	465383.41
3807941.91	4.58771	(10102019)		
465403.41	3807941.91	4.53314	(09010519)	465423.41
3807941.91	4.49673	(09010519)		
465443.41	3807941.91	4.46074	(09010519)	465463.41
3807941.91	4.42633	(09010519)		
465483.41	3807941.91	4.38900	(09010519)	465503.41
3807941.91	4.35229	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465523.41	3807941.91	4.31468	(09010519)	465543.41
3807941.91	4.27188	(09010519)		
465563.41	3807941.91	4.23260	(09010519)	465583.41
3807941.91	4.19521	(09010519)		
465603.41	3807941.91	4.15868	(09010519)	465623.41
3807941.91	4.11810	(09010519)		
465643.41	3807941.91	4.07669	(09010519)	465663.41
3807941.91	4.03944	(09010519)		
465683.41	3807941.91	3.99901	(09010519)	465703.41
3807941.91	3.95814	(09010519)		
464723.41	3807961.91	16.48129	(10020118)	464743.41
3807961.91	16.10761	(10020118)		
464763.41	3807961.91	15.65520	(10020118)	464783.41
3807961.91	15.16170	(10020118)		
464803.41	3807961.91	14.64432	(10020118)	464823.41
3807961.91	14.11209	(10020118)		
464843.41	3807961.91	13.57071	(10020118)	464863.41
3807961.91	13.02349	(10020118)		
464883.41	3807961.91	12.46959	(10020118)	464903.41
3807961.91	11.92587	(10020118)		
464923.41	3807961.91	11.39080	(10020118)	464943.41
3807961.91	10.85877	(10020118)		
464963.41	3807961.91	10.33820	(10020118)	464983.41
3807961.91	9.82955	(10020118)		
465003.41	3807961.91	9.32969	(10020118)	465023.41
3807961.91	8.95131	(10102019)		
465043.41	3807961.91	8.63763	(10102019)	465063.41

3807961.91	8.31865	(10102019)		
465083.41	3807961.91	8.00935	(10102019)	465103.41
3807961.91	7.70880	(10102019)		
465123.41	3807961.91	7.41563	(10102019)	465143.41
3807961.91	7.12952	(10102019)		
465163.41	3807961.91	6.85121	(10102019)	465183.41
3807961.91	6.58129	(10102019)		
465203.41	3807961.91	6.31926	(10102019)	465223.41
3807961.91	6.06640	(10102019)		
465243.41	3807961.91	5.82636	(10102019)	465263.41
3807961.91	5.59131	(10102019)		
465283.41	3807961.91	5.36385	(10102019)	465303.41
3807961.91	5.14813	(10102019)		
465323.41	3807961.91	4.93724	(10102019)	465343.41
3807961.91	4.86604	(09010519)		
465363.41	3807961.91	4.82492	(09010519)	465383.41
3807961.91	4.78072	(09010519)		
465403.41	3807961.91	4.73490	(09010519)	465423.41
3807961.91	4.68860	(09010519)		
465443.41	3807961.91	4.64527	(09010519)	465463.41
3807961.91	4.60925	(09010519)		
465483.41	3807961.91	4.56296	(09010519)	465503.41
3807961.91	4.51965	(09010519)		
465523.41	3807961.91	4.47700	(09010519)	465543.41
3807961.91	4.43142	(09010519)		
465563.41	3807961.91	4.38857	(09010519)	465583.41
3807961.91	4.34633	(09010519)		
465603.41	3807961.91	4.30104	(09010519)	465623.41
3807961.91	4.25623	(09010519)		
465643.41	3807961.91	4.21182	(09010519)	465663.41
3807961.91	4.16739	(09010519)		
465683.41	3807961.91	4.12350	(09010519)	465703.41
3807961.91	4.08073	(09010519)		
464743.41	3807981.91	16.15796	(10020118)	464763.41
3807981.91	15.64842	(10020118)		
464783.41	3807981.91	15.08704	(10020118)	464803.41
3807981.91	14.50428	(10020118)		
464823.41	3807981.91	13.90614	(10020118)	464843.41
3807981.91	13.31218	(10020118)		
464863.41	3807981.91	12.72229	(10020118)	464883.41
3807981.91	12.12857	(10020118)		
464903.41	3807981.91	11.55199	(10020118)	464923.41
3807981.91	10.98968	(10020118)		
464943.41	3807981.91	10.43322	(10020118)	464963.41
3807981.91	9.89772	(10020118)		
464983.41	3807981.91	9.45378	(10102019)	465003.41
3807981.91	9.10318	(10102019)		
465023.41	3807981.91	8.76347	(10102019)	465043.41
3807981.91	8.43181	(10102019)		
465063.41	3807981.91	8.10161	(10102019)	465083.41

3807981.91 7.77766 (10102019)
465103.41 3807981.91 7.46381 (10102019) 465123.41

3807981.91 7.16913 (10102019)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 537

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807981.91	6.87539	(10102019)	465163.41
3807981.91	6.58900 (10102019)			
465183.41	3807981.91	6.31978	(10102019)	465203.41
3807981.91	6.05528 (10102019)			
465223.41	3807981.91	5.79987	(10102019)	465243.41
3807981.91	5.56080 (10102019)			
465263.41	3807981.91	5.33060	(10102019)	465283.41
3807981.91	5.24103 (09010519)			
465303.41	3807981.91	5.19098	(09010519)	465323.41
3807981.91	5.13662 (09010519)			
465343.41	3807981.91	5.08144	(09010519)	465363.41
3807981.91	5.03115 (09010519)			
465383.41	3807981.91	4.98200	(09010519)	465403.41
3807981.91	4.93228 (09010519)			
465423.41	3807981.91	4.87649	(09010519)	465443.41
3807981.91	4.82582 (09010519)			
465463.41	3807981.91	4.78723	(09010519)	465483.41
3807981.91	4.73217 (09010519)			

465503.41	3807981.91	4.68222	(09010519)	465523.41
3807981.91	4.63446 (09010519)			
465543.41	3807981.91	4.58560	(09010519)	465563.41
3807981.91	4.53815 (09010519)			
465583.41	3807981.91	4.49030	(09010519)	465603.41
3807981.91	4.43764 (09010519)			
465623.41	3807981.91	4.38875	(09010519)	465643.41
3807981.91	4.34100 (09010519)			
465663.41	3807981.91	4.28975	(09010519)	465683.41
3807981.91	4.24331 (09010519)			
465703.41	3807981.91	4.19904	(09010519)	464763.41
3808001.91	15.49161 (10020118)			
464783.41	3808001.91	14.88113	(10020118)	464803.41
3808001.91	14.24403 (10020118)			
464823.41	3808001.91	13.58931	(10020118)	464843.41
3808001.91	12.94951 (10020118)			
464863.41	3808001.91	12.32154	(10020118)	464883.41
3808001.91	11.69495 (10020118)			
464903.41	3808001.91	11.09418	(10020118)	464923.41
3808001.91	10.51523 (10020118)			
464943.41	3808001.91	9.99818	(10102019)	464963.41
3808001.91	9.61655 (10102019)			
464983.41	3808001.91	9.24060	(10102019)	465003.41
3808001.91	8.88061 (10102019)			
465023.41	3808001.91	8.52296	(10102019)	465043.41
3808001.91	8.17343 (10102019)			
465063.41	3808001.91	7.84141	(10102019)	465083.41
3808001.91	7.51240 (10102019)			
465103.41	3808001.91	7.19271	(10102019)	465123.41
3808001.91	6.89363 (10102019)			
465143.41	3808001.91	6.59736	(10102019)	465163.41
3808001.91	6.30858 (10102019)			
465183.41	3808001.91	6.03189	(10102019)	465203.41
3808001.91	5.77148 (10102019)			
465223.41	3808001.91	5.65477	(09010519)	465243.41
3808001.91	5.59838 (09010519)			
465263.41	3808001.91	5.54178	(09010519)	465283.41
3808001.91	5.48346 (09010519)			
465303.41	3808001.91	5.41756	(09010519)	465323.41
3808001.91	5.35712 (09010519)			
465343.41	3808001.91	5.29816	(09010519)	465363.41
3808001.91	5.23301 (09010519)			
465383.41	3808001.91	5.17452	(09010519)	465403.41
3808001.91	5.11880 (09010519)			
465423.41	3808001.91	5.06232	(09010519)	465443.41
3808001.91	5.00706 (09010519)			
465463.41	3808001.91	4.95440	(09010519)	465483.41
3808001.91	4.89885 (09010519)			
465503.41	3808001.91	4.84470	(09010519)	465523.41
3808001.91	4.79008 (09010519)			

465543.41	3808001.91	4.72984	(09010519)	465563.41
3808001.91	4.67518	(09010519)		
465583.41	3808001.91	4.62340	(09010519)	465603.41
3808001.91	4.57100	(09010519)		
465623.41	3808001.91	4.51521	(09010519)	465643.41
3808001.91	4.45934	(09010519)		
465663.41	3808001.91	4.40881	(09010519)	465683.41
3808001.91	4.35969	(09010519)		
465703.41	3808001.91	4.31031	(09010519)	464763.41
3808021.91	15.15379	(10020118)		
464783.41	3808021.91	14.50775	(10020118)	464803.41
3808021.91	13.84381	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 538

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	13.16057	(10020118)	464843.41
3808021.91	12.49058	(10020118)		
464863.41	3808021.91	11.83569	(10020118)	464883.41
3808021.91	11.19495	(10020118)		
464903.41	3808021.91	10.58607	(10102019)	464923.41
3808021.91	10.16941	(10102019)		
464943.41	3808021.91	9.76758	(10102019)	464963.41
3808021.91	9.37050	(10102019)		
464983.41	3808021.91	8.98147	(10102019)	465003.41

3808021.91	8.60266	(10102019)		
465023.41	3808021.91	8.23621	(10102019)	465043.41
3808021.91	7.88165	(10102019)		
465063.41	3808021.91	7.53868	(10102019)	465083.41
3808021.91	7.20837	(10102019)		
465103.41	3808021.91	6.89056	(10102019)	465123.41
3808021.91	6.58452	(10102019)		
465143.41	3808021.91	6.29101	(10102019)	465163.41
3808021.91	6.13856	(09010519)		
465183.41	3808021.91	6.05936	(09010519)	465203.41
3808021.91	5.98869	(09010519)		
465223.41	3808021.91	5.92111	(09010519)	465243.41
3808021.91	5.84846	(09010519)		
465263.41	3808021.91	5.78028	(09010519)	465283.41
3808021.91	5.71363	(09010519)		
465303.41	3808021.91	5.64272	(09010519)	465323.41
3808021.91	5.57200	(09010519)		
465343.41	3808021.91	5.50185	(09010519)	465363.41
3808021.91	5.43266	(09010519)		
465383.41	3808021.91	5.36777	(09010519)	465403.41
3808021.91	5.30409	(09010519)		
465423.41	3808021.91	5.23642	(09010519)	465443.41
3808021.91	5.17310	(09010519)		
465463.41	3808021.91	5.11927	(09010519)	465483.41
3808021.91	5.05379	(09010519)		
465503.41	3808021.91	4.99256	(09010519)	465523.41
3808021.91	4.93275	(09010519)		
465543.41	3808021.91	4.87006	(09010519)	465563.41
3808021.91	4.80792	(09010519)		
465583.41	3808021.91	4.74743	(09010519)	465603.41
3808021.91	4.69149	(09010519)		
465623.41	3808021.91	4.63338	(09010519)	465643.41
3808021.91	4.57556	(09010519)		
465663.41	3808021.91	4.52185	(09010519)	465683.41
3808021.91	4.46587	(09010519)		
465703.41	3808021.91	4.40947	(09010519)	464783.41
3808041.91	13.99659	(10020118)		
464803.41	3808041.91	13.31690	(10020118)	464823.41
3808041.91	12.62617	(10020118)		
464843.41	3808041.91	11.94120	(10020118)	464863.41
3808041.91	11.27333	(10020118)		
464883.41	3808041.91	10.79144	(10102019)	464903.41
3808041.91	10.33995	(10102019)		
464923.41	3808041.91	9.89795	(10102019)	464943.41
3808041.91	9.47851	(10102019)		
464963.41	3808041.91	9.07140	(10102019)	464983.41
3808041.91	8.67501	(10102019)		
465003.41	3808041.91	8.28117	(10102019)	465023.41
3808041.91	7.90871	(10102019)		
465043.41	3808041.91	7.55248	(10102019)	465063.41

3808041.91	7.20408	(10102019)		
465083.41	3808041.91	6.87468	(10102019)	465103.41
3808041.91	6.68828	(09010519)		
465123.41	3808041.91	6.59810	(09010519)	465143.41
3808041.91	6.51345	(09010519)		
465163.41	3808041.91	6.43058	(09010519)	465183.41
3808041.91	6.34170	(09010519)		
465203.41	3808041.91	6.25856	(09010519)	465223.41
3808041.91	6.17743	(09010519)		
465243.41	3808041.91	6.09062	(09010519)	465263.41
3808041.91	6.00966	(09010519)		
465283.41	3808041.91	5.93254	(09010519)	465303.41
3808041.91	5.85819	(09010519)		
465323.41	3808041.91	5.77808	(09010519)	465343.41
3808041.91	5.69713	(09010519)		
465363.41	3808041.91	5.62309	(09010519)	465383.41
3808041.91	5.55132	(09010519)		
465403.41	3808041.91	5.47973	(09010519)	465423.41
3808041.91	5.40171	(09010519)		
465443.41	3808041.91	5.33062	(09010519)	465463.41
3808041.91	5.27460	(09010519)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 539

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -
 - - - - -

465483.41	3808041.91	5.19973	(09010519)	465503.41
3808041.91	5.13025 (09010519)			
465523.41	3808041.91	5.06420	(09010519)	465543.41
3808041.91	5.00056 (09010519)			
465563.41	3808041.91	4.93252	(09010519)	465583.41
3808041.91	4.86455 (09010519)			
465603.41	3808041.91	4.80386	(09010519)	465623.41
3808041.91	4.74405 (09010519)			
465643.41	3808041.91	4.68484	(09010519)	465663.41
3808041.91	4.62509 (09010519)			
465683.41	3808041.91	4.56269	(09010519)	465703.41
3808041.91	4.50092 (09010519)			
464803.41	3808061.91	12.69576	(10020118)	464823.41
3808061.91	11.99165 (10020118)			
464843.41	3808061.91	11.43931	(10102019)	464863.41
3808061.91	10.96575 (10102019)			
464883.41	3808061.91	10.48971	(10102019)	464903.41
3808061.91	10.02578 (10102019)			
464923.41	3808061.91	9.57668	(10102019)	464943.41
3808061.91	9.14445 (10102019)			
464963.41	3808061.91	8.72773	(10102019)	464983.41
3808061.91	8.32465 (10102019)			
465003.41	3808061.91	7.92707	(10102019)	465023.41
3808061.91	7.54697 (10102019)			
465043.41	3808061.91	7.30976	(09010519)	465063.41
3808061.91	7.21242 (09010519)			
465083.41	3808061.91	7.10846	(09010519)	465103.41
3808061.91	7.00370 (09010519)			
465123.41	3808061.91	6.90851	(09010519)	465143.41
3808061.91	6.80709 (09010519)			
465163.41	3808061.91	6.70520	(09010519)	465183.41
3808061.91	6.61295 (09010519)			
465203.41	3808061.91	6.51482	(09010519)	465223.41
3808061.91	6.41643 (09010519)			
465243.41	3808061.91	6.32765	(09010519)	465263.41
3808061.91	6.23328 (09010519)			
465283.41	3808061.91	6.13922	(09010519)	465303.41
3808061.91	6.05598 (09010519)			
465323.41	3808061.91	5.97246	(09010519)	465343.41
3808061.91	5.88822 (09010519)			
465363.41	3808061.91	5.79758	(09010519)	465383.41
3808061.91	5.71587 (09010519)			
465403.41	3808061.91	5.63834	(09010519)	465423.41
3808061.91	5.56073 (09010519)			
465443.41	3808061.91	5.48536	(09010519)	465463.41
3808061.91	5.41379 (09010519)			
465483.41	3808061.91	5.33955	(09010519)	465503.41
3808061.91	5.26145 (09010519)			
465523.41	3808061.91	5.18391	(09010519)	465543.41
3808061.91	5.11509 (09010519)			

465563.41	3808061.91	5.04646	(09010519)	465583.41
3808061.91	4.97868	(09010519)		
465603.41	3808061.91	4.91318	(09010519)	465623.41
3808061.91	4.84876	(09010519)		
465643.41	3808061.91	4.78404	(09010519)	465663.41
3808061.91	4.71411	(09010519)		
465683.41	3808061.91	4.64973	(09010519)	465703.41
3808061.91	4.58876	(09010519)		
464823.41	3808081.91	11.59934	(10102019)	464843.41
3808081.91	11.09311	(10102019)		
464863.41	3808081.91	10.59624	(10102019)	464883.41
3808081.91	10.11531	(10102019)		
464903.41	3808081.91	9.65034	(10102019)	464923.41
3808081.91	9.20004	(10102019)		
464943.41	3808081.91	8.76091	(10102019)	464963.41
3808081.91	8.33541	(10102019)		
464983.41	3808081.91	8.04871	(09010519)	465003.41
3808081.91	7.92579	(09010519)		
465023.41	3808081.91	7.79864	(09010519)	465043.41
3808081.91	7.67258	(09010519)		
465063.41	3808081.91	7.56067	(09010519)	465083.41
3808081.91	7.43974	(09010519)		
465103.41	3808081.91	7.31657	(09010519)	465123.41
3808081.91	7.20103	(09010519)		
465143.41	3808081.91	7.08760	(09010519)	465163.41
3808081.91	6.97608	(09010519)		
465183.41	3808081.91	6.86559	(09010519)	465203.41
3808081.91	6.75731	(09010519)		
465223.41	3808081.91	6.65103	(09010519)	465243.41
3808081.91	6.54587	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 540

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3808081.91	6.44295	(09010519)	465283.41
3808081.91	6.34333	(09010519)		
465303.41	3808081.91	6.25089	(09010519)	465323.41
3808081.91	6.15509	(09010519)		
465343.41	3808081.91	6.05903	(09010519)	465363.41
3808081.91	5.96514	(09010519)		
465383.41	3808081.91	5.87727	(09010519)	465403.41
3808081.91	5.79173	(09010519)		
465423.41	3808081.91	5.70236	(09010519)	465443.41
3808081.91	5.61890	(09010519)		
465463.41	3808081.91	5.54722	(09010519)	465483.41
3808081.91	5.46271	(09010519)		
465503.41	3808081.91	5.38016	(09010519)	465523.41
3808081.91	5.29939	(09010519)		
465543.41	3808081.91	5.21969	(09010519)	465563.41
3808081.91	5.14540	(09010519)		
465583.41	3808081.91	5.07421	(09010519)	465603.41
3808081.91	5.00430	(09010519)		
465623.41	3808081.91	4.93566	(09010519)	465643.41
3808081.91	4.86741	(09010519)		
465663.41	3808081.91	4.79680	(09010519)	465683.41
3808081.91	4.73060	(09010519)		
465703.41	3808081.91	4.66619	(09010519)	464843.41
3808101.91	10.67167	(10102019)		
464863.41	3808101.91	10.16379	(10102019)	464883.41
3808101.91	9.68522	(10102019)		
464903.41	3808101.91	9.22068	(10102019)	464923.41
3808101.91	8.88661	(09010519)		
464943.41	3808101.91	8.74587	(09010519)	464963.41
3808101.91	8.59775	(09010519)		
464983.41	3808101.91	8.44898	(09010519)	465003.41
3808101.91	8.31041	(09010519)		
465023.41	3808101.91	8.16698	(09010519)	465043.41
3808101.91	8.02448	(09010519)		
465063.41	3808101.91	7.89235	(09010519)	465083.41
3808101.91	7.75347	(09010519)		
465103.41	3808101.91	7.61344	(09010519)	465123.41
3808101.91	7.47850	(09010519)		
465143.41	3808101.91	7.35471	(09010519)	465163.41
3808101.91	7.23486	(09010519)		
465183.41	3808101.91	7.10393	(09010519)	465203.41

3808101.91	6.98410	(09010519)		
465223.41	3808101.91	6.86922	(09010519)	465243.41
3808101.91	6.74898	(09010519)		
465263.41	3808101.91	6.63923	(09010519)	465283.41
3808101.91	6.53524	(09010519)		
465303.41	3808101.91	6.43085	(09010519)	465323.41
3808101.91	6.32263	(09010519)		
465343.41	3808101.91	6.21562	(09010519)	465363.41
3808101.91	6.11774	(09010519)		
465383.41	3808101.91	6.02347	(09010519)	465403.41
3808101.91	5.93028	(09010519)		
465423.41	3808101.91	5.83052	(09010519)	465443.41
3808101.91	5.73959	(09010519)		
465463.41	3808101.91	5.66673	(09010519)	465483.41
3808101.91	5.57289	(09010519)		
465503.41	3808101.91	5.48594	(09010519)	465523.41
3808101.91	5.40184	(09010519)		
465543.41	3808101.91	5.31377	(09010519)	465563.41
3808101.91	5.23377	(09010519)		
465583.41	3808101.91	5.15820	(09010519)	465603.41
3808101.91	5.08411	(09010519)		
465623.41	3808101.91	5.01148	(09010519)	465643.41
3808101.91	4.93998	(09010519)		
465663.41	3808101.91	4.86830	(09010519)	465683.41
3808101.91	4.79936	(09010519)		
465703.41	3808101.91	4.73096	(09010519)	464863.41
3808121.91	9.80148	(09010519)		
464883.41	3808121.91	9.65558	(09010519)	464903.41
3808121.91	9.49600	(09010519)		
464923.41	3808121.91	9.33178	(09010519)	464943.41
3808121.91	9.16756	(09010519)		
464963.41	3808121.91	9.00404	(09010519)	464983.41
3808121.91	8.84074	(09010519)		
465003.41	3808121.91	8.66957	(09010519)	465023.41
3808121.91	8.51057	(09010519)		
465043.41	3808121.91	8.35689	(09010519)	465063.41
3808121.91	8.19564	(09010519)		
465083.41	3808121.91	8.03628	(09010519)	465103.41
3808121.91	7.88179	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 541

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012

```

, L0006013      , L0006014      , L0006015      ,
                  L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
                  L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
                  L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465123.41	3808121.91	7.74351	(09010519)	465143.41
3808121.91	7.60968	(09010519)		
465163.41	3808121.91	7.47666	(09010519)	465183.41
3808121.91	7.33281	(09010519)		
465203.41	3808121.91	7.19357	(09010519)	465223.41
3808121.91	7.06044	(09010519)		
465243.41	3808121.91	6.94022	(09010519)	465263.41
3808121.91	6.82407	(09010519)		
465283.41	3808121.91	6.70884	(09010519)	465303.41
3808121.91	6.58536	(09010519)		
465323.41	3808121.91	6.47218	(09010519)	465343.41
3808121.91	6.36336	(09010519)		
465363.41	3808121.91	6.24816	(09010519)	465383.41
3808121.91	6.14424	(09010519)		
465403.41	3808121.91	6.04600	(09010519)	465423.41
3808121.91	5.94850	(09010519)		
465443.41	3808121.91	5.85432	(09010519)	465463.41
3808121.91	5.76521	(09010519)		
465483.41	3808121.91	5.67373	(09010519)	465503.41
3808121.91	5.57855	(09010519)		
465523.41	3808121.91	5.48448	(09010519)	465543.41
3808121.91	5.39926	(09010519)		
465563.41	3808121.91	5.31710	(09010519)	465583.41
3808121.91	5.23720	(09010519)		
465603.41	3808121.91	5.15899	(09010519)	465623.41
3808121.91	5.08244	(09010519)		
465643.41	3808121.91	5.00598	(09010519)	465663.41
3808121.91	4.92417	(09010519)		
465683.41	3808121.91	4.84982	(09010519)	465703.41
3808121.91	4.77969	(09010519)		
464883.41	3808141.91	10.12690	(09010519)	464903.41
3808141.91	9.95218	(09010519)		

464923.41	3808141.91	9.76913	(09010519)	464943.41
3808141.91	9.58030	(09010519)		
464963.41	3808141.91	9.39551	(09010519)	464983.41
3808141.91	9.21173	(09010519)		
465003.41	3808141.91	9.01665	(09010519)	465023.41
3808141.91	8.83882	(09010519)		
465043.41	3808141.91	8.66834	(09010519)	465063.41
3808141.91	8.48677	(09010519)		
465083.41	3808141.91	8.30942	(09010519)	465103.41
3808141.91	8.13969	(09010519)		
465123.41	3808141.91	7.98956	(09010519)	465143.41
3808141.91	7.83662	(09010519)		
465163.41	3808141.91	7.68491	(09010519)	465183.41
3808141.91	7.53760	(09010519)		
465203.41	3808141.91	7.38812	(09010519)	465223.41
3808141.91	7.24240	(09010519)		
465243.41	3808141.91	7.11440	(09010519)	465263.41
3808141.91	6.98361	(09010519)		
465283.41	3808141.91	6.85374	(09010519)	465303.41
3808141.91	6.72765	(09010519)		
465323.41	3808141.91	6.60430	(09010519)	465343.41
3808141.91	6.48408	(09010519)		
465363.41	3808141.91	6.36736	(09010519)	465383.41
3808141.91	6.25844	(09010519)		
465403.41	3808141.91	6.15301	(09010519)	465423.41
3808141.91	6.04406	(09010519)		
465443.41	3808141.91	5.94255	(09010519)	465463.41
3808141.91	5.84606	(09010519)		
465483.41	3808141.91	5.75159	(09010519)	465503.41
3808141.91	5.65522	(09010519)		
465523.41	3808141.91	5.55934	(09010519)	465543.41
3808141.91	5.46525	(09010519)		
465563.41	3808141.91	5.37770	(09010519)	465583.41
3808141.91	5.29408	(09010519)		
465603.41	3808141.91	5.21235	(09010519)	465623.41
3808141.91	5.13244	(09010519)		
465643.41	3808141.91	5.05337	(09010519)	465663.41
3808141.91	4.97210	(09010519)		
465683.41	3808141.91	4.89242	(09010519)	465703.41
3808141.91	4.81549	(09010519)		
464883.41	3808161.91	10.55935	(09010519)	464903.41
3808161.91	10.37437	(09010519)		
464923.41	3808161.91	10.17548	(09010519)	464943.41
3808161.91	9.96210	(09010519)		
464963.41	3808161.91	9.75430	(09010519)	464983.41
3808161.91	9.54935	(09010519)		
465003.41	3808161.91	9.33717	(09010519)	465023.41
3808161.91	9.13853	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 542

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465043.41	3808161.91	8.94693	(09010519)	465063.41
3808161.91	8.74780	(09010519)		
465083.41	3808161.91	8.55665	(09010519)	465103.41
3808161.91	8.37433	(09010519)		
465123.41	3808161.91	8.20668	(09010519)	465143.41
3808161.91	8.03585	(09010519)		
465163.41	3808161.91	7.86844	(09010519)	465183.41
3808161.91	7.71483	(09010519)		
465203.41	3808161.91	7.55797	(09010519)	465223.41
3808161.91	7.40417	(09010519)		
465243.41	3808161.91	7.26329	(09010519)	465263.41
3808161.91	7.11914	(09010519)		
465283.41	3808161.91	6.97772	(09010519)	465303.41
3808161.91	6.84839	(09010519)		
465323.41	3808161.91	6.71577	(09010519)	465343.41
3808161.91	6.58558	(09010519)		
465363.41	3808161.91	6.46669	(09010519)	465383.41
3808161.91	6.35273	(09010519)		
465403.41	3808161.91	6.24081	(09010519)	465423.41
3808161.91	6.12231	(09010519)		
465443.41	3808161.91	6.01442	(09010519)	465463.41
3808161.91	5.91262	(09010519)		
465483.41	3808161.91	5.81115	(09010519)	465503.41

3808161.91	5.71399	(09010519)		
465523.41	3808161.91	5.61810	(09010519)	465543.41
3808161.91	5.51643	(09010519)		
465563.41	3808161.91	5.42416	(09010519)	465583.41
3808161.91	5.33721	(09010519)		
465603.41	3808161.91	5.25232	(09010519)	465623.41
3808161.91	5.16792	(09010519)		
465643.41	3808161.91	5.08539	(09010519)	465663.41
3808161.91	5.00640	(09010519)		
465683.41	3808161.91	4.92352	(09010519)	465703.41
3808161.91	4.84125	(09010519)		
464903.41	3808181.91	10.74947	(09010519)	464923.41
3808181.91	10.52845	(09010519)		
464943.41	3808181.91	10.29187	(09010519)	464963.41
3808181.91	10.06243	(09010519)		
464983.41	3808181.91	9.83928	(09010519)	465003.41
3808181.91	9.62074	(09010519)		
465023.41	3808181.91	9.39883	(09010519)	465043.41
3808181.91	9.17855	(09010519)		
465063.41	3808181.91	8.96244	(09010519)	465083.41
3808181.91	8.76523	(09010519)		
465103.41	3808181.91	8.57754	(09010519)	465123.41
3808181.91	8.38330	(09010519)		
465143.41	3808181.91	8.20489	(09010519)	465163.41
3808181.91	8.03427	(09010519)		
465183.41	3808181.91	7.85712	(09010519)	465203.41
3808181.91	7.69468	(09010519)		
465223.41	3808181.91	7.53931	(09010519)	465243.41
3808181.91	7.37749	(09010519)		
465263.41	3808181.91	7.22932	(09010519)	465283.41
3808181.91	7.08758	(09010519)		
465303.41	3808181.91	6.93950	(09010519)	465323.41
3808181.91	6.80408	(09010519)		
465343.41	3808181.91	6.67453	(09010519)	465363.41
3808181.91	6.53877	(09010519)		
465383.41	3808181.91	6.41643	(09010519)	465403.41
3808181.91	6.30117	(09010519)		
465423.41	3808181.91	6.18743	(09010519)	465443.41
3808181.91	6.07805	(09010519)		
465463.41	3808181.91	5.97009	(09010519)	465483.41
3808181.91	5.85538	(09010519)		
465503.41	3808181.91	5.75153	(09010519)	465523.41
3808181.91	5.65398	(09010519)		
465543.41	3808181.91	5.55720	(09010519)	465563.41
3808181.91	5.46421	(09010519)		
465583.41	3808181.91	5.37409	(09010519)	465603.41
3808181.91	5.28621	(09010519)		
465623.41	3808181.91	5.19388	(09010519)	465643.41
3808181.91	5.10259	(09010519)		
465663.41	3808181.91	5.02142	(09010519)	465683.41

```

3808181.91      4.94123 (09010519)
      465703.41  3808181.91      4.86113 (09010519)      464923.41
3808201.91      10.81476 (09010519)
      464943.41  3808201.91      10.57154 (09010519)      464963.41
3808201.91      10.32653 (09010519)
      464983.41  3808201.91      10.08514 (09010519)      465003.41
3808201.91      9.85181 (09010519)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 543

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465023.41	3808201.91	9.61131	(09010519)	465043.41
3808201.91	9.37362	(09010519)		
465063.41	3808201.91	9.15404	(09010519)	465083.41
3808201.91	8.94093	(09010519)		
465103.41	3808201.91	8.73470	(09010519)	465123.41
3808201.91	8.53664	(09010519)		
465143.41	3808201.91	8.34423	(09010519)	465163.41
3808201.91	8.15817	(09010519)		
465183.41	3808201.91	7.97878	(09010519)	465203.41
3808201.91	7.80462	(09010519)		
465223.41	3808201.91	7.63605	(09010519)	465243.41
3808201.91	7.47342	(09010519)		
465263.41	3808201.91	7.31538	(09010519)	465283.41
3808201.91	7.16228	(09010519)		

465303.41	3808201.91	7.01447	(09010519)	465323.41
3808201.91	6.87068 (09010519)			
465343.41	3808201.91	6.73128	(09010519)	465363.41
3808201.91	6.59660 (09010519)			
465383.41	3808201.91	6.46545	(09010519)	465403.41
3808201.91	6.33940 (09010519)			
465423.41	3808201.91	6.22376	(09010519)	465443.41
3808201.91	6.11130 (09010519)			
465463.41	3808201.91	6.00084	(09010519)	465483.41
3808201.91	5.88774 (09010519)			
465503.41	3808201.91	5.78239	(09010519)	465523.41
3808201.91	5.68189 (09010519)			
465543.41	3808201.91	5.58404	(09010519)	465563.41
3808201.91	5.48428 (09010519)			
465583.41	3808201.91	5.38903	(10032206)	465603.41
3808201.91	5.30908 (10032206)			
465623.41	3808201.91	5.22718	(10032206)	465643.41
3808201.91	5.14658 (10032206)			
465663.41	3808201.91	5.07224	(10032206)	465683.41
3808201.91	4.99570 (10032206)			
465703.41	3808201.91	4.91937	(10032206)	464943.41
3808221.91	10.79856 (09010519)			
464963.41	3808221.91	10.54160	(09010519)	464983.41
3808221.91	10.28304 (09010519)			
465003.41	3808221.91	10.03385	(09010519)	465023.41
3808221.91	9.78068 (09010519)			
465043.41	3808221.91	9.53330	(09010519)	465063.41
3808221.91	9.30661 (09010519)			
465083.41	3808221.91	9.07543	(09010519)	465103.41
3808221.91	8.85081 (09010519)			
465123.41	3808221.91	8.65254	(09010519)	465143.41
3808221.91	8.44950 (09010519)			
465163.41	3808221.91	8.25038	(09010519)	465183.41
3808221.91	8.06837 (09010519)			
465203.41	3808221.91	7.88408	(09010519)	465223.41
3808221.91	7.70455 (09010519)			
465243.41	3808221.91	7.54063	(09010519)	465263.41
3808221.91	7.37417 (09010519)			
465283.41	3808221.91	7.21178	(09010519)	465303.41
3808221.91	7.06368 (09010519)			
465323.41	3808221.91	6.91284	(09010519)	465343.41
3808221.91	6.76551 (09010519)			
465363.41	3808221.91	6.63128	(09010519)	465383.41
3808221.91	6.49420 (09010519)			
465403.41	3808221.91	6.36717	(10032206)	465423.41
3808221.91	6.26083 (10032206)			
465443.41	3808221.91	6.15727	(10032206)	465463.41
3808221.91	6.05640 (10032206)			
465483.41	3808221.91	5.95811	(10032206)	465503.41
3808221.91	5.86048 (10032206)			

465523.41	3808221.91	5.76517	(10032206)	465543.41
3808221.91	5.67427	(10032206)		
465563.41	3808221.91	5.57858	(10032206)	465583.41
3808221.91	5.48407	(10032206)		
465603.41	3808221.91	5.40019	(10032206)	465623.41
3808221.91	5.31673	(10032206)		
465643.41	3808221.91	5.23514	(10032206)	465663.41
3808221.91	5.15725	(10032206)		
465683.41	3808221.91	5.07505	(10032206)	465703.41
3808221.91	4.99340	(10032206)		
464963.41	3808241.91	10.70345	(09010519)	464983.41
3808241.91	10.42991	(09010519)		
465003.41	3808241.91	10.16693	(09010519)	465023.41
3808241.91	9.91132	(09010519)		
465043.41	3808241.91	9.66183	(09010519)	465063.41
3808241.91	9.40709	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 544

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465083.41	3808241.91	9.16019	(09010519)	465103.41
3808241.91	8.92546	(09010519)		
465123.41	3808241.91	8.71895	(09010519)	465143.41
3808241.91	8.51741	(09010519)		
465163.41	3808241.91	8.31981	(09010519)	465183.41

3808241.91	8.11629	(09010519)		
465203.41	3808241.91	7.93039	(09010519)	465223.41
3808241.91	7.76181	(10032206)		
465243.41	3808241.91	7.59529	(10032206)	465263.41
3808241.91	7.44374	(10032206)		
465283.41	3808241.91	7.29921	(10032206)	465303.41
3808241.91	7.14780	(10032206)		
465323.41	3808241.91	7.01014	(10032206)	465343.41
3808241.91	6.87879	(10032206)		
465363.41	3808241.91	6.74069	(10032206)	465383.41
3808241.91	6.61527	(10032206)		
465403.41	3808241.91	6.49803	(10032206)	465423.41
3808241.91	6.38579	(10032206)		
465443.41	3808241.91	6.27662	(10032206)	465463.41
3808241.91	6.17042	(10032206)		
465483.41	3808241.91	6.06708	(10032206)	465503.41
3808241.91	5.95824	(10032206)		
465523.41	3808241.91	5.85076	(10032206)	465543.41
3808241.91	5.75596	(10032206)		
465563.41	3808241.91	5.66242	(10032206)	465583.41
3808241.91	5.57094	(10032206)		
465603.41	3808241.91	5.48332	(10032206)	465623.41
3808241.91	5.39077	(10032206)		
465643.41	3808241.91	5.29922	(10032206)	465663.41
3808241.91	5.21845	(10032206)		
465683.41	3808241.91	5.13862	(10032206)	465703.41
3808241.91	5.05873	(10032206)		
464983.41	3808261.91	10.47501	(09010519)	465003.41
3808261.91	10.21888	(09010519)		
465023.41	3808261.91	9.96207	(09010519)	465043.41
3808261.91	9.71271	(10032206)		
465063.41	3808261.91	9.48114	(10032206)	465083.41
3808261.91	9.25827	(10032206)		
465103.41	3808261.91	9.04329	(10032206)	465123.41
3808261.91	8.83473	(10032206)		
465143.41	3808261.91	8.64253	(10032206)	465163.41
3808261.91	8.45871	(10032206)		
465183.41	3808261.91	8.27297	(10032206)	465203.41
3808261.91	8.09271	(10032206)		
465223.41	3808261.91	7.91866	(10032206)	465243.41
3808261.91	7.75113	(10032206)		
465263.41	3808261.91	7.59579	(10032206)	465283.41
3808261.91	7.44516	(10032206)		
465303.41	3808261.91	7.28352	(10032206)	465323.41
3808261.91	7.13299	(10032206)		
465343.41	3808261.91	6.99062	(10032206)	465363.41
3808261.91	6.85329	(10032206)		
465383.41	3808261.91	6.71972	(10032206)	465403.41
3808261.91	6.59158	(10032206)		
465423.41	3808261.91	6.47461	(10032206)	465443.41

3808261.91	6.36097	(10032206)		
465463.41	3808261.91	6.25078	(10032206)	465483.41
3808261.91	6.14342	(10032206)		
465503.41	3808261.91	6.03422	(10032206)	465523.41
3808261.91	5.92727	(10032206)		
465543.41	3808261.91	5.82882	(10032206)	465563.41
3808261.91	5.72813	(10032206)		
465583.41	3808261.91	5.62944	(10032206)	465603.41
3808261.91	5.53892	(10032206)		
465623.41	3808261.91	5.44661	(10032206)	465643.41
3808261.91	5.35492	(10032206)		
465663.41	3808261.91	5.26514	(10032206)	465683.41
3808261.91	5.18205	(10032206)		
465703.41	3808261.91	5.10195	(10032206)	465003.41
3808281.91	10.37449	(10032206)		
465023.41	3808281.91	10.13734	(10032206)	465043.41
3808281.91	9.90099	(10032206)		
465063.41	3808281.91	9.66412	(10032206)	465083.41
3808281.91	9.44327	(10032206)		
465103.41	3808281.91	9.22972	(10032206)	465123.41
3808281.91	9.00336	(10032206)		
465143.41	3808281.91	8.79854	(10032206)	465163.41
3808281.91	8.60688	(10032206)		
465183.41	3808281.91	8.41823	(10032206)	465203.41
3808281.91	8.22701	(10032206)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 545

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808281.91	8.04165	(10032206)	465243.41
3808281.91	7.87684 (10032206)			
465263.41	3808281.91	7.71475	(10032206)	465283.41
3808281.91	7.55425 (10032206)			
465303.41	3808281.91	7.38607	(10032206)	465323.41
3808281.91	7.22608 (10032206)			
465343.41	3808281.91	7.07483	(10032206)	465363.41
3808281.91	6.93773 (10032206)			
465383.41	3808281.91	6.79739	(10032206)	465403.41
3808281.91	6.66021 (10032206)			
465423.41	3808281.91	6.53597	(10032206)	465443.41
3808281.91	6.41752 (10032206)			
465463.41	3808281.91	6.30858	(10032206)	465483.41
3808281.91	6.19793 (10032206)			
465503.41	3808281.91	6.09042	(10032206)	465523.41
3808281.91	5.98551 (10032206)			
465543.41	3808281.91	5.88121	(10032206)	465563.41
3808281.91	5.77407 (10032206)			
465583.41	3808281.91	5.66940	(10032206)	465603.41
3808281.91	5.57654 (10032206)			
465623.41	3808281.91	5.48441	(10032206)	465643.41
3808281.91	5.39269 (10032206)			
465663.41	3808281.91	5.29714	(10032206)	465683.41
3808281.91	5.20935 (10032206)			
465703.41	3808281.91	5.12678	(10032206)	465003.41
3808301.91	10.51839 (10032206)			
465023.41	3808301.91	10.27982	(10032206)	465043.41
3808301.91	10.04729 (10032206)			
465063.41	3808301.91	9.77950	(10032206)	465083.41
3808301.91	9.55737 (10032206)			
465103.41	3808301.91	9.35380	(10032206)	465123.41
3808301.91	9.13541 (10032206)			
465143.41	3808301.91	8.92757	(10032206)	465163.41
3808301.91	8.72490 (10032206)			
465183.41	3808301.91	8.51293	(10032206)	465203.41
3808301.91	8.32034 (10032206)			
465223.41	3808301.91	8.14081	(10032206)	465243.41
3808301.91	7.96983 (10032206)			
465263.41	3808301.91	7.79264	(10032206)	465283.41
3808301.91	7.61560 (10032206)			
465303.41	3808301.91	7.44229	(10032206)	465323.41
3808301.91	7.28664 (10032206)			
465343.41	3808301.91	7.13945	(10032206)	465363.41
3808301.91	6.98550 (10032206)			
465383.41	3808301.91	6.84591	(10032206)	465403.41
3808301.91	6.71301 (10032206)			

465423.41	3808301.91	6.57347	(10032206)	465443.41
3808301.91	6.44886	(10032206)		
465463.41	3808301.91	6.35380	(10032206)	465483.41
3808301.91	6.24027	(10032206)		
465503.41	3808301.91	6.13004	(10032206)	465523.41
3808301.91	6.02081	(10032206)		
465543.41	3808301.91	5.90464	(10032206)	465563.41
3808301.91	5.79876	(10032206)		
465583.41	3808301.91	5.69948	(10032206)	465603.41
3808301.91	5.60459	(10032206)		
465623.41	3808301.91	5.50467	(10032206)	465643.41
3808301.91	5.40585	(10032206)		
465663.41	3808301.91	5.31704	(10032206)	465683.41
3808301.91	5.22469	(10032206)		
465703.41	3808301.91	5.13398	(10032206)	465043.41
3808321.91	10.11565	(10032206)		
465063.41	3808321.91	9.86998	(10032206)	465083.41
3808321.91	9.64169	(10032206)		
465103.41	3808321.91	9.42347	(10032206)	465123.41
3808321.91	9.20256	(10032206)		
465143.41	3808321.91	8.99011	(10032206)	465163.41
3808321.91	8.78344	(10032206)		
465183.41	3808321.91	8.57558	(10032206)	465203.41
3808321.91	8.38304	(10032206)		
465223.41	3808321.91	8.19893	(10032206)	465243.41
3808321.91	8.01170	(10032206)		
465263.41	3808321.91	7.82493	(10032206)	465283.41
3808321.91	7.64365	(10032206)		
465303.41	3808321.91	7.47762	(10032206)	465323.41
3808321.91	7.31682	(10032206)		
465343.41	3808321.91	7.16161	(10032206)	465363.41
3808321.91	7.01230	(10032206)		
465383.41	3808321.91	6.86747	(10032206)	465403.41
3808321.91	6.72747	(10032206)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 546

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,

L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465423.41	3808321.91	6.59263	(10032206)	465443.41
3808321.91	6.46794	(10032206)		
465463.41	3808321.91	6.36167	(10032206)	465483.41
3808321.91	6.24653	(10032206)		
465503.41	3808321.91	6.13481	(10032206)	465523.41
3808321.91	6.02502	(10032206)		
465543.41	3808321.91	5.91278	(10032206)	465563.41
3808321.91	5.80864	(10032206)		
465583.41	3808321.91	5.70835	(10032206)	465603.41
3808321.91	5.60503	(10032206)		
465623.41	3808321.91	5.50514	(10032206)	465643.41
3808321.91	5.40831	(10032206)		
465663.41	3808321.91	5.31367	(10032206)	465683.41
3808321.91	5.22207	(10032206)		
465703.41	3808321.91	5.13321	(10032206)	465083.41
3808341.91	9.67225	(10032206)		
465103.41	3808341.91	9.43936	(10032206)	465123.41
3808341.91	9.22069	(10032206)		
465143.41	3808341.91	9.00626	(10032206)	465163.41
3808341.91	8.79848	(10032206)		
465183.41	3808341.91	8.59858	(10032206)	465203.41
3808341.91	8.40300	(10032206)		
465223.41	3808341.91	8.21102	(10032206)	465243.41
3808341.91	8.01529	(10032206)		
465263.41	3808341.91	7.82359	(10032206)	465283.41
3808341.91	7.64092	(10032206)		
465303.41	3808341.91	7.47889	(10032206)	465323.41
3808341.91	7.31117	(10032206)		
465343.41	3808341.91	7.14789	(10032206)	465363.41
3808341.91	7.00662	(10032206)		
465383.41	3808341.91	6.85970	(10032206)	465403.41
3808341.91	6.71497	(10032206)		
465423.41	3808341.91	6.58415	(10032206)	465443.41
3808341.91	6.45964	(10032206)		
465463.41	3808341.91	6.34536	(10032206)	465483.41
3808341.91	6.22947	(10032206)		
465503.41	3808341.91	6.11706	(10032206)	465523.41

3808341.91	6.00754	(10032206)		
465543.41	3808341.91	5.89883	(10032206)	465563.41
3808341.91	5.79529	(10032206)		
465583.41	3808341.91	5.69350	(10032206)	465603.41
3808341.91	5.58566	(10032206)		
465623.41	3808341.91	5.48669	(10032206)	465643.41
3808341.91	5.39177	(10032206)		
465663.41	3808341.91	5.29297	(10032206)	465683.41
3808341.91	5.20236	(10032206)		
465703.41	3808341.91	5.11539	(10032206)	465103.41
3808361.91	9.40351	(10032206)		
465123.41	3808361.91	9.20245	(10032206)	465143.41
3808361.91	8.99211	(10032206)		
465163.41	3808361.91	8.78236	(10032206)	465183.41
3808361.91	8.58068	(10032206)		
465203.41	3808361.91	8.37293	(10032206)	465223.41
3808361.91	8.16982	(10032206)		
465243.41	3808361.91	7.98813	(10032206)	465263.41
3808361.91	7.80037	(10032206)		
465283.41	3808361.91	7.61413	(10032206)	465303.41
3808361.91	7.43698	(10032206)		
465323.41	3808361.91	7.26471	(10032206)	465343.41
3808361.91	7.10112	(10032206)		
465363.41	3808361.91	6.95997	(10032206)	465383.41
3808361.91	6.82142	(10032206)		
465403.41	3808361.91	6.68464	(10032206)	465423.41
3808361.91	6.54115	(10032206)		
465443.41	3808361.91	6.41328	(10032206)	465463.41
3808361.91	6.31617	(10032206)		
465483.41	3808361.91	6.20001	(10032206)	465503.41
3808361.91	6.08739	(10032206)		
465523.41	3808361.91	5.97587	(10032206)	465543.41
3808361.91	5.85726	(10032206)		
465563.41	3808361.91	5.75070	(10032206)	465583.41
3808361.91	5.65117	(10032206)		
465603.41	3808361.91	5.55263	(10032206)	465623.41
3808361.91	5.45049	(10032206)		
465643.41	3808361.91	5.35017	(10032206)	465663.41
3808361.91	5.26021	(10032206)		
465683.41	3808361.91	5.16667	(10032206)	465703.41
3808361.91	5.07467	(10032206)		
465183.41	3808381.91	8.48319	(10032206)	465203.41
3808381.91	8.27933	(10032206)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465223.41	3808381.91	8.08348 (10032206)	465243.41
3808381.91	7.89383 (10032206)		
465263.41	3808381.91	7.70461 (10032206)	465283.41
3808381.91	7.52086 (10032206)		
465303.41	3808381.91	7.35385 (10032206)	465323.41
3808381.91	7.18524 (10032206)		
465343.41	3808381.91	7.02275 (10032206)	465363.41
3808381.91	6.88294 (10032206)		
465383.41	3808381.91	6.74775 (10032206)	465403.41
3808381.91	6.61554 (10032206)		
465423.41	3808381.91	6.48021 (10032206)	465443.41
3808381.91	6.35531 (10032206)		
465463.41	3808381.91	6.24929 (10032206)	465483.41
3808381.91	6.13420 (10032206)		
465503.41	3808381.91	6.02264 (10032206)	465523.41
3808381.91	5.91305 (10032206)		
465543.41	3808381.91	5.80096 (10032206)	465563.41
3808381.91	5.69190 (10032206)		
465583.41	3808381.91	5.58748 (10032206)	465603.41
3808381.91	5.49205 (10032206)		
465623.41	3808381.91	5.39488 (10032206)	465643.41
3808381.91	5.29855 (10032206)		
465663.41	3808381.91	5.20444 (10032206)	465683.41
3808381.91	5.11343 (10032206)		
465703.41	3808381.91	5.02521 (10032206)	465303.41
3808401.91	7.23022 (10032206)		
465323.41	3808401.91	7.07055 (10032206)	465343.41
3808401.91	6.91410 (10032206)		

465363.41	3808401.91	6.77684	(10032206)	465383.41
3808401.91	6.64410	(10032206)		
465403.41	3808401.91	6.51568	(10032206)	465423.41
3808401.91	6.39138	(10032206)		
465443.41	3808401.91	6.27101	(10032206)	465463.41
3808401.91	6.15467	(10032206)		
465483.41	3808401.91	6.04167	(10032206)	465503.41
3808401.91	5.93211	(10032206)		
465523.41	3808401.91	5.82585	(10032206)	465543.41
3808401.91	5.72275	(10032206)		
465563.41	3808401.91	5.61460	(10032206)	465583.41
3808401.91	5.50826	(10032206)		
465603.41	3808401.91	5.41443	(10032206)	465623.41
3808401.91	5.32143	(10032206)		
465643.41	3808401.91	5.22890	(10032206)	465663.41
3808401.91	5.13243	(10032206)		
465683.41	3808401.91	5.04413	(10032206)	465703.41
3808401.91	4.95946	(10032206)		
465323.41	3808421.91	6.91752	(10032206)	465343.41
3808421.91	6.77700	(10032206)		
465363.41	3808421.91	6.64339	(10032206)	465383.41
3808421.91	6.51417	(10032206)		
465403.41	3808421.91	6.38912	(10032206)	465423.41
3808421.91	6.26807	(10032206)		
465443.41	3808421.91	6.15084	(10032206)	465463.41
3808421.91	6.03725	(10032206)		
465483.41	3808421.91	5.92714	(10032206)	465503.41
3808421.91	5.82038	(10032206)		
465523.41	3808421.91	5.71682	(10032206)	465543.41
3808421.91	5.61632	(10032206)		
465563.41	3808421.91	5.51745	(10032206)	465583.41
3808421.91	5.42105	(10032206)		
465603.41	3808421.91	5.32911	(10032206)	465623.41
3808421.91	5.23193	(10032206)		
465643.41	3808421.91	5.13584	(10032206)	465663.41
3808421.91	5.04996	(10032206)		
465683.41	3808421.91	4.96042	(10032206)	465703.41
3808421.91	4.87232	(10032206)		
465323.41	3808441.91	6.80277	(09031319)	465343.41
3808441.91	6.65168	(09031319)		
465363.41	3808441.91	6.51459	(09031319)	465383.41
3808441.91	6.37487	(09031319)		
465403.41	3808441.91	6.25342	(10032206)	465423.41
3808441.91	6.13600	(10032206)		
465443.41	3808441.91	6.02225	(10032206)	465463.41
3808441.91	5.91202	(10032206)		
465483.41	3808441.91	5.80514	(10032206)	465503.41
3808441.91	5.70148	(10032206)		
465523.41	3808441.91	5.60090	(10032206)	465543.41
3808441.91	5.50327	(10032206)		

465563.41 3808441.91 5.40848 (10032206) 465583.41
 3808441.91 5.31640 (10032206)
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 548

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465603.41	3808441.91	5.22694	(10032206)	465623.41
3808441.91	5.13111	(10032206)		
465643.41	3808441.91	5.03497	(10032206)	465663.41
3808441.91	4.94666	(10032206)		
465683.41	3808441.91	4.86125	(10032206)	465703.41
3808441.91	4.77954	(10032206)		
465343.41	3808461.91	6.90667	(09031319)	465363.41
3808461.91	6.77163	(09031319)		
465383.41	3808461.91	6.63156	(09031319)	465403.41
3808461.91	6.49132	(09031319)		
465423.41	3808461.91	6.35239	(09031319)	465443.41
3808461.91	6.21796	(09031319)		
465463.41	3808461.91	6.08809	(09031319)	465483.41
3808461.91	5.96206	(09031319)		
465503.41	3808461.91	5.84219	(09031319)	465523.41
3808461.91	5.72617	(09031319)		
465543.41	3808461.91	5.61133	(09031319)	465563.41
3808461.91	5.49997	(09031319)		
465583.41	3808461.91	5.39194	(09031319)	465603.41

3808461.91	5.28712	(09031319)		
465623.41	3808461.91	5.17635	(09031319)	465643.41
3808461.91	5.06465	(09031319)		
465663.41	3808461.91	4.95638	(09031319)	465683.41
3808461.91	4.86025	(09031319)		
465703.41	3808461.91	4.77046	(09031319)	465343.41
3808481.91	7.12271	(09031319)		
465363.41	3808481.91	6.97037	(09031319)	465383.41
3808481.91	6.83370	(09031319)		
465403.41	3808481.91	6.70262	(09031319)	465423.41
3808481.91	6.56068	(09031319)		
465443.41	3808481.91	6.42324	(09031319)	465463.41
3808481.91	6.29012	(09031319)		
465483.41	3808481.91	6.16114	(09031319)	465503.41
3808481.91	6.04618	(09031319)		
465523.41	3808481.91	5.93619	(09031319)	465543.41
3808481.91	5.81789	(09031319)		
465563.41	3808481.91	5.70313	(09031319)	465583.41
3808481.91	5.59176	(09031319)		
465603.41	3808481.91	5.48365	(09031319)	465623.41
3808481.91	5.36934	(09031319)		
465643.41	3808481.91	5.25401	(09031319)	465663.41
3808481.91	5.14218	(09031319)		
465683.41	3808481.91	5.04289	(09031319)	465703.41
3808481.91	4.94858	(09031319)		
465463.41	3808501.91	6.47543	(09031319)	465483.41
3808501.91	6.33458	(09031319)		
465503.41	3808501.91	6.21694	(09031319)	465523.41
3808501.91	6.10774	(09031319)		
465543.41	3808501.91	5.98755	(09031319)	465563.41
3808501.91	5.87634	(09031319)		
465583.41	3808501.91	5.76810	(09031319)	465603.41
3808501.91	5.64997	(09031319)		
465623.41	3808501.91	5.53584	(09031319)	465643.41
3808501.91	5.42406	(09031319)		
465663.41	3808501.91	5.30954	(09031319)	465683.41
3808501.91	5.20787	(09031319)		
465703.41	3808501.91	5.11087	(09031319)	465523.41
3808521.91	6.24614	(09031319)		
465543.41	3808521.91	6.12541	(09031319)	465563.41
3808521.91	6.01922	(09031319)		
465583.41	3808521.91	5.91547	(09031319)	465603.41
3808521.91	5.79162	(09031319)		
465623.41	3808521.91	5.67777	(09031319)	465643.41
3808521.91	5.56853	(09031319)		
465663.41	3808521.91	5.45513	(09031319)	465683.41
3808521.91	5.35091	(09031319)		
465703.41	3808521.91	5.25085	(09031319)	464239.31
3809562.31	9.07607	(10010907)		
464277.31	3809562.31	9.08633	(10010907)	463745.31

3809591.37 8.24861 (10011006)
 463783.31 3809591.37 8.01998 (10011006) 463821.31
 3809591.37 8.01350 (09040203)
 463859.31 3809591.37 8.45420 (09011307) 463897.31
 3809591.37 8.99992 (09011307)
 463935.31 3809591.37 9.30235 (09011307) 464239.31
 3809591.37 8.77277 (10010907)
 464277.31 3809591.37 8.81209 (10010907) 463745.31
 3809620.43 7.89341 (10011006)
 463783.31 3809620.43 7.71838 (09040203) 463821.31
 3809620.43 7.72219 (09040203)
 ▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 549

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463859.31	3809620.43	8.18124	(09011307)	463897.31
3809620.43	8.67473	(09011307)		
463935.31	3809620.43	8.97188	(09011307)	463973.31
3809620.43	8.97395	(09011307)		
464011.31	3809620.43	8.88075	(09031206)	464049.31
3809620.43	9.07219	(09011120)		
464087.31	3809620.43	9.15506	(09011120)	464125.31
3809620.43	9.03620	(09011120)		
464163.31	3809620.43	8.69490	(09011120)	464201.31
3809620.43	8.17491	(10010907)		

464239.31	3809620.43	8.46800	(10010907)	464277.31
3809620.43	8.54121	(10010907)		
463745.31	3809649.49	7.54707	(10011006)	463783.31
3809649.49	7.45731	(09040203)		
463821.31	3809649.49	7.42515	(09040203)	463859.31
3809649.49	7.92373	(09011307)		
463897.31	3809649.49	8.36557	(09011307)	463935.31
3809649.49	8.63282	(09011307)		
463973.31	3809649.49	8.60040	(09011307)	464011.31
3809649.49	8.55060	(09031206)		
464049.31	3809649.49	8.76983	(09011120)	464087.31
3809649.49	8.85772	(09011120)		
464125.31	3809649.49	8.77655	(09011120)	464163.31
3809649.49	8.45257	(09011120)		
464201.31	3809649.49	7.95398	(09011120)	464239.31
3809649.49	8.18678	(10010907)		
464277.31	3809649.49	8.28317	(10010907)	464315.31
3809649.49	8.18540	(10010907)		
464353.31	3809649.49	8.00519	(10022820)	464391.31
3809649.49	8.32411	(10022820)		
464429.31	3809649.49	8.45214	(10022820)	464467.31
3809649.49	8.40737	(10022820)		
464505.31	3809649.49	8.17907	(10022820)	463745.31
3809678.55	7.19706	(10011006)		
463783.31	3809678.55	7.16103	(09040203)	463821.31
3809678.55	7.16173	(09011307)		
463859.31	3809678.55	7.66603	(09011307)	463897.31
3809678.55	8.07189	(09011307)		
463935.31	3809678.55	8.32055	(09011307)	463973.31
3809678.55	8.30063	(09011307)		
464011.31	3809678.55	8.24113	(09031206)	464049.31
3809678.55	8.48263	(09011120)		
464087.31	3809678.55	8.61040	(09011120)	464125.31
3809678.55	8.52799	(09011120)		
464163.31	3809678.55	8.23548	(09011120)	464201.31
3809678.55	7.78272	(09011120)		
464239.31	3809678.55	7.90670	(10010907)	464277.31
3809678.55	8.02915	(10010907)		
464315.31	3809678.55	7.97598	(10010907)	464353.31
3809678.55	7.76707	(10010907)		
464391.31	3809678.55	8.02377	(10022820)	464429.31
3809678.55	8.18462	(10022820)		
464467.31	3809678.55	8.19671	(10022820)	464505.31
3809678.55	8.00451	(10022820)		
463745.31	3809707.61	6.88780	(10011006)	463783.31
3809707.61	6.88456	(09040203)		
463821.31	3809707.61	6.93486	(09011307)	463859.31
3809707.61	7.43685	(09011307)		
463897.31	3809707.61	7.79617	(09011307)	463935.31
3809707.61	8.02161	(09011307)		

463973.31	3809707.61	8.01742	(09011307)	464011.31
3809707.61	7.97642	(09031206)		
464049.31	3809707.61	8.21048	(09011120)	464087.31
3809707.61	8.35070	(09011120)		
464125.31	3809707.61	8.29123	(09011120)	464163.31
3809707.61	8.04028	(09011120)		
464201.31	3809707.61	7.58870	(09011120)	464239.31
3809707.61	7.64636	(10010907)		
464277.31	3809707.61	7.78725	(10010907)	464315.31
3809707.61	7.78177	(10010907)		
464353.31	3809707.61	7.58189	(10010907)	464391.31
3809707.61	7.71859	(10022820)		
464429.31	3809707.61	7.91249	(10022820)	464467.31
3809707.61	7.96081	(10022820)		
464505.31	3809707.61	7.84361	(10022820)	463745.31
3809736.67	6.62235	(10011006)		
463783.31	3809736.67	6.62783	(09040203)	463821.31
3809736.67	6.69849	(09011307)		
463859.31	3809736.67	7.17870	(09011307)	463897.31
3809736.67	7.53010	(09011307)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 550

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463935.31	3809736.67	7.71201	(09011307)	463973.31

3809736.67	7.74276 (09011307)		
464011.31	3809736.67	7.75314 (09031206)	464049.31
3809736.67	7.95320 (09011120)		
464087.31	3809736.67	8.12298 (09011120)	464125.31
3809736.67	8.08003 (09011120)		
464163.31	3809736.67	7.85457 (09011120)	464201.31
3809736.67	7.41976 (09011120)		
464239.31	3809736.67	7.40807 (10010907)	464277.31
3809736.67	7.56621 (10010907)		
464315.31	3809736.67	7.56874 (10010907)	464353.31
3809736.67	7.41684 (10010907)		
464391.31	3809736.67	7.42675 (10022820)	464429.31
3809736.67	7.65020 (10022820)		
464467.31	3809736.67	7.74335 (10022820)	464505.31
3809736.67	7.67973 (10022820)		
463745.31	3809765.73	6.40840 (09040203)	463783.31
3809765.73	6.40848 (09040203)		
463821.31	3809765.73	6.50897 (09011307)	463859.31
3809765.73	6.94240 (09011307)		
463897.31	3809765.73	7.27766 (09011307)	463935.31
3809765.73	7.42251 (09011307)		
463973.31	3809765.73	7.41545 (09011307)	464011.31
3809765.73	7.50586 (09031206)		
464049.31	3809765.73	7.73543 (09011120)	464087.31
3809765.73	7.89593 (09011120)		
464125.31	3809765.73	7.88341 (09011120)	464163.31
3809765.73	7.67564 (09011120)		
464201.31	3809765.73	7.26723 (09011120)	464239.31
3809765.73	7.18171 (10010907)		
464277.31	3809765.73	7.35625 (10010907)	464315.31
3809765.73	7.37362 (10010907)		
464353.31	3809765.73	7.26131 (10010907)	464391.31
3809765.73	7.13925 (10022820)		
464429.31	3809765.73	7.40440 (10022820)	464467.31
3809765.73	7.53652 (10022820)		
464505.31	3809765.73	7.49122 (10022820)	463745.31
3809794.79	6.23056 (09040203)		
463783.31	3809794.79	6.18886 (09040203)	463821.31
3809794.79	6.33124 (09011307)		
463859.31	3809794.79	6.71488 (09011307)	463897.31
3809794.79	7.01564 (09011307)		
463935.31	3809794.79	7.14382 (09011307)	463973.31
3809794.79	7.12742 (09011307)		
464011.31	3809794.79	7.21297 (09031206)	464049.31
3809794.79	7.51232 (09011120)		
464087.31	3809794.79	7.68272 (09011120)	464125.31
3809794.79	7.66900 (09011120)		
464163.31	3809794.79	7.47837 (09011120)	464201.31
3809794.79	7.11830 (09011120)		
464239.31	3809794.79	6.94763 (10010907)	464277.31

3809794.79	7.13870	(10010907)		
464315.31	3809794.79	7.18884	(10010907)	464353.31
3809794.79	7.08710	(10010907)		
464391.31	3809794.79	6.87237	(10022820)	464429.31
3809794.79	7.16633	(10022820)		
464467.31	3809794.79	7.30681	(10022820)	464505.31
3809794.79	7.31238	(10022820)		
463745.31	3809823.85	6.05979	(09040203)	463783.31
3809823.85	5.98275	(09040203)		
463821.31	3809823.85	6.13665	(09011307)	463859.31
3809823.85	6.49792	(09011307)		
463897.31	3809823.85	6.75796	(09011307)	463935.31
3809823.85	6.87153	(09011307)		
463973.31	3809823.85	6.85974	(09011307)	464011.31
3809823.85	6.92631	(09031206)		
464049.31	3809823.85	7.21758	(09011120)	464087.31
3809823.85	7.45595	(09011120)		
464125.31	3809823.85	7.47398	(09011120)	464163.31
3809823.85	7.29897	(09011120)		
464201.31	3809823.85	6.95401	(09011120)	464239.31
3809823.85	6.72850	(10010907)		
464277.31	3809823.85	6.93314	(10010907)	464315.31
3809823.85	6.99125	(10010907)		
464353.31	3809823.85	6.92542	(10010907)	464391.31
3809823.85	6.73421	(10010907)		
464429.31	3809823.85	6.91012	(10022820)	464467.31
3809823.85	7.08579	(10022820)		
464505.31	3809823.85	7.11894	(10022820)	463745.31
3809852.91	5.90763	(09040203)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 551

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

463783.31	3809852.91	5.81306	(09040203)	463821.31	
3809852.91	5.97794	(09011307)			
463859.31	3809852.91	6.30235	(09011307)	463897.31	
3809852.91	6.51745	(09011307)			
463935.31	3809852.91	6.61717	(09011307)	463973.31	
3809852.91	6.60550	(09011307)			
464011.31	3809852.91	6.66214	(09031206)	464049.31	
3809852.91	6.91932	(09011120)			
464087.31	3809852.91	7.16752	(09011120)	464125.31	
3809852.91	7.22660	(09011120)			
464163.31	3809852.91	7.07750	(09011120)	464201.31	
3809852.91	6.76239	(09011120)			
464239.31	3809852.91	6.48863	(10010907)	464277.31	
3809852.91	6.71402	(10010907)			
464315.31	3809852.91	6.80346	(10010907)	464353.31	
3809852.91	6.75768	(10010907)			
464391.31	3809852.91	6.59884	(10010907)	464429.31	
3809852.91	6.66711	(10022820)			
464467.31	3809852.91	6.86081	(10022820)	464505.31	
3809852.91	6.93185	(10022820)			
463745.31	3809881.97	5.76892	(09040203)	463783.31	
3809881.97	5.64760	(09040203)			
463821.31	3809881.97	5.85269	(09011307)	463859.31	
3809881.97	6.13174	(09011307)			
463897.31	3809881.97	6.30662	(09011307)	463935.31	
3809881.97	6.37813	(09011307)			
463973.31	3809881.97	6.37245	(09011307)	464011.31	
3809881.97	6.43194	(09031206)			
464049.31	3809881.97	6.65331	(09011120)	464087.31	
3809881.97	6.87736	(09011120)			
464125.31	3809881.97	6.94857	(09011120)	464163.31	
3809881.97	6.82262	(09011120)			
464201.31	3809881.97	6.56397	(09011120)	464239.31	
3809881.97	6.23317	(10010907)			
464277.31	3809881.97	6.48360	(10010907)	464315.31	
3809881.97	6.61483	(10010907)			
464353.31	3809881.97	6.59766	(10010907)	464391.31	
3809881.97	6.47161	(10010907)			
464429.31	3809881.97	6.43195	(10022820)	464467.31	
3809881.97	6.64315	(10022820)			
464505.31	3809881.97	6.75485	(10022820)	463745.31	
3809911.03	5.62171	(09040203)			

463783.31	3809911.03	5.47799	(09040203)	463821.31
3809911.03	5.73606	(09011307)		
463859.31	3809911.03	5.98131	(09011307)	463897.31
3809911.03	6.13307	(09011307)		
463935.31	3809911.03	6.17852	(09011307)	463973.31
3809911.03	6.15309	(09011307)		
464011.31	3809911.03	6.21263	(09031206)	464049.31
3809911.03	6.41933	(09011120)		
464087.31	3809911.03	6.63243	(09011120)	464125.31
3809911.03	6.70153	(09011120)		
464163.31	3809911.03	6.61045	(09011120)	464201.31
3809911.03	6.39075	(09011120)		
464239.31	3809911.03	6.05678	(09102505)	464277.31
3809911.03	6.27593	(10010907)		
464315.31	3809911.03	6.41953	(10010907)	464353.31
3809911.03	6.43820	(10010907)		
464391.31	3809911.03	6.33751	(10010907)	464429.31
3809911.03	6.19833	(10022820)		
464467.31	3809911.03	6.44187	(10022820)	464505.31
3809911.03	6.56360	(10022820)		
463745.31	3809940.09	5.47039	(09040203)	463783.31
3809940.09	5.31459	(09040203)		
463821.31	3809940.09	5.61809	(09011307)	463859.31
3809940.09	5.84002	(09011307)		
463897.31	3809940.09	5.97972	(09011307)	463935.31
3809940.09	6.01522	(09011307)		
463973.31	3809940.09	5.96703	(09011307)	464011.31
3809940.09	6.00044	(09031206)		
464049.31	3809940.09	6.18361	(09011120)	464087.31
3809940.09	6.38883	(09011120)		
464125.31	3809940.09	6.46746	(09011120)	464163.31
3809940.09	6.42033	(09011120)		
464201.31	3809940.09	6.23976	(09011120)	464239.31
3809940.09	5.93447	(09102505)		
464277.31	3809940.09	6.08171	(10010907)	464315.31
3809940.09	6.24275	(10010907)		
464353.31	3809940.09	6.28181	(10010907)	464391.31
3809940.09	6.20453	(10010907)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 552

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,

```

, L0006021      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006022      L0006022      , L0006023      ,
, L0006024      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      L0006030      , L0006031      ,
, L0006032      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464429.31	3809940.09	6.01797	(10010907)	464467.31
3809940.09	6.23109	(10022820)		
464505.31	3809940.09	6.37627	(10022820)	463745.31
3809969.15	5.36683	(09040203)		
463783.31	3809969.15	5.21932	(09011307)	463821.31
3809969.15	5.50014	(09011307)		
463859.31	3809969.15	5.70794	(09011307)	463897.31
3809969.15	5.83234	(09011307)		
463935.31	3809969.15	5.86087	(09011307)	463973.31
3809969.15	5.80438	(09011307)		
464011.31	3809969.15	5.82190	(09031206)	464049.31
3809969.15	5.95956	(09011120)		
464087.31	3809969.15	6.16054	(09011120)	464125.31
3809969.15	6.25896	(09011120)		
464163.31	3809969.15	6.22869	(09011120)	464201.31
3809969.15	6.08119	(09011120)		
464239.31	3809969.15	5.81657	(09102505)	464277.31
3809969.15	5.90111	(10010907)		
464315.31	3809969.15	6.07427	(10010907)	464353.31
3809969.15	6.14357	(10010907)		
464391.31	3809969.15	6.08767	(10010907)	464429.31
3809969.15	5.91791	(10010907)		
464467.31	3809969.15	6.02176	(10022820)	464505.31
3809969.15	6.20042	(10022820)		
463745.31	3809998.21	5.31519	(09040203)	463783.31
3809998.21	5.16891	(09011307)		
463821.31	3809998.21	5.40924	(09011307)	463859.31
3809998.21	5.59160	(09011307)		
463897.31	3809998.21	5.70097	(09011307)	463935.31
3809998.21	5.71278	(09011307)		
463973.31	3809998.21	5.64731	(09011307)	464011.31
3809998.21	5.67080	(09031206)		
464049.31	3809998.21	5.78877	(09011120)	464087.31

3809998.21	5.97211	(09011120)		
464125.31	3809998.21	6.07852	(09011120)	464163.31
3809998.21	6.06012	(09011120)		
464201.31	3809998.21	5.92421	(09011120)	464239.31
3809998.21	5.68082	(09102505)		
464277.31	3809998.21	5.73168	(10010907)	464315.31
3809998.21	5.91018	(10010907)		
464353.31	3809998.21	5.99561	(10010907)	464391.31
3809998.21	5.95960	(10010907)		
464429.31	3809998.21	5.81087	(10010907)	464467.31
3809998.21	5.83046	(10022820)		
464505.31	3809998.21	6.01539	(10022820)	463745.31
3810027.27	5.26604	(09040203)		
463783.31	3810027.27	5.14336	(09011307)	463821.31
3810027.27	5.34387	(09011307)		
463859.31	3810027.27	5.49676	(09011307)	463897.31
3810027.27	5.58879	(09011307)		
463935.31	3810027.27	5.57816	(09011307)	463973.31
3810027.27	5.50734	(09011307)		
464011.31	3810027.27	5.53281	(09031206)	464049.31
3810027.27	5.63973	(09011120)		
464087.31	3810027.27	5.80095	(09011120)	464125.31
3810027.27	5.89293	(09011120)		
464163.31	3810027.27	5.89633	(09011120)	464201.31
3810027.27	5.77798	(09011120)		
464239.31	3810027.27	5.54006	(09102505)	464277.31
3810027.27	5.54784	(10010907)		
464315.31	3810027.27	5.75154	(10010907)	464353.31
3810027.27	5.84569	(10010907)		
464391.31	3810027.27	5.82804	(10010907)	464429.31
3810027.27	5.71201	(10010907)		
464467.31	3810027.27	5.63497	(10022820)	464505.31
3810027.27	5.82910	(10022820)		
463745.31	3810056.33	5.22283	(09040203)	463783.31
3810056.33	5.12344	(09011307)		
463821.31	3810056.33	5.28221	(09011307)	463859.31
3810056.33	5.41393	(09011307)		
463897.31	3810056.33	5.48092	(09011307)	463935.31
3810056.33	5.46162	(09011307)		
463973.31	3810056.33	5.37999	(09011307)	464011.31
3810056.33	5.40196	(09031206)		
464049.31	3810056.33	5.48841	(09011120)	464087.31
3810056.33	5.64468	(09011120)		
464125.31	3810056.33	5.71794	(09011120)	464163.31
3810056.33	5.72559	(09011120)		
464201.31	3810056.33	5.62206	(09011120)	464239.31
3810056.33	5.41092	(09102505)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 553

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK10 ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464277.31	3810056.33	5.36087	(10010907)	464315.31
3810056.33	5.58086	(10010907)		
464353.31	3810056.33	5.70677	(10010907)	464391.31
3810056.33	5.71424	(10010907)		
464429.31	3810056.33	5.61269	(10010907)	464467.31
3810056.33	5.43738	(10022820)		
464505.31	3810056.33	5.65043	(10022820)	463745.31
3810085.39	5.17732	(09040203)		
463783.31	3810085.39	5.10564	(09011307)	463821.31
3810085.39	5.23435	(09011307)		
463859.31	3810085.39	5.33614	(09011307)	463897.31
3810085.39	5.38315	(09011307)		
463935.31	3810085.39	5.35771	(09011307)	463973.31
3810085.39	5.26221	(09011307)		
464011.31	3810085.39	5.27433	(09031206)	464049.31
3810085.39	5.33664	(09011120)		
464087.31	3810085.39	5.49126	(09011120)	464125.31
3810085.39	5.56318	(09011120)		
464163.31	3810085.39	5.55991	(09011120)	464201.31
3810085.39	5.46421	(09011120)		
464239.31	3810085.39	5.27526	(09011120)	464277.31
3810085.39	5.18286	(10010907)		
464315.31	3810085.39	5.40990	(10010907)	464353.31
3810085.39	5.54659	(10010907)		

464391.31	3810085.39	5.57993	(10010907)	464429.31
3810085.39	5.49732 (10010907)			
464467.31	3810085.39	5.32131	(10010907)	464505.31
3810085.39	5.46261 (10022820)			
463745.31	3810114.45	5.10198	(09040203)	463783.31
3810114.45	5.10374 (09011307)			
463821.31	3810114.45	5.20334	(09011307)	463859.31
3810114.45	5.29169 (09011307)			
463897.31	3810114.45	5.30549	(09011307)	463935.31
3810114.45	5.26302 (09011307)			
463973.31	3810114.45	5.14886	(09011307)	464011.31
3810114.45	5.15824 (09031206)			
464049.31	3810114.45	5.20603	(09011120)	464087.31
3810114.45	5.34739 (09011120)			
464125.31	3810114.45	5.40753	(09011120)	464163.31
3810114.45	5.39495 (09011120)			
464201.31	3810114.45	5.30396	(09011120)	464239.31
3810114.45	5.14488 (09011120)			
464277.31	3810114.45	5.01027	(10010907)	464315.31
3810114.45	5.23007 (10010907)			
464353.31	3810114.45	5.36513	(10010907)	464391.31
3810114.45	5.40687 (10010907)			
464429.31	3810114.45	5.36448	(10010907)	464467.31
3810114.45	5.20943 (10010907)			
464505.31	3810114.45	5.27779	(10022820)	463745.31
3810143.51	4.99535 (09040203)			
463783.31	3810143.51	5.06836	(09011307)	463821.31
3810143.51	5.20330 (09011307)			
463859.31	3810143.51	5.26485	(09011307)	463897.31
3810143.51	5.23074 (09011307)			
463935.31	3810143.51	5.16160	(09011307)	463973.31
3810143.51	5.02758 (09011307)			
464011.31	3810143.51	5.04870	(09031206)	464049.31
3810143.51	5.08602 (09011120)			
464087.31	3810143.51	5.20368	(09011120)	464125.31
3810143.51	5.26208 (09011120)			
464163.31	3810143.51	5.25061	(09011120)	464201.31
3810143.51	5.16070 (09011120)			
464239.31	3810143.51	5.00141	(09011120)	464277.31
3810143.51	4.83829 (10010907)			
464315.31	3810143.51	5.06282	(10010907)	464353.31
3810143.51	5.18894 (10010907)			
464391.31	3810143.51	5.25175	(10010907)	464429.31
3810143.51	5.22196 (10010907)			
464467.31	3810143.51	5.11186	(10010907)	464505.31
3810143.51	5.09916 (10022820)			
464383.78	3807479.29	24.84729	(09031218)	464355.03
3807405.24	24.72983 (09123118)			
464402.07	3807352.10	21.43435	(09031218)	464367.23
3807296.35	23.82349 (09123118)			

464358.52	3807237.99	24.27958	(09123118)	464385.52
3807161.33	22.38379	(09123118)		
463132.27	3810926.37	3.37567	(10021119)	463237.82
3811199.31	2.89235	(10011006)		
464944.35	3809244.89	9.19226	(09022206)	465700.32
3809255.46	5.02065	(10021420)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 554

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK10 ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465716.18	3808536.49	5.27035	(09031319)	465544.37
3808533.85	6.18756	(09031319)		
465420.13	3808486.27	6.62465	(09031319)	465348.77
3808491.56	7.17326	(09031319)		
465317.05	3808443.98	6.88108	(09031319)	465327.62
3808406.97	7.00151	(10032206)		
465108.23	3808369.97	9.32341	(10032206)	464999.86
3808301.24	10.56079	(10032206)		
464722.31	3807973.48	16.56371	(10020118)	464717.03
3807836.03	13.18917	(10020118)		
464344.33	3807936.47	40.20234	(09011918)	464349.61
3807780.52	18.63028	(09011918)		
464386.62	3807785.81	18.86151	(09011918)	464521.43
3807859.82	14.19313	(09011918)		
464537.28	3807719.72	25.39467	(09011918)	464426.27

3807613.99	30.65750	(09120417)		
464368.43	3807532.62	25.83317	(09120417)	464324.60
3807121.91	23.66199	(09123118)		
464123.31	3807123.54	24.18647	(09111519)	463930.13
3806909.26	13.01752	(09120318)		
463831.11	3806906.01	14.22629	(09032718)	463821.36
3806720.95	10.97043	(10102005)		
463727.21	3806727.44	15.77915	(09032718)	463598.97
3806334.59	13.22975	(09032718)		
463001.06	3806361.54	9.01329	(09022219)	

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 555

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
462160.55	3809377.75	8.67765	(09022407)	462051.48
3809270.62	7.76648	(10021620)		
462014.47	3809029.10	8.69694	(09021520)	462010.58
3808855.75	8.66017	(09021520)		
461936.56	3808886.92	8.34137	(09021520)	461936.56
3808997.94	8.29456	(09021520)		
461909.30	3808768.10	8.26738	(10021620)	461835.28
3808894.71	7.97571	(09021520)		
461845.02	3808995.99	7.96912	(09021520)	461833.33
3809114.80	7.73954	(09021520)		

461843.07	3809210.24	7.11740	(10021620)	461809.96
3809297.89	5.78252 (10021620)			
461856.71	3809385.54	6.09790	(10042219)	461841.13
3809482.92	6.66374 (10042219)			
462004.74	3809379.69	7.02109	(10042219)	461763.22
3808793.43	7.56568 (09021520)			
461753.48	3808699.93	7.90639	(10021620)	461835.28
3808686.30	8.08232 (10021620)			
461823.60	3808579.17	7.94568	(10021620)	461761.27
3808585.02	7.73181 (10021620)			
462301.19	3807807.15	7.38543	(09122018)	462304.78
3807868.16	7.28563 (09122018)			
462216.84	3807882.52	6.96685	(10021207)	462116.34
3807886.11	7.56485 (10021207)			
462114.55	3807789.20	6.35523	(09122018)	462012.25
3807887.90	7.61566 (10021207)			
462008.66	3807975.84	7.93421	(10021207)	461917.14
3807972.25	7.34629 (10021207)			
461922.52	3808187.60	6.69095	(09020118)	461908.17
3808288.10	6.46172 (09020118)			
461848.94	3808377.83	7.29401	(10021620)	461831.00
3808494.48	7.93559 (10021620)			
462421.43	3808393.98	10.19794	(10021207)	462459.11
3808501.66	11.21010 (10021620)			
462437.58	3808580.62	11.29908	(10021620)	462654.73
3809189.00	15.34470 (09022407)			
462559.49	3809194.32	12.42847	(09022407)	465763.86
3807935.19	4.15974 (10102019)			
465819.84	3807935.19	3.80691	(10102019)	465875.82
3807935.19	3.46792 (10102019)			
465931.80	3807935.19	3.16097	(10102019)	465987.78
3807935.19	2.83532 (10102019)			
466043.76	3807935.19	2.55673	(10102019)	466099.74
3807935.19	2.28910 (10102019)			
466155.72	3807935.19	2.05502	(10102019)	466211.70
3807935.19	1.82528 (10102019)			
466267.68	3807935.19	1.62148	(10102019)	466323.66
3807935.19	1.36519 (10102019)			
466379.64	3807935.19	1.23583	(09010519)	466435.62
3807935.19	1.22794 (09010519)			
466491.60	3807935.19	1.21676	(09010519)	466547.58
3807935.19	1.20417 (09010519)			
466603.56	3807935.19	1.19262	(09010519)	466659.54
3807935.19	1.18104 (09010519)			
466715.52	3807935.19	1.16948	(09010519)	466771.50
3807935.19	1.15774 (09010519)			
466827.48	3807935.19	1.14537	(09010519)	466883.46
3807935.19	1.13355 (09010519)			
465763.86	3808001.41	3.71667	(10102019)	465819.84
3808001.41	3.36875 (10102019)			

465875.82	3808001.41	3.03550	(10102019)	465931.80
3808001.41	2.71835	(10102019)		
465987.78	3808001.41	2.45674	(10102019)	466043.76
3808001.41	2.17530	(10102019)		
466099.74	3808001.41	1.98522	(10102019)	466155.72
3808001.41	1.77259	(10102019)		
466211.70	3808001.41	1.57827	(10102019)	466267.68
3808001.41	1.41136	(10102019)		
466323.66	3808001.41	1.34959	(09010519)	466379.64
3808001.41	1.33847	(09010519)		
466435.62	3808001.41	1.32355	(09010519)	466491.60
3808001.41	1.30867	(09010519)		
466547.58	3808001.41	1.29340	(09010519)	466603.56
3808001.41	1.27882	(09010519)		
466659.54	3808001.41	1.26433	(09010519)	466715.52
3808001.41	1.24823	(09010519)		
466771.50	3808001.41	1.23388	(09010519)	466827.48
3808001.41	1.21943	(09010519)		
466883.46	3808001.41	1.20439	(09010519)	465763.86
3808067.63	3.22666	(10102019)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 556

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465819.84	3808067.63	2.89395	(10102019)	465875.82

3808067.63	2.58557	(10102019)		
465931.80	3808067.63	2.31454	(10102019)	465987.78
3808067.63	2.08476	(10102019)		
466043.76	3808067.63	1.86101	(10102019)	466099.74
3808067.63	1.68165	(09010408)		
466155.72	3808067.63	1.51658	(09010408)	466211.70
3808067.63	1.48460	(09010519)		
466267.68	3808067.63	1.47314	(09010519)	466323.66
3808067.63	1.45191	(09010519)		
466379.64	3808067.63	1.43303	(09010519)	466435.62
3808067.63	1.41526	(09010519)		
466491.60	3808067.63	1.39580	(09010519)	466547.58
3808067.63	1.37744	(09010519)		
466603.56	3808067.63	1.35929	(09010519)	466659.54
3808067.63	1.34136	(09010519)		
466715.52	3808067.63	1.32386	(09010519)	466771.50
3808067.63	1.30653	(09010519)		
466827.48	3808067.63	1.28859	(09010519)	466883.46
3808067.63	1.27044	(09010519)		
465763.86	3808133.85	2.72045	(10102019)	465819.84
3808133.85	2.41720	(10102019)		
465875.82	3808133.85	2.26221	(09010408)	465931.80
3808133.85	2.16413	(09010408)		
465987.78	3808133.85	2.11712	(09010408)	466043.76
3808133.85	1.90760	(09010408)		
466099.74	3808133.85	1.65829	(09010408)	466155.72
3808133.85	1.62204	(09010519)		
466211.70	3808133.85	1.60186	(09010519)	466267.68
3808133.85	1.57191	(09010519)		
466323.66	3808133.85	1.54490	(09010519)	466379.64
3808133.85	1.52242	(09010519)		
466435.62	3808133.85	1.50015	(09010519)	466491.60
3808133.85	1.47824	(09010519)		
466547.58	3808133.85	1.45621	(09010519)	466603.56
3808133.85	1.43486	(09010519)		
466659.54	3808133.85	1.41385	(09010519)	466715.52
3808133.85	1.39300	(09010519)		
466771.50	3808133.85	1.37127	(09010519)	466827.48
3808133.85	1.35129	(09010519)		
466883.46	3808133.85	1.33133	(09010519)	465763.86
3808200.07	2.70355	(09010408)		
465819.84	3808200.07	2.54223	(09010408)	465875.82
3808200.07	2.35606	(09010408)		
465931.80	3808200.07	2.27574	(09010408)	465987.78
3808200.07	2.02414	(09010408)		
466043.76	3808200.07	1.79152	(09010519)	466099.74
3808200.07	1.76676	(09010519)		
466155.72	3808200.07	1.73057	(09010519)	466211.70
3808200.07	1.68449	(09010519)		
466267.68	3808200.07	1.65665	(09010519)	466323.66

3808200.07	1.63061	(09010519)		
466379.64	3808200.07	1.60386	(09010519)	466435.62
3808200.07	1.57760	(09010519)		
466491.60	3808200.07	1.55185	(09010519)	466547.58
3808200.07	1.52658	(09010519)		
466603.56	3808200.07	1.50180	(09010519)	466659.54
3808200.07	1.47749	(09010519)		
466715.52	3808200.07	1.45369	(09010519)	466771.50
3808200.07	1.42997	(09010519)		
466827.48	3808200.07	1.40625	(09010519)	466883.46
3808200.07	1.38375	(09010519)		
465763.86	3808266.29	2.67135	(09010408)	465819.84
3808266.29	2.57988	(09010408)		
465875.82	3808266.29	2.44151	(09010408)	465931.80
3808266.29	2.14839	(09010408)		
465987.78	3808266.29	1.94852	(09010519)	466043.76
3808266.29	1.90987	(09010519)		
466099.74	3808266.29	1.86306	(09010519)	466155.72
3808266.29	1.79986	(09010519)		
466211.70	3808266.29	1.76714	(09010519)	466267.68
3808266.29	1.73584	(09010519)		
466323.66	3808266.29	1.70454	(09010519)	466379.64
3808266.29	1.67508	(09010519)		
466435.62	3808266.29	1.64539	(09010519)	466491.60
3808266.29	1.61556	(09010519)		
466547.58	3808266.29	1.58679	(09010519)	466603.56
3808266.29	1.55866	(09010519)		
466659.54	3808266.29	1.53201	(09010519)	466715.52
3808266.29	1.50462	(09010519)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 557

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	(YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)

466771.50	3808266.29	1.47867	(09010519)	466827.48		
3808266.29	1.45260	(09010519)				
466883.46	3808266.29	1.42753	(09010519)	465763.86		
3808332.51	2.53211	(09010408)				
465819.84	3808332.51	2.49301	(09010408)	465875.82		
3808332.51	2.19495	(09010408)				
465931.80	3808332.51	2.11407	(09010519)	465987.78		
3808332.51	2.05046	(09010519)				
466043.76	3808332.51	1.98599	(09010519)	466099.74		
3808332.51	1.91173	(09010519)				
466155.72	3808332.51	1.87421	(09010519)	466211.70		
3808332.51	1.83725	(09010519)				
466267.68	3808332.51	1.80115	(09010519)	466323.66		
3808332.51	1.76800	(09010519)				
466379.64	3808332.51	1.73369	(09010519)	466435.62		
3808332.51	1.70019	(09010519)				
466491.60	3808332.51	1.66755	(09010519)	466547.58		
3808332.51	1.63570	(09010519)				
466603.56	3808332.51	1.60669	(09010519)	466659.54		
3808332.51	1.57668	(09010519)				
466715.52	3808332.51	1.54712	(09010519)	466771.50		
3808332.51	1.51668	(09010519)				
466827.48	3808332.51	1.48884	(09010519)	466883.46		
3808332.51	1.46157	(09010519)				
465763.86	3808398.73	2.37370	(09010519)	465819.84		
3808398.73	2.32852	(09010519)				
465875.82	3808398.73	2.26489	(09010519)	465931.80		
3808398.73	2.19128	(09010519)				
465987.78	3808398.73	2.10588	(09010519)	466043.76		
3808398.73	2.01768	(09010519)				
466099.74	3808398.73	1.97541	(09010519)	466155.72		
3808398.73	1.93307	(09010519)				
466211.70	3808398.73	1.89202	(09010519)	466267.68		
3808398.73	1.85472	(09010519)				
466323.66	3808398.73	1.81597	(09010519)	466379.64		
3808398.73	1.77849	(09010519)				
466435.62	3808398.73	1.74305	(09010519)	466491.60		
3808398.73	1.70780	(09010519)				
466547.58	3808398.73	1.67349	(09010519)	466603.56		
3808398.73	1.64034	(09010519)				
466659.54	3808398.73	1.60788	(09010519)	466715.52		
3808398.73	1.57580	(09010519)				

466771.50	3808398.73	1.54494	(09010519)	466827.48
3808398.73	1.51459	(09010519)		
466883.46	3808398.73	1.48519	(09010519)	465763.86
3808464.95	2.47260	(09010519)		
465819.84	3808464.95	2.40256	(09010519)	465875.82
3808464.95	2.29656	(09010519)		
465931.80	3808464.95	2.16512	(09010519)	465987.78
3808464.95	2.11538	(09010519)		
466043.76	3808464.95	2.06817	(09010519)	466099.74
3808464.95	2.02090	(09010519)		
466155.72	3808464.95	1.97514	(09010519)	466211.70
3808464.95	1.93089	(09010519)		
466267.68	3808464.95	1.89002	(09010519)	466323.66
3808464.95	1.84841	(09010519)		
466379.64	3808464.95	1.80931	(09010519)	466435.62
3808464.95	1.77034	(09010519)		
466491.60	3808464.95	1.73381	(09010519)	466547.58
3808464.95	1.69694	(09010519)		
466603.56	3808464.95	1.66117	(09010519)	466659.54
3808464.95	1.62646	(09010519)		
466715.52	3808464.95	1.59287	(09010519)	466771.50
3808464.95	1.56026	(09010519)		
466827.48	3808464.95	1.52855	(09010519)	466883.46
3808464.95	1.49775	(09010519)		
465763.86	3808531.17	2.52316	(09010519)	465819.84
3808531.17	2.38845	(09010519)		
465875.82	3808531.17	2.25674	(09010519)	465931.80
3808531.17	2.20081	(09010519)		
465987.78	3808531.17	2.14855	(09010519)	466043.76
3808531.17	2.09726	(09010519)		
466099.74	3808531.17	2.04788	(09010519)	466155.72
3808531.17	1.99932	(09010519)		
466211.70	3808531.17	1.95249	(09010519)	466267.68
3808531.17	1.90857	(09010519)		
466323.66	3808531.17	1.86585	(09010519)	466379.64
3808531.17	1.82367	(09010519)		
466435.62	3808531.17	1.78400	(09010519)	466491.60
3808531.17	1.74413	(09010519)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 558

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,

```

, L0006366      L0006361      , L0006362      , L0006363      , L0006364      , L0006365
, L0006366      , L0006367      , L0006368      ,
, L0006374      L0006369      , L0006370      , L0006371      , L0006372      , L0006373
, L0006374      , L0006375      , L0006376      ,
, L0006382      L0006377      , L0006378      , L0006379      , L0006380      , L0006381
, L0006382      , L0006383      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466547.58	3808531.17	1.70554	(09010519)	466603.56
3808531.17	1.66814	(09010519)		
466659.54	3808531.17	1.63186	(09010519)	466715.52
3808531.17	1.59691	(09010519)		
466771.50	3808531.17	1.56263	(09010519)	466827.48
3808531.17	1.53010	(09010519)		
466883.46	3808531.17	1.49820	(09010519)	465763.86
3808597.39	2.46385	(09010519)		
465819.84	3808597.39	2.33757	(09010519)	465875.82
3808597.39	2.27631	(09010519)		
465931.80	3808597.39	2.21558	(09010519)	465987.78
3808597.39	2.16055	(09010519)		
466043.76	3808597.39	2.10804	(09010519)	466099.74
3808597.39	2.05558	(09010519)		
466155.72	3808597.39	2.00540	(09010519)	466211.70
3808597.39	1.95714	(09010519)		
466267.68	3808597.39	1.90986	(09010519)	466323.66
3808597.39	1.86607	(09010519)		
466379.64	3808597.39	1.82335	(09010519)	466435.62
3808597.39	1.78081	(09010519)		
466491.60	3808597.39	1.74046	(09010519)	466547.58
3808597.39	1.70530	(10032206)		
466603.56	3808597.39	1.67092	(10032206)	466659.54
3808597.39	1.63760	(10032206)		
466715.52	3808597.39	1.60546	(10032206)	466771.50
3808597.39	1.57427	(10032206)		
466827.48	3808597.39	1.54401	(10032206)	466883.46
3808597.39	1.51557	(10032206)		
465763.86	3808663.61	2.39781	(09010519)	465819.84
3808663.61	2.33502	(09010519)		
465875.82	3808663.61	2.27495	(10032206)	465931.80
3808663.61	2.22016	(10032206)		
465987.78	3808663.61	2.16760	(10032206)	466043.76

3808663.61	2.11682	(10032206)		
466099.74	3808663.61	2.06895	(10032206)	466155.72
3808663.61	2.02157	(10032206)		
466211.70	3808663.61	1.97565	(10032206)	466267.68
3808663.61	1.93155	(10032206)		
466323.66	3808663.61	1.89172	(10032206)	466379.64
3808663.61	1.85056	(10032206)		
466435.62	3808663.61	1.81352	(10032206)	466491.60
3808663.61	1.77495	(10032206)		
466547.58	3808663.61	1.73751	(10032206)	466603.56
3808663.61	1.70131	(10032206)		
466659.54	3808663.61	1.66625	(10032206)	466715.52
3808663.61	1.63259	(10032206)		
466771.50	3808663.61	1.59998	(10032206)	466827.48
3808663.61	1.56995	(10032206)		
466883.46	3808663.61	1.53907	(10032206)	465763.86
3808729.83	2.43371	(10032206)		
465819.84	3808729.83	2.37551	(10032206)	465875.82
3808729.83	2.31605	(10032206)		
465931.80	3808729.83	2.25803	(10032206)	465987.78
3808729.83	2.20238	(10032206)		
466043.76	3808729.83	2.14909	(10032206)	466099.74
3808729.83	2.09778	(10032206)		
466155.72	3808729.83	2.04842	(10032206)	466211.70
3808729.83	2.00065	(10032206)		
466267.68	3808729.83	1.95487	(10032206)	466323.66
3808729.83	1.91340	(10032206)		
466379.64	3808729.83	1.87184	(10032206)	466435.62
3808729.83	1.83077	(10032206)		
466491.60	3808729.83	1.79243	(10032206)	466547.58
3808729.83	1.75371	(10032206)		
466603.56	3808729.83	1.71630	(10032206)	466659.54
3808729.83	1.68275	(10032206)		
466715.52	3808729.83	1.64765	(10032206)	466771.50
3808729.83	1.61389	(10032206)		
466827.48	3808729.83	1.58196	(10032206)	466883.46
3808729.83	1.55031	(10032206)		
465763.86	3808796.05	2.44816	(10032206)	465819.84
3808796.05	2.39161	(10032206)		
465875.82	3808796.05	2.32834	(10032206)	465931.80
3808796.05	2.26990	(10032206)		
465987.78	3808796.05	2.21320	(10032206)	466043.76
3808796.05	2.15894	(10032206)		
466099.74	3808796.05	2.10671	(10032206)	466155.72
3808796.05	2.05641	(10032206)		
466211.70	3808796.05	2.00794	(10032206)	466267.68
3808796.05	1.96114	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 559

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***
INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466323.66	3808796.05	1.91681	(10032206)	466379.64
3808796.05	1.87380	(10032206)		
466435.62	3808796.05	1.83352	(10032206)	466491.60
3808796.05	1.79277	(10032206)		
466547.58	3808796.05	1.75368	(10032206)	466603.56
3808796.05	1.71738	(10032206)		
466659.54	3808796.05	1.68069	(10032206)	466715.52
3808796.05	1.64591	(10032206)		
466771.50	3808796.05	1.61186	(10032206)	466827.48
3808796.05	1.57859	(10032206)		
466883.46	3808796.05	1.54777	(10032206)	465763.86
3808862.27	2.43131	(10032206)		
465819.84	3808862.27	2.37259	(10032206)	465875.82
3808862.27	2.31482	(10032206)		
465931.80	3808862.27	2.25582	(10032206)	465987.78
3808862.27	2.19891	(10032206)		
466043.76	3808862.27	2.14413	(10032206)	466099.74
3808862.27	2.09274	(10032206)		
466155.72	3808862.27	2.04067	(10032206)	466211.70
3808862.27	1.99183	(10032206)		
466267.68	3808862.27	1.94651	(10032206)	466323.66
3808862.27	1.90122	(10032206)		
466379.64	3808862.27	1.85843	(10032206)	466435.62
3808862.27	1.81680	(10032206)		

466491.60	3808862.27	1.77668	(10032206)	466547.58
3808862.27	1.73813 (10032206)			
466603.56	3808862.27	1.70002	(10032206)	466659.54
3808862.27	1.66481 (10032206)			
466715.52	3808862.27	1.62916	(10032206)	466771.50
3808862.27	1.59510 (10032206)			
466827.48	3808862.27	1.56270	(10032206)	466883.46
3808862.27	1.53109 (10032206)			
465763.86	3808928.49	2.38274	(10032206)	465819.84
3808928.49	2.32443 (10032206)			
465875.82	3808928.49	2.26992	(10032206)	465931.80
3808928.49	2.21523 (10032206)			
465987.78	3808928.49	2.16166	(10032206)	466043.76
3808928.49	2.11036 (10032206)			
466099.74	3808928.49	2.05665	(10032206)	466155.72
3808928.49	2.00657 (10032206)			
466211.70	3808928.49	1.95842	(10032206)	466267.68
3808928.49	1.91176 (10032206)			
466323.66	3808928.49	1.86665	(10032206)	466379.64
3808928.49	1.82319 (10032206)			
466435.62	3808928.49	1.78290	(10032206)	466491.60
3808928.49	1.74358 (10032206)			
466547.58	3808928.49	1.70497	(10032206)	466603.56
3808928.49	1.66936 (10032206)			
466659.54	3808928.49	1.63299	(10032206)	466715.52
3808928.49	1.59866 (10032206)			
466771.50	3808928.49	1.56468	(10032206)	466827.48
3808928.49	1.53309 (10032206)			
466883.46	3808928.49	1.50137	(10032206)	465763.86
3808994.71	2.32202 (10032206)			
465819.84	3808994.71	2.26004	(10032206)	465875.82
3808994.71	2.20435 (10032206)			
465931.80	3808994.71	2.15351	(10032206)	465987.78
3808994.71	2.10498 (10032206)			
466043.76	3808994.71	2.05306	(10032206)	466099.74
3808994.71	2.00172 (10032206)			
466155.72	3808994.71	1.95154	(10032206)	466211.70
3808994.71	1.90466 (10032206)			
466267.68	3808994.71	1.85928	(10032206)	466323.66
3808994.71	1.81559 (10032206)			
466379.64	3808994.71	1.77345	(10032206)	466435.62
3808994.71	1.73285 (10032206)			
466491.60	3808994.71	1.69490	(10032206)	466547.58
3808994.71	1.65905 (10032206)			
466603.56	3808994.71	1.62287	(10032206)	466659.54
3808994.71	1.58735 (10032206)			
466715.52	3808994.71	1.55564	(10032206)	466771.50
3808994.71	1.52224 (10032206)			
466827.48	3808994.71	1.48999	(10032206)	466883.46
3808994.71	1.46028 (10032206)			

465763.86	3809060.93	2.25246	(09031319)	465819.84
3809060.93	2.18710	(09031319)		
465875.82	3809060.93	2.12777	(09031319)	465931.80
3809060.93	2.07418	(10032206)		
465987.78	3809060.93	2.02434	(10032206)	466043.76
3809060.93	1.97619	(10032206)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 560

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	1.92546	(10032206)	466155.72
3809060.93	1.87888	(10032206)		
466211.70	3809060.93	1.83312	(10032206)	466267.68
3809060.93	1.78982	(10032206)		
466323.66	3809060.93	1.74789	(10032206)	466379.64
3809060.93	1.70742	(10032206)		
466435.62	3809060.93	1.67012	(10032206)	466491.60
3809060.93	1.63366	(10032206)		
466547.58	3809060.93	1.59726	(10032206)	466603.56
3809060.93	1.56293	(10032206)		
466659.54	3809060.93	1.53112	(10032206)	466715.52
3809060.93	1.49805	(10032206)		
466771.50	3809060.93	1.46635	(10032206)	466827.48
3809060.93	1.43632	(10032206)		
466883.46	3809060.93	1.40764	(10032206)	465763.86

3809127.15	2.33914 (09031319)		
465819.84	3809127.15	2.27587 (09031319)	465875.82
3809127.15	2.21622 (09031319)		
465931.80	3809127.15	2.15722 (09031319)	465987.78
3809127.15	2.10052 (09031319)		
466043.76	3809127.15	2.04091 (09031319)	466099.74
3809127.15	1.98365 (09031319)		
466155.72	3809127.15	1.93080 (09031319)	466211.70
3809127.15	1.88580 (09031319)		
466267.68	3809127.15	1.83913 (09031319)	466323.66
3809127.15	1.79263 (09031319)		
466379.64	3809127.15	1.74628 (09031319)	466435.62
3809127.15	1.70263 (09031319)		
466491.60	3809127.15	1.66043 (09031319)	466547.58
3809127.15	1.61988 (09031319)		
466603.56	3809127.15	1.58122 (09031319)	466659.54
3809127.15	1.54208 (09031319)		
466715.52	3809127.15	1.50515 (09031319)	466771.50
3809127.15	1.46909 (09031319)		
466827.48	3809127.15	1.43367 (09031319)	466883.46
3809127.15	1.40082 (09031319)		
465763.86	3809193.37	2.39377 (09031319)	465819.84
3809193.37	2.33573 (09031319)		
465875.82	3809193.37	2.27676 (09031319)	465931.80
3809193.37	2.21837 (09031319)		
465987.78	3809193.37	2.15743 (09031319)	466043.76
3809193.37	2.09158 (09031319)		
466099.74	3809193.37	2.04125 (09031319)	466155.72
3809193.37	1.99013 (09031319)		
466211.70	3809193.37	1.94460 (09031319)	466267.68
3809193.37	1.90037 (09031319)		
466323.66	3809193.37	1.85595 (09031319)	466379.64
3809193.37	1.81231 (09031319)		
466435.62	3809193.37	1.76816 (09031319)	466491.60
3809193.37	1.72623 (09031319)		
466547.58	3809193.37	1.68563 (09031319)	466603.56
3809193.37	1.64732 (09031319)		
466659.54	3809193.37	1.60816 (09031319)	466715.52
3809193.37	1.57174 (09031319)		
466771.50	3809193.37	1.53488 (09031319)	466827.48
3809193.37	1.50022 (09031319)		
466883.46	3809193.37	1.46598 (09031319)	465763.86
3809259.59	2.41745 (09031319)		
465819.84	3809259.59	2.36106 (09031319)	465875.82
3809259.59	2.30370 (09031319)		
465931.80	3809259.59	2.24806 (09031319)	465987.78
3809259.59	2.18858 (09031319)		
466043.76	3809259.59	2.13068 (09031319)	466099.74
3809259.59	2.07644 (09031319)		
466155.72	3809259.59	2.03127 (09031319)	466211.70

3809259.59	1.98732	(09031319)		
466267.68	3809259.59	1.94455	(09031319)	466323.66
3809259.59	1.89884	(09031319)		
466379.64	3809259.59	1.85610	(09031319)	466435.62
3809259.59	1.81485	(09031319)		
466491.60	3809259.59	1.77322	(09031319)	466547.58
3809259.59	1.73489	(09031319)		
466603.56	3809259.59	1.69581	(09031319)	466659.54
3809259.59	1.65792	(09031319)		
466715.52	3809259.59	1.62306	(09031319)	466771.50
3809259.59	1.58659	(09031319)		
466827.48	3809259.59	1.55215	(09031319)	466883.46
3809259.59	1.51827	(09031319)		
464503.41	3807141.91	11.26134	(09011918)	464523.41
3807141.91	10.77910	(09011918)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 561

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464543.41	3807141.91	10.19404	(09011918)	464563.41
3807141.91	9.57001	(09011918)		
464583.41	3807141.91	9.03046	(09011918)	464603.41
3807141.91	8.42396	(09011918)		
464623.41	3807141.91	7.80171	(09011918)	464643.41
3807141.91	7.24058	(09011918)		

464663.41	3807141.91	6.65184	(09011918)	464683.41
3807141.91	6.29493 (09122717)			
464703.41	3807141.91	6.05219	(09122717)	464723.41
3807141.91	5.78962 (09122717)			
464743.41	3807141.91	5.52303	(09122717)	464763.41
3807141.91	5.25753 (09122717)			
464783.41	3807141.91	4.98942	(09122717)	464803.41
3807141.91	4.72418 (09122717)			
464823.41	3807141.91	4.48288	(09122717)	464843.41
3807141.91	4.23048 (09122717)			
464863.41	3807141.91	3.97571	(09122717)	464883.41
3807141.91	3.73246 (09122717)			
464903.41	3807141.91	3.76277	(09030119)	464923.41
3807141.91	3.82773 (09030119)			
464503.41	3807161.91	10.94896	(09011918)	464523.41
3807161.91	10.44240 (09011918)			
464543.41	3807161.91	9.83530	(09011918)	464563.41
3807161.91	9.19515 (09011918)			
464583.41	3807161.91	8.64665	(09011918)	464603.41
3807161.91	8.08535 (09011918)			
464623.41	3807161.91	7.50813	(09011918)	464643.41
3807161.91	6.87962 (09011918)			
464663.41	3807161.91	6.43134	(09122717)	464683.41
3807161.91	6.18503 (09122717)			
464703.41	3807161.91	5.92043	(09122717)	464723.41
3807161.91	5.64640 (09122717)			
464743.41	3807161.91	5.37558	(09122717)	464763.41
3807161.91	5.12488 (09122717)			
464783.41	3807161.91	4.86089	(09122717)	464803.41
3807161.91	4.59215 (09122717)			
464823.41	3807161.91	4.33052	(09122717)	464843.41
3807161.91	4.07089 (09122717)			
464863.41	3807161.91	3.82083	(09122717)	464883.41
3807161.91	3.82629 (09030119)			
464903.41	3807161.91	3.91155	(09030119)	464923.41
3807161.91	4.00333 (09030119)			
464503.41	3807181.91	10.69657	(09011918)	464523.41
3807181.91	10.10597 (09011918)			
464543.41	3807181.91	9.50296	(09011918)	464563.41
3807181.91	8.89140 (09011918)			
464583.41	3807181.91	8.27492	(09011918)	464603.41
3807181.91	7.70178 (09011918)			
464623.41	3807181.91	7.13668	(09011918)	464643.41
3807181.91	6.55436 (09122717)			
464663.41	3807181.91	6.30394	(09122717)	464683.41
3807181.91	6.04805 (09122717)			
464703.41	3807181.91	5.77348	(09122717)	464723.41
3807181.91	5.50461 (09122717)			
464743.41	3807181.91	5.24029	(09122717)	464763.41
3807181.91	4.97705 (09122717)			

464783.41	3807181.91	4.70711	(09122717)	464803.41
3807181.91	4.43904	(09122717)		
464823.41	3807181.91	4.19042	(09122717)	464843.41
3807181.91	3.93737	(09122717)		
464863.41	3807181.91	3.91233	(09030119)	464883.41
3807181.91	3.99212	(09030119)		
464903.41	3807181.91	4.06803	(09030119)	464923.41
3807181.91	4.14211	(09030119)		
464503.41	3807201.91	10.41712	(09011918)	464523.41
3807201.91	9.74857	(09011918)		
464543.41	3807201.91	9.15246	(09011918)	464563.41
3807201.91	8.57323	(09011918)		
464583.41	3807201.91	7.91968	(09011918)	464603.41
3807201.91	7.32408	(09011918)		
464623.41	3807201.91	6.75013	(09011918)	464643.41
3807201.91	6.42889	(09122717)		
464663.41	3807201.91	6.16870	(09122717)	464683.41
3807201.91	5.90438	(09122717)		
464703.41	3807201.91	5.62687	(09122717)	464723.41
3807201.91	5.36134	(09122717)		
464743.41	3807201.91	5.09845	(09122717)	464763.41
3807201.91	4.81945	(09122717)		
464783.41	3807201.91	4.54757	(09122717)	464803.41
3807201.91	4.28641	(09122717)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 562

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
-------------	-------------	------	------------	-------------

Y-COORD (M)	CONC	(YYMMDDHH)	
464823.41	3807201.91	4.04870	(09122717)
3807201.91	3.86884	(09030119)	464843.41
464863.41	3807201.91	4.00578	(09030119)
3807201.91	4.15302	(09030119)	464883.41
464903.41	3807201.91	4.22577	(09030119)
3807201.91	4.25115	(09030119)	464923.41
464503.41	3807221.91	10.04232	(09011918)
3807221.91	9.35805	(09011918)	464523.41
464543.41	3807221.91	8.75348	(09011918)
3807221.91	8.18471	(09011918)	464563.41
464583.41	3807221.91	7.60784	(09011918)
3807221.91	6.98796	(09011918)	464603.41
464623.41	3807221.91	6.56615	(09122717)
3807221.91	6.31018	(09122717)	464643.41
464663.41	3807221.91	6.03626	(09122717)
3807221.91	5.75379	(09122717)	464683.41
464703.41	3807221.91	5.49096	(09122717)
3807221.91	5.21578	(09122717)	464723.41
464743.41	3807221.91	4.93476	(09122717)
3807221.91	4.65302	(09122717)	464763.41
464783.41	3807221.91	4.39603	(09122717)
3807221.91	4.15110	(09122717)	464803.41
464823.41	3807221.91	3.99693	(09030119)
3807221.91	4.03051	(09030119)	464843.41
464863.41	3807221.91	4.09424	(09030119)
3807221.91	4.24117	(09030119)	464883.41
464903.41	3807221.91	4.34462	(09030119)
3807221.91	4.47203	(09030119)	464923.41
464503.41	3807241.91	9.66231	(09011918)
3807241.91	9.03274	(09011918)	464523.41
464543.41	3807241.91	8.39953	(09011918)
3807241.91	7.77999	(09011918)	464563.41
464583.41	3807241.91	7.22186	(09011918)
3807241.91	6.70424	(09122717)	464603.41
464623.41	3807241.91	6.42463	(09122717)
3807241.91	6.16573	(09122717)	464643.41
464663.41	3807241.91	5.89238	(09122717)
3807241.91	5.61534	(09122717)	464683.41
464703.41	3807241.91	5.33830	(09122717)
3807241.91	5.05312	(09122717)	464723.41
464743.41	3807241.91	4.76894	(09122717)
3807241.91	4.50463	(09122717)	464763.41
464783.41	3807241.91	4.24570	(09122717)
3807241.91	4.07015	(09030119)	464803.41
464823.41	3807241.91	4.11078	(09030119)
3807241.91	4.18964	(09030119)	464843.41
464863.41	3807241.91	4.27421	(09030119)
			464883.41

3807241.91	4.42315	(09030119)		
464903.41	3807241.91	4.50791	(09030119)	464923.41
3807241.91	4.58016	(09030119)		
464503.41	3807261.91	9.26747	(09011918)	464523.41
3807261.91	8.69115	(09011918)		
464543.41	3807261.91	8.03480	(09011918)	464563.41
3807261.91	7.37280	(09011918)		
464583.41	3807261.91	6.83980	(09122717)	464603.41
3807261.91	6.56605	(09122717)		
464623.41	3807261.91	6.28114	(09122717)	464643.41
3807261.91	6.00946	(09122717)		
464663.41	3807261.91	5.74056	(09122717)	464683.41
3807261.91	5.46930	(09122717)		
464703.41	3807261.91	5.17461	(09122717)	464723.41
3807261.91	4.88645	(09122717)		
464743.41	3807261.91	4.60888	(09122717)	464763.41
3807261.91	4.35556	(09122717)		
464783.41	3807261.91	4.11291	(09030119)	464803.41
3807261.91	4.24685	(09030119)		
464823.41	3807261.91	4.26659	(09030119)	464843.41
3807261.91	4.35072	(09030119)		
464863.41	3807261.91	4.48851	(09030119)	464883.41
3807261.91	4.63841	(09030119)		
464903.41	3807261.91	4.66176	(09030119)	464923.41
3807261.91	4.63837	(09030119)		
464503.41	3807281.91	8.85353	(09011918)	464523.41
3807281.91	8.27474	(09011918)		
464543.41	3807281.91	7.62150	(09011918)	464563.41
3807281.91	6.96783	(09011918)		
464583.41	3807281.91	6.69610	(09122717)	464603.41
3807281.91	6.42841	(09122717)		
464623.41	3807281.91	6.15103	(09122717)	464643.41
3807281.91	5.85063	(09122717)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 563

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381

, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464663.41	3807281.91	5.57239	(09122717)	464683.41
3807281.91	5.29931	(09122717)		
464703.41	3807281.91	5.00076	(09122717)	464723.41
3807281.91	4.72771	(09122717)		
464743.41	3807281.91	4.46677	(09122717)	464763.41
3807281.91	4.25224	(09030119)		
464783.41	3807281.91	4.28528	(09030119)	464803.41
3807281.91	4.34792	(09030119)		
464823.41	3807281.91	4.45334	(09030119)	464843.41
3807281.91	4.51978	(09030119)		
464863.41	3807281.91	4.54173	(09030119)	464883.41
3807281.91	4.69222	(09030119)		
464903.41	3807281.91	4.68127	(09030119)	464923.41
3807281.91	4.66651	(09030119)		
464503.41	3807301.91	8.52252	(09011918)	464523.41
3807301.91	7.87756	(09011918)		
464543.41	3807301.91	7.25048	(09011918)	464563.41
3807301.91	6.83399	(09122717)		
464583.41	3807301.91	6.54741	(09122717)	464603.41
3807301.91	6.26951	(09122717)		
464623.41	3807301.91	5.99030	(09122717)	464643.41
3807301.91	5.67985	(09122717)		
464663.41	3807301.91	5.39689	(09122717)	464683.41
3807301.91	5.12298	(09122717)		
464703.41	3807301.91	4.82184	(09122717)	464723.41
3807301.91	4.55272	(09122717)		
464743.41	3807301.91	4.33296	(09030119)	464763.41
3807301.91	4.37353	(09030119)		
464783.41	3807301.91	4.45471	(09030119)	464803.41
3807301.91	4.54195	(09030119)		
464823.41	3807301.91	4.69772	(09030119)	464843.41
3807301.91	4.75862	(09030119)		
464863.41	3807301.91	4.72462	(09030119)	464883.41
3807301.91	4.72652	(09030119)		
464903.41	3807301.91	4.77060	(09030119)	464923.41
3807301.91	4.85888	(09030119)		
464503.41	3807321.91	8.17652	(09011918)	464523.41
3807321.91	7.47650	(09011918)		

464543.41	3807321.91	6.97841	(09122717)	464563.41
3807321.91	6.70152	(09122717)		
464583.41	3807321.91	6.38770	(09122717)	464603.41
3807321.91	6.09766	(09122717)		
464623.41	3807321.91	5.81546	(09122717)	464643.41
3807321.91	5.49928	(09122717)		
464663.41	3807321.91	5.21497	(09122717)	464683.41
3807321.91	4.94240	(09122717)		
464703.41	3807321.91	4.64775	(09122717)	464723.41
3807321.91	4.52493	(09030119)		
464743.41	3807321.91	4.54248	(09030119)	464763.41
3807321.91	4.54409	(09030119)		
464783.41	3807321.91	4.63687	(09030119)	464803.41
3807321.91	4.79247	(09030119)		
464823.41	3807321.91	4.93262	(09030119)	464843.41
3807321.91	4.94759	(09030119)		
464863.41	3807321.91	4.87197	(09030119)	464883.41
3807321.91	4.85650	(09030119)		
464903.41	3807321.91	4.95405	(09030119)	464923.41
3807321.91	5.10338	(09030119)		
464503.41	3807341.91	7.75035	(09011918)	464523.41
3807341.91	7.10655	(09122717)		
464543.41	3807341.91	6.82043	(09122717)	464563.41
3807341.91	6.53540	(09122717)		
464583.41	3807341.91	6.21219	(09122717)	464603.41
3807341.91	5.91683	(09122717)		
464623.41	3807341.91	5.63265	(09122717)	464643.41
3807341.91	5.31217	(09122717)		
464663.41	3807341.91	5.02757	(09122717)	464683.41
3807341.91	4.76115	(09122717)		
464703.41	3807341.91	4.60987	(09030119)	464723.41
3807341.91	4.70446	(09030119)		
464743.41	3807341.91	4.80563	(09030119)	464763.41
3807341.91	4.80278	(09030119)		
464783.41	3807341.91	4.89525	(09030119)	464803.41
3807341.91	5.04130	(09030119)		
464823.41	3807341.91	5.04467	(09030119)	464843.41
3807341.91	4.96807	(09030119)		
464863.41	3807341.91	4.94689	(09030119)	464883.41
3807341.91	5.05528	(09030119)		
464903.41	3807341.91	5.20537	(09030119)	464923.41
3807341.91	5.31109	(09030119)		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***
INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
464503.41	3807361.91	7.33734 (09011918)	464523.41
3807361.91	6.97267 (09122717)		
464543.41	3807361.91	6.66984 (09122717)	464563.41
3807361.91	6.35853 (09122717)		
464583.41	3807361.91	6.02741 (09122717)	464603.41
3807361.91	5.72799 (09122717)		
464623.41	3807361.91	5.44817 (09122717)	464643.41
3807361.91	5.15008 (09122717)		
464663.41	3807361.91	4.85640 (09122717)	464683.41
3807361.91	4.86937 (09030119)		
464703.41	3807361.91	4.82597 (09030119)	464723.41
3807361.91	4.89312 (09030119)		
464743.41	3807361.91	4.97245 (09030119)	464763.41
3807361.91	5.05222 (09030119)		
464783.41	3807361.91	5.08790 (09030119)	464803.41
3807361.91	5.15286 (09030119)		
464823.41	3807361.91	5.06950 (09030119)	464843.41
3807361.91	5.06258 (09030119)		
464863.41	3807361.91	5.15280 (09030119)	464883.41
3807361.91	5.30802 (09030119)		
464903.41	3807361.91	5.36362 (09030119)	464923.41
3807361.91	5.41023 (09030119)		
464503.41	3807381.91	7.12310 (09122717)	464523.41
3807381.91	6.82972 (09122717)		
464543.41	3807381.91	6.50851 (09122717)	464563.41
3807381.91	6.17333 (09122717)		
464583.41	3807381.91	5.84548 (09122717)	464603.41
3807381.91	5.54027 (09122717)		
464623.41	3807381.91	5.25654 (09122717)	464643.41

3807381.91	4.98143	(09122717)		
464663.41	3807381.91	4.98125	(09030119)	464683.41
3807381.91	5.08470	(09030119)		
464703.41	3807381.91	5.09863	(09030119)	464723.41
3807381.91	5.09751	(09030119)		
464743.41	3807381.91	5.10283	(09030119)	464763.41
3807381.91	5.24814	(09030119)		
464783.41	3807381.91	5.27276	(09030119)	464803.41
3807381.91	5.27793	(09030119)		
464823.41	3807381.91	5.16119	(09030119)	464843.41
3807381.91	5.25660	(09030119)		
464863.41	3807381.91	5.41125	(09030119)	464883.41
3807381.91	5.51513	(09030119)		
464903.41	3807381.91	5.51738	(09030119)	464923.41
3807381.91	5.38045	(09030119)		
464503.41	3807401.91	6.99218	(09122717)	464523.41
3807401.91	6.66009	(09122717)		
464543.41	3807401.91	6.32004	(09122717)	464563.41
3807401.91	5.98410	(09122717)		
464583.41	3807401.91	5.68603	(09122717)	464603.41
3807401.91	5.36692	(09122717)		
464623.41	3807401.91	5.18279	(09030119)	464643.41
3807401.91	5.18118	(09030119)		
464663.41	3807401.91	5.18519	(09030119)	464683.41
3807401.91	5.20346	(09030119)		
464703.41	3807401.91	5.36139	(09030119)	464723.41
3807401.91	5.37704	(09030119)		
464743.41	3807401.91	5.36724	(09030119)	464763.41
3807401.91	5.36671	(09030119)		
464783.41	3807401.91	5.45269	(09030119)	464803.41
3807401.91	5.54780	(09030119)		
464823.41	3807401.91	5.42799	(09030119)	464843.41
3807401.91	5.52233	(09030119)		
464863.41	3807401.91	5.63037	(09030119)	464883.41
3807401.91	5.57698	(09030119)		
464903.41	3807401.91	5.63446	(09030119)	464923.41
3807401.91	5.63246	(09030119)		
464503.41	3807421.91	6.81975	(09122717)	464523.41
3807421.91	6.47196	(09122717)		
464543.41	3807421.91	6.14094	(09122717)	464563.41
3807421.91	5.81900	(09122717)		
464583.41	3807421.91	5.49896	(09122717)	464603.41
3807421.91	5.28568	(09030119)		
464623.41	3807421.91	5.37418	(09030119)	464643.41
3807421.91	5.46197	(09030119)		
464663.41	3807421.91	5.46963	(09030119)	464683.41
3807421.91	5.46661	(09030119)		
464703.41	3807421.91	5.50019	(09030119)	464723.41
3807421.91	5.57753	(09030119)		
464743.41	3807421.91	5.64656	(09030119)	464763.41

3807421.91 5.62895 (09030119)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 565

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464783.41	3807421.91	5.60513	(09030119)	464803.41
3807421.91	5.60379 (09030119)			
464823.41	3807421.91	5.64656	(09030119)	464843.41
3807421.91	5.68915 (09030119)			
464863.41	3807421.91	5.73428	(09030119)	464883.41
3807421.91	5.74724 (09030119)			
464903.41	3807421.91	5.69563	(09030119)	464923.41
3807421.91	5.72085 (09030119)			
464503.41	3807441.91	6.62932	(09122717)	464523.41
3807441.91	6.28391 (09122717)			
464543.41	3807441.91	5.96164	(09122717)	464563.41
3807441.91	5.65307 (09122717)			
464583.41	3807441.91	5.42294	(09030119)	464603.41
3807441.91	5.50201 (09030119)			
464623.41	3807441.91	5.52402	(09030119)	464643.41
3807441.91	5.68265 (09030119)			
464663.41	3807441.91	5.70748	(09030119)	464683.41
3807441.91	5.70985 (09030119)			
464703.41	3807441.91	5.69285	(09030119)	464723.41
3807441.91	5.77082 (09030119)			

464743.41	3807441.91	5.86385	(09030119)	464763.41
3807441.91	5.86494	(09030119)		
464783.41	3807441.91	5.77680	(09030119)	464803.41
3807441.91	5.74944	(09030119)		
464823.41	3807441.91	5.90896	(09030119)	464843.41
3807441.91	5.86303	(09030119)		
464863.41	3807441.91	5.70354	(09030119)	464883.41
3807441.91	5.85998	(09030119)		
464903.41	3807441.91	5.87374	(09030119)	464923.41
3807441.91	5.85223	(09030119)		
464503.41	3807461.91	6.43366	(09122717)	464523.41
3807461.91	6.11940	(09122717)		
464543.41	3807461.91	5.78108	(09122717)	464563.41
3807461.91	5.55949	(09030119)		
464583.41	3807461.91	5.56569	(09030119)	464603.41
3807461.91	5.66549	(09030119)		
464623.41	3807461.91	5.82028	(09030119)	464643.41
3807461.91	5.81786	(09030119)		
464663.41	3807461.91	5.90870	(09030119)	464683.41
3807461.91	6.00803	(09030119)		
464703.41	3807461.91	5.98644	(09030119)	464723.41
3807461.91	5.97340	(09030119)		
464743.41	3807461.91	5.97937	(09030119)	464763.41
3807461.91	6.12640	(09030119)		
464783.41	3807461.91	6.05949	(09030119)	464803.41
3807461.91	6.02904	(09030119)		
464823.41	3807461.91	6.18627	(09030119)	464843.41
3807461.91	6.13766	(09030119)		
464863.41	3807461.91	5.97463	(09030119)	464883.41
3807461.91	6.12805	(09030119)		
464903.41	3807461.91	6.13677	(09030119)	464923.41
3807461.91	6.10926	(09030119)		
464503.41	3807481.91	6.22348	(09122717)	464523.41
3807481.91	5.91419	(09122717)		
464543.41	3807481.91	5.67301	(09030119)	464563.41
3807481.91	5.76234	(09030119)		
464583.41	3807481.91	5.85079	(09030119)	464603.41
3807481.91	5.88644	(09030119)		
464623.41	3807481.91	5.96633	(09030119)	464643.41
3807481.91	6.04631	(09030119)		
464663.41	3807481.91	6.12024	(09030119)	464683.41
3807481.91	6.19148	(09030119)		
464703.41	3807481.91	6.26364	(09030119)	464723.41
3807481.91	6.25662	(09030119)		
464743.41	3807481.91	6.24983	(09030119)	464763.41
3807481.91	6.40816	(09030119)		
464783.41	3807481.91	6.34458	(09030119)	464803.41
3807481.91	6.31094	(09030119)		
464823.41	3807481.91	6.46455	(09030119)	464843.41
3807481.91	6.41306	(09030119)		

464863.41	3807481.91	6.24193	(09030119)	464883.41
3807481.91	6.25651	(09030119)		
464903.41	3807481.91	6.30929	(09030119)	464923.41
3807481.91	6.36155	(09030119)		
464503.41	3807501.91	6.02236	(09122717)	464523.41
3807501.91	6.05329	(09030119)		
464543.41	3807501.91	5.90428	(09030119)	464563.41
3807501.91	5.92249	(09030119)		
464583.41	3807501.91	6.08587	(09030119)	464603.41
3807501.91	6.10714	(09030119)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 566

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	6.16393	(09030119)	464643.41
3807501.91	6.27198	(09030119)		
464663.41	3807501.91	6.33125	(09030119)	464683.41
3807501.91	6.33841	(09030119)		
464703.41	3807501.91	6.48075	(09030119)	464723.41
3807501.91	6.49425	(09030119)		
464743.41	3807501.91	6.53780	(09030119)	464763.41
3807501.91	6.63433	(09030119)		
464783.41	3807501.91	6.57692	(09030119)	464803.41
3807501.91	6.59063	(09030119)		
464823.41	3807501.91	6.68631	(09030119)	464843.41

3807501.91	6.67408 (09030119)		
464863.41	3807501.91	6.50891 (09030119)	464883.41
3807501.91	6.42584 (09030119)		
464903.41	3807501.91	6.48247 (09030119)	464923.41
3807501.91	6.61043 (09030119)		
464503.41	3807521.91	6.20183 (09030119)	464523.41
3807521.91	5.98290 (09030119)		
464543.41	3807521.91	6.07917 (09030119)	464563.41
3807521.91	6.23801 (09030119)		
464583.41	3807521.91	6.22974 (09030119)	464603.41
3807521.91	6.32062 (09030119)		
464623.41	3807521.91	6.42206 (09030119)	464643.41
3807521.91	6.40866 (09030119)		
464663.41	3807521.91	6.49269 (09030119)	464683.41
3807521.91	6.62901 (09030119)		
464703.41	3807521.91	6.61208 (09030119)	464723.41
3807521.91	6.68988 (09030119)		
464743.41	3807521.91	6.77909 (09030119)	464763.41
3807521.91	6.69329 (09030119)		
464783.41	3807521.91	6.73565 (09030119)	464803.41
3807521.91	6.82496 (09030119)		
464823.41	3807521.91	6.75339 (09030119)	464843.41
3807521.91	6.79656 (09030119)		
464863.41	3807521.91	6.77719 (09030119)	464883.41
3807521.91	6.68770 (09030119)		
464903.41	3807521.91	6.73686 (09030119)	464923.41
3807521.91	6.85608 (09030119)		
464503.41	3807541.91	6.19413 (09030119)	464523.41
3807541.91	6.28232 (09030119)		
464543.41	3807541.91	6.31467 (09030119)	464563.41
3807541.91	6.39354 (09030119)		
464583.41	3807541.91	6.47240 (09030119)	464603.41
3807541.91	6.54470 (09030119)		
464623.41	3807541.91	6.61404 (09030119)	464643.41
3807541.91	6.68427 (09030119)		
464663.41	3807541.91	6.70755 (09030119)	464683.41
3807541.91	6.77122 (09030119)		
464703.41	3807541.91	6.83619 (09030119)	464723.41
3807541.91	6.85857 (09030119)		
464743.41	3807541.91	6.84590 (09030119)	464763.41
3807541.91	6.87618 (09030119)		
464783.41	3807541.91	7.01064 (09030119)	464803.41
3807541.91	7.10242 (09030119)		
464823.41	3807541.91	6.98093 (09030119)	464843.41
3807541.91	6.85877 (09030119)		
464863.41	3807541.91	6.86206 (09030119)	464883.41
3807541.91	6.90161 (09030119)		
464903.41	3807541.91	6.97139 (09030119)	464923.41
3807541.91	7.03289 (09030119)		
464503.41	3807561.91	6.36548 (09030119)	464523.41

3807561.91	6.53280	(09030119)		
464543.41	3807561.91	6.54939	(09030119)	464563.41
3807561.91	6.60306	(09030119)		
464583.41	3807561.91	6.71151	(09030119)	464603.41
3807561.91	6.76772	(09030119)		
464623.41	3807561.91	6.76941	(09030119)	464643.41
3807561.91	6.91283	(09030119)		
464663.41	3807561.91	6.92127	(09030119)	464683.41
3807561.91	6.96060	(09030119)		
464703.41	3807561.91	7.05577	(09030119)	464723.41
3807561.91	6.99071	(09030119)		
464743.41	3807561.91	7.00183	(09030119)	464763.41
3807561.91	7.15040	(09030119)		
464783.41	3807561.91	7.24386	(09030119)	464803.41
3807561.91	7.31801	(09030119)		
464823.41	3807561.91	7.24687	(09030119)	464843.41
3807561.91	7.03674	(09030119)		
464863.41	3807561.91	6.98650	(09030119)	464883.41
3807561.91	7.11014	(09030119)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 567

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464903.41	3807561.91	7.19809	(09030119)	464923.41
3807561.91	7.23526	(09030119)		

464503.41	3807581.91	6.70146	(09030119)	464523.41
3807581.91	6.68601	(09030119)		
464543.41	3807581.91	6.77586	(09030119)	464563.41
3807581.91	6.87681	(09030119)		
464583.41	3807581.91	6.85622	(09030119)	464603.41
3807581.91	6.93849	(09030119)		
464623.41	3807581.91	7.07502	(09030119)	464643.41
3807581.91	7.05092	(09030119)		
464663.41	3807581.91	7.12614	(09030119)	464683.41
3807581.91	7.21314	(09030119)		
464703.41	3807581.91	7.11793	(09030119)	464723.41
3807581.91	7.15601	(09030119)		
464743.41	3807581.91	7.29390	(09030119)	464763.41
3807581.91	7.43415	(09030119)		
464783.41	3807581.91	7.41093	(09030119)	464803.41
3807581.91	7.37739	(09030119)		
464823.41	3807581.91	7.45899	(09030119)	464843.41
3807581.91	7.29691	(09030119)		
464863.41	3807581.91	7.23831	(09030119)	464883.41
3807581.91	7.35039	(09030119)		
464903.41	3807581.91	7.42607	(09030119)	464923.41
3807581.91	7.41361	(09030119)		
464503.41	3807601.91	6.85449	(09030119)	464523.41
3807601.91	6.82003	(09030119)		
464543.41	3807601.91	6.91278	(09030119)	464563.41
3807601.91	7.07933	(09030119)		
464583.41	3807601.91	7.14639	(09030119)	464603.41
3807601.91	7.16461	(09030119)		
464623.41	3807601.91	7.22456	(09030119)	464643.41
3807601.91	7.28578	(09030119)		
464663.41	3807601.91	7.30286	(09030119)	464683.41
3807601.91	7.28358	(09030119)		
464703.41	3807601.91	7.30853	(09030119)	464723.41
3807601.91	7.44126	(09030119)		
464743.41	3807601.91	7.53635	(09030119)	464763.41
3807601.91	7.55204	(09030119)		
464783.41	3807601.91	7.57008	(09030119)	464803.41
3807601.91	7.44778	(09030119)		
464823.41	3807601.91	7.43441	(09030119)	464843.41
3807601.91	7.45692	(09030119)		
464863.41	3807601.91	7.47646	(09030119)	464883.41
3807601.91	7.55574	(09030119)		
464903.41	3807601.91	7.59206	(09030119)	464923.41
3807601.91	7.61543	(09030119)		
464503.41	3807621.91	6.98957	(09030119)	464523.41
3807621.91	6.97507	(09030119)		
464543.41	3807621.91	7.07295	(09030119)	464563.41
3807621.91	7.24357	(09030119)		
464583.41	3807621.91	7.38669	(09030119)	464603.41
3807621.91	7.38881	(09030119)		

464623.41	3807621.91	7.42255	(09030119)	464643.41
3807621.91	7.51498	(09030119)		
464663.41	3807621.91	7.44118	(09030119)	464683.41
3807621.91	7.44559	(09030119)		
464703.41	3807621.91	7.59258	(09030119)	464723.41
3807621.91	7.68186	(09030119)		
464743.41	3807621.91	7.75057	(09030119)	464763.41
3807621.91	7.66977	(09030119)		
464783.41	3807621.91	7.58580	(09030119)	464803.41
3807621.91	7.61783	(09030119)		
464823.41	3807621.91	7.58656	(09030119)	464843.41
3807621.91	7.60679	(09030119)		
464863.41	3807621.91	7.69237	(09030119)	464883.41
3807621.91	7.71458	(09030119)		
464903.41	3807621.91	7.77266	(09030119)	464923.41
3807621.91	7.79156	(09030119)		
464503.41	3807641.91	7.13230	(09030119)	464523.41
3807641.91	7.24688	(09030119)		
464543.41	3807641.91	7.41595	(09030119)	464563.41
3807641.91	7.56438	(09030119)		
464583.41	3807641.91	7.53177	(09030119)	464603.41
3807641.91	7.60295	(09030119)		
464623.41	3807641.91	7.68622	(09030119)	464643.41
3807641.91	7.58048	(09030119)		
464663.41	3807641.91	7.61282	(09030119)	464683.41
3807641.91	7.74799	(09030119)		
464703.41	3807641.91	7.88465	(09030119)	464723.41
3807641.91	7.85295	(09030119)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 568

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

464743.41	3807641.91	7.81029	(09030119)	464763.41	
3807641.91	7.88567	(09030119)			
464783.41	3807641.91	7.75103	(09030119)	464803.41	
3807641.91	7.68407	(09030119)			
464823.41	3807641.91	7.78361	(09030119)	464843.41	
3807641.91	7.81891	(09030119)			
464863.41	3807641.91	7.84050	(09030119)	464883.41	
3807641.91	7.90583	(09030119)			
464903.41	3807641.91	7.90907	(09030119)	464923.41	
3807641.91	7.89658	(09030119)			
464503.41	3807661.91	7.21265	(09030119)	464523.41	
3807661.91	7.39264	(09030119)			
464543.41	3807661.91	7.56564	(09030119)	464563.41	
3807661.91	7.72147	(09030119)			
464583.41	3807661.91	7.77735	(09030119)	464603.41	
3807661.91	7.78769	(09030119)			
464623.41	3807661.91	7.76042	(09030119)	464643.41	
3807661.91	7.77849	(09030119)			
464663.41	3807661.91	7.79423	(09030119)	464683.41	
3807661.91	7.81769	(09030119)			
464703.41	3807661.91	7.95250	(09030119)	464723.41	
3807661.91	8.01477	(09030119)			
464743.41	3807661.91	7.87991	(09030119)	464763.41	
3807661.91	7.85657	(09030119)			
464783.41	3807661.91	7.87017	(09030119)	464803.41	
3807661.91	7.88048	(09030119)			
464823.41	3807661.91	7.95250	(09030119)	464843.41	
3807661.91	7.97980	(09030119)			
464863.41	3807661.91	8.02916	(09030119)	464883.41	
3807661.91	8.03283	(09030119)			
464903.41	3807661.91	8.05551	(09030119)	464923.41	
3807661.91	8.03629	(09030119)			
464503.41	3807681.91	7.28914	(09030119)	464523.41	
3807681.91	7.46982	(09030119)			
464543.41	3807681.91	7.64340	(09030119)	464563.41	
3807681.91	7.80915	(09030119)			
464583.41	3807681.91	7.96636	(09030119)	464603.41	
3807681.91	7.93210	(09030119)			
464623.41	3807681.91	7.92494	(09030119)	464643.41	
3807681.91	8.00985	(09030119)			
464663.41	3807681.91	7.97354	(09030119)	464683.41	
3807681.91	7.77261	(09030119)			
464703.41	3807681.91	7.85718	(09030119)	464723.41	

3807681.91	7.98004	(09030119)		
464743.41	3807681.91	8.05082	(09030119)	464763.41
3807681.91	8.00861	(09030119)		
464783.41	3807681.91	8.01897	(09030119)	464803.41
3807681.91	8.09642	(09030119)		
464823.41	3807681.91	8.10932	(09030119)	464843.41
3807681.91	8.15795	(09030119)		
464863.41	3807681.91	8.16567	(09030119)	464883.41
3807681.91	8.14389	(09030119)		
464903.41	3807681.91	8.15349	(09030119)	464923.41
3807681.91	8.15138	(09030119)		
464523.41	3807701.91	7.51088	(09030119)	464543.41
3807701.91	7.68640	(09030119)		
464563.41	3807701.91	7.85385	(09030119)	464583.41
3807701.91	8.01242	(09030119)		
464603.41	3807701.91	8.10963	(09030119)	464623.41
3807701.91	8.18538	(09030119)		
464643.41	3807701.91	8.08150	(09030119)	464663.41
3807701.91	8.10485	(09030119)		
464683.41	3807701.91	8.05826	(09030119)	464703.41
3807701.91	7.93583	(09030119)		
464723.41	3807701.91	8.00507	(09030119)	464743.41
3807701.91	8.11374	(09030119)		
464763.41	3807701.91	8.20506	(09030119)	464783.41
3807701.91	8.23062	(09030119)		
464803.41	3807701.91	8.24226	(09030119)	464823.41
3807701.91	8.29689	(09030119)		
464843.41	3807701.91	8.28903	(09030119)	464863.41
3807701.91	8.26537	(09030119)		
464883.41	3807701.91	8.27970	(09030119)	464903.41
3807701.91	8.26173	(09030119)		
464923.41	3807701.91	8.19828	(09030119)	464543.41
3807721.91	7.82189	(09030119)		
464563.41	3807721.91	8.12307	(09030119)	464583.41
3807721.91	8.27326	(09030119)		
464603.41	3807721.91	8.41268	(09030119)	464623.41
3807721.91	8.48722	(09030119)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 569

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365

```

, L0006366      , L0006367      , L0006368      ,
                  L0006369      , L0006370      , L0006371      , L0006372      , L0006373
, L0006374      , L0006375      , L0006376      ,
                  L0006377      , L0006378      , L0006379      , L0006380      , L0006381
, L0006382      , L0006383      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464643.41	3807721.91	8.32857	(09030119)	464663.41
3807721.91	8.16500	(09030119)		
464683.41	3807721.91	8.13969	(09030119)	464703.41
3807721.91	8.15477	(09030119)		
464723.41	3807721.91	8.21710	(09030119)	464743.41
3807721.91	8.30911	(09030119)		
464763.41	3807721.91	8.37177	(09030119)	464783.41
3807721.91	8.38803	(09030119)		
464803.41	3807721.91	8.42660	(09030119)	464823.41
3807721.91	8.41831	(09030119)		
464843.41	3807721.91	8.42899	(09030119)	464863.41
3807721.91	8.39672	(09030119)		
464883.41	3807721.91	8.37758	(09030119)	464903.41
3807721.91	8.31781	(09030119)		
464923.41	3807721.91	8.24518	(09030119)	464943.41
3807721.91	8.18268	(09030119)		
464963.41	3807721.91	8.08297	(09030119)	464983.41
3807721.91	7.97124	(09030119)		
465003.41	3807721.91	7.84535	(09030119)	465023.41
3807721.91	7.72865	(09030119)		
465043.41	3807721.91	7.57979	(09030119)	465063.41
3807721.91	7.43653	(09030119)		
465083.41	3807721.91	7.26560	(09030119)	465103.41
3807721.91	7.13458	(09031219)		
465123.41	3807721.91	7.20993	(09031219)	465143.41
3807721.91	7.25627	(09031219)		
465163.41	3807721.91	7.25802	(09031219)	465183.41
3807721.91	7.30561	(09031219)		
465203.41	3807721.91	7.32510	(09031219)	465223.41
3807721.91	7.29724	(09031219)		
465243.41	3807721.91	7.25678	(09031219)	465263.41
3807721.91	7.23360	(09031219)		
465283.41	3807721.91	7.17961	(09031219)	465303.41
3807721.91	7.16292	(09031219)		

465323.41	3807721.91	7.11229	(09031219)	465343.41
3807721.91	7.02346	(09031219)		
465363.41	3807721.91	6.97269	(09031219)	465383.41
3807721.91	6.85847	(10020118)		
464543.41	3807741.91	7.62210	(09030119)	464563.41
3807741.91	8.26589	(09030119)		
464583.41	3807741.91	8.47289	(09030119)	464603.41
3807741.91	8.61008	(09030119)		
464623.41	3807741.91	8.67658	(09030119)	464643.41
3807741.91	8.55390	(09030119)		
464663.41	3807741.91	8.30070	(09030119)	464683.41
3807741.91	8.26323	(09030119)		
464703.41	3807741.91	8.36908	(09030119)	464723.41
3807741.91	8.45599	(09030119)		
464743.41	3807741.91	8.52287	(09030119)	464763.41
3807741.91	8.52461	(09030119)		
464783.41	3807741.91	8.56154	(09030119)	464803.41
3807741.91	8.55591	(09030119)		
464823.41	3807741.91	8.52202	(09030119)	464843.41
3807741.91	8.52225	(09030119)		
464863.41	3807741.91	8.50945	(09030119)	464883.41
3807741.91	8.42886	(09030119)		
464903.41	3807741.91	8.38113	(09030119)	464923.41
3807741.91	8.29914	(09030119)		
464943.41	3807741.91	8.17812	(09030119)	464963.41
3807741.91	8.06573	(09030119)		
464983.41	3807741.91	7.96681	(09030119)	465003.41
3807741.91	7.80684	(09030119)		
465023.41	3807741.91	7.65281	(09030119)	465043.41
3807741.91	7.51187	(09030119)		
465063.41	3807741.91	7.32414	(09030119)	465083.41
3807741.91	7.27549	(09031219)		
465103.41	3807741.91	7.34528	(09031219)	465123.41
3807741.91	7.39640	(09031219)		
465143.41	3807741.91	7.38377	(09031219)	465163.41
3807741.91	7.35834	(09031219)		
465183.41	3807741.91	7.38060	(09031219)	465203.41
3807741.91	7.39810	(09031219)		
465223.41	3807741.91	7.37395	(09031219)	465243.41
3807741.91	7.32767	(09031219)		
465263.41	3807741.91	7.27495	(09031219)	465283.41
3807741.91	7.24975	(09031219)		
465303.41	3807741.91	7.20242	(09031219)	465323.41
3807741.91	7.07494	(09031219)		
465343.41	3807741.91	6.93412	(09031219)	465363.41
3807741.91	6.90767	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465383.41	3807741.91	6.92230	(10020118)	464543.41
3807761.91	7.44475	(09030119)		
464563.41	3807761.91	7.88952	(09030119)	464583.41
3807761.91	8.28896	(09030119)		
464603.41	3807761.91	8.66114	(09030119)	464623.41
3807761.91	8.72381	(09030119)		
464643.41	3807761.91	8.45723	(09030119)	464663.41
3807761.91	8.46757	(09030119)		
464683.41	3807761.91	8.52419	(09030119)	464703.41
3807761.91	8.61176	(09030119)		
464723.41	3807761.91	8.66486	(09030119)	464743.41
3807761.91	8.66455	(09030119)		
464763.41	3807761.91	8.70585	(09030119)	464783.41
3807761.91	8.68497	(09030119)		
464803.41	3807761.91	8.64843	(09030119)	464823.41
3807761.91	8.64739	(09030119)		
464843.41	3807761.91	8.63204	(09030119)	464863.41
3807761.91	8.59675	(09030119)		
464883.41	3807761.91	8.49894	(09030119)	464903.41
3807761.91	8.42936	(09030119)		
464923.41	3807761.91	8.32653	(09030119)	464943.41
3807761.91	8.18845	(09030119)		
464963.41	3807761.91	8.05651	(09030119)	464983.41
3807761.91	7.93632	(09030119)		
465003.41	3807761.91	7.76068	(09030119)	465023.41

3807761.91	7.57460 (09030119)		
465043.41	3807761.91	7.38344 (09030119)	465063.41
3807761.91	7.42000 (09031219)		
465083.41	3807761.91	7.48467 (09031219)	465103.41
3807761.91	7.53354 (09031219)		
465123.41	3807761.91	7.50232 (09031219)	465143.41
3807761.91	7.48946 (09031219)		
465163.41	3807761.91	7.50295 (09031219)	465183.41
3807761.91	7.44183 (09031219)		
465203.41	3807761.91	7.43110 (09031219)	465223.41
3807761.91	7.39740 (09031219)		
465243.41	3807761.91	7.37160 (09031219)	465263.41
3807761.91	7.33847 (09031219)		
465283.41	3807761.91	7.28673 (09031219)	465303.41
3807761.91	7.13791 (09031219)		
465323.41	3807761.91	7.01557 (10020118)	465343.41
3807761.91	7.02449 (10020118)		
465363.41	3807761.91	6.95727 (10020118)	465383.41
3807761.91	6.91641 (10020118)		
464543.41	3807781.91	7.50695 (09030119)	464563.41
3807781.91	7.85439 (09030119)		
464583.41	3807781.91	8.10233 (09030119)	464603.41
3807781.91	8.32031 (09030119)		
464623.41	3807781.91	8.46701 (09030119)	464643.41
3807781.91	8.58330 (09030119)		
464663.41	3807781.91	8.66937 (09030119)	464683.41
3807781.91	8.69886 (09030119)		
464703.41	3807781.91	8.77041 (09030119)	464723.41
3807781.91	8.81641 (09030119)		
464743.41	3807781.91	8.84180 (09030119)	464763.41
3807781.91	8.81943 (09030119)		
464783.41	3807781.91	8.81591 (09030119)	464803.41
3807781.91	8.77109 (09030119)		
464823.41	3807781.91	8.75076 (09030119)	464843.41
3807781.91	8.70473 (09030119)		
464863.41	3807781.91	8.61426 (09030119)	464883.41
3807781.91	8.53501 (09030119)		
464903.41	3807781.91	8.41735 (09030119)	464923.41
3807781.91	8.28682 (09030119)		
464943.41	3807781.91	8.14471 (09030119)	464963.41
3807781.91	8.00896 (09030119)		
464983.41	3807781.91	7.84185 (09030119)	465003.41
3807781.91	7.68143 (09030119)		
465023.41	3807781.91	7.56877 (09031219)	465043.41
3807781.91	7.56063 (09031219)		
465063.41	3807781.91	7.62305 (09031219)	465083.41
3807781.91	7.65558 (09031219)		
465103.41	3807781.91	7.63919 (09031219)	465123.41
3807781.91	7.61533 (09031219)		
465143.41	3807781.91	7.60879 (09031219)	465163.41

```

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apol1\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 571

```
*** MODELOPTs:      RegDFault  CONC  ELEV  URBAN
```

VALUES FOR SOURCE GROUP:		*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
TRUCK31 ***		
	INCLUDING SOURCE(S):	L0006356 , L0006357
, L0006358	, L0006359 , L0006360	
	L0006361 , L0006362	, L0006363 , L0006364 , L0006365
, L0006366	, L0006367 , L0006368	
	L0006369 , L0006370	, L0006371 , L0006372 , L0006373
, L0006374	, L0006375 , L0006376	
	L0006377 , L0006378	, L0006379 , L0006380 , L0006381
, L0006382	, L0006383 , . . .	

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM 10 IN MICROGRAMS/M**3

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
465263.41	3807781.91	7.30471	(09031219)	465283.41
465303.41	3807781.91	7.16446	(10020118)	465323.41
465343.41	3807781.91	7.07177	(10020118)	465363.41
465383.41	3807781.91	6.98812	(10020118)	464543.41
464563.41	3807801.91	7.89000	(09030119)	464583.41
464603.41	3807801.91	8.38196	(09030119)	464623.41
464643.41	3807801.91	8.82068	(09030119)	464663.41
464683.41	3807801.91	8.89925	(09030119)	464703.41
	3807801.91	8.95146	(09030119)	

464723.41	3807801.91	8.98259	(09030119)	464743.41
3807801.91	8.96113	(09030119)		
464763.41	3807801.91	8.91340	(09030119)	464783.41
3807801.91	8.89712	(09030119)		
464803.41	3807801.91	8.86954	(09030119)	464823.41
3807801.91	8.82098	(09030119)		
464843.41	3807801.91	8.72254	(09030119)	464863.41
3807801.91	8.63244	(09030119)		
464883.41	3807801.91	8.51599	(09030119)	464903.41
3807801.91	8.37727	(09030119)		
464923.41	3807801.91	8.22431	(09030119)	464943.41
3807801.91	8.08965	(09030119)		
464963.41	3807801.91	7.91405	(09030119)	464983.41
3807801.91	7.72522	(09030119)		
465003.41	3807801.91	7.73990	(09031219)	465023.41
3807801.91	7.77352	(09031219)		
465043.41	3807801.91	7.76029	(09031219)	465063.41
3807801.91	7.79636	(09031219)		
465083.41	3807801.91	7.76922	(09031219)	465103.41
3807801.91	7.72875	(09031219)		
465123.41	3807801.91	7.73339	(09031219)	465143.41
3807801.91	7.67574	(09031219)		
465163.41	3807801.91	7.60373	(09031219)	465183.41
3807801.91	7.58451	(09031219)		
465203.41	3807801.91	7.54435	(09031219)	465223.41
3807801.91	7.48140	(09031219)		
465243.41	3807801.91	7.31213	(09031219)	465263.41
3807801.91	7.22128	(10020118)		
465283.41	3807801.91	7.24143	(10020118)	465303.41
3807801.91	7.24098	(10020118)		
465323.41	3807801.91	7.17699	(10020118)	465343.41
3807801.91	7.09821	(10020118)		
465363.41	3807801.91	7.07760	(10020118)	465383.41
3807801.91	7.03667	(10020118)		
464543.41	3807821.91	7.61151	(09030119)	464563.41
3807821.91	7.87088	(09030119)		
464583.41	3807821.91	8.19661	(09030119)	464603.41
3807821.91	8.55070	(09030119)		
464623.41	3807821.91	8.82205	(09030119)	464643.41
3807821.91	8.98636	(09030119)		
464663.41	3807821.91	9.05825	(09030119)	464683.41
3807821.91	9.10124	(09030119)		
464703.41	3807821.91	9.13036	(09030119)	464723.41
3807821.91	9.09556	(09030119)		
464743.41	3807821.91	9.04431	(09030119)	464763.41
3807821.91	9.02512	(09030119)		
464783.41	3807821.91	8.99025	(09030119)	464803.41
3807821.91	8.93573	(09030119)		
464823.41	3807821.91	8.82684	(09030119)	464843.41
3807821.91	8.73728	(09030119)		

464863.41	3807821.91	8.61256	(09030119)	464883.41
3807821.91	8.46297	(09030119)		
464903.41	3807821.91	8.31080	(09030119)	464923.41
3807821.91	8.16772	(09030119)		
464943.41	3807821.91	7.98049	(09030119)	464963.41
3807821.91	7.87315	(09031219)		
464983.41	3807821.91	7.89222	(09031219)	465003.41
3807821.91	7.87365	(09031219)		
465023.41	3807821.91	7.90626	(09031219)	465043.41
3807821.91	7.93354	(09031219)		
465063.41	3807821.91	7.88782	(09031219)	465083.41
3807821.91	7.85850	(09031219)		
465103.41	3807821.91	7.85348	(09031219)	465123.41
3807821.91	7.77578	(09031219)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 572

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807821.91	7.71373	(09031219)	465163.41
3807821.91	7.68100	(09031219)		
465183.41	3807821.91	7.64083	(09031219)	465203.41
3807821.91	7.53229	(09031219)		
465223.41	3807821.91	7.38239	(09031219)	465243.41
3807821.91	7.34517	(10020118)		
465263.41	3807821.91	7.35799	(10020118)	465283.41

3807821.91	7.35338	(10020118)		
465303.41	3807821.91	7.26703	(10020118)	465323.41
3807821.91	7.19958	(10020118)		
465343.41	3807821.91	7.16451	(10020118)	465363.41
3807821.91	7.12482	(10020118)		
465383.41	3807821.91	7.01150	(10020118)	464543.41
3807841.91	7.50321	(09030119)		
464563.41	3807841.91	7.77865	(09030119)	464583.41
3807841.91	8.19082	(09030119)		
464603.41	3807841.91	8.53273	(09030119)	464623.41
3807841.91	8.91042	(09030119)		
464643.41	3807841.91	9.06568	(09030119)	464663.41
3807841.91	9.14066	(09030119)		
464683.41	3807841.91	9.22068	(09030119)	464723.41
3807841.91	9.21446	(09030119)		
464743.41	3807841.91	9.15193	(09030119)	464763.41
3807841.91	9.11081	(09030119)		
464783.41	3807841.91	9.04582	(09030119)	464803.41
3807841.91	8.93760	(09030119)		
464823.41	3807841.91	8.83961	(09030119)	464843.41
3807841.91	8.70382	(09030119)		
464863.41	3807841.91	8.55504	(09030119)	464883.41
3807841.91	8.39436	(09030119)		
464903.41	3807841.91	8.23935	(09030119)	464923.41
3807841.91	8.05381	(09030119)		
464943.41	3807841.91	8.02971	(09031219)	464963.41
3807841.91	8.03137	(09031219)		
464983.41	3807841.91	8.05994	(09031219)	465003.41
3807841.91	8.04740	(09031219)		
465023.41	3807841.91	8.05581	(09031219)	465043.41
3807841.91	8.02325	(09031219)		
465063.41	3807841.91	7.98247	(09031219)	465083.41
3807841.91	7.95731	(09031219)		
465103.41	3807841.91	7.89304	(09031219)	465123.41
3807841.91	7.81855	(09031219)		
465143.41	3807841.91	7.75504	(09031219)	465163.41
3807841.91	7.65912	(09031219)		
465183.41	3807841.91	7.59976	(09031219)	465203.41
3807841.91	7.49578	(10020118)		
465223.41	3807841.91	7.45763	(10020118)	465243.41
3807841.91	7.40673	(10020118)		
465263.41	3807841.91	7.39397	(10020118)	465283.41
3807841.91	7.37559	(10020118)		
465303.41	3807841.91	7.29446	(10020118)	465323.41
3807841.91	7.24856	(10020118)		
465343.41	3807841.91	7.19474	(10020118)	465363.41
3807841.91	7.07785	(10020118)		
465383.41	3807841.91	6.97323	(10020118)	464503.41
3807861.91	7.26698	(09030119)		
464523.41	3807861.91	7.31570	(09030119)	464543.41

3807861.91	7.42831	(09030119)		
464563.41	3807861.91	7.56795	(09030119)	464583.41
3807861.91	8.08881	(09030119)		
464603.41	3807861.91	8.50067	(09030119)	464723.41
3807861.91	9.28050	(09030119)		
464743.41	3807861.91	9.23174	(09030119)	464763.41
3807861.91	9.16439	(09030119)		
464783.41	3807861.91	9.07172	(09030119)	464803.41
3807861.91	8.93797	(09030119)		
464823.41	3807861.91	8.80047	(09030119)	464843.41
3807861.91	8.64388	(09030119)		
464863.41	3807861.91	8.47344	(09030119)	464883.41
3807861.91	8.31679	(09030119)		
464903.41	3807861.91	8.14344	(09031219)	464923.41
3807861.91	8.13834	(09031219)		
464943.41	3807861.91	8.18733	(09031219)	464963.41
3807861.91	8.20553	(09031219)		
464983.41	3807861.91	8.17729	(09031219)	465003.41
3807861.91	8.19505	(09031219)		
465023.41	3807861.91	8.15144	(09031219)	465043.41
3807861.91	8.09411	(09031219)		
465063.41	3807861.91	8.07805	(09031219)	465083.41
3807861.91	8.00188	(09031219)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 573

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

	465103.41	3807861.91	7.90923	(09031219)	465123.41
3807861.91	7.85575	(09031219)			
	465143.41	3807861.91	7.71975	(09031219)	465163.41
3807861.91	7.56946	(09031219)			
	465183.41	3807861.91	7.55561	(10020118)	465203.41
3807861.91	7.56408	(10020118)			
	465223.41	3807861.91	7.55710	(10020118)	465243.41
3807861.91	7.47102	(10020118)			
	465263.41	3807861.91	7.40638	(10020118)	465283.41
3807861.91	7.37197	(10020118)			
	465303.41	3807861.91	7.31452	(10020118)	465323.41
3807861.91	7.25312	(10020118)			
	465343.41	3807861.91	7.17597	(10020118)	465363.41
3807861.91	7.02086	(10020118)			
	465383.41	3807861.91	6.88342	(10020118)	464503.41
3807881.91	7.47231	(09030119)			
	464523.41	3807881.91	7.50467	(09030119)	464543.41
3807881.91	7.60395	(09030119)			
	464723.41	3807881.91	9.35292	(09030119)	464743.41
3807881.91	9.27736	(09030119)			
	464763.41	3807881.91	9.18340	(09030119)	464783.41
3807881.91	9.06891	(09030119)			
	464803.41	3807881.91	8.89503	(09030119)	464823.41
3807881.91	8.72924	(09030119)			
	464843.41	3807881.91	8.55681	(09030119)	464863.41
3807881.91	8.39162	(09030119)			
	464883.41	3807881.91	8.29554	(09031219)	464903.41
3807881.91	8.33746	(09031219)			
	464923.41	3807881.91	8.34015	(09031219)	464943.41
3807881.91	8.30718	(09031219)			
	464963.41	3807881.91	8.32199	(09031219)	464983.41
3807881.91	8.33003	(09031219)			
	465003.41	3807881.91	8.26838	(09031219)	465023.41
3807881.91	8.22019	(09031219)			
	465043.41	3807881.91	8.19366	(09031219)	465063.41
3807881.91	8.09801	(09031219)			
	465083.41	3807881.91	8.01515	(09031219)	465103.41
3807881.91	7.95034	(09031219)			
	465123.41	3807881.91	7.79355	(09031219)	465143.41
3807881.91	7.68090	(10020118)			
	465163.41	3807881.91	7.68413	(10020118)	465183.41
3807881.91	7.60931	(10020118)			
	465203.41	3807881.91	7.55889	(10020118)	465223.41
3807881.91	7.54092	(10020118)			
	465243.41	3807881.91	7.50384	(10020118)	465263.41
3807881.91	7.46004	(10020118)			
	465283.41	3807881.91	7.39710	(10020118)	465303.41
3807881.91	7.25027	(10020118)			

465323.41	3807881.91	7.15516	(10020118)	465343.41
3807881.91	7.04714	(10020118)		
465363.41	3807881.91	6.94160	(10020118)	465383.41
3807881.91	6.78775	(10020118)		
464723.41	3807901.91	9.35749	(09030119)	464743.41
3807901.91	9.28736	(09030119)		
464763.41	3807901.91	9.16671	(09030119)	464783.41
3807901.91	9.01091	(09030119)		
464803.41	3807901.91	8.84191	(09030119)	464823.41
3807901.91	8.65728	(09030119)		
464843.41	3807901.91	8.48146	(09031219)	464863.41
3807901.91	8.53326	(09031219)		
464883.41	3807901.91	8.50302	(09031219)	464903.41
3807901.91	8.48022	(09031219)		
464923.41	3807901.91	8.49117	(09031219)	464943.41
3807901.91	8.46132	(09031219)		
464963.41	3807901.91	8.46671	(09031219)	464983.41
3807901.91	8.45835	(09031219)		
465003.41	3807901.91	8.34795	(09031219)	465023.41
3807901.91	8.29372	(09031219)		
465043.41	3807901.91	8.20914	(09031219)	465063.41
3807901.91	8.11367	(09031219)		
465083.41	3807901.91	8.02707	(09031219)	465103.41
3807901.91	7.88341	(09031219)		
465123.41	3807901.91	7.84416	(10020118)	465143.41
3807901.91	7.79458	(10020118)		
465163.41	3807901.91	7.73415	(10020118)	465183.41
3807901.91	7.66350	(10020118)		
465203.41	3807901.91	7.62959	(10020118)	465223.41
3807901.91	7.58666	(10020118)		
465243.41	3807901.91	7.47789	(10020118)	465263.41
3807901.91	7.40491	(10020118)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 574

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM ₁₀ IN MICROGRAMS/M**3		
**				
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465283.41	3807901.91	7.32702	(10020118)	465303.41
3807901.91	7.18778	(10020118)		
465323.41	3807901.91	7.05540	(10020118)	465343.41
3807901.91	6.88267	(10020118)		
465363.41	3807901.91	6.76932	(10020118)	465383.41
3807901.91	6.60381	(10020118)		
464723.41	3807921.91	9.33014	(09030119)	464743.41
3807921.91	9.26330	(09030119)		
464763.41	3807921.91	9.10057	(09030119)	464783.41
3807921.91	8.92511	(09030119)		
464803.41	3807921.91	8.75464	(09030119)	464823.41
3807921.91	8.69890	(09031219)		
464843.41	3807921.91	8.69398	(09031219)	464863.41
3807921.91	8.72122	(09031219)		
464883.41	3807921.91	8.67908	(09031219)	464903.41
3807921.91	8.63492	(09031219)		
464923.41	3807921.91	8.59113	(09031219)	464943.41
3807921.91	8.59508	(09031219)		
464963.41	3807921.91	8.57983	(09031219)	464983.41
3807921.91	8.51789	(09031219)		
465003.41	3807921.91	8.41903	(09031219)	465023.41
3807921.91	8.31158	(09031219)		
465043.41	3807921.91	8.19846	(09031219)	465063.41
3807921.91	8.11944	(09031219)		
465083.41	3807921.91	8.01896	(10020118)	465103.41
3807921.91	7.93158	(10020118)		
465123.41	3807921.91	7.92290	(10020118)	465143.41
3807921.91	7.84928	(10020118)		
465163.41	3807921.91	7.75801	(10020118)	465183.41
3807921.91	7.71223	(10020118)		
465203.41	3807921.91	7.66118	(10020118)	465223.41
3807921.91	7.59329	(10020118)		
465243.41	3807921.91	7.44485	(10020118)	465263.41
3807921.91	7.31217	(10020118)		
465283.41	3807921.91	7.20769	(10020118)	465303.41
3807921.91	7.10484	(10020118)		
465323.41	3807921.91	6.91535	(10020118)	465343.41
3807921.91	6.57718	(10020118)		
465363.41	3807921.91	6.44281	(10020118)	465383.41

3807921.91	6.24976	(10020118)		
464723.41	3807941.91	9.21636	(09030119)	464743.41
3807941.91	9.14804	(09030119)		
464763.41	3807941.91	9.00721	(09030119)	464783.41
3807941.91	8.88198	(09031219)		
464803.41	3807941.91	8.86035	(09031219)	464823.41
3807941.91	8.85966	(09031219)		
464843.41	3807941.91	8.83343	(09031219)	464863.41
3807941.91	8.82571	(09031219)		
464883.41	3807941.91	8.73836	(09031219)	464903.41
3807941.91	8.73046	(09031219)		
464923.41	3807941.91	8.72164	(09031219)	464943.41
3807941.91	8.70257	(09031219)		
464963.41	3807941.91	8.62439	(09031219)	464983.41
3807941.91	8.52384	(09031219)		
465003.41	3807941.91	8.40388	(09031219)	465023.41
3807941.91	8.29602	(09031219)		
465043.41	3807941.91	8.23874	(10020118)	465063.41
3807941.91	8.14155	(10020118)		
465083.41	3807941.91	8.06505	(10020118)	465103.41
3807941.91	8.04516	(10020118)		
465123.41	3807941.91	7.94930	(10020118)	465143.41
3807941.91	7.86938	(10020118)		
465163.41	3807941.91	7.81109	(10020118)	465183.41
3807941.91	7.67315	(10020118)		
465203.41	3807941.91	7.58687	(10020118)	465223.41
3807941.91	7.48390	(10020118)		
465243.41	3807941.91	7.38426	(10020118)	465263.41
3807941.91	7.23484	(10020118)		
465283.41	3807941.91	6.99245	(10020118)	465303.41
3807941.91	6.86960	(10020118)		
465323.41	3807941.91	6.68286	(10020118)	465343.41
3807941.91	6.45292	(10020118)		
465363.41	3807941.91	6.30230	(10020118)	465383.41
3807941.91	6.05396	(10020118)		
465403.41	3807941.91	5.81245	(10020118)	465423.41
3807941.91	5.64239	(10020118)		
465443.41	3807941.91	5.51241	(10102019)	465463.41
3807941.91	5.50330	(10102019)		
465483.41	3807941.91	5.46415	(10102019)	465503.41
3807941.91	5.42676	(10102019)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 575

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465523.41	3807941.91	5.37637 (10102019)	465543.41
3807941.91	5.24682 (10102019)		
465563.41	3807941.91	5.14794 (10102019)	465583.41
3807941.91	5.08666 (10102019)		
465603.41	3807941.91	5.02976 (10102019)	465623.41
3807941.91	4.90669 (10102019)		
465643.41	3807941.91	4.77026 (10102019)	465663.41
3807941.91	4.69248 (10102019)		
465683.41	3807941.91	4.53791 (10102019)	465703.41
3807941.91	4.37999 (10102019)		
464723.41	3807961.91	9.02855 (09030119)	464743.41
3807961.91	9.02076 (09030119)		
464763.41	3807961.91	8.98138 (09031219)	464783.41
3807961.91	9.03394 (09031219)		
464803.41	3807961.91	9.01244 (09031219)	464823.41
3807961.91	8.98325 (09031219)		
464843.41	3807961.91	8.98330 (09031219)	464863.41
3807961.91	8.93886 (09031219)		
464883.41	3807961.91	8.87156 (09031219)	464903.41
3807961.91	8.84606 (09031219)		
464923.41	3807961.91	8.81486 (09031219)	464943.41
3807961.91	8.73117 (09031219)		
464963.41	3807961.91	8.66145 (09031219)	464983.41
3807961.91	8.55352 (09031219)		
465003.41	3807961.91	8.41760 (10020118)	465023.41
3807961.91	8.38263 (10020118)		
465043.41	3807961.91	8.37597 (10020118)	465063.41
3807961.91	8.22994 (10020118)		
465083.41	3807961.91	8.14910 (10020118)	465103.41
3807961.91	8.06593 (10020118)		

465123.41	3807961.91	7.97172	(10020118)	465143.41
3807961.91	7.88795	(10020118)		
465163.41	3807961.91	7.76575	(10020118)	465183.41
3807961.91	7.63288	(10020118)		
465203.41	3807961.91	7.50746	(10020118)	465223.41
3807961.91	7.33877	(10020118)		
465243.41	3807961.91	7.22859	(10020118)	465263.41
3807961.91	7.06516	(10020118)		
465283.41	3807961.91	6.75338	(10020118)	465303.41
3807961.91	6.60959	(10020118)		
465323.41	3807961.91	6.39276	(10020118)	465343.41
3807961.91	6.19481	(10020118)		
465363.41	3807961.91	6.03169	(10020118)	465383.41
3807961.91	5.83452	(10020118)		
465403.41	3807961.91	5.61242	(10020118)	465423.41
3807961.91	5.52272	(10102019)		
465443.41	3807961.91	5.48155	(10102019)	465463.41
3807961.91	5.52452	(10102019)		
465483.41	3807961.91	5.42208	(10102019)	465503.41
3807961.91	5.36541	(10102019)		
465523.41	3807961.91	5.30905	(10102019)	465543.41
3807961.91	5.19687	(10102019)		
465563.41	3807961.91	5.12763	(10102019)	465583.41
3807961.91	5.03833	(10102019)		
465603.41	3807961.91	4.93377	(10102019)	465623.41
3807961.91	4.80914	(10102019)		
465643.41	3807961.91	4.68368	(10102019)	465663.41
3807961.91	4.55062	(10102019)		
465683.41	3807961.91	4.42296	(10102019)	465703.41
3807961.91	4.30230	(10102019)		
464743.41	3807981.91	8.82775	(09030119)	464763.41
3807981.91	9.05325	(09031219)		
464783.41	3807981.91	9.15622	(09031219)	464803.41
3807981.91	9.17179	(09031219)		
464823.41	3807981.91	9.11442	(09031219)	464843.41
3807981.91	9.07065	(09031219)		
464863.41	3807981.91	9.05113	(09031219)	464883.41
3807981.91	8.96892	(09031219)		
464903.41	3807981.91	8.92124	(09031219)	464923.41
3807981.91	8.84189	(09031219)		
464943.41	3807981.91	8.73237	(09031219)	464963.41
3807981.91	8.64393	(09031219)		
464983.41	3807981.91	8.59276	(10020118)	465003.41
3807981.91	8.55802	(10020118)		
465023.41	3807981.91	8.50216	(10020118)	465043.41
3807981.91	8.46736	(10020118)		
465063.41	3807981.91	8.32029	(10020118)	465083.41
3807981.91	8.18101	(10020118)		
465103.41	3807981.91	8.05874	(10020118)	465123.41
3807981.91	7.99690	(10020118)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 576

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807981.91	7.85659	(10020118)	465163.41
3807981.91	7.68903	(10020118)		
465183.41	3807981.91	7.57716	(10020118)	465203.41
3807981.91	7.38533	(10020118)		
465223.41	3807981.91	7.04991	(10020118)	465243.41
3807981.91	6.91504	(10020118)		
465263.41	3807981.91	6.77070	(10020118)	465283.41
3807981.91	6.59355	(10020118)		
465303.41	3807981.91	6.39895	(10020118)	465323.41
3807981.91	6.18437	(10020118)		
465343.41	3807981.91	5.93602	(10020118)	465363.41
3807981.91	5.75364	(10020118)		
465383.41	3807981.91	5.67996	(10102019)	465403.41
3807981.91	5.61477	(10102019)		
465423.41	3807981.91	5.52104	(10102019)	465443.41
3807981.91	5.43588	(10102019)		
465463.41	3807981.91	5.49600	(10102019)	465483.41
3807981.91	5.38491	(10102019)		
465503.41	3807981.91	5.28797	(10102019)	465523.41
3807981.91	5.22639	(10102019)		
465543.41	3807981.91	5.12781	(10102019)	465563.41

3807981.91	5.05498	(10102019)		
465583.41	3807981.91	4.97184	(10102019)	465603.41
3807981.91	4.81985	(10102019)		
465623.41	3807981.91	4.69650	(10102019)	465643.41
3807981.91	4.57391	(10102019)		
465663.41	3807981.91	4.40328	(10102019)	465683.41
3807981.91	4.30568	(10102019)		
465703.41	3807981.91	4.22149	(10102019)	464763.41
3808001.91	9.03935	(09031219)		
464783.41	3808001.91	9.20393	(09031219)	464803.41
3808001.91	9.25575	(09031219)		
464823.41	3808001.91	9.15491	(09031219)	464843.41
3808001.91	9.12638	(09031219)		
464863.41	3808001.91	9.08793	(09031219)	464883.41
3808001.91	8.98749	(09031219)		
464903.41	3808001.91	8.89637	(09031219)	464923.41
3808001.91	8.82454	(09031219)		
464943.41	3808001.91	8.77668	(10020118)	464963.41
3808001.91	8.72252	(10020118)		
464983.41	3808001.91	8.65470	(10020118)	465003.41
3808001.91	8.63155	(10020118)		
465023.41	3808001.91	8.54753	(10020118)	465043.41
3808001.91	8.42294	(10020118)		
465063.41	3808001.91	8.34204	(10020118)	465083.41
3808001.91	8.22086	(10020118)		
465103.41	3808001.91	8.07868	(10020118)	465123.41
3808001.91	7.99279	(10020118)		
465143.41	3808001.91	7.83256	(10020118)	465163.41
3808001.91	7.63710	(10020118)		
465183.41	3808001.91	7.41626	(10020118)	465203.41
3808001.91	7.16831	(10020118)		
465223.41	3808001.91	6.93636	(10020118)	465243.41
3808001.91	6.78245	(10020118)		
465263.41	3808001.91	6.62028	(10020118)	465283.41
3808001.91	6.39556	(10020118)		
465303.41	3808001.91	6.16129	(10020118)	465323.41
3808001.91	5.92338	(10020118)		
465343.41	3808001.91	5.80219	(10102019)	465363.41
3808001.91	5.68099	(10102019)		
465383.41	3808001.91	5.62571	(10102019)	465403.41
3808001.91	5.55792	(10102019)		
465423.41	3808001.91	5.50278	(10102019)	465443.41
3808001.91	5.44907	(10102019)		
465463.41	3808001.91	5.43098	(10102019)	465483.41
3808001.91	5.33632	(10102019)		
465503.41	3808001.91	5.26746	(10102019)	465523.41
3808001.91	5.16540	(10102019)		
465543.41	3808001.91	5.00927	(10102019)	465563.41
3808001.91	4.91220	(10102019)		
465583.41	3808001.91	4.83179	(10102019)	465603.41

3808001.91 4.73866 (10102019)
 465623.41 3808001.91 4.57016 (10102019) 465643.41
 3808001.91 4.40285 (10102019)
 465663.41 3808001.91 4.30802 (10102019) 465683.41
 3808001.91 4.21853 (10102019)
 465703.41 3808001.91 4.12107 (10102019) 464763.41
 3808021.91 8.86246 (09031219)
 464783.41 3808021.91 9.09374 (09031219) 464803.41
 3808021.91 9.21359 (09031219)
 ▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 577

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	9.19344	(09031219)	464843.41
3808021.91	9.15636	(09031219)		
464863.41	3808021.91	9.10019	(09031219)	464883.41
3808021.91	8.99647	(09031219)		
464903.41	3808021.91	8.90090	(09031219)	464923.41
3808021.91	8.85127	(10020118)		
464943.41	3808021.91	8.84730	(10020118)	464963.41
3808021.91	8.81746	(10020118)		
464983.41	3808021.91	8.74305	(10020118)	465003.41
3808021.91	8.65525	(10020118)		
465023.41	3808021.91	8.53537	(10020118)	465043.41
3808021.91	8.42963	(10020118)		

465063.41	3808021.91	8.30921	(10020118)	465083.41
3808021.91	8.19866	(10020118)		
465103.41	3808021.91	8.05391	(10020118)	465123.41
3808021.91	7.89372	(10020118)		
465143.41	3808021.91	7.74166	(10020118)	465163.41
3808021.91	7.55484	(10020118)		
465183.41	3808021.91	7.28574	(10020118)	465203.41
3808021.91	6.95197	(10020118)		
465223.41	3808021.91	6.73784	(10020118)	465243.41
3808021.91	6.52250	(10020118)		
465263.41	3808021.91	6.33619	(10020118)	465283.41
3808021.91	6.15052	(10020118)		
465303.41	3808021.91	5.93896	(10102019)	465323.41
3808021.91	5.87206	(10102019)		
465343.41	3808021.91	5.77161	(10102019)	465363.41
3808021.91	5.66742	(10102019)		
465383.41	3808021.91	5.61032	(10102019)	465403.41
3808021.91	5.53283	(10102019)		
465423.41	3808021.91	5.43498	(10102019)	465443.41
3808021.91	5.33635	(10102019)		
465463.41	3808021.91	5.34595	(10102019)	465483.41
3808021.91	5.23497	(10102019)		
465503.41	3808021.91	5.12701	(10102019)	465523.41
3808021.91	5.04189	(10102019)		
465543.41	3808021.91	4.92513	(10102019)	465563.41
3808021.91	4.78586	(10102019)		
465583.41	3808021.91	4.62976	(10102019)	465603.41
3808021.91	4.54263	(10102019)		
465623.41	3808021.91	4.43161	(10102019)	465643.41
3808021.91	4.30029	(10102019)		
465663.41	3808021.91	4.20949	(10102019)	465683.41
3808021.91	4.08088	(10102019)		
465703.41	3808021.91	3.93466	(10102019)	464783.41
3808041.91	8.87841	(09031219)		
464803.41	3808041.91	9.12886	(09031219)	464823.41
3808041.91	9.16717	(09031219)		
464843.41	3808041.91	9.12817	(09031219)	464863.41
3808041.91	9.08290	(09031219)		
464883.41	3808041.91	9.04471	(10020118)	464903.41
3808041.91	8.98966	(10020118)		
464923.41	3808041.91	8.92057	(10020118)	464943.41
3808041.91	8.89720	(10020118)		
464963.41	3808041.91	8.85977	(10020118)	464983.41
3808041.91	8.80220	(10020118)		
465003.41	3808041.91	8.63087	(10020118)	465023.41
3808041.91	8.51685	(10020118)		
465043.41	3808041.91	8.41904	(10020118)	465063.41
3808041.91	8.26255	(10020118)		
465083.41	3808041.91	8.11238	(10020118)	465103.41
3808041.91	7.97436	(10020118)		

465123.41	3808041.91	7.77561	(10020118)	465143.41
3808041.91	7.58981	(10020118)		
465163.41	3808041.91	7.41706	(10020118)	465183.41
3808041.91	7.14355	(10020118)		
465203.41	3808041.91	6.73399	(10020118)	465223.41
3808041.91	6.53658	(10020118)		
465243.41	3808041.91	6.25434	(10020118)	465263.41
3808041.91	6.04699	(10020118)		
465283.41	3808041.91	5.99483	(10102019)	465303.41
3808041.91	5.95929	(10102019)		
465323.41	3808041.91	5.84988	(10102019)	465343.41
3808041.91	5.72262	(10102019)		
465363.41	3808041.91	5.63585	(10102019)	465383.41
3808041.91	5.57183	(10102019)		
465403.41	3808041.91	5.49780	(10102019)	465423.41
3808041.91	5.34492	(10102019)		
465443.41	3808041.91	5.25202	(10102019)	465463.41
3808041.91	5.27787	(10102019)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 578

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465483.41	3808041.91	5.11655	(10102019)	465503.41
3808041.91	4.98471	(10102019)		
465523.41	3808041.91	4.88809	(10102019)	465543.41

3808041.91	4.79956	(10102019)		
465563.41	3808041.91	4.62921	(10102019)	465583.41
3808041.91	4.47649	(10102019)		
465603.41	3808041.91	4.38478	(10102019)	465623.41
3808041.91	4.29125	(10102019)		
465643.41	3808041.91	4.19440	(10102019)	465663.41
3808041.91	4.08680	(10102019)		
465683.41	3808041.91	3.91697	(10102019)	465703.41
3808041.91	3.77354	(10102019)		
464803.41	3808061.91	8.97103	(09031219)	464823.41
3808061.91	9.00583	(09031219)		
464843.41	3808061.91	9.07855	(09031219)	464863.41
3808061.91	9.11736	(10020118)		
464883.41	3808061.91	9.10841	(10020118)	464903.41
3808061.91	9.05457	(10020118)		
464923.41	3808061.91	9.01646	(10020118)	464943.41
3808061.91	8.96809	(10020118)		
464963.41	3808061.91	8.90533	(10020118)	464983.41
3808061.91	8.82325	(10020118)		
465003.41	3808061.91	8.64027	(10020118)	465023.41
3808061.91	8.46571	(10020118)		
465043.41	3808061.91	8.30342	(10020118)	465063.41
3808061.91	8.17720	(10020118)		
465083.41	3808061.91	7.99330	(10020118)	465103.41
3808061.91	7.78935	(10020118)		
465123.41	3808061.91	7.62856	(10020118)	465143.41
3808061.91	7.42332	(10020118)		
465163.41	3808061.91	7.08934	(10020118)	465183.41
3808061.91	6.80795	(10020118)		
465203.41	3808061.91	6.50102	(10020118)	465223.41
3808061.91	6.22855	(10020118)		
465243.41	3808061.91	6.14317	(10102019)	465263.41
3808061.91	6.03140	(10102019)		
465283.41	3808061.91	5.93422	(10102019)	465303.41
3808061.91	5.88640	(10102019)		
465323.41	3808061.91	5.79893	(10102019)	465343.41
3808061.91	5.69960	(10102019)		
465363.41	3808061.91	5.54192	(10102019)	465383.41
3808061.91	5.45167	(10102019)		
465403.41	3808061.91	5.37615	(10102019)	465423.41
3808061.91	5.28776	(10102019)		
465443.41	3808061.91	5.20249	(10102019)	465463.41
3808061.91	5.13162	(10102019)		
465483.41	3808061.91	5.03093	(10102019)	465503.41
3808061.91	4.85120	(10102019)		
465523.41	3808061.91	4.67371	(10102019)	465543.41
3808061.91	4.58091	(10102019)		
465563.41	3808061.91	4.48003	(10102019)	465583.41
3808061.91	4.37575	(10102019)		
465603.41	3808061.91	4.27782	(10102019)	465623.41

3808061.91	4.17860	(10102019)		
465643.41	3808061.91	4.06996	(10102019)	465663.41
3808061.91	3.88476	(10102019)		
465683.41	3808061.91	3.75504	(10102019)	465703.41
3808061.91	3.65282	(10102019)		
464823.41	3808081.91	8.96032	(09031219)	464843.41
3808081.91	8.96122	(10020118)		
464863.41	3808081.91	9.01774	(10020118)	464883.41
3808081.91	9.08192	(10020118)		
464903.41	3808081.91	9.11571	(10020118)	464923.41
3808081.91	9.07129	(10020118)		
464943.41	3808081.91	8.99700	(10020118)	464963.41
3808081.91	8.89842	(10020118)		
464983.41	3808081.91	8.74542	(10020118)	465003.41
3808081.91	8.60032	(10020118)		
465023.41	3808081.91	8.41145	(10020118)	465043.41
3808081.91	8.22386	(10020118)		
465063.41	3808081.91	8.08002	(10020118)	465083.41
3808081.91	7.87417	(10020118)		
465103.41	3808081.91	7.64020	(10020118)	465123.41
3808081.91	7.43207	(10020118)		
465143.41	3808081.91	7.16050	(10020118)	465163.41
3808081.91	6.71464	(10020118)		
465183.41	3808081.91	6.47877	(10020118)	465203.41
3808081.91	6.31145	(10102019)		
465223.41	3808081.91	6.22321	(10102019)	465243.41
3808081.91	6.11220	(10102019)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 579

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465263.41	3808081.91	6.02440 (10102019)	465283.41
3808081.91	5.91223 (10102019)		
465303.41	3808081.91	5.85215 (10102019)	465323.41
3808081.91	5.73666 (10102019)		
465343.41	3808081.91	5.60114 (10102019)	465363.41
3808081.91	5.48728 (10102019)		
465383.41	3808081.91	5.39550 (10102019)	465403.41
3808081.91	5.28397 (10102019)		
465423.41	3808081.91	5.13254 (10102019)	465443.41
3808081.91	5.00998 (10102019)		
465463.41	3808081.91	5.01214 (10102019)	465483.41
3808081.91	4.85288 (10102019)		
465503.41	3808081.91	4.70382 (10102019)	465523.41
3808081.91	4.55634 (10102019)		
465543.41	3808081.91	4.40675 (10102019)	465563.41
3808081.91	4.27154 (10102019)		
465583.41	3808081.91	4.17214 (10102019)	465603.41
3808081.91	4.07175 (10102019)		
465623.41	3808081.91	3.97067 (10102019)	465643.41
3808081.91	3.86458 (10102019)		
465663.41	3808081.91	3.72768 (10102019)	465683.41
3808081.91	3.62131 (10102019)		
465703.41	3808081.91	3.51863 (10102019)	464843.41
3808101.91	9.00257 (10020118)		
464863.41	3808101.91	9.00771 (10020118)	464883.41
3808101.91	9.07368 (10020118)		
464903.41	3808101.91	9.09524 (10020118)	464923.41
3808101.91	9.07528 (10020118)		
464943.41	3808101.91	8.97526 (10020118)	464963.41
3808101.91	8.81399 (10020118)		
464983.41	3808101.91	8.63590 (10020118)	465003.41
3808101.91	8.49567 (10020118)		
465023.41	3808101.91	8.31124 (10020118)	465043.41
3808101.91	8.10957 (10020118)		
465063.41	3808101.91	7.93304 (10020118)	465083.41
3808101.91	7.70392 (10020118)		
465103.41	3808101.91	7.44856 (10020118)	465123.41
3808101.91	7.14680 (10020118)		
465143.41	3808101.91	6.75067 (10020118)	465163.41
3808101.91	6.57241 (10102019)		
465183.41	3808101.91	6.38518 (10102019)	465203.41
3808101.91	6.30640 (10102019)		
465223.41	3808101.91	6.20541 (10102019)	465243.41
3808101.91	6.08620 (10102019)		

465263.41	3808101.91	5.97677	(10102019)	465283.41
3808101.91	5.90684	(10102019)		
465303.41	3808101.91	5.79619	(10102019)	465323.41
3808101.91	5.64601	(10102019)		
465343.41	3808101.91	5.48636	(10102019)	465363.41
3808101.91	5.38574	(10102019)		
465383.41	3808101.91	5.29073	(10102019)	465403.41
3808101.91	5.16251	(10102019)		
465423.41	3808101.91	4.96974	(10102019)	465443.41
3808101.91	4.85425	(10102019)		
465463.41	3808101.91	4.86380	(10102019)	465483.41
3808101.91	4.67307	(10102019)		
465503.41	3808101.91	4.54457	(10102019)	465523.41
3808101.91	4.40639	(10102019)		
465543.41	3808101.91	4.21142	(10102019)	465563.41
3808101.91	4.09501	(10102019)		
465583.41	3808101.91	3.99364	(10102019)	465603.41
3808101.91	3.89182	(10102019)		
465623.41	3808101.91	3.78979	(10102019)	465643.41
3808101.91	3.68638	(10102019)		
465663.41	3808101.91	3.57592	(10102019)	465683.41
3808101.91	3.47278	(10102019)		
465703.41	3808101.91	3.36700	(10102019)	464863.41
3808121.91	9.09114	(10020118)		
464883.41	3808121.91	9.11850	(10020118)	464903.41
3808121.91	9.04577	(10020118)		
464923.41	3808121.91	8.96614	(10020118)	464943.41
3808121.91	8.84642	(10020118)		
464963.41	3808121.91	8.69344	(10020118)	464983.41
3808121.91	8.54011	(10020118)		
465003.41	3808121.91	8.33736	(10020118)	465023.41
3808121.91	8.13974	(10020118)		
465043.41	3808121.91	7.94981	(10020118)	465063.41
3808121.91	7.70653	(10020118)		
465083.41	3808121.91	7.44409	(10020118)	465103.41
3808121.91	7.06806	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 580

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,

, L0006374 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465123.41	3808121.91	6.75866	(10102019)	465143.41
3808121.91	6.70820	(10102019)		
465163.41	3808121.91	6.62517	(10102019)	465183.41
3808121.91	6.42421	(10102019)		
465203.41	3808121.91	6.26900	(10102019)	465223.41
3808121.91	6.12033	(10102019)		
465243.41	3808121.91	6.04036	(10102019)	465263.41
3808121.91	5.96147	(10102019)		
465283.41	3808121.91	5.84581	(10102019)	465303.41
3808121.91	5.66925	(10102019)		
465323.41	3808121.91	5.55003	(10102019)	465343.41
3808121.91	5.41634	(10102019)		
465363.41	3808121.91	5.20841	(10102019)	465383.41
3808121.91	5.07139	(10102019)		
465403.41	3808121.91	4.97047	(10102019)	465423.41
3808121.91	4.85936	(10102019)		
465443.41	3808121.91	4.75262	(10102019)	465463.41
3808121.91	4.65982	(10102019)		
465483.41	3808121.91	4.54245	(10102019)	465503.41
3808121.91	4.37999	(10102019)		
465523.41	3808121.91	4.18825	(10102019)	465543.41
3808121.91	4.07454	(10102019)		
465563.41	3808121.91	3.96690	(10102019)	465583.41
3808121.91	3.86164	(10102019)		
465603.41	3808121.91	3.75645	(10102019)	465623.41
3808121.91	3.65156	(10102019)		
465643.41	3808121.91	3.54083	(10102019)	465663.41
3808121.91	3.39211	(10102019)		
465683.41	3808121.91	3.25524	(10102019)	465703.41
3808121.91	3.15779	(10102019)		
464883.41	3808141.91	9.03647	(10020118)	464903.41
3808141.91	8.99872	(10020118)		
464923.41	3808141.91	8.88163	(10020118)	464943.41
3808141.91	8.73706	(10020118)		
464963.41	3808141.91	8.57895	(10020118)	464983.41

3808141.91	8.40384	(10020118)		
465003.41	3808141.91	8.17756	(10020118)	465023.41
3808141.91	7.96227	(10020118)		
465043.41	3808141.91	7.75548	(10020118)	465063.41
3808141.91	7.49032	(10020118)		
465083.41	3808141.91	7.20058	(10020118)	465103.41
3808141.91	6.84925	(10102019)		
465123.41	3808141.91	6.80425	(10102019)	465143.41
3808141.91	6.69676	(10102019)		
465163.41	3808141.91	6.57091	(10102019)	465183.41
3808141.91	6.42136	(10102019)		
465203.41	3808141.91	6.25985	(10102019)	465223.41
3808141.91	6.09169	(10102019)		
465243.41	3808141.91	6.00844	(10102019)	465263.41
3808141.91	5.86799	(10102019)		
465283.41	3808141.91	5.71316	(10102019)	465303.41
3808141.91	5.57886	(10102019)		
465323.41	3808141.91	5.41913	(10102019)	465343.41
3808141.91	5.23324	(10102019)		
465363.41	3808141.91	5.07511	(10102019)	465383.41
3808141.91	4.95964	(10102019)		
465403.41	3808141.91	4.84649	(10102019)	465423.41
3808141.91	4.68518	(10102019)		
465443.41	3808141.91	4.53719	(10102019)	465463.41
3808141.91	4.42893	(10102019)		
465483.41	3808141.91	4.31864	(10102019)	465503.41
3808141.91	4.18907	(10102019)		
465523.41	3808141.91	4.03954	(10102019)	465543.41
3808141.91	3.90298	(10102019)		
465563.41	3808141.91	3.77586	(10102019)	465583.41
3808141.91	3.67082	(10102019)		
465603.41	3808141.91	3.56631	(10102019)	465623.41
3808141.91	3.46252	(10102019)		
465643.41	3808141.91	3.35609	(10102019)	465663.41
3808141.91	3.21018	(10102019)		
465683.41	3808141.91	3.08592	(10102019)	465703.41
3808141.91	2.97722	(10102019)		
464883.41	3808161.91	8.92149	(10020118)	464903.41
3808161.91	8.88389	(10020118)		
464923.41	3808161.91	8.76918	(10020118)	464943.41
3808161.91	8.59885	(10020118)		
464963.41	3808161.91	8.41615	(10020118)	464983.41
3808161.91	8.21856	(10020118)		
465003.41	3808161.91	7.98057	(10020118)	465023.41
3808161.91	7.74489	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 , L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 , L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 , L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465043.41	3808161.91	7.51258	(10020118)	465063.41
3808161.91	7.27458	(10102019)		
465083.41	3808161.91	7.13081	(10102019)	465103.41
3808161.91	6.87920	(10102019)		
465123.41	3808161.91	6.78770	(10102019)	465143.41
3808161.91	6.64615	(10102019)		
465163.41	3808161.91	6.47215	(10102019)	465183.41
3808161.91	6.37437	(10102019)		
465203.41	3808161.91	6.21626	(10102019)	465223.41
3808161.91	6.04740	(10102019)		
465243.41	3808161.91	5.91097	(10102019)	465263.41
3808161.91	5.74175	(10102019)		
465283.41	3808161.91	5.56431	(10102019)	465303.41
3808161.91	5.44332	(10102019)		
465323.41	3808161.91	5.24315	(10102019)	465343.41
3808161.91	5.06472	(10102019)		
465363.41	3808161.91	4.94053	(10102019)	465383.41
3808161.91	4.80670	(10102019)		
465403.41	3808161.91	4.68512	(10102019)	465423.41
3808161.91	4.47652	(10102019)		
465443.41	3808161.91	4.34835	(10102019)	465463.41
3808161.91	4.23503	(10102019)		
465483.41	3808161.91	4.11213	(10102019)	465503.41
3808161.91	3.99746	(10102019)		
465523.41	3808161.91	3.87866	(10102019)	465543.41
3808161.91	3.68841	(10102019)		

465563.41	3808161.91	3.57068	(10102019)	465583.41
3808161.91	3.46619	(10102019)		
465603.41	3808161.91	3.36269	(10102019)	465623.41
3808161.91	3.24617	(10102019)		
465643.41	3808161.91	3.14105	(10102019)	465663.41
3808161.91	3.04292	(10102019)		
465683.41	3808161.91	2.92984	(10102019)	465703.41
3808161.91	2.80116	(10102019)		
464903.41	3808181.91	8.69728	(10020118)	464923.41
3808181.91	8.56683	(10020118)		
464943.41	3808181.91	8.37517	(10020118)	464963.41
3808181.91	8.17237	(10020118)		
464983.41	3808181.91	7.95861	(10020118)	465003.41
3808181.91	7.73249	(10020118)		
465023.41	3808181.91	7.51298	(10102019)	465043.41
3808181.91	7.38393	(10102019)		
465063.41	3808181.91	7.22057	(10102019)	465083.41
3808181.91	7.06121	(10102019)		
465103.41	3808181.91	6.86838	(10102019)	465123.41
3808181.91	6.69988	(10102019)		
465143.41	3808181.91	6.54052	(10102019)	465163.41
3808181.91	6.42951	(10102019)		
465183.41	3808181.91	6.24475	(10102019)	465203.41
3808181.91	6.09305	(10102019)		
465223.41	3808181.91	5.94286	(10102019)	465243.41
3808181.91	5.74833	(10102019)		
465263.41	3808181.91	5.60829	(10102019)	465283.41
3808181.91	5.45653	(10102019)		
465303.41	3808181.91	5.23195	(10102019)	465323.41
3808181.91	5.07191	(10102019)		
465343.41	3808181.91	4.93771	(10102019)	465363.41
3808181.91	4.71612	(10102019)		
465383.41	3808181.91	4.56711	(10102019)	465403.41
3808181.91	4.45010	(10102019)		
465423.41	3808181.91	4.32628	(10102019)	465443.41
3808181.91	4.20787	(10102019)		
465463.41	3808181.91	4.08398	(10102019)	465483.41
3808181.91	3.91171	(10102019)		
465503.41	3808181.91	3.75695	(10102019)	465523.41
3808181.91	3.64685	(10102019)		
465543.41	3808181.91	3.53194	(10102019)	465563.41
3808181.91	3.42320	(10102019)		
465583.41	3808181.91	3.31764	(10102019)	465603.41
3808181.91	3.21349	(10102019)		
465623.41	3808181.91	3.08440	(10102019)	465643.41
3808181.91	2.95589	(10102019)		
465663.41	3808181.91	2.86159	(10102019)	465683.41
3808181.91	2.76662	(10102019)		
465703.41	3808181.91	2.70657	(09010408)	464923.41
3808201.91	8.28674	(10020118)		

464943.41 3808201.91 8.11166 (10020118) 464963.41
 3808201.91 7.89731 (10020118)
 464983.41 3808201.91 7.66682 (10020118) 465003.41
 3808201.91 7.61212 (10102019)
 ^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 582

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465023.41	3808201.91	7.48813	(10102019)	465043.41
3808201.91	7.32262	(10102019)		
465063.41	3808201.91	7.16484	(10102019)	465083.41
3808201.91	6.92243	(10102019)		
465103.41	3808201.91	6.77101	(10102019)	465123.41
3808201.91	6.59567	(10102019)		
465143.41	3808201.91	6.45707	(10102019)	465163.41
3808201.91	6.29196	(10102019)		
465183.41	3808201.91	6.12505	(10102019)	465203.41
3808201.91	5.94729	(10102019)		
465223.41	3808201.91	5.77345	(10102019)	465243.41
3808201.91	5.61877	(10102019)		
465263.41	3808201.91	5.44239	(10102019)	465283.41
3808201.91	5.23867	(10102019)		
465303.41	3808201.91	5.06642	(10102019)	465323.41
3808201.91	4.89330	(10102019)		
465343.41	3808201.91	4.70834	(10102019)	465363.41

3808201.91	4.54219	(10102019)		
465383.41	3808201.91	4.39139	(10102019)	465403.41
3808201.91	4.23307	(10102019)		
465423.41	3808201.91	4.11688	(10102019)	465443.41
3808201.91	4.00082	(10102019)		
465463.41	3808201.91	3.88138	(10102019)	465483.41
3808201.91	3.71428	(10102019)		
465503.41	3808201.91	3.59589	(10102019)	465523.41
3808201.91	3.48564	(10102019)		
465543.41	3808201.91	3.37671	(10102019)	465563.41
3808201.91	3.24838	(10102019)		
465583.41	3808201.91	3.13051	(10102019)	465603.41
3808201.91	3.02947	(10102019)		
465623.41	3808201.91	2.91362	(10102019)	465643.41
3808201.91	2.80015	(10102019)		
465663.41	3808201.91	2.80691	(09010408)	465683.41
3808201.91	2.79605	(09010408)		
465703.41	3808201.91	2.74538	(09010408)	464943.41
3808221.91	7.79088	(10020118)		
464963.41	3808221.91	7.67561	(10102019)	464983.41
3808221.91	7.62406	(10102019)		
465003.41	3808221.91	7.56312	(10102019)	465023.41
3808221.91	7.41516	(10102019)		
465043.41	3808221.91	7.11735	(10102019)	465063.41
3808221.91	6.99447	(10102019)		
465083.41	3808221.91	6.81870	(10102019)	465103.41
3808221.91	6.60829	(10102019)		
465123.41	3808221.91	6.49766	(10102019)	465143.41
3808221.91	6.32293	(10102019)		
465163.41	3808221.91	6.13348	(10102019)	465183.41
3808221.91	5.97001	(10102019)		
465203.41	3808221.91	5.78261	(10102019)	465223.41
3808221.91	5.58864	(10102019)		
465243.41	3808221.91	5.44718	(10102019)	465263.41
3808221.91	5.23026	(10102019)		
465283.41	3808221.91	5.03959	(10102019)	465303.41
3808221.91	4.89895	(10102019)		
465323.41	3808221.91	4.68673	(10102019)	465343.41
3808221.91	4.50491	(10102019)		
465363.41	3808221.91	4.36989	(10102019)	465383.41
3808221.91	4.19874	(10102019)		
465403.41	3808221.91	4.01194	(10102019)	465423.41
3808221.91	3.89512	(10102019)		
465443.41	3808221.91	3.77905	(10102019)	465463.41
3808221.91	3.66397	(10102019)		
465483.41	3808221.91	3.55010	(10102019)	465503.41
3808221.91	3.42347	(10102019)		
465523.41	3808221.91	3.30852	(10102019)	465543.41
3808221.91	3.20093	(10102019)		
465563.41	3808221.91	3.07867	(10102019)	465583.41

3808221.91	2.94246	(10102019)		
465603.41	3808221.91	2.87584	(09010408)	465623.41
3808221.91	2.89428	(09010408)		
465643.41	3808221.91	2.89524	(09010408)	465663.41
3808221.91	2.91830	(09010408)		
465683.41	3808221.91	2.85932	(09010408)	465703.41
3808221.91	2.78866	(09010408)		
464963.41	3808241.91	7.58267	(10102019)	464983.41
3808241.91	7.50959	(10102019)		
465003.41	3808241.91	7.42743	(10102019)	465023.41
3808241.91	7.28726	(10102019)		
465043.41	3808241.91	7.05462	(10102019)	465063.41
3808241.91	6.86255	(10102019)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 583

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465083.41	3808241.91	6.61344	(10102019)	465103.41
3808241.91	6.43435	(10102019)		
465123.41	3808241.91	6.31168	(10102019)	465143.41
3808241.91	6.15794	(10102019)		
465163.41	3808241.91	5.98073	(10102019)	465183.41
3808241.91	5.77000	(10102019)		
465203.41	3808241.91	5.60951	(10102019)	465223.41
3808241.91	5.44042	(10102019)		

465243.41	3808241.91	5.20151	(10102019)	465263.41
3808241.91	5.02783	(10102019)		
465283.41	3808241.91	4.87795	(10102019)	465303.41
3808241.91	4.64682	(10102019)		
465323.41	3808241.91	4.48149	(10102019)	465343.41
3808241.91	4.33900	(10102019)		
465363.41	3808241.91	4.15223	(10102019)	465383.41
3808241.91	3.97871	(10102019)		
465403.41	3808241.91	3.85330	(10102019)	465423.41
3808241.91	3.73434	(10102019)		
465443.41	3808241.91	3.61668	(10102019)	465463.41
3808241.91	3.50054	(10102019)		
465483.41	3808241.91	3.38610	(10102019)	465503.41
3808241.91	3.24713	(10102019)		
465523.41	3808241.91	3.10920	(10102019)	465543.41
3808241.91	3.00633	(09010408)		
465563.41	3808241.91	3.02880	(09010408)	465583.41
3808241.91	3.00302	(09010408)		
465603.41	3808241.91	3.02861	(09010408)	465623.41
3808241.91	2.95174	(09010408)		
465643.41	3808241.91	2.87938	(09010408)	465663.41
3808241.91	2.89755	(09010408)		
465683.41	3808241.91	2.90743	(09010408)	465703.41
3808241.91	2.90101	(09010408)		
464983.41	3808261.91	7.06647	(10102019)	465003.41
3808261.91	7.03105	(10102019)		
465023.41	3808261.91	6.93408	(10102019)	465043.41
3808261.91	6.80999	(10102019)		
465063.41	3808261.91	6.63279	(10102019)	465083.41
3808261.91	6.47163	(10102019)		
465103.41	3808261.91	6.25759	(10102019)	465123.41
3808261.91	6.08456	(10102019)		
465143.41	3808261.91	5.91806	(10102019)	465163.41
3808261.91	5.77209	(10102019)		
465183.41	3808261.91	5.59899	(10102019)	465203.41
3808261.91	5.40760	(10102019)		
465223.41	3808261.91	5.18779	(10102019)	465243.41
3808261.91	5.00338	(10102019)		
465263.41	3808261.91	4.85476	(10102019)	465283.41
3808261.91	4.70575	(10102019)		
465303.41	3808261.91	4.46903	(10102019)	465323.41
3808261.91	4.28733	(10102019)		
465343.41	3808261.91	4.11938	(10102019)	465363.41
3808261.91	3.93733	(10102019)		
465383.41	3808261.91	3.78042	(10102019)	465403.41
3808261.91	3.64188	(10102019)		
465423.41	3808261.91	3.52539	(10102019)	465443.41
3808261.91	3.41060	(10102019)		
465463.41	3808261.91	3.29821	(10102019)	465483.41
3808261.91	3.18730	(10102019)		

465503.41	3808261.91	3.12537	(09010408)	465523.41
3808261.91	3.08083 (09010408)			
465543.41	3808261.91	3.10777	(09010408)	465563.41
3808261.91	3.09129 (09010408)			
465583.41	3808261.91	3.03791	(09010408)	465603.41
3808261.91	3.05802 (09010408)			
465623.41	3808261.91	3.00709	(09010408)	465643.41
3808261.91	2.98544 (09010408)			
465663.41	3808261.91	2.91285	(09010408)	465683.41
3808261.91	2.89077 (09010408)			
465703.41	3808261.91	2.89215	(09010408)	465003.41
3808281.91	6.70665 (10102019)			
465023.41	3808281.91	6.64022	(10102019)	465043.41
3808281.91	6.52203 (10102019)			
465063.41	3808281.91	6.37339	(10102019)	465083.41
3808281.91	6.23890 (10102019)			
465103.41	3808281.91	6.09766	(10102019)	465123.41
3808281.91	5.88128 (10102019)			
465143.41	3808281.91	5.71644	(10102019)	465163.41
3808281.91	5.55171 (10102019)			
465183.41	3808281.91	5.39062	(10102019)	465203.41
3808281.91	5.15923 (10102019)			

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 584

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -					
	465223.41	3808281.91	4.96080	(10102019)	465243.41
3808281.91		4.81601 (10102019)			
	465263.41	3808281.91	4.66416	(10102019)	465283.41
3808281.91		4.49284 (10102019)			
	465303.41	3808281.91	4.26145	(10102019)	465323.41
3808281.91		4.07472 (10102019)			
	465343.41	3808281.91	3.88110	(10102019)	465363.41
3808281.91		3.73764 (10102019)			
	465383.41	3808281.91	3.59056	(10102019)	465403.41
3808281.91		3.42683 (10102019)			
	465423.41	3808281.91	3.27625	(10102019)	465443.41
3808281.91		3.16437 (10102019)			
	465463.41	3808281.91	3.16214	(09010408)	465483.41
3808281.91		3.19052 (09010408)			
	465503.41	3808281.91	3.21732	(09010408)	465523.41
3808281.91		3.24018 (09010408)			
	465543.41	3808281.91	3.23128	(09010408)	465563.41
3808281.91		3.15680 (09010408)			
	465583.41	3808281.91	3.07624	(09010408)	465603.41
3808281.91		3.09116 (09010408)			
	465623.41	3808281.91	3.09261	(09010408)	465643.41
3808281.91		3.03345 (09010408)			
	465663.41	3808281.91	2.94831	(09010408)	465683.41
3808281.91		2.87571 (09010408)			
	465703.41	3808281.91	2.86535	(09010408)	465003.41
3808301.91		6.39305 (10102019)			
	465023.41	3808301.91	6.33781	(10102019)	465043.41
3808301.91		6.29602 (10102019)			
	465063.41	3808301.91	6.01746	(10102019)	465083.41
3808301.91		5.91388 (10102019)			
	465103.41	3808301.91	5.86138	(10102019)	465123.41
3808301.91		5.69858 (10102019)			
	465143.41	3808301.91	5.54018	(10102019)	465163.41
3808301.91		5.36191 (10102019)			
	465183.41	3808301.91	5.11181	(10102019)	465203.41
3808301.91		4.92674 (10102019)			
	465223.41	3808301.91	4.77096	(10102019)	465243.41
3808301.91		4.62144 (10102019)			
	465263.41	3808301.91	4.43562	(10102019)	465283.41
3808301.91		4.20984 (10102019)			
	465303.41	3808301.91	4.01746	(10102019)	465323.41
3808301.91		3.83458 (10102019)			
	465343.41	3808301.91	3.68739	(10102019)	465363.41
3808301.91		3.52176 (10102019)			
	465383.41	3808301.91	3.38060	(10102019)	465403.41
3808301.91		3.25708 (10102019)			
	465423.41	3808301.91	3.09186	(09010408)	465443.41
3808301.91		3.09844 (09010408)			
	465463.41	3808301.91	3.33192	(09010408)	465483.41

3808301.91	3.35668	(09010408)		
465503.41	3808301.91	3.37958	(09010408)	465523.41
3808301.91	3.38772	(09010408)		
465543.41	3808301.91	3.22128	(09010408)	465563.41
3808301.91	3.20427	(09010408)		
465583.41	3808301.91	3.20599	(09010408)	465603.41
3808301.91	3.21645	(09010408)		
465623.41	3808301.91	3.12553	(09010408)	465643.41
3808301.91	2.99617	(09010408)		
465663.41	3808301.91	2.98498	(09010408)	465683.41
3808301.91	2.92260	(09010408)		
465703.41	3808301.91	2.78282	(09010408)	465043.41
3808321.91	5.93814	(10102019)		
465063.41	3808321.91	5.79627	(10102019)	465083.41
3808321.91	5.68519	(10102019)		
465103.41	3808321.91	5.55551	(10102019)	465123.41
3808321.91	5.39774	(10102019)		
465143.41	3808321.91	5.23905	(10102019)	465163.41
3808321.91	5.07528	(10102019)		
465183.41	3808321.91	4.88225	(10102019)	465203.41
3808321.91	4.71961	(10102019)		
465223.41	3808321.91	4.56162	(10102019)	465243.41
3808321.91	4.37687	(10102019)		
465263.41	3808321.91	4.15305	(10102019)	465283.41
3808321.91	3.96656	(10102019)		
465303.41	3808321.91	3.77928	(10102019)	465323.41
3808321.91	3.62255	(10102019)		
465343.41	3808321.91	3.47143	(10102019)	465363.41
3808321.91	3.43038	(09010408)		
465383.41	3808321.91	3.35461	(09010408)	465403.41
3808321.91	3.29146	(09010408)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 585

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM ₁₀ IN MICROGRAMS/M**3		
		**		
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465423.41	3808321.91	3.22827	(09010408)	465443.41
3808321.91	3.23689	(09010408)		
465463.41	3808321.91	3.36441	(09010408)	465483.41
3808321.91	3.38259	(09010408)		
465503.41	3808321.91	3.39879	(09010408)	465523.41
3808321.91	3.40461	(09010408)		
465543.41	3808321.91	3.32589	(09010408)	465563.41
3808321.91	3.32100	(09010408)		
465583.41	3808321.91	3.31937	(09010408)	465603.41
3808321.91	3.22726	(09010408)		
465623.41	3808321.91	3.15590	(09010408)	465643.41
3808321.91	3.06276	(09010408)		
465663.41	3808321.91	2.96157	(09010408)	465683.41
3808321.91	2.87897	(09010408)		
465703.41	3808321.91	2.77908	(09010408)	465083.41
3808341.91	5.43064	(10102019)		
465103.41	3808341.91	5.27398	(10102019)	465123.41
3808341.91	5.13969	(10102019)		
465143.41	3808341.91	4.98199	(10102019)	465163.41
3808341.91	4.82148	(10102019)		
465183.41	3808341.91	4.66199	(10102019)	465203.41
3808341.91	4.49836	(10102019)		
465223.41	3808341.91	4.32258	(10102019)	465243.41
3808341.91	4.09995	(10102019)		
465263.41	3808341.91	3.91354	(10102019)	465283.41
3808341.91	3.71183	(10102019)		
465303.41	3808341.91	3.66978	(09010408)	465323.41
3808341.91	3.58943	(09010408)		
465343.41	3808341.91	3.48380	(09010408)	465363.41
3808341.91	3.50990	(09010408)		
465383.41	3808341.91	3.43740	(09010408)	465403.41
3808341.91	3.34942	(09010408)		
465423.41	3808341.91	3.34960	(09010408)	465443.41
3808341.91	3.35792	(09010408)		
465463.41	3808341.91	3.39997	(09010408)	465483.41
3808341.91	3.41194	(09010408)		
465503.41	3808341.91	3.42185	(09010408)	465523.41
3808341.91	3.42668	(09010408)		
465543.41	3808341.91	3.41209	(09010408)	465563.41
3808341.91	3.40902	(09010408)		

465583.41	3808341.91	3.34968	(09010408)	465603.41
3808341.91	3.23674	(09010408)		
465623.41	3808341.91	3.14723	(09010408)	465643.41
3808341.91	3.10825	(09010408)		
465663.41	3808341.91	2.93953	(09010408)	465683.41
3808341.91	2.84417	(09010408)		
465703.41	3808341.91	2.75802	(09010408)	465103.41
3808361.91	4.98230	(10102019)		
465123.41	3808361.91	4.90235	(10102019)	465143.41
3808361.91	4.76193	(10102019)		
465163.41	3808361.91	4.59817	(10102019)	465183.41
3808361.91	4.43638	(10102019)		
465203.41	3808361.91	4.24886	(10102019)	465223.41
3808361.91	4.02929	(10102019)		
465243.41	3808361.91	4.04443	(09010408)	465263.41
3808361.91	3.96888	(09010408)		
465283.41	3808361.91	3.85197	(09010408)	465303.41
3808361.91	3.75265	(09010408)		
465323.41	3808361.91	3.57243	(09010408)	465343.41
3808361.91	3.47186	(09010408)		
465363.41	3808361.91	3.49158	(09010408)	465383.41
3808361.91	3.49947	(09010408)		
465403.41	3808361.91	3.48997	(09010408)	465423.41
3808361.91	3.34482	(09010408)		
465443.41	3808361.91	3.27619	(09010408)	465463.41
3808361.91	3.53649	(09010408)		
465483.41	3808361.91	3.54278	(09010408)	465503.41
3808361.91	3.54689	(09010408)		
465523.41	3808361.91	3.53235	(09010408)	465543.41
3808361.91	3.36624	(09010408)		
465563.41	3808361.91	3.28531	(09010408)	465583.41
3808361.91	3.27855	(09010408)		
465603.41	3808361.91	3.25472	(09010408)	465623.41
3808361.91	3.17214	(09010408)		
465643.41	3808361.91	3.00514	(09010408)	465663.41
3808361.91	2.93256	(09010408)		
465683.41	3808361.91	2.80363	(09010408)	465703.41
3808361.91	2.63322	(09010408)		
465183.41	3808381.91	4.16555	(09010408)	465203.41
3808381.91	4.16773	(09010408)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 586

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808381.91	4.10720	(09010408)	465243.41
3808381.91	4.07835	(09010408)		
465263.41	3808381.91	3.97499	(09010408)	465283.41
3808381.91	3.80579	(09010408)		
465303.41	3808381.91	3.71291	(09010408)	465323.41
3808381.91	3.60170	(09010408)		
465343.41	3808381.91	3.46277	(09010408)	465363.41
3808381.91	3.47436	(09010408)		
465383.41	3808381.91	3.48382	(09010408)	465403.41
3808381.91	3.48323	(09010408)		
465423.41	3808381.91	3.38638	(09010408)	465443.41
3808381.91	3.37275	(09010408)		
465463.41	3808381.91	3.50185	(09010408)	465483.41
3808381.91	3.50062	(09010408)		
465503.41	3808381.91	3.49730	(09010408)	465523.41
3808381.91	3.48153	(09010408)		
465543.41	3808381.91	3.37228	(09010408)	465563.41
3808381.91	3.30256	(09010408)		
465583.41	3808381.91	3.19609	(09010408)	465603.41
3808381.91	3.18341	(09010408)		
465623.41	3808381.91	3.09844	(09010408)	465643.41
3808381.91	2.98170	(09010408)		
465663.41	3808381.91	2.85939	(09010408)	465683.41
3808381.91	2.74070	(09010408)		
465703.41	3808381.91	2.59289	(09010408)	465303.41
3808401.91	3.62989	(09010408)		
465323.41	3808401.91	3.56084	(09010408)	465343.41
3808401.91	3.44395	(09010408)		
465363.41	3808401.91	3.44810	(09010408)	465383.41
3808401.91	3.45015	(09010408)		
465403.41	3808401.91	3.45013	(09010408)	465423.41

3808401.91	3.44803	(09010408)		
465443.41	3808401.91	3.44390	(09010408)	465463.41
3808401.91	3.43957	(09010408)		
465483.41	3808401.91	3.43147	(09010408)	465503.41
3808401.91	3.42142	(09010408)		
465523.41	3808401.91	3.40948	(09010408)	465543.41
3808401.91	3.39569	(09010408)		
465563.41	3808401.91	3.26621	(09010408)	465583.41
3808401.91	3.09152	(09010408)		
465603.41	3808401.91	3.07352	(09010408)	465623.41
3808401.91	3.03734	(09010408)		
465643.41	3808401.91	2.93746	(09010408)	465663.41
3808401.91	2.74114	(09010408)		
465683.41	3808401.91	2.63246	(09010408)	465703.41
3808401.91	2.53504	(09010408)		
465323.41	3808421.91	3.38336	(09010408)	465343.41
3808421.91	3.36909	(09010408)		
465363.41	3808421.91	3.36532	(09010408)	465383.41
3808421.91	3.35961	(09010408)		
465403.41	3808421.91	3.35197	(09010408)	465423.41
3808421.91	3.34246	(09010408)		
465443.41	3808421.91	3.33110	(09010408)	465463.41
3808421.91	3.31795	(09010408)		
465483.41	3808421.91	3.30305	(09010408)	465503.41
3808421.91	3.28646	(09010408)		
465523.41	3808421.91	3.26824	(09010408)	465543.41
3808421.91	3.24843	(09010408)		
465563.41	3808421.91	3.21530	(09010408)	465583.41
3808421.91	3.13486	(09010408)		
465603.41	3808421.91	3.11160	(09010408)	465623.41
3808421.91	2.97105	(09010408)		
465643.41	3808421.91	2.77901	(09010408)	465663.41
3808421.91	2.69539	(09010408)		
465683.41	3808421.91	2.55496	(09010408)	465703.41
3808421.91	2.47128	(09010519)		
465323.41	3808441.91	3.24657	(09010408)	465343.41
3808441.91	3.25008	(09010408)		
465363.41	3808441.91	3.35878	(09010408)	465383.41
3808441.91	3.37052	(09010408)		
465403.41	3808441.91	3.35736	(09010408)	465423.41
3808441.91	3.34238	(09010408)		
465443.41	3808441.91	3.32564	(09010408)	465463.41
3808441.91	3.30720	(09010408)		
465483.41	3808441.91	3.28711	(09010408)	465503.41
3808441.91	3.26545	(09010408)		
465523.41	3808441.91	3.24227	(09010408)	465543.41
3808441.91	3.21765	(09010408)		
465563.41	3808441.91	3.19166	(09010408)	465583.41
3808441.91	3.16436	(09010408)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 587

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***
INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465603.41	3808441.91	3.13583	(09010408)	465623.41
3808441.91	2.97869	(09010408)		
465643.41	3808441.91	2.71661	(09010408)	465663.41
3808441.91	2.58497	(09010408)		
465683.41	3808441.91	2.54461	(09010519)	465703.41
3808441.91	2.51676	(09010519)		
465343.41	3808461.91	3.06922	(09010408)	465363.41
3808461.91	3.29597	(09010408)		
465383.41	3808461.91	3.33151	(09010408)	465403.41
3808461.91	3.38385	(09010408)		
465423.41	3808461.91	3.36251	(09010408)	465443.41
3808461.91	3.33955	(09010408)		
465463.41	3808461.91	3.31711	(09010408)	465483.41
3808461.91	3.29110	(09010408)		
465503.41	3808461.91	3.28217	(09010408)	465523.41
3808461.91	3.27355	(09010408)		
465543.41	3808461.91	3.24329	(09010408)	465563.41
3808461.91	3.21181	(09010408)		
465583.41	3808461.91	3.17918	(09010408)	465603.41
3808461.91	3.14547	(09010408)		
465623.41	3808461.91	2.98447	(09010408)	465643.41
3808461.91	2.70762	(09010408)		

465663.41	3808461.91	2.60902	(09010519)	465683.41
3808461.91	2.57882	(09010519)		
465703.41	3808461.91	2.56318	(09010519)	465343.41
3808481.91	2.93112	(09010519)		
465363.41	3808481.91	2.92131	(09010519)	465383.41
3808481.91	2.99126	(09010408)		
465403.41	3808481.91	3.16275	(09010408)	465423.41
3808481.91	3.13692	(09010408)		
465443.41	3808481.91	3.10981	(09010408)	465463.41
3808481.91	3.08147	(09010408)		
465483.41	3808481.91	3.05200	(09010408)	465503.41
3808481.91	3.18409	(09010408)		
465523.41	3808481.91	3.28914	(09010408)	465543.41
3808481.91	3.25336	(09010408)		
465563.41	3808481.91	3.21652	(09010408)	465583.41
3808481.91	3.17872	(09010408)		
465603.41	3808481.91	3.14003	(09010408)	465623.41
3808481.91	2.97653	(09010408)		
465643.41	3808481.91	2.70364	(09010519)	465663.41
3808481.91	2.65815	(09010519)		
465683.41	3808481.91	2.62515	(09010519)	465703.41
3808481.91	2.59623	(09010519)		
465463.41	3808501.91	3.01197	(09010408)	465483.41
3808501.91	2.87823	(09010519)		
465503.41	3808501.91	2.94272	(09010408)	465523.41
3808501.91	3.14191	(09010408)		
465543.41	3808501.91	3.10316	(09010408)	465563.41
3808501.91	3.10960	(09010408)		
465583.41	3808501.91	3.15102	(09010408)	465603.41
3808501.91	3.00410	(09010408)		
465623.41	3808501.91	2.86327	(09010408)	465643.41
3808501.91	2.75699	(09010519)		
465663.41	3808501.91	2.70648	(09010519)	465683.41
3808501.91	2.67052	(09010519)		
465703.41	3808501.91	2.63947	(09010519)	465523.41
3808521.91	2.91362	(09010519)		
465543.41	3808521.91	2.89567	(09010519)	465563.41
3808521.91	2.96026	(09010408)		
465583.41	3808521.91	3.04042	(09010408)	465603.41
3808521.91	2.86246	(09010519)		
465623.41	3808521.91	2.82704	(09010519)	465643.41
3808521.91	2.79250	(09010519)		
465663.41	3808521.91	2.73930	(09010519)	465683.41
3808521.91	2.69977	(09010519)		
465703.41	3808521.91	2.67909	(09010519)	464239.31
3809562.31	6.30087	(10021420)		
464277.31	3809562.31	5.83418	(10021420)	463745.31
3809591.37	10.03801	(10012420)		
463783.31	3809591.37	9.53517	(10031906)	463821.31
3809591.37	9.07178	(10031906)		

```

463859.31 3809591.37 8.66236 (10031906) 463897.31
3809591.37 12.02975 (10021420)
463935.31 3809591.37 13.02201 (10021420) 464239.31
3809591.37 5.98465 (10021420)
464277.31 3809591.37 5.80307 (10021420) 463745.31
3809620.43 9.94630 (09022206)
463783.31 3809620.43 9.42370 (10012420) 463821.31
3809620.43 8.98454 (10031906)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

```

PAGE 588

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***
INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463859.31	3809620.43	8.59918	(10031906)	463897.31
3809620.43	8.98379	(10030307)		
463935.31	3809620.43	11.34487	(10021420)	463973.31
3809620.43	11.63327	(10021420)		
464011.31	3809620.43	11.26941	(10021420)	464049.31
3809620.43	10.19355	(10021420)		
464087.31	3809620.43	8.38621	(10021420)	464125.31
3809620.43	7.50736	(10021420)		
464163.31	3809620.43	6.63673	(10021420)	464201.31
3809620.43	6.11185	(10021420)		
464239.31	3809620.43	5.93217	(10021420)	464277.31
3809620.43	5.75765	(10021420)		
463745.31	3809649.49	9.80875	(09022206)	463783.31

3809649.49	9.37479 (09022206)		
463821.31	3809649.49	8.92696 (09022206)	463859.31
3809649.49	8.51735 (10012420)		
463897.31	3809649.49	8.15773 (10031906)	463935.31
3809649.49	8.86073 (10030307)		
463973.31	3809649.49	8.69373 (10030307)	464011.31
3809649.49	8.79912 (10021420)		
464049.31	3809649.49	8.68484 (10021420)	464087.31
3809649.49	7.21423 (10021420)		
464125.31	3809649.49	6.98890 (10021420)	464163.31
3809649.49	6.21270 (10021420)		
464201.31	3809649.49	6.03187 (10021420)	464239.31
3809649.49	5.86149 (10021420)		
464277.31	3809649.49	5.69553 (10021420)	464315.31
3809649.49	5.53661 (10021420)		
464353.31	3809649.49	5.39187 (10021420)	464391.31
3809649.49	5.25402 (10021420)		
464429.31	3809649.49	5.11946 (10021420)	464467.31
3809649.49	4.99392 (10021420)		
464505.31	3809649.49	4.87325 (10021420)	463745.31
3809678.55	9.57944 (09022206)		
463783.31	3809678.55	9.23053 (09022206)	463821.31
3809678.55	8.87139 (09022206)		
463859.31	3809678.55	8.46477 (09022206)	463897.31
3809678.55	8.10722 (09022206)		
463935.31	3809678.55	7.77278 (09022206)	463973.31
3809678.55	7.44415 (10031906)		
464011.31	3809678.55	7.15479 (10031906)	464049.31
3809678.55	7.41447 (10030307)		
464087.31	3809678.55	6.63620 (10031906)	464125.31
3809678.55	6.39714 (10031906)		
464163.31	3809678.55	6.17222 (10031906)	464201.31
3809678.55	5.96827 (10031906)		
464239.31	3809678.55	5.76880 (10031906)	464277.31
3809678.55	5.61071 (10021420)		
464315.31	3809678.55	5.46483 (10021420)	464353.31
3809678.55	5.33031 (10021420)		
464391.31	3809678.55	5.19919 (10021420)	464429.31
3809678.55	5.06992 (10021420)		
464467.31	3809678.55	4.95214 (10021420)	464505.31
3809678.55	4.83140 (10021420)		
463745.31	3809707.61	9.32192 (09022206)	463783.31
3809707.61	9.03713 (09022206)		
463821.31	3809707.61	8.73860 (09022206)	463859.31
3809707.61	8.40291 (09022206)		
463897.31	3809707.61	8.05808 (09022206)	463935.31
3809707.61	7.74181 (09022206)		
463973.31	3809707.61	7.41935 (09022206)	464011.31
3809707.61	7.11166 (09022206)		
464049.31	3809707.61	6.84242 (10031906)	464087.31

3809707.61	6.60097	(10031906)		
464125.31	3809707.61	6.37235	(10031906)	464163.31
3809707.61	6.15805	(10031906)		
464201.31	3809707.61	5.95029	(10031906)	464239.31
3809707.61	5.75766	(10031906)		
464277.31	3809707.61	5.57405	(10031906)	464315.31
3809707.61	5.40821	(10031906)		
464353.31	3809707.61	5.24311	(10021420)	464391.31
3809707.61	5.12391	(10021420)		
464429.31	3809707.61	5.00306	(10021420)	464467.31
3809707.61	4.89097	(10021420)		
464505.31	3809707.61	4.78274	(10021420)	463745.31
3809736.67	9.07682	(10022819)		
463783.31	3809736.67	8.79033	(09022206)	463821.31
3809736.67	8.52178	(09022206)		
463859.31	3809736.67	8.26304	(09022206)	463897.31
3809736.67	7.97711	(09022206)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 589

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463935.31	3809736.67	7.67451	(09022206)	463973.31
3809736.67	7.39229	(09022206)		
464011.31	3809736.67	7.10900	(09022206)	464049.31
3809736.67	6.83155	(09022206)		

464087.31	3809736.67	6.58043	(09022206)	464125.31
3809736.67	6.33812 (09022206)			
464163.31	3809736.67	6.13200	(10031906)	464201.31
3809736.67	5.92847 (10031906)			
464239.31	3809736.67	5.74340	(10031906)	464277.31
3809736.67	5.56366 (10031906)			
464315.31	3809736.67	5.39457	(10031906)	464353.31
3809736.67	5.23627 (10031906)			
464391.31	3809736.67	5.08804	(10031906)	464429.31
3809736.67	4.94124 (10031906)			
464467.31	3809736.67	4.81873	(10021420)	464505.31
3809736.67	4.72053 (10021420)			
463745.31	3809765.73	9.05121	(10022819)	463783.31
3809765.73	8.57518 (10022819)			
463821.31	3809765.73	8.29802	(09022206)	463859.31
3809765.73	8.08216 (09022206)			
463897.31	3809765.73	7.85918	(09022206)	463935.31
3809765.73	7.57597 (09022206)			
463973.31	3809765.73	7.30405	(09022206)	464011.31
3809765.73	7.08298 (09022206)			
464049.31	3809765.73	6.82884	(09022206)	464087.31
3809765.73	6.57625 (09022206)			
464125.31	3809765.73	6.34250	(09022206)	464163.31
3809765.73	6.11801 (09022206)			
464201.31	3809765.73	5.89690	(10012420)	464239.31
3809765.73	5.71942 (10031906)			
464277.31	3809765.73	5.54630	(10031906)	464315.31
3809765.73	5.37891 (10031906)			
464353.31	3809765.73	5.22720	(10031906)	464391.31
3809765.73	5.07583 (10031906)			
464429.31	3809765.73	4.93806	(10031906)	464467.31
3809765.73	4.80897 (10031906)			
464505.31	3809765.73	4.67461	(10031906)	463745.31
3809794.79	9.01736 (10022819)			
463783.31	3809794.79	8.51451	(10022819)	463821.31
3809794.79	8.09531 (10022819)			
463859.31	3809794.79	7.84173	(09022206)	463897.31
3809794.79	7.67096 (09022206)			
463935.31	3809794.79	7.43373	(09022206)	463973.31
3809794.79	7.19546 (09022206)			
464011.31	3809794.79	7.00499	(09022206)	464049.31
3809794.79	6.81166 (09022206)			
464087.31	3809794.79	6.56888	(09022206)	464125.31
3809794.79	6.33476 (09022206)			
464163.31	3809794.79	6.11213	(09022206)	464201.31
3809794.79	5.89722 (09022206)			
464239.31	3809794.79	5.69568	(10012420)	464277.31
3809794.79	5.51271 (10031906)			
464315.31	3809794.79	5.35596	(10031906)	464353.31
3809794.79	5.20328 (10031906)			

464391.31	3809794.79	5.06202	(10031906)	464429.31
3809794.79	4.93106	(10031906)		
464467.31	3809794.79	4.79752	(10031906)	464505.31
3809794.79	4.67061	(10031906)		
463745.31	3809823.85	8.96290	(10022819)	463783.31
3809823.85	8.44935	(10022819)		
463821.31	3809823.85	7.99037	(10022819)	463859.31
3809823.85	7.63983	(10022819)		
463897.31	3809823.85	7.41727	(09022206)	463935.31
3809823.85	7.23642	(09022206)		
463973.31	3809823.85	7.05395	(09022206)	464011.31
3809823.85	6.88618	(09022206)		
464049.31	3809823.85	6.73837	(09022206)	464087.31
3809823.85	6.54341	(09022206)		
464125.31	3809823.85	6.32533	(09022206)	464163.31
3809823.85	6.10685	(09022206)		
464201.31	3809823.85	5.89181	(09022206)	464239.31
3809823.85	5.69111	(09022206)		
464277.31	3809823.85	5.50520	(10012420)	464315.31
3809823.85	5.32234	(10012420)		
464353.31	3809823.85	5.17291	(10031906)	464391.31
3809823.85	5.03947	(10031906)		
464429.31	3809823.85	4.90880	(10031906)	464467.31
3809823.85	4.78277	(10031906)		
464505.31	3809823.85	4.65706	(10031906)	463745.31
3809852.91	8.90441	(10022819)		
▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15				
Industrial Park\I15 Industrial *** 05/09/22				
*** AERMET - VERSION 14134 ***				
*** 16:42:19				

PAGE 590

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357

, L0006358	, L0006359	, L0006360	,
	L0006361	, L0006362	, L0006363 , L0006364 , L0006365
, L0006366	, L0006367	, L0006368	,
	L0006369	, L0006370	, L0006371 , L0006372 , L0006373
, L0006374	, L0006375	, L0006376	,
	L0006377	, L0006378	, L0006379 , L0006380 , L0006381
, L0006382	, L0006383	, . . .	,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)

463783.31	3809852.91	8.42157 (10022819)	463821.31
3809852.91	7.92320 (10022819)		
463859.31	3809852.91	7.56655 (10022819)	463897.31
3809852.91	7.22637 (10022819)		
463935.31	3809852.91	6.99457 (09022206)	463973.31
3809852.91	6.87090 (09022206)		
464011.31	3809852.91	6.73521 (09022206)	464049.31
3809852.91	6.61920 (09022206)		
464087.31	3809852.91	6.46643 (09022206)	464125.31
3809852.91	6.28107 (09022206)		
464163.31	3809852.91	6.07463 (09022206)	464201.31
3809852.91	5.86690 (09022206)		
464239.31	3809852.91	5.67633 (09022206)	464277.31
3809852.91	5.49077 (10012420)		
464315.31	3809852.91	5.31771 (10012420)	464353.31
3809852.91	5.14975 (10012420)		
464391.31	3809852.91	5.00250 (10031906)	464429.31
3809852.91	4.88031 (10031906)		
464467.31	3809852.91	4.75811 (10031906)	464505.31
3809852.91	4.63979 (10031906)		
463745.31	3809881.97	8.82434 (10022819)	463783.31
3809881.97	8.36267 (10022819)		
463821.31	3809881.97	7.89168 (10022819)	463859.31
3809881.97	7.51006 (10022819)		
463897.31	3809881.97	7.14900 (10022819)	463935.31
3809881.97	6.83010 (10022819)		
463973.31	3809881.97	6.65532 (09022206)	464011.31
3809881.97	6.56658 (09022206)		
464049.31	3809881.97	6.47542 (09022206)	464087.31
3809881.97	6.34735 (09022206)		
464125.31	3809881.97	6.19402 (09022206)	464163.31
3809881.97	6.00630 (09022206)		
464201.31	3809881.97	5.82526 (09022206)	464239.31
3809881.97	5.64130 (09022206)		
464277.31	3809881.97	5.47040 (09022206)	464315.31
3809881.97	5.30486 (10012420)		
464353.31	3809881.97	5.14439 (10012420)	464391.31
3809881.97	4.99663 (10012420)		
464429.31	3809881.97	4.84792 (10012420)	464467.31
3809881.97	4.72563 (10031906)		
464505.31	3809881.97	4.61851 (10031906)	463745.31
3809911.03	8.66907 (10022819)		
463783.31	3809911.03	8.24834 (10022819)	463821.31
3809911.03	7.84643 (10022819)		
463859.31	3809911.03	7.46210 (10022819)	463897.31

3809911.03	7.10456	(10022819)		
463935.31	3809911.03	6.77467	(10022819)	463973.31
3809911.03	6.52433	(10022819)		
464011.31	3809911.03	6.35967	(09022206)	464049.31
3809911.03	6.31272	(09022206)		
464087.31	3809911.03	6.21738	(09022206)	464125.31
3809911.03	6.08995	(09022206)		
464163.31	3809911.03	5.93591	(09022206)	464201.31
3809911.03	5.78088	(09022206)		
464239.31	3809911.03	5.60914	(09022206)	464277.31
3809911.03	5.45156	(09022206)		
464315.31	3809911.03	5.29110	(09022206)	464353.31
3809911.03	5.13202	(09022206)		
464391.31	3809911.03	4.98930	(10012420)	464429.31
3809911.03	4.84560	(10012420)		
464467.31	3809911.03	4.70736	(10012420)	464505.31
3809911.03	4.58189	(10031906)		
463745.31	3809940.09	8.44537	(10022819)	463783.31
3809940.09	8.09575	(10022819)		
463821.31	3809940.09	7.76323	(10022819)	463859.31
3809940.09	7.40143	(10022819)		
463897.31	3809940.09	7.06867	(10022819)	463935.31
3809940.09	6.75120	(10022819)		
463973.31	3809940.09	6.48654	(10022819)	464011.31
3809940.09	6.23069	(10022819)		
464049.31	3809940.09	6.10045	(09022206)	464087.31
3809940.09	6.04542	(09022206)		
464125.31	3809940.09	5.95845	(09022206)	464163.31
3809940.09	5.85411	(09022206)		
464201.31	3809940.09	5.73186	(09022206)	464239.31
3809940.09	5.58130	(09022206)		
464277.31	3809940.09	5.42789	(09022206)	464315.31
3809940.09	5.27804	(09022206)		
464353.31	3809940.09	5.12605	(09022206)	464391.31
3809940.09	4.97650	(09022206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 591

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373

, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464429.31	3809940.09	4.84236	(10012420)	464467.31
3809940.09	4.70541	(10012420)		
464505.31	3809940.09	4.56873	(10012420)	463745.31
3809969.15	8.29983	(10011407)		
463783.31	3809969.15	7.94077	(10022819)	463821.31
3809969.15	7.64061	(10022819)		
463859.31	3809969.15	7.32487	(10022819)	463897.31
3809969.15	7.01665	(10022819)		
463935.31	3809969.15	6.72053	(10022819)	463973.31
3809969.15	6.46261	(10022819)		
464011.31	3809969.15	6.19254	(10022819)	464049.31
3809969.15	5.96359	(10022819)		
464087.31	3809969.15	5.84295	(09022206)	464125.31
3809969.15	5.81036	(09022206)		
464163.31	3809969.15	5.74279	(09022206)	464201.31
3809969.15	5.65699	(09022206)		
464239.31	3809969.15	5.54066	(09022206)	464277.31
3809969.15	5.39776	(09022206)		
464315.31	3809969.15	5.25846	(09022206)	464353.31
3809969.15	5.12151	(09022206)		
464391.31	3809969.15	4.97806	(09022206)	464429.31
3809969.15	4.83264	(09022206)		
464467.31	3809969.15	4.69623	(10012420)	464505.31
3809969.15	4.57155	(10012420)		
463745.31	3809998.21	8.34056	(10011407)	463783.31
3809998.21	7.81711	(10022819)		
463821.31	3809998.21	7.53004	(10022819)	463859.31
3809998.21	7.24177	(10022819)		
463897.31	3809998.21	6.96235	(10022819)	463935.31
3809998.21	6.67595	(10022819)		
463973.31	3809998.21	6.42715	(10022819)	464011.31
3809998.21	6.17394	(10022819)		
464049.31	3809998.21	5.94230	(10022819)	464087.31
3809998.21	5.73774	(10022819)		
464125.31	3809998.21	5.65189	(09022206)	464163.31
3809998.21	5.61943	(09022206)		

464201.31	3809998.21	5.55882	(09022206)	464239.31
3809998.21	5.46953	(09022206)		
464277.31	3809998.21	5.35789	(09022206)	464315.31
3809998.21	5.22816	(09022206)		
464353.31	3809998.21	5.10160	(09022206)	464391.31
3809998.21	4.96593	(09022206)		
464429.31	3809998.21	4.82564	(09022206)	464467.31
3809998.21	4.68938	(09022206)		
464505.31	3809998.21	4.56294	(10012420)	463745.31
3810027.27	8.33411	(10011407)		
463783.31	3810027.27	7.80996	(10011407)	463821.31
3810027.27	7.42657	(10022819)		
463859.31	3810027.27	7.16104	(10022819)	463897.31
3810027.27	6.90948	(10022819)		
463935.31	3810027.27	6.62660	(10022819)	463973.31
3810027.27	6.39528	(10022819)		
464011.31	3810027.27	6.15636	(10022819)	464049.31
3810027.27	5.93302	(10022819)		
464087.31	3810027.27	5.71692	(10022819)	464125.31
3810027.27	5.53253	(10022819)		
464163.31	3810027.27	5.46970	(09022206)	464201.31
3810027.27	5.44252	(09022206)		
464239.31	3810027.27	5.37272	(09022206)	464277.31
3810027.27	5.28941	(09022206)		
464315.31	3810027.27	5.18577	(09022206)	464353.31
3810027.27	5.06841	(09022206)		
464391.31	3810027.27	4.94238	(09022206)	464429.31
3810027.27	4.81599	(09022206)		
464467.31	3810027.27	4.68468	(09022206)	464505.31
3810027.27	4.54801	(09022206)		
463745.31	3810056.33	8.33776	(09040202)	463783.31
3810056.33	7.80636	(10011407)		
463821.31	3810056.33	7.33144	(10011407)	463859.31
3810056.33	7.06396	(10022819)		
463897.31	3810056.33	6.83130	(10022819)	463935.31
3810056.33	6.57865	(10022819)		
463973.31	3810056.33	6.35944	(10022819)	464011.31
3810056.33	6.13029	(10022819)		
464049.31	3810056.33	5.90485	(10022819)	464087.31
3810056.33	5.69883	(10022819)		
464125.31	3810056.33	5.50450	(10022819)	464163.31
3810056.33	5.34015	(10022819)		
464201.31	3810056.33	5.29078	(09022206)	464239.31
3810056.33	5.26085	(09022206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK31 ***

INCLUDING SOURCE(S): L0006356 , L0006357
, L0006358 , L0006359 , L0006360 ,
L0006361 , L0006362 , L0006363 , L0006364 , L0006365
, L0006366 , L0006367 , L0006368 ,
L0006369 , L0006370 , L0006371 , L0006372 , L0006373
, L0006374 , L0006375 , L0006376 ,
L0006377 , L0006378 , L0006379 , L0006380 , L0006381
, L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464277.31	3810056.33	5.19626	(09022206)	464315.31
3810056.33	5.11832	(09022206)		
464353.31	3810056.33	5.02748	(09022206)	464391.31
3810056.33	4.91763	(09022206)		
464429.31	3810056.33	4.79744	(09022206)	464467.31
3810056.33	4.66868	(09022206)		
464505.31	3810056.33	4.54236	(09022206)	463745.31
3810085.39	8.42199	(09040202)		
463783.31	3810085.39	7.76422	(10011407)	463821.31
3810085.39	7.31761	(10011407)		
463859.31	3810085.39	6.93750	(10022819)	463897.31
3810085.39	6.73643	(10022819)		
463935.31	3810085.39	6.52217	(10022819)	463973.31
3810085.39	6.31363	(10022819)		
464011.31	3810085.39	6.08825	(10022819)	464049.31
3810085.39	5.85740	(10022819)		
464087.31	3810085.39	5.66869	(10022819)	464125.31
3810085.39	5.48414	(10022819)		
464163.31	3810085.39	5.31543	(10022819)	464201.31
3810085.39	5.14178	(10022819)		
464239.31	3810085.39	5.11676	(09022206)	464277.31
3810085.39	5.08543	(09022206)		
464315.31	3810085.39	5.03058	(09022206)	464353.31
3810085.39	4.95788	(09022206)		
464391.31	3810085.39	4.86842	(09022206)	464429.31
3810085.39	4.75941	(09022206)		
464467.31	3810085.39	4.64318	(09022206)	464505.31

3810085.39	4.52224 (09022206)		
463745.31	3810114.45	8.42590 (09040202)	463783.31
3810114.45	7.76878 (09040202)		
463821.31	3810114.45	7.29872 (10011407)	463859.31
3810114.45	6.94053 (10011407)		
463897.31	3810114.45	6.64106 (10022819)	463935.31
3810114.45	6.45046 (10022819)		
463973.31	3810114.45	6.24850 (10022819)	464011.31
3810114.45	6.04122 (10022819)		
464049.31	3810114.45	5.81948 (10022819)	464087.31
3810114.45	5.63351 (10022819)		
464125.31	3810114.45	5.44791 (10022819)	464163.31
3810114.45	5.27730 (10022819)		
464201.31	3810114.45	5.11222 (10022819)	464239.31
3810114.45	4.95605 (10022819)		
464277.31	3810114.45	4.95398 (09022206)	464315.31
3810114.45	4.91436 (09022206)		
464353.31	3810114.45	4.85520 (09022206)	464391.31
3810114.45	4.77972 (09022206)		
464429.31	3810114.45	4.69839 (09022206)	464467.31
3810114.45	4.59319 (09022206)		
464505.31	3810114.45	4.49282 (09022206)	463745.31
3810143.51	8.35789 (09040202)		
463783.31	3810143.51	7.79937 (09040202)	463821.31
3810143.51	7.28989 (10011407)		
463859.31	3810143.51	6.95798 (10011407)	463897.31
3810143.51	6.55935 (10011407)		
463935.31	3810143.51	6.33724 (10022819)	463973.31
3810143.51	6.14321 (10022819)		
464011.31	3810143.51	5.98084 (10022819)	464049.31
3810143.51	5.77644 (10022819)		
464087.31	3810143.51	5.58006 (10022819)	464125.31
3810143.51	5.40748 (10022819)		
464163.31	3810143.51	5.24692 (10022819)	464201.31
3810143.51	5.08670 (10022819)		
464239.31	3810143.51	4.93110 (10022819)	464277.31
3810143.51	4.79777 (09022206)		
464315.31	3810143.51	4.78447 (09022206)	464353.31
3810143.51	4.73404 (09022206)		
464391.31	3810143.51	4.68380 (09022206)	464429.31
3810143.51	4.61605 (09022206)		
464467.31	3810143.51	4.54079 (09022206)	464505.31
3810143.51	4.45483 (09022206)		
464383.78	3807479.29	9.34099 (09011918)	464355.03
3807405.24	11.91072 (09011918)		
464402.07	3807352.10	11.07958 (09011918)	464367.23
3807296.35	13.02737 (09011918)		
464358.52	3807237.99	13.51112 (09011918)	464385.52
3807161.33	13.44504 (09011918)		
463132.27	3810926.37	5.67997 (09011307)	463237.82

3811199.31 4.49204 (09031206)
 464944.35 3809244.89 3.75242 (09010419) 465700.32
 3809255.46 2.48573 (09031319)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 593

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK31 ***
 INCLUDING SOURCE(S): L0006356 , L0006357
 , L0006358 , L0006359 , L0006360 ,
 L0006361 , L0006362 , L0006363 , L0006364 , L0006365
 , L0006366 , L0006367 , L0006368 ,
 L0006369 , L0006370 , L0006371 , L0006372 , L0006373
 , L0006374 , L0006375 , L0006376 ,
 L0006377 , L0006378 , L0006379 , L0006380 , L0006381
 , L0006382 , L0006383 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465716.18	3808536.49	2.65900	(09010519)	465544.37
3808533.85	2.89331 (09010519)			
465420.13	3808486.27	3.07037	(09010408)	465348.77
3808491.56	2.94320 (09010519)			
465317.05	3808443.98	3.19201	(09010408)	465327.62
3808406.97	3.48753 (09010408)			
465108.23	3808369.97	4.83579	(10102019)	464999.86
3808301.24	6.42114 (10102019)			
464722.31	3807973.48	8.84698	(09030119)	464717.03
3807836.03	9.18995 (09030119)			
464344.33	3807936.47	10.36316	(09030119)	464349.61
3807780.52	6.40485 (09122717)			
464386.62	3807785.81	5.66876	(09030119)	464521.43
3807859.82	7.28082 (09030119)			
464537.28	3807719.72	7.67336	(09030119)	464426.27
3807613.99	6.56170 (09122717)			
464368.43	3807532.62	9.16999	(09011918)	464324.60
3807121.91	13.52491 (09011918)			

464123.31	3807123.54	16.00648	(10112518)	463930.13
3806909.26	10.01879 (09121017)			
463831.11	3806906.01	14.11403	(09123118)	463821.36
3806720.95	15.17893 (09123118)			
463727.21	3806727.44	16.07040	(09123118)	463598.97
3806334.59	9.78540 (09011117)			
463001.06	3806361.54	6.27833	(10102005)	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 594

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

462160.55	3809377.75	6.74254	(10021207)	462051.48
3809270.62	6.35975 (10021207)			
462014.47	3809029.10	5.47725	(09122018)	462010.58
3808855.75	5.47716 (09122018)			
461936.56	3808886.92	5.14881	(09122018)	461936.56
3808997.94	5.12196 (09122018)			
461909.30	3808768.10	5.05777	(09122018)	461835.28
3808894.71	4.79893 (09122018)			
461845.02	3808995.99	4.96275	(10021207)	461833.33
3809114.80	5.53285 (10021207)			
461843.07	3809210.24	5.53259	(10021207)	461809.96
3809297.89	5.33506 (09020118)			
461856.71	3809385.54	5.49038	(09020118)	461841.13

3809482.92	5.47975 (09020118)		
462004.74	3809379.69	6.03315 (09020118)	461763.22
3808793.43	4.51847 (09122018)		
461753.48	3808699.93	4.63823 (09122018)	461835.28
3808686.30	4.80127 (09122018)		
461823.60	3808579.17	4.69694 (09122018)	461761.27
3808585.02	4.48376 (09122018)		
462301.19	3807807.15	5.25386 (09111517)	462304.78
3807868.16	5.14339 (09111517)		
462216.84	3807882.52	5.03224 (09022219)	462116.34
3807886.11	5.22704 (09022219)		
462114.55	3807789.20	4.89418 (09022219)	462012.25
3807887.90	4.97047 (09022219)		
462008.66	3807975.84	5.00304 (09022219)	461917.14
3807972.25	4.54217 (09022219)		
461922.52	3808187.60	4.37859 (09022219)	461908.17
3808288.10	4.46255 (09122018)		
461848.94	3808377.83	4.81662 (09122018)	461831.00
3808494.48	4.80337 (09122018)		
462421.43	3808393.98	7.36620 (09022219)	462459.11
3808501.66	7.81476 (09022219)		
462437.58	3808580.62	7.81604 (09022219)	462654.73
3809189.00	10.45814 (09122018)		
462559.49	3809194.32	9.39833 (09122018)	465763.86
3807935.19	2.35107 (09030119)		
465819.84	3807935.19	2.29575 (09030119)	465875.82
3807935.19	2.32272 (09030119)		
465931.80	3807935.19	2.31226 (09030119)	465987.78
3807935.19	2.28626 (09030119)		
466043.76	3807935.19	2.28985 (09030119)	466099.74
3807935.19	2.25682 (09030119)		
466155.72	3807935.19	2.24750 (09030119)	466211.70
3807935.19	2.20193 (09030119)		
466267.68	3807935.19	2.16239 (09030119)	466323.66
3807935.19	2.05939 (09030119)		
466379.64	3807935.19	2.00705 (09030119)	466435.62
3807935.19	1.93404 (09030119)		
466491.60	3807935.19	1.87273 (09030119)	466547.58
3807935.19	1.73300 (09030119)		
466603.56	3807935.19	1.62186 (09030119)	466659.54
3807935.19	1.53944 (09030119)		
466715.52	3807935.19	1.42002 (09030119)	466771.50
3807935.19	1.32128 (10020118)		
466827.48	3807935.19	1.32768 (10020118)	466883.46
3807935.19	1.32811 (10020118)		
465763.86	3808001.41	2.40958 (09030119)	465819.84
3808001.41	2.43890 (09030119)		
465875.82	3808001.41	2.40805 (09030119)	465931.80
3808001.41	2.37625 (09030119)		
465987.78	3808001.41	2.41536 (09030119)	466043.76

3808001.41	2.34681	(09030119)		
466099.74	3808001.41	2.38687	(09030119)	466155.72
3808001.41	2.33746	(09030119)		
466211.70	3808001.41	2.29736	(09030119)	466267.68
3808001.41	2.27348	(09030119)		
466323.66	3808001.41	2.13957	(09030119)	466379.64
3808001.41	2.04161	(09030119)		
466435.62	3808001.41	1.96849	(09030119)	466491.60
3808001.41	1.88704	(09030119)		
466547.58	3808001.41	1.78044	(09030119)	466603.56
3808001.41	1.66586	(09030119)		
466659.54	3808001.41	1.52202	(09030119)	466715.52
3808001.41	1.37305	(09030119)		
466771.50	3808001.41	1.36155	(10020118)	466827.48
3808001.41	1.36092	(10020118)		
466883.46	3808001.41	1.35761	(10020118)	465763.86
3808067.63	2.56067	(09030119)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 595

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465819.84	3808067.63	2.52395	(09030119)	465875.82
3808067.63	2.50482	(09030119)		
465931.80	3808067.63	2.50443	(09030119)	465987.78
3808067.63	2.47695	(09030119)		

466043.76	3808067.63	2.46408	(09030119)	466099.74
3808067.63	2.42340 (09030119)			
466155.72	3808067.63	2.37905	(09030119)	466211.70
3808067.63	2.28311 (09030119)			
466267.68	3808067.63	2.21788	(09030119)	466323.66
3808067.63	2.11297 (09030119)			
466379.64	3808067.63	2.03372	(09030119)	466435.62
3808067.63	2.01438 (09030119)			
466491.60	3808067.63	1.85095	(09030119)	466547.58
3808067.63	1.71496 (09030119)			
466603.56	3808067.63	1.55810	(09030119)	466659.54
3808067.63	1.46195 (09030119)			
466715.52	3808067.63	1.39684	(10020118)	466771.50
3808067.63	1.39383 (10020118)			
466827.48	3808067.63	1.38874	(10020118)	466883.46
3808067.63	1.38056 (10020118)			
465763.86	3808133.85	2.64509	(09030119)	465819.84
3808133.85	2.60303 (09030119)			
465875.82	3808133.85	2.60860	(09030119)	465931.80
3808133.85	2.56328 (09030119)			
465987.78	3808133.85	2.61251	(09030119)	466043.76
3808133.85	2.54864 (09030119)			
466099.74	3808133.85	2.48067	(09030119)	466155.72
3808133.85	2.37385 (09030119)			
466211.70	3808133.85	2.29821	(09030119)	466267.68
3808133.85	2.22878 (09030119)			
466323.66	3808133.85	2.14756	(09030119)	466379.64
3808133.85	2.06285 (09030119)			
466435.62	3808133.85	1.96632	(09030119)	466491.60
3808133.85	1.87202 (09030119)			
466547.58	3808133.85	1.71945	(09030119)	466603.56
3808133.85	1.56297 (09030119)			
466659.54	3808133.85	1.43631	(09030119)	466715.52
3808133.85	1.42794 (10020118)			
466771.50	3808133.85	1.42075	(10020118)	466827.48
3808133.85	1.40892 (10020118)			
466883.46	3808133.85	1.39370	(10020118)	465763.86
3808200.07	2.72225 (09030119)			
465819.84	3808200.07	2.67186	(09030119)	465875.82
3808200.07	2.66743 (09030119)			
465931.80	3808200.07	2.69865	(09030119)	465987.78
3808200.07	2.63120 (09030119)			
466043.76	3808200.07	2.57012	(09030119)	466099.74
3808200.07	2.44833 (09030119)			
466155.72	3808200.07	2.37861	(09030119)	466211.70
3808200.07	2.25263 (09030119)			
466267.68	3808200.07	2.20306	(09030119)	466323.66
3808200.07	2.15533 (09030119)			
466379.64	3808200.07	2.04787	(09030119)	466435.62
3808200.07	1.94188 (09030119)			

466491.60	3808200.07	1.78581	(09030119)	466547.58
3808200.07	1.61568	(09030119)		
466603.56	3808200.07	1.47091	(09030119)	466659.54
3808200.07	1.46316	(10020118)		
466715.52	3808200.07	1.45391	(10020118)	466771.50
3808200.07	1.43799	(10020118)		
466827.48	3808200.07	1.42058	(10020118)	466883.46
3808200.07	1.39937	(10020118)		
465763.86	3808266.29	2.72637	(09030119)	465819.84
3808266.29	2.76774	(09030119)		
465875.82	3808266.29	2.77234	(09030119)	465931.80
3808266.29	2.71278	(09030119)		
465987.78	3808266.29	2.64721	(09030119)	466043.76
3808266.29	2.53224	(09030119)		
466099.74	3808266.29	2.44753	(09030119)	466155.72
3808266.29	2.32659	(09030119)		
466211.70	3808266.29	2.24434	(09030119)	466267.68
3808266.29	2.19856	(09030119)		
466323.66	3808266.29	2.08540	(09030119)	466379.64
3808266.29	2.02062	(09030119)		
466435.62	3808266.29	1.91486	(09030119)	466491.60
3808266.29	1.65781	(09030119)		
466547.58	3808266.29	1.51033	(09030119)	466603.56
3808266.29	1.49886	(10020118)		
466659.54	3808266.29	1.48756	(10020118)	466715.52
3808266.29	1.46871	(10020118)		
▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15				
Industrial Park\I15 Industrial *** 05/09/22				
*** AERMET - VERSION 14134 ***				
*** 16:42:19				

PAGE 596

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
466771.50	3808266.29	1.44824 (10020118)	466827.48
3808266.29	1.42303 (10020118)		
466883.46	3808266.29	1.39801 (10020118)	465763.86
3808332.51	2.76396 (09030119)		
465819.84	3808332.51	2.84356 (09030119)	465875.82
3808332.51	2.78055 (09030119)		
465931.80	3808332.51	2.72240 (09030119)	465987.78
3808332.51	2.60405 (09030119)		
466043.76	3808332.51	2.51423 (09030119)	466099.74
3808332.51	2.39906 (09030119)		
466155.72	3808332.51	2.31987 (09030119)	466211.70
3808332.51	2.24086 (09030119)		
466267.68	3808332.51	2.10956 (09030119)	466323.66
3808332.51	2.07761 (09030119)		
466379.64	3808332.51	1.93808 (09030119)	466435.62
3808332.51	1.77045 (09030119)		
466491.60	3808332.51	1.58637 (09030119)	466547.58
3808332.51	1.53603 (10020118)		
466603.56	3808332.51	1.52036 (10020118)	466659.54
3808332.51	1.49757 (10020118)		
466715.52	3808332.51	1.47516 (10020118)	466771.50
3808332.51	1.44561 (10020118)		
466827.48	3808332.51	1.41831 (10020118)	466883.46
3808332.51	1.38992 (10020118)		
465763.86	3808398.73	2.76901 (09030119)	465819.84
3808398.73	2.83463 (09030119)		
465875.82	3808398.73	2.79338 (09030119)	465931.80
3808398.73	2.67518 (09030119)		
465987.78	3808398.73	2.58024 (09030119)	466043.76
3808398.73	2.45870 (09030119)		
466099.74	3808398.73	2.38568 (09030119)	466155.72
3808398.73	2.26098 (09030119)		
466211.70	3808398.73	2.13936 (09030119)	466267.68
3808398.73	2.12083 (09030119)		
466323.66	3808398.73	1.94312 (09030119)	466379.64
3808398.73	1.73485 (09030119)		
466435.62	3808398.73	1.66301 (09030119)	466491.60
3808398.73	1.57358 (10020118)		
466547.58	3808398.73	1.55351 (10020118)	466603.56
3808398.73	1.52742 (10020118)		
466659.54	3808398.73	1.50111 (10020118)	466715.52
3808398.73	1.46894 (10020118)		
466771.50	3808398.73	1.43776 (10020118)	466827.48
3808398.73	1.40698 (10020118)		
466883.46	3808398.73	1.37532 (10020118)	465763.86

3808464.95	2.75267	(09030119)		
465819.84	3808464.95	2.78341	(09030119)	465875.82
3808464.95	2.68275	(09030119)		
465931.80	3808464.95	2.55505	(09030119)	465987.78
3808464.95	2.51979	(09030119)		
466043.76	3808464.95	2.45886	(09030119)	466099.74
3808464.95	2.32741	(09030119)		
466155.72	3808464.95	2.18832	(09030119)	466211.70
3808464.95	2.01283	(09030119)		
466267.68	3808464.95	1.97019	(09030119)	466323.66
3808464.95	1.75349	(09030119)		
466379.64	3808464.95	1.67845	(09030119)	466435.62
3808464.95	1.60987	(10020118)		
466491.60	3808464.95	1.58754	(10020118)	466547.58
3808464.95	1.55631	(10020118)		
466603.56	3808464.95	1.52653	(10020118)	466659.54
3808464.95	1.49379	(10020118)		
466715.52	3808464.95	1.45584	(10020118)	466771.50
3808464.95	1.42285	(10020118)		
466827.48	3808464.95	1.38901	(10020118)	466883.46
3808464.95	1.35440	(10020118)		
465763.86	3808531.17	2.86139	(09030119)	465819.84
3808531.17	2.75546	(09030119)		
465875.82	3808531.17	2.61033	(09030119)	465931.80
3808531.17	2.49339	(09030119)		
465987.78	3808531.17	2.47003	(09030119)	466043.76
3808531.17	2.35003	(09030119)		
466099.74	3808531.17	2.24590	(09030119)	466155.72
3808531.17	2.06117	(09030119)		
466211.70	3808531.17	1.84113	(09030119)	466267.68
3808531.17	1.77122	(09030119)		
466323.66	3808531.17	1.66321	(10020118)	466379.64
3808531.17	1.64543	(10020118)		
466435.62	3808531.17	1.62219	(10020118)	466491.60
3808531.17	1.58382	(10020118)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 597

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746

, L0006747 , L0006748 , L0006749 ,
 , L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466547.58	3808531.17	1.55150	(10020118)	466603.56
3808531.17	1.50991	(10020118)		
466659.54	3808531.17	1.47274	(10020118)	466715.52
3808531.17	1.43742	(10020118)		
466771.50	3808531.17	1.40120	(10020118)	466827.48
3808531.17	1.36452	(10020118)		
466883.46	3808531.17	1.32711	(10020118)	465763.86
3808597.39	2.81724	(09030119)		
465819.84	3808597.39	2.76343	(09030119)	465875.82
3808597.39	2.63241	(09030119)		
465931.80	3808597.39	2.41814	(09030119)	465987.78
3808597.39	2.34103	(09030119)		
466043.76	3808597.39	2.28842	(09030119)	466099.74
3808597.39	2.09779	(09030119)		
466155.72	3808597.39	1.88608	(09030119)	466211.70
3808597.39	1.78629	(09030119)		
466267.68	3808597.39	1.70031	(10020118)	466323.66
3808597.39	1.67571	(10020118)		
466379.64	3808597.39	1.65463	(10020118)	466435.62
3808597.39	1.61266	(10020118)		
466491.60	3808597.39	1.57566	(10020118)	466547.58
3808597.39	1.54055	(10020118)		
466603.56	3808597.39	1.48890	(10020118)	466659.54
3808597.39	1.45111	(10020118)		
466715.52	3808597.39	1.41265	(10020118)	466771.50
3808597.39	1.37356	(10020118)		
466827.48	3808597.39	1.33393	(10020118)	466883.46
3808597.39	1.29416	(10020118)		
465763.86	3808663.61	2.74564	(09030119)	465819.84
3808663.61	2.72668	(09030119)		
465875.82	3808663.61	2.63310	(09030119)	465931.80
3808663.61	2.47108	(09030119)		
465987.78	3808663.61	2.32694	(09030119)	466043.76
3808663.61	2.13004	(09030119)		
466099.74	3808663.61	1.93232	(09030119)	466155.72
3808663.61	1.79306	(09030119)		

466211.70	3808663.61	1.73343	(10020118)	466267.68
3808663.61	1.70655	(10020118)		
466323.66	3808663.61	1.67686	(10020118)	466379.64
3808663.61	1.63561	(10020118)		
466435.62	3808663.61	1.59968	(10020118)	466491.60
3808663.61	1.55667	(10020118)		
466547.58	3808663.61	1.50370	(10020118)	466603.56
3808663.61	1.46344	(10020118)		
466659.54	3808663.61	1.42254	(10020118)	466715.52
3808663.61	1.38117	(10020118)		
466771.50	3808663.61	1.33935	(10020118)	466827.48
3808663.61	1.29765	(10020118)		
466883.46	3808663.61	1.25518	(10020118)	465763.86
3808729.83	2.80418	(09030119)		
465819.84	3808729.83	2.83629	(09030119)	465875.82
3808729.83	2.70683	(09030119)		
465931.80	3808729.83	2.47797	(09030119)	465987.78
3808729.83	2.23761	(09030119)		
466043.76	3808729.83	1.97624	(09030119)	466099.74
3808729.83	1.80121	(10020118)		
466155.72	3808729.83	1.76946	(10020118)	466211.70
3808729.83	1.72660	(10020118)		
466267.68	3808729.83	1.69149	(10020118)	466323.66
3808729.83	1.65615	(10020118)		
466379.64	3808729.83	1.61886	(10020118)	466435.62
3808729.83	1.56092	(10020118)		
466491.60	3808729.83	1.51758	(10020118)	466547.58
3808729.83	1.47482	(10020118)		
466603.56	3808729.83	1.43149	(10020118)	466659.54
3808729.83	1.38841	(10020118)		
466715.52	3808729.83	1.34426	(10020118)	466771.50
3808729.83	1.29991	(10020118)		
466827.48	3808729.83	1.25565	(10020118)	466883.46
3808729.83	1.21116	(10020118)		
465763.86	3808796.05	2.70355	(09030119)	465819.84
3808796.05	2.87145	(09030119)		
465875.82	3808796.05	2.58742	(09030119)	465931.80
3808796.05	2.40921	(09030119)		
465987.78	3808796.05	2.17382	(09030119)	466043.76
3808796.05	1.91264	(09030119)		
466099.74	3808796.05	1.81902	(10020118)	466155.72
3808796.05	1.78160	(10020118)		
466211.70	3808796.05	1.72772	(10020118)	466267.68
3808796.05	1.67954	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466323.66	3808796.05	1.62329	(10020118)	466379.64
3808796.05	1.57475	(10020118)		
466435.62	3808796.05	1.53046	(10020118)	466491.60
3808796.05	1.48514	(10020118)		
466547.58	3808796.05	1.43941	(10020118)	466603.56
3808796.05	1.39369	(10020118)		
466659.54	3808796.05	1.34728	(10020118)	466715.52
3808796.05	1.30092	(10020118)		
466771.50	3808796.05	1.25441	(10020118)	466827.48
3808796.05	1.20792	(10020118)		
466883.46	3808796.05	1.16206	(10020118)	465763.86
3808862.27	2.36120	(09030119)		
465819.84	3808862.27	2.39504	(09030119)	465875.82
3808862.27	2.36904	(09030119)		
465931.80	3808862.27	2.19244	(09030119)	465987.78
3808862.27	1.94334	(09030119)		
466043.76	3808862.27	1.86283	(10020118)	466099.74
3808862.27	1.81891	(10020118)		
466155.72	3808862.27	1.75581	(10020118)	466211.70
3808862.27	1.70195	(10020118)		
466267.68	3808862.27	1.64189	(10020118)	466323.66
3808862.27	1.58936	(10020118)		
466379.64	3808862.27	1.54215	(10020118)	466435.62
3808862.27	1.49436	(10020118)		
466491.60	3808862.27	1.44619	(10020118)	466547.58
3808862.27	1.39779	(10020118)		
466603.56	3808862.27	1.34900	(10020118)	466659.54

3808862.27	1.30062 (10020118)		
466715.52	3808862.27	1.25188 (10020118)	466771.50
3808862.27	1.20349 (10020118)		
466827.48	3808862.27	1.16856 (10102019)	466883.46
3808862.27	1.13852 (10102019)		
465763.86	3808928.49	2.00383 (10020118)	465819.84
3808928.49	1.96984 (10020118)		
465875.82	3808928.49	1.94771 (10020118)	465931.80
3808928.49	1.92742 (10020118)		
465987.78	3808928.49	1.89810 (10020118)	466043.76
3808928.49	1.86752 (10020118)		
466099.74	3808928.49	1.78942 (10020118)	466155.72
3808928.49	1.73286 (10020118)		
466211.70	3808928.49	1.65983 (10020118)	466267.68
3808928.49	1.60310 (10020118)		
466323.66	3808928.49	1.55278 (10020118)	466379.64
3808928.49	1.50205 (10020118)		
466435.62	3808928.49	1.45145 (10020118)	466491.60
3808928.49	1.40056 (10020118)		
466547.58	3808928.49	1.34944 (10020118)	466603.56
3808928.49	1.29889 (10020118)		
466659.54	3808928.49	1.24801 (10020118)	466715.52
3808928.49	1.20702 (10102019)		
466771.50	3808928.49	1.17500 (10102019)	466827.48
3808928.49	1.14341 (10102019)		
466883.46	3808928.49	1.11142 (10102019)	465763.86
3808994.71	2.00667 (10020118)		
465819.84	3808994.71	1.96500 (10020118)	465875.82
3808994.71	1.92395 (10020118)		
465931.80	3808994.71	1.89198 (10020118)	465987.78
3808994.71	1.90000 (10020118)		
466043.76	3808994.71	1.84560 (10020118)	466099.74
3808994.71	1.76299 (10020118)		
466155.72	3808994.71	1.67412 (10020118)	466211.70
3808994.71	1.61598 (10020118)		
466267.68	3808994.71	1.56281 (10020118)	466323.66
3808994.71	1.50932 (10020118)		
466379.64	3808994.71	1.45562 (10020118)	466435.62
3808994.71	1.40187 (10020118)		
466491.60	3808994.71	1.34855 (10020118)	466547.58
3808994.71	1.29569 (10020118)		
466603.56	3808994.71	1.24781 (10102019)	466659.54
3808994.71	1.21387 (10102019)		
466715.52	3808994.71	1.18084 (10102019)	466771.50
3808994.71	1.14688 (10102019)		
466827.48	3808994.71	1.11305 (10102019)	466883.46
3808994.71	1.07990 (10102019)		
465763.86	3809060.93	2.00706 (10020118)	465819.84
3809060.93	1.96479 (10020118)		
465875.82	3809060.93	1.91423 (10020118)	465931.80

3809060.93 1.87085 (10020118)
465987.78 3809060.93 1.82792 (10020118) 466043.76

3809060.93 1.78521 (10020118)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 599

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	1.68674	(10020118)	466155.72
3809060.93	1.62780 (10020118)			
466211.70	3809060.93	1.57145	(10020118)	466267.68
3809060.93	1.51507 (10020118)			
466323.66	3809060.93	1.45856	(10020118)	466379.64
3809060.93	1.40211 (10020118)			
466435.62	3809060.93	1.34640	(10020118)	466491.60
3809060.93	1.29110 (10102019)			
466547.58	3809060.93	1.25517	(10102019)	466603.56
3809060.93	1.21958 (10102019)			
466659.54	3809060.93	1.18454	(10102019)	466715.52
3809060.93	1.14878 (10102019)			
466771.50	3809060.93	1.11332	(10102019)	466827.48
3809060.93	1.07833 (10102019)			
466883.46	3809060.93	1.04378	(10102019)	465763.86
3809127.15	2.05293 (10020118)			
465819.84	3809127.15	2.00988	(10020118)	465875.82
3809127.15	1.93217 (10020118)			

465931.80	3809127.15	1.88320	(10020118)	465987.78
3809127.15	1.80635	(10020118)		
466043.76	3809127.15	1.69751	(10020118)	466099.74
3809127.15	1.63765	(10020118)		
466155.72	3809127.15	1.57803	(10020118)	466211.70
3809127.15	1.51969	(10020118)		
466267.68	3809127.15	1.46070	(10020118)	466323.66
3809127.15	1.40167	(10020118)		
466379.64	3809127.15	1.34274	(10020118)	466435.62
3809127.15	1.29940	(10102019)		
466491.60	3809127.15	1.26156	(10102019)	466547.58
3809127.15	1.22393	(10102019)		
466603.56	3809127.15	1.18665	(10102019)	466659.54
3809127.15	1.14909	(10102019)		
466715.52	3809127.15	1.11212	(10102019)	466771.50
3809127.15	1.07541	(10102019)		
466827.48	3809127.15	1.03895	(10102019)	466883.46
3809127.15	1.00341	(10102019)		
465763.86	3809193.37	2.08164	(10020118)	465819.84
3809193.37	2.05995	(10020118)		
465875.82	3809193.37	2.00399	(10020118)	465931.80
3809193.37	1.88629	(10020118)		
465987.78	3809193.37	1.72061	(10020118)	466043.76
3809193.37	1.64649	(10020118)		
466099.74	3809193.37	1.58418	(10020118)	466155.72
3809193.37	1.52140	(10020118)		
466211.70	3809193.37	1.45979	(10020118)	466267.68
3809193.37	1.39855	(10020118)		
466323.66	3809193.37	1.34687	(10102019)	466379.64
3809193.37	1.30693	(10102019)		
466435.62	3809193.37	1.26665	(10102019)	466491.60
3809193.37	1.22683	(10102019)		
466547.58	3809193.37	1.18731	(10102019)	466603.56
3809193.37	1.14844	(10102019)		
466659.54	3809193.37	1.10939	(10102019)	466715.52
3809193.37	1.07126	(10102019)		
466771.50	3809193.37	1.03321	(10102019)	466827.48
3809193.37	0.99607	(10102019)		
466883.46	3809193.37	0.95938	(10102019)	465763.86
3809259.59	2.08018	(10020118)		
465819.84	3809259.59	1.97399	(10020118)	465875.82
3809259.59	1.90151	(10020118)		
465931.80	3809259.59	1.79770	(10020118)	465987.78
3809259.59	1.65707	(10020118)		
466043.76	3809259.59	1.58965	(10020118)	466099.74
3809259.59	1.52274	(10020118)		
466155.72	3809259.59	1.45802	(10020118)	466211.70
3809259.59	1.39682	(10102019)		
466267.68	3809259.59	1.35490	(10102019)	466323.66
3809259.59	1.31206	(10102019)		

466379.64	3809259.59	1.26994	(10102019)	466435.62
3809259.59	1.22822	(10102019)		
466491.60	3809259.59	1.18648	(10102019)	466547.58
3809259.59	1.14577	(10102019)		
466603.56	3809259.59	1.10508	(10102019)	466659.54
3809259.59	1.06501	(10102019)		
466715.52	3809259.59	1.02613	(10102019)	466771.50
3809259.59	0.98724	(10102019)		
466827.48	3809259.59	0.94940	(10102019)	466883.46
3809259.59	0.93506	(09010519)		
464503.41	3807141.91	5.56325	(09121017)	464523.41
3807141.91	5.62529	(09121017)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 600

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464543.41	3807141.91	5.65101	(09121017)	464563.41
3807141.91	5.65511	(09121017)		
464583.41	3807141.91	5.80148	(09031218)	464603.41
3807141.91	5.92842	(09031218)		
464623.41	3807141.91	6.03847	(09031218)	464643.41
3807141.91	6.14216	(09031218)		
464663.41	3807141.91	6.22515	(09031218)	464683.41
3807141.91	6.29193	(09031218)		
464703.41	3807141.91	6.35243	(09031218)	464723.41

3807141.91	6.39000	(09031218)	
464743.41	3807141.91	6.40890	(09031218) 464763.41
3807141.91	6.41629	(09031218)	
464783.41	3807141.91	6.40714	(09031218) 464803.41
3807141.91	6.38520	(09031218)	
464823.41	3807141.91	6.36401	(09031218) 464843.41
3807141.91	6.31879	(09031218)	
464863.41	3807141.91	6.25546	(09031218) 464883.41
3807141.91	6.18340	(09031218)	
464903.41	3807141.91	6.10952	(09031218) 464923.41
3807141.91	6.02622	(09031218)	
464503.41	3807161.91	5.60622	(09121017) 464523.41
3807161.91	5.66164	(09121017)	
464543.41	3807161.91	5.68007	(09121017) 464563.41
3807161.91	5.74714	(09031218)	
464583.41	3807161.91	5.89188	(09031218) 464603.41
3807161.91	6.02024	(09031218)	
464623.41	3807161.91	6.13098	(09031218) 464643.41
3807161.91	6.21771	(09031218)	
464663.41	3807161.91	6.29775	(09031218) 464683.41
3807161.91	6.36492	(09031218)	
464703.41	3807161.91	6.40795	(09031218) 464723.41
3807161.91	6.43454	(09031218)	
464743.41	3807161.91	6.44829	(09031218) 464763.41
3807161.91	6.46162	(09031218)	
464783.41	3807161.91	6.44991	(09031218) 464803.41
3807161.91	6.41963	(09031218)	
464823.41	3807161.91	6.37784	(09031218) 464843.41
3807161.91	6.32081	(09031218)	
464863.41	3807161.91	6.25336	(09031218) 464883.41
3807161.91	6.19086	(09031218)	
464903.41	3807161.91	6.10528	(09031218) 464923.41
3807161.91	6.00579	(09031218)	
464503.41	3807181.91	5.66768	(09121017) 464523.41
3807181.91	5.70035	(09121017)	
464543.41	3807181.91	5.71707	(09121017) 464563.41
3807181.91	5.85354	(09031218)	
464583.41	3807181.91	5.98304	(09031218) 464603.41
3807181.91	6.10394	(09031218)	
464623.41	3807181.91	6.20994	(09031218) 464643.41
3807181.91	6.28752	(09031218)	
464663.41	3807181.91	6.36175	(09031218) 464683.41
3807181.91	6.42382	(09031218)	
464703.41	3807181.91	6.45731	(09031218) 464723.41
3807181.91	6.48241	(09031218)	
464743.41	3807181.91	6.49607	(09031218) 464763.41
3807181.91	6.49525	(09031218)	
464783.41	3807181.91	6.47424	(09031218) 464803.41
3807181.91	6.43815	(09031218)	
464823.41	3807181.91	6.39805	(09031218) 464843.41

3807181.91	6.33773	(09031218)		
464863.41	3807181.91	6.26240	(09031218)	464883.41
3807181.91	6.18453	(09031218)		
464903.41	3807181.91	6.09605	(09031218)	464923.41
3807181.91	5.99677	(09031218)		
464503.41	3807201.91	5.72442	(09121017)	464523.41
3807201.91	5.73525	(09121017)		
464543.41	3807201.91	5.81255	(09031218)	464563.41
3807201.91	5.95704	(09031218)		
464583.41	3807201.91	6.07540	(09031218)	464603.41
3807201.91	6.18634	(09031218)		
464623.41	3807201.91	6.28370	(09031218)	464643.41
3807201.91	6.35757	(09031218)		
464663.41	3807201.91	6.42401	(09031218)	464683.41
3807201.91	6.47709	(09031218)		
464703.41	3807201.91	6.50669	(09031218)	464723.41
3807201.91	6.52957	(09031218)		
464743.41	3807201.91	6.53918	(09031218)	464763.41
3807201.91	6.52226	(09031218)		
464783.41	3807201.91	6.49376	(09031218)	464803.41
3807201.91	6.45514	(09031218)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 601

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -
 - - - - -

464823.41	3807201.91	6.41430	(09031218)	464843.41
3807201.91	6.35253	(09031218)		
464863.41	3807201.91	6.27324	(09031218)	464883.41
3807201.91	6.17807	(09031218)		
464903.41	3807201.91	6.08430	(09031218)	464923.41
3807201.91	5.98347	(09031218)		
464503.41	3807221.91	5.75936	(09121017)	464523.41
3807221.91	5.76239	(09121017)		
464543.41	3807221.91	5.90812	(09031218)	464563.41
3807221.91	6.04903	(09031218)		
464583.41	3807221.91	6.17279	(09031218)	464603.41
3807221.91	6.27303	(09031218)		
464623.41	3807221.91	6.35608	(09031218)	464643.41
3807221.91	6.43500	(09031218)		
464663.41	3807221.91	6.49035	(09031218)	464683.41
3807221.91	6.52864	(09031218)		
464703.41	3807221.91	6.56361	(09031218)	464723.41
3807221.91	6.57519	(09031218)		
464743.41	3807221.91	6.56729	(09031218)	464763.41
3807221.91	6.54274	(09031218)		
464783.41	3807221.91	6.51673	(09031218)	464803.41
3807221.91	6.48075	(09031218)		
464823.41	3807221.91	6.41910	(09031218)	464843.41
3807221.91	6.35577	(09031218)		
464863.41	3807221.91	6.28212	(09031218)	464883.41
3807221.91	6.18134	(09031218)		
464903.41	3807221.91	6.07149	(09031218)	464923.41
3807221.91	5.95453	(09031218)		
464503.41	3807241.91	5.79394	(09121017)	464523.41
3807241.91	5.86900	(09031218)		
464543.41	3807241.91	6.00972	(09031218)	464563.41
3807241.91	6.13663	(09031218)		
464583.41	3807241.91	6.25664	(09031218)	464603.41
3807241.91	6.34925	(09031218)		
464623.41	3807241.91	6.42348	(09031218)	464643.41
3807241.91	6.49831	(09031218)		
464663.41	3807241.91	6.55227	(09031218)	464683.41
3807241.91	6.58824	(09031218)		
464703.41	3807241.91	6.60910	(09031218)	464723.41
3807241.91	6.60925	(09031218)		
464743.41	3807241.91	6.59358	(09031218)	464763.41
3807241.91	6.57295	(09031218)		
464783.41	3807241.91	6.53826	(09031218)	464803.41
3807241.91	6.49017	(09031218)		
464823.41	3807241.91	6.43037	(09031218)	464843.41
3807241.91	6.35766	(09031218)		
464863.41	3807241.91	6.27081	(09031218)	464883.41
3807241.91	6.16355	(09031218)		
464903.41	3807241.91	6.05368	(09031218)	464923.41
3807241.91	5.93718	(09031218)		

464503.41	3807261.91	5.82491	(09121017)	464523.41
3807261.91	5.97700	(09031218)		
464543.41	3807261.91	6.10832	(09031218)	464563.41
3807261.91	6.22116	(09031218)		
464583.41	3807261.91	6.33499	(09031218)	464603.41
3807261.91	6.42309	(09031218)		
464623.41	3807261.91	6.49269	(09031218)	464643.41
3807261.91	6.55677	(09031218)		
464663.41	3807261.91	6.60858	(09031218)	464683.41
3807261.91	6.64322	(09031218)		
464703.41	3807261.91	6.64805	(09031218)	464723.41
3807261.91	6.64045	(09031218)		
464743.41	3807261.91	6.62188	(09031218)	464763.41
3807261.91	6.60011	(09031218)		
464783.41	3807261.91	6.55675	(09031218)	464803.41
3807261.91	6.49805	(09031218)		
464823.41	3807261.91	6.43763	(09031218)	464843.41
3807261.91	6.35657	(09031218)		
464863.41	3807261.91	6.25837	(09031218)	464883.41
3807261.91	6.14480	(09031218)		
464903.41	3807261.91	6.03661	(09031218)	464923.41
3807261.91	5.92190	(09031218)		
464503.41	3807281.91	5.91861	(09031218)	464523.41
3807281.91	6.07228	(09031218)		
464543.41	3807281.91	6.19698	(09031218)	464563.41
3807281.91	6.30271	(09031218)		
464583.41	3807281.91	6.41020	(09031218)	464603.41
3807281.91	6.50007	(09031218)		
464623.41	3807281.91	6.57101	(09031218)	464643.41
3807281.91	6.61516	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 602

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464663.41	3807281.91	6.65575	(09031218)	464683.41
3807281.91	6.68359	(09031218)		
464703.41	3807281.91	6.68050	(09031218)	464723.41
3807281.91	6.67490	(09031218)		
464743.41	3807281.91	6.65852	(09031218)	464763.41
3807281.91	6.61589	(09031218)		
464783.41	3807281.91	6.57056	(09031218)	464803.41
3807281.91	6.51467	(09031218)		
464823.41	3807281.91	6.43329	(09031218)	464843.41
3807281.91	6.35082	(09031218)		
464863.41	3807281.91	6.25854	(09031218)	464883.41
3807281.91	6.13951	(09031218)		
464903.41	3807281.91	6.02541	(09031218)	464923.41
3807281.91	5.90491	(09031218)		
464503.41	3807301.91	6.03208	(09031218)	464523.41
3807301.91	6.16863	(09031218)		
464543.41	3807301.91	6.29024	(09031218)	464563.41
3807301.91	6.39621	(09031218)		
464583.41	3807301.91	6.48590	(09031218)	464603.41
3807301.91	6.56715	(09031218)		
464623.41	3807301.91	6.63288	(09031218)	464643.41
3807301.91	6.66660	(09031218)		
464663.41	3807301.91	6.69920	(09031218)	464683.41
3807301.91	6.72019	(09031218)		
464703.41	3807301.91	6.70914	(09031218)	464723.41
3807301.91	6.69847	(09031218)		
464743.41	3807301.91	6.67915	(09031218)	464763.41
3807301.91	6.63792	(09031218)		
464783.41	3807301.91	6.58292	(09031218)	464803.41
3807301.91	6.51288	(09031218)		
464823.41	3807301.91	6.42147	(09031218)	464843.41
3807301.91	6.33382	(09031218)		
464863.41	3807301.91	6.24033	(09031218)	464883.41
3807301.91	6.12721	(09031218)		
464903.41	3807301.91	6.00331	(09031218)	464923.41
3807301.91	5.87870	(09120417)		
464503.41	3807321.91	6.14181	(09031218)	464523.41
3807321.91	6.26183	(09031218)		
464543.41	3807321.91	6.38004	(09031218)	464563.41
3807321.91	6.48547	(09031218)		
464583.41	3807321.91	6.55793	(09031218)	464603.41

3807321.91	6.62898	(09031218)		
464623.41	3807321.91	6.68777	(09031218)	464643.41
3807321.91	6.71340	(09031218)		
464663.41	3807321.91	6.73886	(09031218)	464683.41
3807321.91	6.75362	(09031218)		
464703.41	3807321.91	6.73917	(09031218)	464723.41
3807321.91	6.72012	(09031218)		
464743.41	3807321.91	6.69214	(09031218)	464763.41
3807321.91	6.65458	(09031218)		
464783.41	3807321.91	6.58922	(09031218)	464803.41
3807321.91	6.50420	(09031218)		
464823.41	3807321.91	6.41046	(09031218)	464843.41
3807321.91	6.31843	(09031218)		
464863.41	3807321.91	6.22010	(09031218)	464883.41
3807321.91	6.10723	(09031218)		
464903.41	3807321.91	5.97261	(09031218)	464923.41
3807321.91	5.84488	(09120417)		
464503.41	3807341.91	6.23642	(09031218)	464523.41
3807341.91	6.34901	(09031218)		
464543.41	3807341.91	6.46032	(09031218)	464563.41
3807341.91	6.55890	(09031218)		
464583.41	3807341.91	6.62332	(09031218)	464603.41
3807341.91	6.68716	(09031218)		
464623.41	3807341.91	6.73893	(09031218)	464643.41
3807341.91	6.75638	(09031218)		
464663.41	3807341.91	6.77464	(09031218)	464683.41
3807341.91	6.78533	(09031218)		
464703.41	3807341.91	6.77903	(09031218)	464723.41
3807341.91	6.74747	(09031218)		
464743.41	3807341.91	6.69963	(09031218)	464763.41
3807341.91	6.65580	(09031218)		
464783.41	3807341.91	6.58337	(09031218)	464803.41
3807341.91	6.49403	(09031218)		
464823.41	3807341.91	6.41009	(09031218)	464843.41
3807341.91	6.31622	(09031218)		
464863.41	3807341.91	6.20913	(09031218)	464883.41
3807341.91	6.07557	(09031218)		
464903.41	3807341.91	5.92991	(09031218)	464923.41
3807341.91	5.81219	(09120417)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 603

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730

```

, L0006731      , L0006732      , L0006733      ,
                  L0006734      , L0006735      , L0006736      , L0006737      , L0006738
, L0006739      , L0006740      , L0006741      ,
                  L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006747      , L0006748      , L0006749      ,
                  L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464503.41	3807361.91	6.33012	(09031218)	464523.41
3807361.91	6.44707	(09031218)		
464543.41	3807361.91	6.54720	(09031218)	464563.41
3807361.91	6.62883	(09031218)		
464583.41	3807361.91	6.68506	(09031218)	464603.41
3807361.91	6.74158	(09031218)		
464623.41	3807361.91	6.78841	(09031218)	464643.41
3807361.91	6.81069	(09031218)		
464663.41	3807361.91	6.81733	(09031218)	464683.41
3807361.91	6.81084	(09031218)		
464703.41	3807361.91	6.80096	(09031218)	464723.41
3807361.91	6.76957	(09031218)		
464743.41	3807361.91	6.72045	(09031218)	464763.41
3807361.91	6.65746	(09031218)		
464783.41	3807361.91	6.58248	(09031218)	464803.41
3807361.91	6.49776	(09031218)		
464823.41	3807361.91	6.40999	(09031218)	464843.41
3807361.91	6.30291	(09031218)		
464863.41	3807361.91	6.17938	(09031218)	464883.41
3807361.91	6.03658	(09031218)		
464903.41	3807361.91	5.90369	(09120417)	464923.41
3807361.91	5.80411	(09120417)		
464503.41	3807381.91	6.42672	(09031218)	464523.41
3807381.91	6.54247	(09031218)		
464543.41	3807381.91	6.63026	(09031218)	464563.41
3807381.91	6.69585	(09031218)		
464583.41	3807381.91	6.74878	(09031218)	464603.41
3807381.91	6.79638	(09031218)		
464623.41	3807381.91	6.83384	(09031218)	464643.41
3807381.91	6.86046	(09031218)		
464663.41	3807381.91	6.85905	(09031218)	464683.41
3807381.91	6.83894	(09031218)		

464703.41	3807381.91	6.81706	(09031218)	464723.41
3807381.91	6.78493	(09031218)		
464743.41	3807381.91	6.73701	(09031218)	464763.41
3807381.91	6.66042	(09031218)		
464783.41	3807381.91	6.58130	(09031218)	464803.41
3807381.91	6.49507	(09031218)		
464823.41	3807381.91	6.40117	(09031218)	464843.41
3807381.91	6.28083	(09031218)		
464863.41	3807381.91	6.14288	(09031218)	464883.41
3807381.91	5.99876	(09031218)		
464903.41	3807381.91	5.88751	(09120417)	464923.41
3807381.91	5.79027	(09120417)		
464503.41	3807401.91	6.53266	(09031218)	464523.41
3807401.91	6.62647	(09031218)		
464543.41	3807401.91	6.70118	(09031218)	464563.41
3807401.91	6.76149	(09031218)		
464583.41	3807401.91	6.82371	(09031218)	464603.41
3807401.91	6.85779	(09031218)		
464623.41	3807401.91	6.87352	(09031218)	464643.41
3807401.91	6.89329	(09031218)		
464663.41	3807401.91	6.89574	(09031218)	464683.41
3807401.91	6.87919	(09031218)		
464703.41	3807401.91	6.83358	(09031218)	464723.41
3807401.91	6.78907	(09031218)		
464743.41	3807401.91	6.73755	(09031218)	464763.41
3807401.91	6.67032	(09031218)		
464783.41	3807401.91	6.57881	(09031218)	464803.41
3807401.91	6.47273	(09031218)		
464823.41	3807401.91	6.37316	(09031218)	464843.41
3807401.91	6.24652	(09031218)		
464863.41	3807401.91	6.10520	(09031218)	464883.41
3807401.91	5.97902	(09120417)		
464903.41	3807401.91	5.87191	(09120417)	464923.41
3807401.91	5.74909	(09120417)		
464503.41	3807421.91	6.62040	(09031218)	464523.41
3807421.91	6.70311	(09031218)		
464543.41	3807421.91	6.77741	(09031218)	464563.41
3807421.91	6.83904	(09031218)		
464583.41	3807421.91	6.88389	(09031218)	464603.41
3807421.91	6.91376	(09031218)		
464623.41	3807421.91	6.92825	(09031218)	464643.41
3807421.91	6.92688	(09031218)		
464663.41	3807421.91	6.91996	(09031218)	464683.41
3807421.91	6.90092	(09031218)		
464703.41	3807421.91	6.85794	(09031218)	464723.41
3807421.91	6.80064	(09031218)		
464743.41	3807421.91	6.73175	(09031218)	464763.41
3807421.91	6.66152	(09031218)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 604

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***
INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464783.41	3807421.91	6.57102	(09031218)	464803.41
3807421.91	6.46441	(09031218)		
464823.41	3807421.91	6.34591	(09031218)	464843.41
3807421.91	6.21760	(09031218)		
464863.41	3807421.91	6.07939	(09031218)	464883.41
3807421.91	5.95586	(09120417)		
464903.41	3807421.91	5.84923	(09120417)	464923.41
3807421.91	5.73201	(09120417)		
464503.41	3807441.91	6.70151	(09031218)	464523.41
3807441.91	6.78068	(09031218)		
464543.41	3807441.91	6.85352	(09031218)	464563.41
3807441.91	6.91198	(09031218)		
464583.41	3807441.91	6.94193	(09031218)	464603.41
3807441.91	6.96692	(09031218)		
464623.41	3807441.91	6.97858	(09031218)	464643.41
3807441.91	6.96218	(09031218)		
464663.41	3807441.91	6.94237	(09031218)	464683.41
3807441.91	6.91403	(09031218)		
464703.41	3807441.91	6.87640	(09031218)	464723.41
3807441.91	6.81131	(09031218)		
464743.41	3807441.91	6.72886	(09031218)	464763.41
3807441.91	6.64685	(09031218)		
464783.41	3807441.91	6.55640	(09031218)	464803.41

3807441.91	6.45115	(09031218)		
464823.41	3807441.91	6.31461	(09031218)	464843.41
3807441.91	6.18456	(09031218)		
464863.41	3807441.91	6.04850	(09031218)	464883.41
3807441.91	5.92135	(09120417)		
464903.41	3807441.91	5.81673	(09120417)	464923.41
3807441.91	5.70772	(09120417)		
464503.41	3807461.91	6.78128	(09031218)	464523.41
3807461.91	6.86919	(09031218)		
464543.41	3807461.91	6.92842	(09031218)	464563.41
3807461.91	6.96810	(09031218)		
464583.41	3807461.91	7.00762	(09031218)	464603.41
3807461.91	7.01881	(09031218)		
464623.41	3807461.91	7.01134	(09031218)	464643.41
3807461.91	7.00553	(09031218)		
464663.41	3807461.91	6.97192	(09031218)	464683.41
3807461.91	6.92115	(09031218)		
464703.41	3807461.91	6.87702	(09031218)	464723.41
3807461.91	6.81680	(09031218)		
464743.41	3807461.91	6.73884	(09031218)	464763.41
3807461.91	6.63287	(09031218)		
464783.41	3807461.91	6.53041	(09031218)	464803.41
3807461.91	6.41926	(09031218)		
464823.41	3807461.91	6.27603	(09031218)	464843.41
3807461.91	6.14039	(09031218)		
464863.41	3807461.91	6.00838	(09120417)	464883.41
3807461.91	5.87674	(09120417)		
464903.41	3807461.91	5.76677	(09120417)	464923.41
3807461.91	5.65985	(09011918)		
464503.41	3807481.91	6.85480	(09031218)	464523.41
3807481.91	6.93870	(09031218)		
464543.41	3807481.91	6.99791	(09031218)	464563.41
3807481.91	7.03635	(09031218)		
464583.41	3807481.91	7.05809	(09031218)	464603.41
3807481.91	7.06507	(09031218)		
464623.41	3807481.91	7.05688	(09031218)	464643.41
3807481.91	7.03309	(09031218)		
464663.41	3807481.91	6.99572	(09031218)	464683.41
3807481.91	6.94438	(09031218)		
464703.41	3807481.91	6.87864	(09031218)	464723.41
3807481.91	6.80936	(09031218)		
464743.41	3807481.91	6.72721	(09031218)	464763.41
3807481.91	6.61050	(09031218)		
464783.41	3807481.91	6.50063	(09031218)	464803.41
3807481.91	6.38365	(09031218)		
464823.41	3807481.91	6.23387	(09031218)	464843.41
3807481.91	6.09276	(09031218)		
464863.41	3807481.91	5.97068	(09120417)	464883.41
3807481.91	5.85832	(09120417)		
464903.41	3807481.91	5.73386	(09120417)	464923.41

```

3807481.91      5.71142 (09011918)
      464503.41  3807501.91      6.93224 (09031218)      464523.41
3807501.91      7.00852 (09031218)
      464543.41  3807501.91      7.06457 (09031218)      464563.41
3807501.91      7.09980 (09031218)
      464583.41  3807501.91      7.10633 (09031218)      464603.41
3807501.91      7.10841 (09031218)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 605

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***
      INCLUDING SOURCE(S):      L0006729      , L0006730
, L0006731      , L0006732      , L0006733      ,
      L0006734      , L0006735      , L0006736      , L0006737      , L0006738
, L0006739      , L0006740      , L0006741      ,
      L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006747      , L0006748      , L0006749      ,
      L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	7.09749	(09031218)	464643.41
3807501.91	7.05844	(09031218)		
464663.41	3807501.91	7.01663	(09031218)	464683.41
3807501.91	6.96306	(09031218)		
464703.41	3807501.91	6.88223	(09031218)	464723.41
3807501.91	6.80026	(09031218)		
464743.41	3807501.91	6.70788	(09031218)	464763.41
3807501.91	6.58958	(09031218)		
464783.41	3807501.91	6.47177	(09031218)	464803.41
3807501.91	6.34521	(09031218)		
464823.41	3807501.91	6.19461	(09031218)	464843.41
3807501.91	6.04636	(09031218)		
464863.41	3807501.91	5.92925	(09120417)	464883.41
3807501.91	5.83399	(09120417)		

464903.41	3807501.91	5.73062	(09011918)	464923.41
3807501.91	5.75856	(09011918)		
464503.41	3807521.91	7.02530	(09031218)	464523.41
3807521.91	7.09326	(09031218)		
464543.41	3807521.91	7.12989	(09031218)	464563.41
3807521.91	7.14589	(09031218)		
464583.41	3807521.91	7.16240	(09031218)	464603.41
3807521.91	7.15045	(09031218)		
464623.41	3807521.91	7.12005	(09031218)	464643.41
3807521.91	7.09208	(09031218)		
464663.41	3807521.91	7.03631	(09031218)	464683.41
3807521.91	6.96328	(09031218)		
464703.41	3807521.91	6.89442	(09031218)	464723.41
3807521.91	6.79877	(09031218)		
464743.41	3807521.91	6.68731	(09031218)	464763.41
3807521.91	6.58163	(09031218)		
464783.41	3807521.91	6.45071	(09031218)	464803.41
3807521.91	6.30579	(09031218)		
464823.41	3807521.91	6.16840	(09031218)	464843.41
3807521.91	6.00791	(09031218)		
464863.41	3807521.91	5.88113	(09120417)	464883.41
3807521.91	5.78059	(09120417)		
464903.41	3807521.91	5.77845	(09011918)	464923.41
3807521.91	5.80001	(09011918)		
464503.41	3807541.91	7.11208	(09031218)	464523.41
3807541.91	7.15869	(09031218)		
464543.41	3807541.91	7.18959	(09031218)	464563.41
3807541.91	7.20443	(09031218)		
464583.41	3807541.91	7.20280	(09031218)	464603.41
3807541.91	7.18671	(09031218)		
464623.41	3807541.91	7.15576	(09031218)	464643.41
3807541.91	7.10954	(09031218)		
464663.41	3807541.91	7.05014	(09031218)	464683.41
3807541.91	6.97716	(09031218)		
464703.41	3807541.91	6.89021	(09031218)	464723.41
3807541.91	6.79148	(09031218)		
464743.41	3807541.91	6.68064	(09031218)	464763.41
3807541.91	6.55738	(09031218)		
464783.41	3807541.91	6.41366	(09031218)	464803.41
3807541.91	6.25993	(09031218)		
464823.41	3807541.91	6.12117	(09031218)	464843.41
3807541.91	5.98402	(09120417)		
464863.41	3807541.91	5.86443	(09120417)	464883.41
3807541.91	5.79830	(09011918)		
464903.41	3807541.91	5.82897	(09011918)	464923.41
3807541.91	5.85244	(09011918)		
464503.41	3807561.91	7.18944	(09031218)	464523.41
3807561.91	7.22069	(09031218)		
464543.41	3807561.91	7.24632	(09031218)	464563.41
3807561.91	7.25802	(09031218)		

464583.41	3807561.91	7.24089	(09031218)	464603.41
3807561.91	7.21998	(09031218)		
464623.41	3807561.91	7.18643	(09031218)	464643.41
3807561.91	7.12477	(09031218)		
464663.41	3807561.91	7.06104	(09031218)	464683.41
3807561.91	6.98599	(09031218)		
464703.41	3807561.91	6.88389	(09031218)	464723.41
3807561.91	6.78137	(09031218)		
464743.41	3807561.91	6.66817	(09031218)	464763.41
3807561.91	6.52465	(09031218)		
464783.41	3807561.91	6.37407	(09031218)	464803.41
3807561.91	6.21835	(09031218)		
464823.41	3807561.91	6.06816	(09031218)	464843.41
3807561.91	5.95117	(09120417)		
464863.41	3807561.91	5.84086	(09120417)	464883.41
3807561.91	5.84653	(09011918)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 606

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464903.41	3807561.91	5.87532	(09011918)	464923.41
3807561.91	5.90134	(09011918)		
464503.41	3807581.91	7.24975	(09031218)	464523.41
3807581.91	7.29025	(09031218)		
464543.41	3807581.91	7.30165	(09031218)	464563.41

3807581.91	7.29370	(09031218)	
464583.41	3807581.91	7.28708	(09031218) 464603.41
3807581.91	7.25193	(09031218)	
464623.41	3807581.91	7.19859	(09031218) 464643.41
3807581.91	7.14853	(09031218)	
464663.41	3807581.91	7.07071	(09031218) 464683.41
3807581.91	6.97605	(09031218)	
464703.41	3807581.91	6.88635	(09031218) 464723.41
3807581.91	6.77016	(09031218)	
464743.41	3807581.91	6.63432	(09031218) 464763.41
3807581.91	6.48391	(09031218)	
464783.41	3807581.91	6.34074	(09031218) 464803.41
3807581.91	6.19224	(09031218)	
464823.41	3807581.91	6.01689	(09031218) 464843.41
3807581.91	5.89965	(09120417)	
464863.41	3807581.91	5.87111	(09011918) 464883.41
3807581.91	5.88736	(09011918)	
464903.41	3807581.91	5.91117	(09011918) 464923.41
3807581.91	5.93577	(09011918)	
464503.41	3807601.91	7.32481	(09031218) 464523.41
3807601.91	7.36003	(09031218)	
464543.41	3807601.91	7.36260	(09031218) 464563.41
3807601.91	7.34224	(09031218)	
464583.41	3807601.91	7.31714	(09031218) 464603.41
3807601.91	7.27795	(09031218)	
464623.41	3807601.91	7.22429	(09031218) 464643.41
3807601.91	7.15574	(09031218)	
464663.41	3807601.91	7.07445	(09031218) 464683.41
3807601.91	6.98006	(09031218)	
464703.41	3807601.91	6.87219	(09031218) 464723.41
3807601.91	6.74257	(09031218)	
464743.41	3807601.91	6.59939	(09031218) 464763.41
3807601.91	6.45856	(09031218)	
464783.41	3807601.91	6.30666	(09031218) 464803.41
3807601.91	6.14487	(09031218)	
464823.41	3807601.91	5.99371	(09120417) 464843.41
3807601.91	5.88739	(09011918)	
464863.41	3807601.91	5.91616	(09011918) 464883.41
3807601.91	5.93860	(09011918)	
464903.41	3807601.91	5.95361	(09011918) 464923.41
3807601.91	5.96394	(09011918)	
464503.41	3807621.91	7.39962	(09031218) 464523.41
3807621.91	7.42174	(09031218)	
464543.41	3807621.91	7.41496	(09031218) 464563.41
3807621.91	7.38569	(09031218)	
464583.41	3807621.91	7.34485	(09031218) 464603.41
3807621.91	7.30094	(09031218)	
464623.41	3807621.91	7.24485	(09031218) 464643.41
3807621.91	7.16071	(09031218)	
464663.41	3807621.91	7.07524	(09031218) 464683.41

3807621.91	6.97810	(09031218)		
464703.41	3807621.91	6.84927	(09031218)	464723.41
3807621.91	6.71220	(09031218)		
464743.41	3807621.91	6.56884	(09031218)	464763.41
3807621.91	6.43011	(09031218)		
464783.41	3807621.91	6.26959	(09031218)	464803.41
3807621.91	6.09679	(09031218)		
464823.41	3807621.91	5.97300	(09120417)	464843.41
3807621.91	5.94369	(09011918)		
464863.41	3807621.91	5.96310	(09011918)	464883.41
3807621.91	5.98713	(09011918)		
464903.41	3807621.91	5.99554	(09011918)	464923.41
3807621.91	5.99506	(09011918)		
464503.41	3807641.91	7.46882	(09031218)	464523.41
3807641.91	7.46679	(09031218)		
464543.41	3807641.91	7.44553	(09031218)	464563.41
3807641.91	7.41068	(09031218)		
464583.41	3807641.91	7.38093	(09031218)	464603.41
3807641.91	7.32262	(09031218)		
464623.41	3807641.91	7.24647	(09031218)	464643.41
3807641.91	7.17444	(09031218)		
464663.41	3807641.91	7.07482	(09031218)	464683.41
3807641.91	6.95434	(09031218)		
464703.41	3807641.91	6.81801	(09031218)	464723.41
3807641.91	6.68810	(09031218)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 607

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)
464743.41	3807641.91	6.55173	(09031218)	464763.41
3807641.91	6.38673 (09031218)			
464783.41	3807641.91	6.22730	(09031218)	464803.41
3807641.91	6.07625 (09120417)			
464823.41	3807641.91	5.96604	(09011918)	464843.41
3807641.91	5.99518 (09011918)			
464863.41	3807641.91	6.01978	(09011918)	464883.41
3807641.91	6.02337 (09011918)			
464903.41	3807641.91	6.03300	(09011918)	464923.41
3807641.91	6.04002 (09011918)			
464503.41	3807661.91	7.53622	(09031218)	464523.41
3807661.91	7.52351 (09031218)			
464543.41	3807661.91	7.49353	(09031218)	464563.41
3807661.91	7.44898 (09031218)			
464583.41	3807661.91	7.40044	(09031218)	464603.41
3807661.91	7.33824 (09031218)			
464623.41	3807661.91	7.26200	(09031218)	464643.41
3807661.91	7.17131 (09031218)			
464663.41	3807661.91	7.06840	(09031218)	464683.41
3807661.91	6.95071 (09031218)			
464703.41	3807661.91	6.80792	(09031218)	464723.41
3807661.91	6.66311 (09031218)			
464743.41	3807661.91	6.51268	(09031218)	464763.41
3807661.91	6.35361 (09031218)			
464783.41	3807661.91	6.18436	(09031218)	464803.41
3807661.91	6.03783 (09120417)			
464823.41	3807661.91	6.02427	(09011918)	464843.41
3807661.91	6.04532 (09011918)			
464863.41	3807661.91	6.05914	(09011918)	464883.41
3807661.91	6.06779 (09011918)			
464903.41	3807661.91	6.06992	(09011918)	464923.41
3807661.91	6.06630 (09011918)			
464503.41	3807681.91	7.60017	(09031218)	464523.41
3807681.91	7.58029 (09031218)			
464543.41	3807681.91	7.54322	(09031218)	464563.41
3807681.91	7.48951 (09031218)			
464583.41	3807681.91	7.41977	(09031218)	464603.41
3807681.91	7.35080 (09031218)			
464623.41	3807681.91	7.27230	(09031218)	464643.41
3807681.91	7.16595 (09031218)			
464663.41	3807681.91	7.05901	(09031218)	464683.41
3807681.91	6.94185 (09031218)			
464703.41	3807681.91	6.79841	(09031218)	464723.41
3807681.91	6.64000 (09031218)			
464743.41	3807681.91	6.47272	(09031218)	464763.41
3807681.91	6.31608 (09031218)			

464783.41	3807681.91	6.14014	(09120417)	464803.41
3807681.91	6.04843	(09011918)		
464823.41	3807681.91	6.07851	(09011918)	464843.41
3807681.91	6.09259	(09011918)		
464863.41	3807681.91	6.09719	(09011918)	464883.41
3807681.91	6.10867	(09011918)		
464903.41	3807681.91	6.10449	(09011918)	464923.41
3807681.91	6.09202	(09011918)		
464523.41	3807701.91	7.63255	(09031218)	464543.41
3807701.91	7.58839	(09031218)		
464563.41	3807701.91	7.52766	(09031218)	464583.41
3807701.91	7.45098	(09031218)		
464603.41	3807701.91	7.36205	(09031218)	464623.41
3807701.91	7.26331	(09031218)		
464643.41	3807701.91	7.16953	(09031218)	464663.41
3807701.91	7.04845	(09031218)		
464683.41	3807701.91	6.91158	(09031218)	464703.41
3807701.91	6.78136	(09031218)		
464723.41	3807701.91	6.62259	(09031218)	464743.41
3807701.91	6.44635	(09031218)		
464763.41	3807701.91	6.26365	(09031218)	464783.41
3807701.91	6.11096	(09120417)		
464803.41	3807701.91	6.11081	(09011918)	464823.41
3807701.91	6.12049	(09011918)		
464843.41	3807701.91	6.13518	(09011918)	464863.41
3807701.91	6.14666	(09011918)		
464883.41	3807701.91	6.13661	(09011918)	464903.41
3807701.91	6.13469	(09011918)		
464923.41	3807701.91	6.13109	(09011918)	464543.41
3807721.91	7.62155	(09031218)		
464563.41	3807721.91	7.54169	(09031218)	464583.41
3807721.91	7.45656	(09031218)		
464603.41	3807721.91	7.35634	(09031218)	464623.41
3807721.91	7.24697	(09031218)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 608

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,

L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464643.41	3807721.91	7.15063	(09031218)	464663.41
3807721.91	7.03185	(09031218)		
464683.41	3807721.91	6.89574	(09031218)	464703.41
3807721.91	6.74743	(09031218)		
464723.41	3807721.91	6.57867	(09031218)	464743.41
3807721.91	6.39802	(09031218)		
464763.41	3807721.91	6.22164	(09031218)	464783.41
3807721.91	6.13622	(09011918)		
464803.41	3807721.91	6.15609	(09011918)	464823.41
3807721.91	6.17008	(09011918)		
464843.41	3807721.91	6.17695	(09011918)	464863.41
3807721.91	6.17758	(09011918)		
464883.41	3807721.91	6.17407	(09011918)	464903.41
3807721.91	6.16477	(09011918)		
464923.41	3807721.91	6.15037	(09011918)	464943.41
3807721.91	6.13294	(09011918)		
464963.41	3807721.91	6.11041	(09011918)	464983.41
3807721.91	6.08333	(09011918)		
465003.41	3807721.91	6.05359	(09011918)	465023.41
3807721.91	6.01879	(09011918)		
465043.41	3807721.91	5.97928	(09011918)	465063.41
3807721.91	5.93677	(09011918)		
465083.41	3807721.91	5.88862	(09011918)	465103.41
3807721.91	5.83219	(09011918)		
465123.41	3807721.91	5.75821	(09011918)	465143.41
3807721.91	5.69008	(09011918)		
465163.41	3807721.91	5.61836	(09011918)	465183.41
3807721.91	5.52698	(09011918)		
465203.41	3807721.91	5.43888	(09011918)	465223.41
3807721.91	5.34878	(09011918)		
465243.41	3807721.91	5.25255	(09011918)	465263.41
3807721.91	5.14781	(09011918)		
465283.41	3807721.91	5.03256	(09011918)	465303.41
3807721.91	4.89972	(09011918)		
465323.41	3807721.91	4.76902	(09011918)	465343.41
3807721.91	4.63291	(09011918)		
465363.41	3807721.91	4.47948	(09011918)	465383.41

3807721.91	4.32734	(09011918)		
464543.41	3807741.91	7.66233	(09031218)	464563.41
3807741.91	7.56123	(09031218)		
464583.41	3807741.91	7.46265	(09031218)	464603.41
3807741.91	7.35266	(09031218)		
464623.41	3807741.91	7.23566	(09031218)	464643.41
3807741.91	7.13251	(09031218)		
464663.41	3807741.91	7.01230	(09031218)	464683.41
3807741.91	6.87387	(09031218)		
464703.41	3807741.91	6.70474	(09031218)	464723.41
3807741.91	6.52906	(09031218)		
464743.41	3807741.91	6.34889	(09031218)	464763.41
3807741.91	6.19350	(09120417)		
464783.41	3807741.91	6.18941	(09011918)	464803.41
3807741.91	6.19971	(09011918)		
464823.41	3807741.91	6.21592	(09011918)	464843.41
3807741.91	6.21251	(09011918)		
464863.41	3807741.91	6.19985	(09011918)	464883.41
3807741.91	6.20642	(09011918)		
464903.41	3807741.91	6.18870	(09011918)	464923.41
3807741.91	6.16102	(09011918)		
464943.41	3807741.91	6.15531	(09011918)	464963.41
3807741.91	6.12450	(09011918)		
464983.41	3807741.91	6.08404	(09011918)	465003.41
3807741.91	6.06677	(09011918)		
465023.41	3807741.91	6.02791	(09011918)	465043.41
3807741.91	5.97940	(09011918)		
465063.41	3807741.91	5.94218	(09011918)	465083.41
3807741.91	5.88340	(09011918)		
465103.41	3807741.91	5.81180	(09011918)	465123.41
3807741.91	5.74007	(09011918)		
465143.41	3807741.91	5.67597	(09011918)	465163.41
3807741.91	5.60758	(09011918)		
465183.41	3807741.91	5.51754	(09011918)	465203.41
3807741.91	5.41729	(09011918)		
465223.41	3807741.91	5.31195	(09011918)	465243.41
3807741.91	5.21806	(09011918)		
465263.41	3807741.91	5.10175	(09011918)	465283.41
3807741.91	4.97170	(09011918)		
465303.41	3807741.91	4.83881	(09011918)	465323.41
3807741.91	4.70925	(09011918)		
465343.41	3807741.91	4.57390	(09011918)	465363.41
3807741.91	4.42001	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 609

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***
INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465383.41	3807741.91	4.25740 (09011918)	464543.41
3807761.91	7.72038 (09031218)		
464563.41	3807761.91	7.61015 (09031218)	464583.41
3807761.91	7.48971 (09031218)		
464603.41	3807761.91	7.36675 (09031218)	464623.41
3807761.91	7.24334 (09031218)		
464643.41	3807761.91	7.13237 (09031218)	464663.41
3807761.91	6.99162 (09031218)		
464683.41	3807761.91	6.82987 (09031218)	464703.41
3807761.91	6.65376 (09031218)		
464723.41	3807761.91	6.48597 (09031218)	464743.41
3807761.91	6.31349 (09031218)		
464763.41	3807761.91	6.21733 (09011918)	464783.41
3807761.91	6.23770 (09011918)		
464803.41	3807761.91	6.25413 (09011918)	464823.41
3807761.91	6.24882 (09011918)		
464843.41	3807761.91	6.23393 (09011918)	464863.41
3807761.91	6.21618 (09011918)		
464883.41	3807761.91	6.21991 (09011918)	464903.41
3807761.91	6.19804 (09011918)		
464923.41	3807761.91	6.16612 (09011918)	464943.41
3807761.91	6.15806 (09011918)		
464963.41	3807761.91	6.12367 (09011918)	464983.41
3807761.91	6.07949 (09011918)		
465003.41	3807761.91	6.05994 (09011918)	465023.41
3807761.91	6.03267 (09011918)		
465043.41	3807761.91	5.99480 (09011918)	465063.41
3807761.91	5.93308 (09011918)		

465083.41	3807761.91	5.86331	(09011918)	465103.41
3807761.91	5.79165	(09011918)		
465123.41	3807761.91	5.73761	(09011918)	465143.41
3807761.91	5.66148	(09011918)		
465163.41	3807761.91	5.57528	(09011918)	465183.41
3807761.91	5.50051	(09011918)		
465203.41	3807761.91	5.40081	(09011918)	465223.41
3807761.91	5.28721	(09011918)		
465243.41	3807761.91	5.16935	(09011918)	465263.41
3807761.91	5.04177	(09011918)		
465283.41	3807761.91	4.90976	(09011918)	465303.41
3807761.91	4.78883	(09011918)		
465323.41	3807761.91	4.64768	(09011918)	465343.41
3807761.91	4.49678	(09011918)		
465363.41	3807761.91	4.35360	(09011918)	465383.41
3807761.91	4.19074	(09011918)		
464543.41	3807781.91	7.75856	(09031218)	464563.41
3807781.91	7.66238	(09031218)		
464583.41	3807781.91	7.54391	(09031218)	464603.41
3807781.91	7.41034	(09031218)		
464623.41	3807781.91	7.26462	(09031218)	464643.41
3807781.91	7.11474	(09031218)		
464663.41	3807781.91	6.96489	(09031218)	464683.41
3807781.91	6.80653	(09031218)		
464703.41	3807781.91	6.62440	(09031218)	464723.41
3807781.91	6.44215	(09031218)		
464743.41	3807781.91	6.26257	(09120417)	464763.41
3807781.91	6.27266	(09011918)		
464783.41	3807781.91	6.28485	(09011918)	464803.41
3807781.91	6.28775	(09011918)		
464823.41	3807781.91	6.27313	(09011918)	464843.41
3807781.91	6.26277	(09011918)		
464863.41	3807781.91	6.25202	(09011918)	464883.41
3807781.91	6.23574	(09011918)		
464903.41	3807781.91	6.21615	(09011918)	464923.41
3807781.91	6.19251	(09011918)		
464943.41	3807781.91	6.16391	(09011918)	464963.41
3807781.91	6.13244	(09011918)		
464983.41	3807781.91	6.09704	(09011918)	465003.41
3807781.91	6.05656	(09011918)		
465023.41	3807781.91	6.02354	(09011918)	465043.41
3807781.91	5.98559	(09011918)		
465063.41	3807781.91	5.91566	(09011918)	465083.41
3807781.91	5.85244	(09011918)		
465103.41	3807781.91	5.78860	(09011918)	465123.41
3807781.91	5.71775	(09011918)		
465143.41	3807781.91	5.64138	(09011918)	465163.41
3807781.91	5.55812	(09011918)		
465183.41	3807781.91	5.46673	(09011918)	465203.41
3807781.91	5.35860	(09011918)		

465223.41 3807781.91 5.24156 (09011918) 465243.41
 3807781.91 5.12900 (09011918)
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 610

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3807781.91	4.99950	(09011918)	465283.41
3807781.91	4.85995	(09011918)		
465303.41	3807781.91	4.72344	(09011918)	465323.41
3807781.91	4.58032	(09011918)		
465343.41	3807781.91	4.43029	(09011918)	465363.41
3807781.91	4.27330	(09011918)		
465383.41	3807781.91	4.10349	(09011918)	464543.41
3807801.91	7.76567	(09031218)		
464563.41	3807801.91	7.69035	(09031218)	464583.41
3807801.91	7.57943	(09031218)		
464603.41	3807801.91	7.44040	(09031218)	464623.41
3807801.91	7.27659	(09031218)		
464643.41	3807801.91	7.09590	(09031218)	464663.41
3807801.91	6.93526	(09031218)		
464683.41	3807801.91	6.77709	(09031218)	464703.41
3807801.91	6.58895	(09031218)		
464723.41	3807801.91	6.39528	(09031218)	464743.41
3807801.91	6.30250	(09011918)		
464763.41	3807801.91	6.32401	(09011918)	464783.41

3807801.91	6.32560 (09011918)		
464803.41	3807801.91	6.31341 (09011918)	464823.41
3807801.91	6.29925 (09011918)		
464843.41	3807801.91	6.29289 (09011918)	464863.41
3807801.91	6.28442 (09011918)		
464883.41	3807801.91	6.25542 (09011918)	464903.41
3807801.91	6.23618 (09011918)		
464923.41	3807801.91	6.21560 (09011918)	464943.41
3807801.91	6.17421 (09011918)		
464963.41	3807801.91	6.14340 (09011918)	464983.41
3807801.91	6.11119 (09011918)		
465003.41	3807801.91	6.05773 (09011918)	465023.41
3807801.91	6.01447 (09011918)		
465043.41	3807801.91	5.96894 (09011918)	465063.41
3807801.91	5.90168 (09011918)		
465083.41	3807801.91	5.84312 (09011918)	465103.41
3807801.91	5.78086 (09011918)		
465123.41	3807801.91	5.69657 (09011918)	465143.41
3807801.91	5.61880 (09011918)		
465163.41	3807801.91	5.53496 (09011918)	465183.41
3807801.91	5.42459 (09011918)		
465203.41	3807801.91	5.31097 (09011918)	465223.41
3807801.91	5.19458 (09011918)		
465243.41	3807801.91	5.08362 (09011918)	465263.41
3807801.91	4.95083 (09011918)		
465283.41	3807801.91	4.80465 (09011918)	465303.41
3807801.91	4.65559 (09011918)		
465323.41	3807801.91	4.50974 (09011918)	465343.41
3807801.91	4.35815 (09011918)		
465363.41	3807801.91	4.18578 (09011918)	465383.41
3807801.91	4.01162 (09011918)		
464543.41	3807821.91	7.74665 (09031218)	464563.41
3807821.91	7.68575 (09031218)		
464583.41	3807821.91	7.58854 (09031218)	464603.41
3807821.91	7.44683 (09031218)		
464623.41	3807821.91	7.27017 (09031218)	464643.41
3807821.91	7.08433 (09031218)		
464663.41	3807821.91	6.90455 (09031218)	464683.41
3807821.91	6.72320 (09031218)		
464703.41	3807821.91	6.52844 (09031218)	464723.41
3807821.91	6.34307 (09031218)		
464743.41	3807821.91	6.36240 (09011918)	464763.41
3807821.91	6.36241 (09011918)		
464783.41	3807821.91	6.35214 (09011918)	464803.41
3807821.91	6.33785 (09011918)		
464823.41	3807821.91	6.34070 (09011918)	464843.41
3807821.91	6.32321 (09011918)		
464863.41	3807821.91	6.29698 (09011918)	464883.41
3807821.91	6.28724 (09011918)		
464903.41	3807821.91	6.25687 (09011918)	464923.41

3807821.91	6.21826	(09011918)	
464943.41	3807821.91	6.19726	(09011918) 464963.41
3807821.91	6.15513	(09011918)	
464983.41	3807821.91	6.10469	(09011918) 465003.41
3807821.91	6.07151	(09011918)	
465023.41	3807821.91	6.01657	(09011918) 465043.41
3807821.91	5.95271	(09011918)	
465063.41	3807821.91	5.90438	(09011918) 465083.41
3807821.91	5.83372	(09011918)	
465103.41	3807821.91	5.75321	(09011918) 465123.41
3807821.91	5.68556	(09011918)	

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 611

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807821.91	5.59541	(09011918)	465163.41
3807821.91	5.49020	(09011918)		
465183.41	3807821.91	5.37481	(09011918)	465203.41
3807821.91	5.26883	(09011918)		
465223.41	3807821.91	5.15859	(09011918)	465243.41
3807821.91	5.02438	(09011918)		
465263.41	3807821.91	4.88049	(09011918)	465283.41
3807821.91	4.73213	(09011918)		
465303.41	3807821.91	4.59421	(09011918)	465323.41
3807821.91	4.43739	(09011918)		

465343.41	3807821.91	4.26838	(09011918)	465363.41
3807821.91	4.09181 (09011918)			
465383.41	3807821.91	3.92391	(09011918)	464543.41
3807841.91	7.69898 (09120417)			
464563.41	3807841.91	7.64500	(09120417)	464583.41
3807841.91	7.57336 (09031218)			
464603.41	3807841.91	7.45176	(09031218)	464623.41
3807841.91	7.27544 (09031218)			
464643.41	3807841.91	7.08928	(09031218)	464663.41
3807841.91	6.89344 (09031218)			
464683.41	3807841.91	6.69021	(09031218)	464723.41
3807841.91	6.39354 (09011918)			
464743.41	3807841.91	6.40177	(09011918)	464763.41
3807841.91	6.39198 (09011918)			
464783.41	3807841.91	6.38565	(09011918)	464803.41
3807841.91	6.37839 (09011918)			
464823.41	3807841.91	6.36523	(09011918)	464843.41
3807841.91	6.34849 (09011918)			
464863.41	3807841.91	6.32751	(09011918)	464883.41
3807841.91	6.30148 (09011918)			
464903.41	3807841.91	6.27261	(09011918)	464923.41
3807841.91	6.23992 (09011918)			
464943.41	3807841.91	6.20233	(09011918)	464963.41
3807841.91	6.16186 (09011918)			
464983.41	3807841.91	6.11725	(09011918)	465003.41
3807841.91	6.06719 (09011918)			
465023.41	3807841.91	6.01346	(09011918)	465043.41
3807841.91	5.95459 (09011918)			
465063.41	3807841.91	5.88917	(09011918)	465083.41
3807841.91	5.81876 (09011918)			
465103.41	3807841.91	5.74188	(09011918)	465123.41
3807841.91	5.65719 (09011918)			
465143.41	3807841.91	5.56613	(09011918)	465163.41
3807841.91	5.46528 (09011918)			
465183.41	3807841.91	5.34455	(09011918)	465203.41
3807841.91	5.22516 (09011918)			
465223.41	3807841.91	5.10235	(09011918)	465243.41
3807841.91	4.97265 (09011918)			
465263.41	3807841.91	4.82657	(09011918)	465283.41
3807841.91	4.67084 (09011918)			
465303.41	3807841.91	4.51809	(09011918)	465323.41
3807841.91	4.35123 (09011918)			
465343.41	3807841.91	4.17746	(09011918)	465363.41
3807841.91	4.00873 (09011918)			
465383.41	3807841.91	3.83515	(09011918)	464503.41
3807861.91	7.77168 (09120417)			
464523.41	3807861.91	7.74510	(09120417)	464543.41
3807861.91	7.71625 (09120417)			
464563.41	3807861.91	7.67842	(09120417)	464583.41
3807861.91	7.59699 (09120417)			

464603.41	3807861.91	7.43589	(09120417)	464723.41
3807861.91	6.44008	(09011918)		
464743.41	3807861.91	6.43204	(09011918)	464763.41
3807861.91	6.41585	(09011918)		
464783.41	3807861.91	6.41488	(09011918)	464803.41
3807861.91	6.41487	(09011918)		
464823.41	3807861.91	6.38875	(09011918)	464843.41
3807861.91	6.37217	(09011918)		
464863.41	3807861.91	6.35417	(09011918)	464883.41
3807861.91	6.31517	(09011918)		
464903.41	3807861.91	6.28700	(09011918)	464923.41
3807861.91	6.25769	(09011918)		
464943.41	3807861.91	6.20700	(09011918)	464963.41
3807861.91	6.16720	(09011918)		
464983.41	3807861.91	6.12569	(09011918)	465003.41
3807861.91	6.06229	(09011918)		
465023.41	3807861.91	6.00863	(09011918)	465043.41
3807861.91	5.95193	(09011918)		
465063.41	3807861.91	5.87291	(09011918)	465083.41
3807861.91	5.80155	(09011918)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 612

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465103.41	3807861.91	5.72552	(09011918)	465123.41

3807861.91	5.62712	(09011918)		
465143.41	3807861.91	5.53398	(09011918)	465163.41
3807861.91	5.43479	(09011918)		
465183.41	3807861.91	5.31389	(09011918)	465203.41
3807861.91	5.18215	(09011918)		
465223.41	3807861.91	5.04445	(09011918)	465243.41
3807861.91	4.91584	(09011918)		
465263.41	3807861.91	4.76636	(09011918)	465283.41
3807861.91	4.60419	(09011918)		
465303.41	3807861.91	4.43955	(09011918)	465323.41
3807861.91	4.26628	(09011918)		
465343.41	3807861.91	4.08929	(09011918)	465363.41
3807861.91	3.92274	(09011918)		
465383.41	3807861.91	3.74858	(09011918)	464503.41
3807881.91	7.80160	(09120417)		
464523.41	3807881.91	7.76703	(09120417)	464543.41
3807881.91	7.73345	(09120417)		
464723.41	3807881.91	6.47232	(09011918)	464743.41
3807881.91	6.45767	(09011918)		
464763.41	3807881.91	6.43539	(09011918)	464783.41
3807881.91	6.43048	(09011918)		
464803.41	3807881.91	6.43137	(09011918)	464823.41
3807881.91	6.42431	(09011918)		
464843.41	3807881.91	6.39643	(09011918)	464863.41
3807881.91	6.36014	(09011918)		
464883.41	3807881.91	6.34181	(09011918)	464903.41
3807881.91	6.30223	(09011918)		
464923.41	3807881.91	6.25442	(09011918)	464943.41
3807881.91	6.22477	(09011918)		
464963.41	3807881.91	6.17328	(09011918)	464983.41
3807881.91	6.11311	(09011918)		
465003.41	3807881.91	6.06983	(09011918)	465023.41
3807881.91	6.00404	(09011918)		
465043.41	3807881.91	5.92868	(09011918)	465063.41
3807881.91	5.86771	(09011918)		
465083.41	3807881.91	5.78384	(09011918)	465103.41
3807881.91	5.68942	(09011918)		
465123.41	3807881.91	5.60632	(09011918)	465143.41
3807881.91	5.50054	(09011918)		
465163.41	3807881.91	5.38364	(09011918)	465183.41
3807881.91	5.27531	(09011918)		
465203.41	3807881.91	5.14280	(09011918)	465223.41
3807881.91	4.99657	(09011918)		
465243.41	3807881.91	4.84561	(09011918)	465263.41
3807881.91	4.68539	(09011918)		
465283.41	3807881.91	4.52107	(09011918)	465303.41
3807881.91	4.36724	(09011918)		
465323.41	3807881.91	4.19380	(09011918)	465343.41
3807881.91	4.01032	(09011918)		
465363.41	3807881.91	3.82541	(09011918)	465383.41

3807881.91	3.65397	(09011918)		
464723.41	3807901.91	6.52648	(09011918)	464743.41
3807901.91	6.48194	(09011918)		
464763.41	3807901.91	6.47348	(09011918)	464783.41
3807901.91	6.45806	(09011918)		
464803.41	3807901.91	6.44087	(09011918)	464823.41
3807901.91	6.43583	(09011918)		
464843.41	3807901.91	6.40274	(09011918)	464863.41
3807901.91	6.35947	(09011918)		
464883.41	3807901.91	6.34370	(09011918)	464903.41
3807901.91	6.31244	(09011918)		
464923.41	3807901.91	6.27082	(09011918)	464943.41
3807901.91	6.22410	(09011918)		
464963.41	3807901.91	6.16118	(09011918)	464983.41
3807901.91	6.09422	(09011918)		
465003.41	3807901.91	6.05272	(09011918)	465023.41
3807901.91	5.99395	(09011918)		
465043.41	3807901.91	5.92296	(09011918)	465063.41
3807901.91	5.84457	(09011918)		
465083.41	3807901.91	5.76026	(09011918)	465103.41
3807901.91	5.66861	(09011918)		
465123.41	3807901.91	5.56835	(09011918)	465143.41
3807901.91	5.46096	(09011918)		
465163.41	3807901.91	5.34535	(09011918)	465183.41
3807901.91	5.22065	(09011918)		
465203.41	3807901.91	5.07946	(09011918)	465223.41
3807901.91	4.92921	(09011918)		
465243.41	3807901.91	4.78226	(09011918)	465263.41
3807901.91	4.61985	(09011918)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 613

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465283.41	3807901.91	4.44860 (09011918)	465303.41
3807901.91	4.28088 (09011918)		
465323.41	3807901.91	4.11354 (09011918)	465343.41
3807901.91	3.93585 (09011918)		
465363.41	3807901.91	3.74457 (09011918)	465383.41
3807901.91	3.55878 (09011918)		
464723.41	3807921.91	6.59100 (09011918)	464743.41
3807921.91	6.52105 (09011918)		
464763.41	3807921.91	6.51096 (09011918)	464783.41
3807921.91	6.48663 (09011918)		
464803.41	3807921.91	6.45661 (09011918)	464823.41
3807921.91	6.44119 (09011918)		
464843.41	3807921.91	6.40740 (09011918)	464863.41
3807921.91	6.36700 (09011918)		
464883.41	3807921.91	6.34879 (09011918)	464903.41
3807921.91	6.32134 (09011918)		
464923.41	3807921.91	6.28210 (09011918)	464943.41
3807921.91	6.21474 (09011918)		
464963.41	3807921.91	6.14775 (09011918)	464983.41
3807921.91	6.08339 (09011918)		
465003.41	3807921.91	6.03840 (09011918)	465023.41
3807921.91	5.98184 (09011918)		
465043.41	3807921.91	5.91232 (09011918)	465063.41
3807921.91	5.81998 (09011918)		
465083.41	3807921.91	5.73402 (09011918)	465103.41
3807921.91	5.64238 (09011918)		
465123.41	3807921.91	5.52826 (09011918)	465143.41
3807921.91	5.41816 (09011918)		
465163.41	3807921.91	5.30143 (09011918)	465183.41
3807921.91	5.16342 (09011918)		
465203.41	3807921.91	5.01466 (09011918)	465223.41
3807921.91	4.85997 (09011918)		
465243.41	3807921.91	4.71390 (09011918)	465263.41
3807921.91	4.55699 (09011918)		
465283.41	3807921.91	4.38252 (09011918)	465303.41
3807921.91	4.19910 (09011918)		
465323.41	3807921.91	4.02504 (09011918)	465343.41
3807921.91	3.84859 (09011918)		
465363.41	3807921.91	3.65448 (09011918)	465383.41
3807921.91	3.46262 (09011918)		
464723.41	3807941.91	6.66525 (09011918)	464743.41
3807941.91	6.59617 (09011918)		

464763.41	3807941.91	6.53776	(09011918)	464783.41
3807941.91	6.51034	(09011918)		
464803.41	3807941.91	6.49339	(09011918)	464823.41
3807941.91	6.44998	(09011918)		
464843.41	3807941.91	6.42180	(09011918)	464863.41
3807941.91	6.39977	(09011918)		
464883.41	3807941.91	6.37816	(09011918)	464903.41
3807941.91	6.33114	(09011918)		
464923.41	3807941.91	6.26844	(09011918)	464943.41
3807941.91	6.19731	(09011918)		
464963.41	3807941.91	6.14385	(09011918)	464983.41
3807941.91	6.09615	(09011918)		
465003.41	3807941.91	6.04615	(09011918)	465023.41
3807941.91	5.96958	(09011918)		
465043.41	3807941.91	5.88118	(09011918)	465063.41
3807941.91	5.80563	(09011918)		
465083.41	3807941.91	5.70678	(09011918)	465103.41
3807941.91	5.59676	(09011918)		
465123.41	3807941.91	5.49646	(09011918)	465143.41
3807941.91	5.37363	(09011918)		
465163.41	3807941.91	5.23950	(09011918)	465183.41
3807941.91	5.11286	(09011918)		
465203.41	3807941.91	4.96300	(09011918)	465223.41
3807941.91	4.80000	(09011918)		
465243.41	3807941.91	4.63265	(09011918)	465263.41
3807941.91	4.47662	(09011918)		
465283.41	3807941.91	4.31131	(09011918)	465303.41
3807941.91	4.12363	(09011918)		
465323.41	3807941.91	3.93424	(09011918)	465343.41
3807941.91	3.74186	(09011918)		
465363.41	3807941.91	3.54525	(09011918)	465383.41
3807941.91	3.36313	(09011918)		
465403.41	3807941.91	3.18426	(09011918)	465423.41
3807941.91	2.99201	(09011918)		
465443.41	3807941.91	2.89498	(09122717)	465463.41
3807941.91	2.79938	(09122717)		
465483.41	3807941.91	2.70896	(09122717)	465503.41
3807941.91	2.62000	(09122717)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 614

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,

```

, L0006739      , L0006734      , L0006735      , L0006736      , L0006737      , L0006738
, L0006740      , L0006741      ,
, L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006747      , L0006748      , L0006749      ,
, L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465523.41	3807941.91	2.52844	(09122717)	465543.41
3807941.91	2.44293	(09122717)		
465563.41	3807941.91	2.35457	(09122717)	465583.41
3807941.91	2.28347	(09030119)		
465603.41	3807941.91	2.33239	(09030119)	465623.41
3807941.91	2.32820	(09030119)		
465643.41	3807941.91	2.33000	(09030119)	465663.41
3807941.91	2.34340	(09030119)		
465683.41	3807941.91	2.27453	(09030119)	465703.41
3807941.91	2.26747	(09030119)		
464723.41	3807961.91	6.74065	(09011918)	464743.41
3807961.91	6.66744	(09011918)		
464763.41	3807961.91	6.58506	(09011918)	464783.41
3807961.91	6.53480	(09011918)		
464803.41	3807961.91	6.50514	(09011918)	464823.41
3807961.91	6.47415	(09011918)		
464843.41	3807961.91	6.43729	(09011918)	464863.41
3807961.91	6.39981	(09011918)		
464883.41	3807961.91	6.37585	(09011918)	464903.41
3807961.91	6.32234	(09011918)		
464923.41	3807961.91	6.25555	(09011918)	464943.41
3807961.91	6.20161	(09011918)		
464963.41	3807961.91	6.14057	(09011918)	464983.41
3807961.91	6.07703	(09011918)		
465003.41	3807961.91	6.02333	(09011918)	465023.41
3807961.91	5.93946	(09011918)		
465043.41	3807961.91	5.84351	(09011918)	465063.41
3807961.91	5.76780	(09011918)		
465083.41	3807961.91	5.67337	(09011918)	465103.41
3807961.91	5.56520	(09011918)		
465123.41	3807961.91	5.44782	(09011918)	465143.41
3807961.91	5.32281	(09011918)		
465163.41	3807961.91	5.18931	(09011918)	465183.41

3807961.91	5.04675	(09011918)		
465203.41	3807961.91	4.90280	(09011918)	465223.41
3807961.91	4.74437	(09011918)		
465243.41	3807961.91	4.56832	(09011918)	465263.41
3807961.91	4.39436	(09011918)		
465283.41	3807961.91	4.21665	(09011918)	465303.41
3807961.91	4.02510	(09011918)		
465323.41	3807961.91	3.83989	(09011918)	465343.41
3807961.91	3.65374	(09011918)		
465363.41	3807961.91	3.45503	(09011918)	465383.41
3807961.91	3.26375	(09011918)		
465403.41	3807961.91	3.08169	(09011918)	465423.41
3807961.91	2.94098	(09122717)		
465443.41	3807961.91	2.85043	(09122717)	465463.41
3807961.91	2.75521	(09122717)		
465483.41	3807961.91	2.66560	(09122717)	465503.41
3807961.91	2.57366	(09122717)		
465523.41	3807961.91	2.48220	(09122717)	465543.41
3807961.91	2.39348	(09122717)		
465563.41	3807961.91	2.31532	(09030119)	465583.41
3807961.91	2.36062	(09030119)		
465603.41	3807961.91	2.35875	(09030119)	465623.41
3807961.91	2.37057	(09030119)		
465643.41	3807961.91	2.31629	(09030119)	465663.41
3807961.91	2.30385	(09030119)		
465683.41	3807961.91	2.31804	(09030119)	465703.41
3807961.91	2.33509	(09030119)		
464743.41	3807981.91	6.73771	(09011918)	464763.41
3807981.91	6.64486	(09011918)		
464783.41	3807981.91	6.56990	(09011918)	464803.41
3807981.91	6.51877	(09011918)		
464823.41	3807981.91	6.50295	(09011918)	464843.41
3807981.91	6.45748	(09011918)		
464863.41	3807981.91	6.40181	(09011918)	464883.41
3807981.91	6.37533	(09011918)		
464903.41	3807981.91	6.31865	(09011918)	464923.41
3807981.91	6.25022	(09011918)		
464943.41	3807981.91	6.20260	(09011918)	464963.41
3807981.91	6.13500	(09011918)		
464983.41	3807981.91	6.05812	(09011918)	465003.41
3807981.91	5.99306	(09011918)		
465023.41	3807981.91	5.90740	(09011918)	465043.41
3807981.91	5.81128	(09011918)		
465063.41	3807981.91	5.72385	(09011918)	465083.41
3807981.91	5.63201	(09011918)		
465103.41	3807981.91	5.52710	(09011918)	465123.41
3807981.91	5.39051	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 615

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807981.91	5.26415	(09011918)	465163.41
3807981.91	5.13858	(09011918)		
465183.41	3807981.91	4.98394	(09011918)	465203.41
3807981.91	4.83268	(09011918)		
465223.41	3807981.91	4.67351	(09011918)	465243.41
3807981.91	4.49240	(09011918)		
465263.41	3807981.91	4.30577	(09011918)	465283.41
3807981.91	4.11507	(09011918)		
465303.41	3807981.91	3.92517	(09011918)	465323.41
3807981.91	3.74337	(09011918)		
465343.41	3807981.91	3.56544	(09011918)	465363.41
3807981.91	3.36896	(09011918)		
465383.41	3807981.91	3.17053	(09011918)	465403.41
3807981.91	2.98517	(09122717)		
465423.41	3807981.91	2.89591	(09122717)	465443.41
3807981.91	2.80534	(09122717)		
465463.41	3807981.91	2.70719	(09122717)	465483.41
3807981.91	2.61904	(09122717)		
465503.41	3807981.91	2.52711	(09122717)	465523.41
3807981.91	2.43429	(09122717)		
465543.41	3807981.91	2.34366	(09122717)	465563.41
3807981.91	2.37097	(09030119)		
465583.41	3807981.91	2.41304	(09030119)	465603.41
3807981.91	2.39656	(09030119)		

465623.41	3807981.91	2.33252	(09030119)	465643.41
3807981.91	2.35510 (09030119)			
465663.41	3807981.91	2.34360	(09030119)	465683.41
3807981.91	2.36587 (09030119)			
465703.41	3807981.91	2.40941	(09030119)	464763.41
3808001.91	6.71980 (09011918)			
464783.41	3808001.91	6.62783	(09011918)	464803.41
3808001.91	6.55523 (09011918)			
464823.41	3808001.91	6.53611	(09011918)	464843.41
3808001.91	6.48743 (09011918)			
464863.41	3808001.91	6.42976	(09011918)	464883.41
3808001.91	6.39958 (09011918)			
464903.41	3808001.91	6.33919	(09011918)	464923.41
3808001.91	6.26362 (09011918)			
464943.41	3808001.91	6.18719	(09011918)	464963.41
3808001.91	6.12424 (09011918)			
464983.41	3808001.91	6.05888	(09011918)	465003.41
3808001.91	5.96570 (09011918)			
465023.41	3808001.91	5.88309	(09011918)	465043.41
3808001.91	5.79606 (09011918)			
465063.41	3808001.91	5.68177	(09011918)	465083.41
3808001.91	5.57773 (09011918)			
465103.41	3808001.91	5.46752	(09011918)	465123.41
3808001.91	5.32527 (09011918)			
465143.41	3808001.91	5.19337	(09011918)	465163.41
3808001.91	5.06632 (09011918)			
465183.41	3808001.91	4.92291	(09011918)	465203.41
3808001.91	4.75902 (09011918)			
465223.41	3808001.91	4.58127	(09011918)	465243.41
3808001.91	4.39538 (09011918)			
465263.41	3808001.91	4.20440	(09011918)	465283.41
3808001.91	4.01354 (09011918)			
465303.41	3808001.91	3.83790	(09011918)	465323.41
3808001.91	3.64724 (09011918)			
465343.41	3808001.91	3.45500	(09011918)	465363.41
3808001.91	3.27339 (09011918)			
465383.41	3808001.91	3.07970	(09011918)	465403.41
3808001.91	2.94124 (09122717)			
465423.41	3808001.91	2.84905	(09122717)	465443.41
3808001.91	2.75603 (09122717)			
465463.41	3808001.91	2.66154	(09122717)	465483.41
3808001.91	2.56822 (09122717)			
465503.41	3808001.91	2.47451	(09122717)	465523.41
3808001.91	2.38258 (09122717)			
465543.41	3808001.91	2.34365	(09030119)	465563.41
3808001.91	2.37932 (09030119)			
465583.41	3808001.91	2.42652	(09030119)	465603.41
3808001.91	2.43976 (09030119)			
465623.41	3808001.91	2.36759	(09030119)	465643.41
3808001.91	2.35921 (09030119)			

465663.41	3808001.91	2.39905	(09030119)	465683.41
3808001.91	2.44232	(09030119)		
465703.41	3808001.91	2.46766	(09030119)	464763.41
3808021.91	6.80122	(09011918)		
464783.41	3808021.91	6.72703	(09011918)	464803.41
3808021.91	6.63904	(09011918)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 616

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730

, L0006731	, L0006732	, L0006733	,
	L0006734	, L0006735	, L0006736 , L0006737 , L0006738
, L0006739	, L0006740	, L0006741	,
	L0006742	, L0006743	, L0006744 , L0006745 , L0006746
, L0006747	, L0006748	, L0006749	,
	L0006750	, L0006751	, L0006752 , L0006753 , L0006754
, L0006755	, L0006756	, . . .	,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464823.41	3808021.91	6.57935	(09011918)	464843.41
3808021.91	6.51576	(09011918)		
464863.41	3808021.91	6.45204	(09011918)	464883.41
3808021.91	6.39824	(09011918)		
464903.41	3808021.91	6.34177	(09011918)	464923.41
3808021.91	6.27776	(09011918)		
464943.41	3808021.91	6.19265	(09011918)	464963.41
3808021.91	6.11373	(09011918)		
464983.41	3808021.91	6.03478	(09011918)	465003.41
3808021.91	5.95116	(09011918)		
465023.41	3808021.91	5.85812	(09011918)	465043.41
3808021.91	5.75733	(09011918)		
465063.41	3808021.91	5.64979	(09011918)	465083.41
3808021.91	5.53280	(09011918)		
465103.41	3808021.91	5.40671	(09011918)	465123.41

3808021.91	5.27316	(09011918)		
465143.41	3808021.91	5.13014	(09011918)	465163.41
3808021.91	4.98636	(09011918)		
465183.41	3808021.91	4.84064	(09011918)	465203.41
3808021.91	4.67044	(09011918)		
465223.41	3808021.91	4.48858	(09011918)	465243.41
3808021.91	4.31168	(09011918)		
465263.41	3808021.91	4.12148	(09011918)	465283.41
3808021.91	3.92427	(09011918)		
465303.41	3808021.91	3.73517	(09011918)	465323.41
3808021.91	3.54817	(09011918)		
465343.41	3808021.91	3.35756	(09011918)	465363.41
3808021.91	3.16619	(09011918)		
465383.41	3808021.91	2.98660	(09122717)	465403.41
3808021.91	2.89380	(09122717)		
465423.41	3808021.91	2.80285	(09122717)	465443.41
3808021.91	2.70958	(09122717)		
465463.41	3808021.91	2.61091	(09122717)	465483.41
3808021.91	2.52051	(09122717)		
465503.41	3808021.91	2.42727	(09122717)	465523.41
3808021.91	2.39694	(09030119)		
465543.41	3808021.91	2.39558	(09030119)	465563.41
3808021.91	2.32584	(09030119)		
465583.41	3808021.91	2.34453	(09030119)	465603.41
3808021.91	2.39217	(09030119)		
465623.41	3808021.91	2.41240	(09030119)	465643.41
3808021.91	2.42918	(09030119)		
465663.41	3808021.91	2.47458	(09030119)	465683.41
3808021.91	2.46527	(09030119)		
465703.41	3808021.91	2.46294	(09030119)	464783.41
3808041.91	6.79552	(09011918)		
464803.41	3808041.91	6.71324	(09011918)	464823.41
3808041.91	6.62727	(09011918)		
464843.41	3808041.91	6.54757	(09011918)	464863.41
3808041.91	6.47209	(09011918)		
464883.41	3808041.91	6.39768	(09011918)	464903.41
3808041.91	6.33888	(09011918)		
464923.41	3808041.91	6.27932	(09011918)	464943.41
3808041.91	6.19035	(09011918)		
464963.41	3808041.91	6.09563	(09011918)	464983.41
3808041.91	6.00085	(09011918)		
465003.41	3808041.91	5.92870	(09011918)	465023.41
3808041.91	5.82976	(09011918)		
465043.41	3808041.91	5.71759	(09011918)	465063.41
3808041.91	5.61248	(09011918)		
465083.41	3808041.91	5.48663	(09011918)	465103.41
3808041.91	5.34927	(09011918)		
465123.41	3808041.91	5.21681	(09011918)	465143.41
3808041.91	5.07139	(09011918)		
465163.41	3808041.91	4.90996	(09011918)	465183.41

3808041.91	4.75252	(09011918)		
465203.41	3808041.91	4.58006	(09011918)	465223.41
3808041.91	4.39795	(09011918)		
465243.41	3808041.91	4.22457	(09011918)	465263.41
3808041.91	4.03974	(09011918)		
465283.41	3808041.91	3.84098	(09011918)	465303.41
3808041.91	3.63698	(09011918)		
465323.41	3808041.91	3.44555	(09011918)	465343.41
3808041.91	3.25664	(09011918)		
465363.41	3808041.91	3.05912	(09011918)	465383.41
3808041.91	2.93999	(09122717)		
465403.41	3808041.91	2.84606	(09122717)	465423.41
3808041.91	2.75495	(09122717)		
465443.41	3808041.91	2.66492	(09122717)	465463.41
3808041.91	2.56053	(09122717)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 617

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730

, L0006731	, L0006732	, L0006733	,	
	L0006734	, L0006735	, L0006736	, L0006737 , L0006738
, L0006739	, L0006740	, L0006741	,	
	L0006742	, L0006743	, L0006744	, L0006745 , L0006746
, L0006747	, L0006748	, L0006749	,	
	L0006750	, L0006751	, L0006752	, L0006753 , L0006754
, L0006755	, L0006756	, . . .	,	

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465483.41	3808041.91	2.47131	(09122717)	465503.41
3808041.91	2.38450	(09122717)		
465523.41	3808041.91	2.31151	(09030119)	465543.41
3808041.91	2.36108	(09030119)		
465563.41	3808041.91	2.37454	(09030119)	465583.41
3808041.91	2.36864	(09030119)		

465603.41	3808041.91	2.41546	(09030119)	465623.41
3808041.91	2.46175	(09030119)		
465643.41	3808041.91	2.50613	(09030119)	465663.41
3808041.91	2.51655	(09030119)		
465683.41	3808041.91	2.49627	(09030119)	465703.41
3808041.91	2.43494	(09030119)		
464803.41	3808061.91	6.76126	(09011918)	464823.41
3808061.91	6.68060	(09011918)		
464843.41	3808061.91	6.58861	(09011918)	464863.41
3808061.91	6.49248	(09011918)		
464883.41	3808061.91	6.41511	(09011918)	464903.41
3808061.91	6.33654	(09011918)		
464923.41	3808061.91	6.25276	(09011918)	464943.41
3808061.91	6.15954	(09011918)		
464963.41	3808061.91	6.06043	(09011918)	464983.41
3808061.91	5.96116	(09011918)		
465003.41	3808061.91	5.88464	(09011918)	465023.41
3808061.91	5.79545	(09011918)		
465043.41	3808061.91	5.69103	(09011918)	465063.41
3808061.91	5.55959	(09011918)		
465083.41	3808061.91	5.43428	(09011918)	465103.41
3808061.91	5.30259	(09011918)		
465123.41	3808061.91	5.14604	(09011918)	465143.41
3808061.91	5.00124	(09011918)		
465163.41	3808061.91	4.84533	(09011918)	465183.41
3808061.91	4.66561	(09011918)		
465203.41	3808061.91	4.49417	(09011918)	465223.41
3808061.91	4.31887	(09011918)		
465243.41	3808061.91	4.12388	(09011918)	465263.41
3808061.91	3.94002	(09011918)		
465283.41	3808061.91	3.75168	(09011918)	465303.41
3808061.91	3.54582	(09011918)		
465323.41	3808061.91	3.34200	(09011918)	465343.41
3808061.91	3.14353	(09011918)		
465363.41	3808061.91	2.98775	(09122717)	465383.41
3808061.91	2.89392	(09122717)		
465403.41	3808061.91	2.79932	(09122717)	465423.41
3808061.91	2.70604	(09122717)		
465443.41	3808061.91	2.61312	(09122717)	465463.41
3808061.91	2.51303	(09122717)		
465483.41	3808061.91	2.42019	(09122717)	465503.41
3808061.91	2.33428	(09122717)		
465523.41	3808061.91	2.31306	(09030119)	465543.41
3808061.91	2.36151	(09030119)		
465563.41	3808061.91	2.40594	(09030119)	465583.41
3808061.91	2.44832	(09030119)		
465603.41	3808061.91	2.49493	(09030119)	465623.41
3808061.91	2.54092	(09030119)		
465643.41	3808061.91	2.56635	(09030119)	465663.41
3808061.91	2.52212	(09030119)		

465683.41	3808061.91	2.52399	(09030119)	465703.41
3808061.91	2.51030	(09030119)		
464823.41	3808081.91	6.70659	(09011918)	464843.41
3808081.91	6.62237	(09011918)		
464863.41	3808081.91	6.53397	(09011918)	464883.41
3808081.91	6.43650	(09011918)		
464903.41	3808081.91	6.33130	(09011918)	464923.41
3808081.91	6.22332	(09011918)		
464943.41	3808081.91	6.12579	(09011918)	464963.41
3808081.91	6.03567	(09011918)		
464983.41	3808081.91	5.94398	(09011918)	465003.41
3808081.91	5.84344	(09011918)		
465023.41	3808081.91	5.74598	(09011918)	465043.41
3808081.91	5.63882	(09011918)		
465063.41	3808081.91	5.49753	(09011918)	465083.41
3808081.91	5.36773	(09011918)		
465103.41	3808081.91	5.24144	(09011918)	465123.41
3808081.91	5.08966	(09011918)		
465143.41	3808081.91	4.92875	(09011918)	465163.41
3808081.91	4.76098	(09011918)		
465183.41	3808081.91	4.58709	(09011918)	465203.41
3808081.91	4.40628	(09011918)		
465223.41	3808081.91	4.22474	(09011918)	465243.41
3808081.91	4.03374	(09011918)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 618

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
-------------	-------------	------	------------	-------------

Y-COORD (M)	CONC	(YYMMDDHH)	
465263.41	3808081.91	3.83935	(09011918) 465283.41
3808081.91	3.64130	(09011918)	
465303.41	3808081.91	3.43377	(09011918) 465323.41
3808081.91	3.23549	(09011918)	
465343.41	3808081.91	3.04240	(09011918) 465363.41
3808081.91	2.94034	(09122717)	
465383.41	3808081.91	2.84806	(09122717) 465403.41
3808081.91	2.75323	(09122717)	
465423.41	3808081.91	2.66046	(09122717) 465443.41
3808081.91	2.56548	(09122717)	
465463.41	3808081.91	2.46513	(09122717) 465483.41
3808081.91	2.37448	(09122717)	
465503.41	3808081.91	2.36703	(09030119) 465523.41
3808081.91	2.36843	(09030119)	
465543.41	3808081.91	2.35433	(09030119) 465563.41
3808081.91	2.39536	(09030119)	
465583.41	3808081.91	2.44190	(09030119) 465603.41
3808081.91	2.48793	(09030119)	
465623.41	3808081.91	2.53337	(09030119) 465643.41
3808081.91	2.56107	(09030119)	
465663.41	3808081.91	2.55816	(09030119) 465683.41
3808081.91	2.54281	(09030119)	
465703.41	3808081.91	2.58268	(09030119) 464843.41
3808101.91	6.64803	(09011918)	
464863.41	3808101.91	6.55811	(09011918) 464883.41
3808101.91	6.44328	(09011918)	
464903.41	3808101.91	6.32302	(09011918) 464923.41
3808101.91	6.20250	(09011918)	
464943.41	3808101.91	6.10055	(09011918) 464963.41
3808101.91	6.01232	(09011918)	
464983.41	3808101.91	5.92159	(09011918) 465003.41
3808101.91	5.80552	(09011918)	
465023.41	3808101.91	5.69534	(09011918) 465043.41
3808101.91	5.57826	(09011918)	
465063.41	3808101.91	5.43698	(09011918) 465083.41
3808101.91	5.30316	(09011918)	
465103.41	3808101.91	5.17271	(09011918) 465123.41
3808101.91	5.02129	(09011918)	
465143.41	3808101.91	4.84894	(09011918) 465163.41
3808101.91	4.66710	(09011918)	
465183.41	3808101.91	4.50114	(09011918) 465203.41
3808101.91	4.31975	(09011918)	
465223.41	3808101.91	4.12413	(09011918) 465243.41
3808101.91	3.93526	(09011918)	
465263.41	3808101.91	3.73378	(09011918) 465283.41
3808101.91	3.52537	(09011918)	
465303.41	3808101.91	3.32171	(09011918) 465323.41

3808101.91	3.12847	(09011918)		
465343.41	3808101.91	2.98943	(09122717)	465363.41
3808101.91	2.89565	(09122717)		
465383.41	3808101.91	2.79961	(09122717)	465403.41
3808101.91	2.70333	(09122717)		
465423.41	3808101.91	2.60996	(09122717)	465443.41
3808101.91	2.51562	(09122717)		
465463.41	3808101.91	2.41360	(09122717)	465483.41
3808101.91	2.39525	(09030119)		
465503.41	3808101.91	2.39988	(09030119)	465523.41
3808101.91	2.40799	(09030119)		
465543.41	3808101.91	2.38257	(09030119)	465563.41
3808101.91	2.34939	(09030119)		
465583.41	3808101.91	2.39565	(09030119)	465603.41
3808101.91	2.44150	(09030119)		
465623.41	3808101.91	2.48687	(09030119)	465643.41
3808101.91	2.53060	(09030119)		
465663.41	3808101.91	2.56735	(09030119)	465683.41
3808101.91	2.60825	(09030119)		
465703.41	3808101.91	2.63179	(09030119)	464863.41
3808121.91	6.53935	(09011918)		
464883.41	3808121.91	6.41851	(09011918)	464903.41
3808121.91	6.30942	(09011918)		
464923.41	3808121.91	6.20473	(09011918)	464943.41
3808121.91	6.09805	(09011918)		
464963.41	3808121.91	5.98843	(09011918)	464983.41
3808121.91	5.87686	(09011918)		
465003.41	3808121.91	5.77796	(09011918)	465023.41
3808121.91	5.65348	(09011918)		
465043.41	3808121.91	5.51660	(09011918)	465063.41
3808121.91	5.38910	(09011918)		
465083.41	3808121.91	5.26093	(09011918)	465103.41
3808121.91	5.11453	(09011918)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 619

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754

, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465123.41	3808121.91	4.93931	(09011918)	465143.41
3808121.91	4.75478	(09011918)		
465163.41	3808121.91	4.56775	(09011918)	465183.41
3808121.91	4.39720	(09011918)		
465203.41	3808121.91	4.22208	(09011918)	465223.41
3808121.91	4.03282	(09011918)		
465243.41	3808121.91	3.82655	(09011918)	465263.41
3808121.91	3.61708	(09011918)		
465283.41	3808121.91	3.41068	(09011918)	465303.41
3808121.91	3.22170	(09011918)		
465323.41	3808121.91	3.03376	(09122717)	465343.41
3808121.91	2.94139	(09122717)		
465363.41	3808121.91	2.84658	(09122717)	465383.41
3808121.91	2.75085	(09122717)		
465403.41	3808121.91	2.65434	(09122717)	465423.41
3808121.91	2.55804	(09122717)		
465443.41	3808121.91	2.46183	(09122717)	465463.41
3808121.91	2.41209	(09030119)		
465483.41	3808121.91	2.45567	(09030119)	465503.41
3808121.91	2.42143	(09030119)		
465523.41	3808121.91	2.41318	(09030119)	465543.41
3808121.91	2.43996	(09030119)		
465563.41	3808121.91	2.42816	(09030119)	465583.41
3808121.91	2.47435	(09030119)		
465603.41	3808121.91	2.52004	(09030119)	465623.41
3808121.91	2.56515	(09030119)		
465643.41	3808121.91	2.60384	(09030119)	465663.41
3808121.91	2.58686	(09030119)		
465683.41	3808121.91	2.60429	(09030119)	465703.41
3808121.91	2.64507	(09030119)		
464883.41	3808141.91	6.42434	(09011918)	464903.41
3808141.91	6.29580	(09011918)		
464923.41	3808141.91	6.17506	(09011918)	464943.41
3808141.91	6.06352	(09011918)		
464963.41	3808141.91	5.94501	(09011918)	464983.41
3808141.91	5.82498	(09011918)		
465003.41	3808141.91	5.72517	(09011918)	465023.41
3808141.91	5.59340	(09011918)		

465043.41	3808141.91	5.44779	(09011918)	465063.41
3808141.91	5.31826	(09011918)		
465083.41	3808141.91	5.18522	(09011918)	465103.41
3808141.91	5.03194	(09011918)		
465123.41	3808141.91	4.84775	(09011918)	465143.41
3808141.91	4.66766	(09011918)		
465163.41	3808141.91	4.48449	(09011918)	465183.41
3808141.91	4.29498	(09011918)		
465203.41	3808141.91	4.11280	(09011918)	465223.41
3808141.91	3.92231	(09011918)		
465243.41	3808141.91	3.71073	(09011918)	465263.41
3808141.91	3.50712	(09011918)		
465283.41	3808141.91	3.30738	(09011918)	465303.41
3808141.91	3.11007	(09011918)		
465323.41	3808141.91	2.98901	(09122717)	465343.41
3808141.91	2.89220	(09122717)		
465363.41	3808141.91	2.79612	(09122717)	465383.41
3808141.91	2.69887	(09122717)		
465403.41	3808141.91	2.60230	(09122717)	465423.41
3808141.91	2.50845	(09122717)		
465443.41	3808141.91	2.41341	(09122717)	465463.41
3808141.91	2.39936	(09030119)		
465483.41	3808141.91	2.44798	(09030119)	465503.41
3808141.91	2.45412	(09030119)		
465523.41	3808141.91	2.41144	(09030119)	465543.41
3808141.91	2.42648	(09030119)		
465563.41	3808141.91	2.45229	(09030119)	465583.41
3808141.91	2.49740	(09030119)		
465603.41	3808141.91	2.54199	(09030119)	465623.41
3808141.91	2.58603	(09030119)		
465643.41	3808141.91	2.62585	(09030119)	465663.41
3808141.91	2.63526	(09030119)		
465683.41	3808141.91	2.62893	(09030119)	465703.41
3808141.91	2.63880	(09030119)		
464883.41	3808161.91	6.43413	(09011918)	464903.41
3808161.91	6.28507	(09011918)		
464923.41	3808161.91	6.14568	(09011918)	464943.41
3808161.91	6.02907	(09011918)		
464963.41	3808161.91	5.90522	(09011918)	464983.41
3808161.91	5.77848	(09011918)		
465003.41	3808161.91	5.66566	(09011918)	465023.41
3808161.91	5.53036	(09011918)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***
INCLUDING SOURCE(S): L0006729 , L0006730
, L0006731 , L0006732 , L0006733 ,
L0006734 , L0006735 , L0006736 , L0006737 , L0006738
, L0006739 , L0006740 , L0006741 ,
L0006742 , L0006743 , L0006744 , L0006745 , L0006746
, L0006747 , L0006748 , L0006749 ,
L0006750 , L0006751 , L0006752 , L0006753 , L0006754
, L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465043.41	3808161.91	5.38368 (09011918)	465063.41
3808161.91	5.24760 (09011918)		
465083.41	3808161.91	5.10552 (09011918)	465103.41
3808161.91	4.94166 (09011918)		
465123.41	3808161.91	4.75780 (09011918)	465143.41
3808161.91	4.57943 (09011918)		
465163.41	3808161.91	4.40131 (09011918)	465183.41
3808161.91	4.19846 (09011918)		
465203.41	3808161.91	4.00342 (09011918)	465223.41
3808161.91	3.80628 (09011918)		
465243.41	3808161.91	3.59773 (09011918)	465263.41
3808161.91	3.39825 (09011918)		
465283.41	3808161.91	3.20749 (09011918)	465303.41
3808161.91	3.03684 (09122717)		
465323.41	3808161.91	2.93912 (09122717)	465343.41
3808161.91	2.84209 (09122717)		
465363.41	3808161.91	2.74536 (09122717)	465383.41
3808161.91	2.64735 (09122717)		
465403.41	3808161.91	2.55031 (09122717)	465423.41
3808161.91	2.45691 (09122717)		
465443.41	3808161.91	2.36469 (09122717)	465463.41
3808161.91	2.35088 (09030119)		
465483.41	3808161.91	2.39294 (09030119)	465503.41
3808161.91	2.43838 (09030119)		
465523.41	3808161.91	2.46578 (09030119)	465543.41
3808161.91	2.45495 (09030119)		
465563.41	3808161.91	2.49049 (09030119)	465583.41
3808161.91	2.53444 (09030119)		
465603.41	3808161.91	2.57787 (09030119)	465623.41

3808161.91	2.60160	(09030119)		
465643.41	3808161.91	2.63758	(09030119)	465663.41
3808161.91	2.67895	(09030119)		
465683.41	3808161.91	2.66952	(09030119)	465703.41
3808161.91	2.62856	(09030119)		
464903.41	3808181.91	6.28165	(09011918)	464923.41
3808181.91	6.13790	(09011918)		
464943.41	3808181.91	6.01573	(09011918)	464963.41
3808181.91	5.88593	(09011918)		
464983.41	3808181.91	5.74920	(09011918)	465003.41
3808181.91	5.60769	(09011918)		
465023.41	3808181.91	5.47313	(09011918)	465043.41
3808181.91	5.33621	(09011918)		
465063.41	3808181.91	5.20035	(09011918)	465083.41
3808181.91	5.03161	(09011918)		
465103.41	3808181.91	4.85079	(09011918)	465123.41
3808181.91	4.68095	(09011918)		
465143.41	3808181.91	4.49029	(09011918)	465163.41
3808181.91	4.29402	(09011918)		
465183.41	3808181.91	4.10415	(09011918)	465203.41
3808181.91	3.89962	(09011918)		
465223.41	3808181.91	3.69099	(09011918)	465243.41
3808181.91	3.49623	(09011918)		
465263.41	3808181.91	3.29099	(09011918)	465283.41
3808181.91	3.09085	(09011918)		
465303.41	3808181.91	2.98731	(09122717)	465323.41
3808181.91	2.88886	(09122717)		
465343.41	3808181.91	2.79047	(09122717)	465363.41
3808181.91	2.69443	(09122717)		
465383.41	3808181.91	2.59717	(09122717)	465403.41
3808181.91	2.49958	(09122717)		
465423.41	3808181.91	2.40339	(09122717)	465443.41
3808181.91	2.38505	(09030119)		
465463.41	3808181.91	2.42890	(09030119)	465483.41
3808181.91	2.41924	(09030119)		
465503.41	3808181.91	2.44122	(09030119)	465523.41
3808181.91	2.48621	(09030119)		
465543.41	3808181.91	2.52569	(09030119)	465563.41
3808181.91	2.56825	(09030119)		
465583.41	3808181.91	2.61194	(09030119)	465603.41
3808181.91	2.65502	(09030119)		
465623.41	3808181.91	2.64560	(09030119)	465643.41
3808181.91	2.60404	(09030119)		
465663.41	3808181.91	2.64459	(09030119)	465683.41
3808181.91	2.68075	(09030119)		
465703.41	3808181.91	2.68274	(09030119)	464923.41
3808201.91	6.15591	(09011918)		
464943.41	3808201.91	6.00405	(09011918)	464963.41
3808201.91	5.86212	(09011918)		
464983.41	3808201.91	5.71791	(09011918)	465003.41

3808201.91 5.56530 (09011918)
 ^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 621

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465023.41	3808201.91	5.42465	(09011918)	465043.41
3808201.91	5.28923 (09011918)			
465063.41	3808201.91	5.12383	(09011918)	465083.41
3808201.91	4.95231 (09011918)			
465103.41	3808201.91	4.77315	(09011918)	465123.41
3808201.91	4.58555 (09011918)			
465143.41	3808201.91	4.39656	(09011918)	465163.41
3808201.91	4.19895 (09011918)			
465183.41	3808201.91	3.99602	(09011918)	465203.41
3808201.91	3.79163 (09011918)			
465223.41	3808201.91	3.58651	(09011918)	465243.41
3808201.91	3.38249 (09011918)			
465263.41	3808201.91	3.18645	(09011918)	465283.41
3808201.91	3.03517 (09122717)			
465303.41	3808201.91	2.93638	(09122717)	465323.41
3808201.91	2.83832 (09122717)			
465343.41	3808201.91	2.73994	(09122717)	465363.41
3808201.91	2.64221 (09122717)			
465383.41	3808201.91	2.54684	(09122717)	465403.41
3808201.91	2.45036 (09122717)			

465423.41	3808201.91	2.36472	(09030119)	465443.41
3808201.91	2.41245 (09030119)			
465463.41	3808201.91	2.45741	(09030119)	465483.41
3808201.91	2.47282 (09030119)			
465503.41	3808201.91	2.51312	(09030119)	465523.41
3808201.91	2.55817 (09030119)			
465543.41	3808201.91	2.60270	(09030119)	465563.41
3808201.91	2.60381 (09030119)			
465583.41	3808201.91	2.61598	(09030119)	465603.41
3808201.91	2.65812 (09030119)			
465623.41	3808201.91	2.65846	(09030119)	465643.41
3808201.91	2.65630 (09030119)			
465663.41	3808201.91	2.69632	(09030119)	465683.41
3808201.91	2.70738 (09030119)			
465703.41	3808201.91	2.69836	(09030119)	464943.41
3808221.91	5.99638 (09011918)			
464963.41	3808221.91	5.84029	(09011918)	464983.41
3808221.91	5.68912 (09011918)			
465003.41	3808221.91	5.52942	(09011918)	465023.41
3808221.91	5.37916 (09011918)			
465043.41	3808221.91	5.22195	(09011918)	465063.41
3808221.91	5.04297 (09011918)			
465083.41	3808221.91	4.87354	(09011918)	465103.41
3808221.91	4.70017 (09011918)			
465123.41	3808221.91	4.49402	(09011918)	465143.41
3808221.91	4.29721 (09011918)			
465163.41	3808221.91	4.09829	(09011918)	465183.41
3808221.91	3.88630 (09011918)			
465203.41	3808221.91	3.68192	(09011918)	465223.41
3808221.91	3.48507 (09011918)			
465243.41	3808221.91	3.27538	(09011918)	465263.41
3808221.91	3.08435 (09122717)			
465283.41	3808221.91	2.98457	(09122717)	465303.41
3808221.91	2.88503 (09122717)			
465323.41	3808221.91	2.78623	(09122717)	465343.41
3808221.91	2.68955 (09122717)			
465363.41	3808221.91	2.59033	(09122717)	465383.41
3808221.91	2.49319 (09122717)			
465403.41	3808221.91	2.39698	(09122717)	465423.41
3808221.91	2.40891 (09030119)			
465443.41	3808221.91	2.45553	(09030119)	465463.41
3808221.91	2.50179 (09030119)			
465483.41	3808221.91	2.54764	(09030119)	465503.41
3808221.91	2.57316 (09030119)			
465523.41	3808221.91	2.61199	(09030119)	465543.41
3808221.91	2.65595 (09030119)			
465563.41	3808221.91	2.64802	(09030119)	465583.41
3808221.91	2.60802 (09030119)			
465603.41	3808221.91	2.64945	(09030119)	465623.41
3808221.91	2.67118 (09030119)			

465643.41	3808221.91	2.70519	(09030119)	465663.41
3808221.91	2.74452	(09030119)		
465683.41	3808221.91	2.73307	(09030119)	465703.41
3808221.91	2.68995	(09030119)		
464963.41	3808241.91	5.80887	(09011918)	464983.41
3808241.91	5.65083	(09011918)		
465003.41	3808241.91	5.48416	(09011918)	465023.41
3808241.91	5.31183	(09011918)		
465043.41	3808241.91	5.13643	(09011918)	465063.41
3808241.91	4.97194	(09011918)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 622

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465083.41	3808241.91	4.80400	(09011918)	465103.41
3808241.91	4.61875	(09011918)		
465123.41	3808241.91	4.40790	(09011918)	465143.41
3808241.91	4.19501	(09011918)		
465163.41	3808241.91	3.98349	(09011918)	465183.41
3808241.91	3.78440	(09011918)		
465203.41	3808241.91	3.57325	(09011918)	465223.41
3808241.91	3.36612	(09011918)		
465243.41	3808241.91	3.17057	(09011918)	465263.41
3808241.91	3.03371	(09122717)		
465283.41	3808241.91	2.93246	(09122717)	465303.41

3808241.91	2.83324	(09122717)	
465323.41	3808241.91	2.73336	(09122717) 465343.41
3808241.91	2.63517	(09122717)	
465363.41	3808241.91	2.53682	(09122717) 465383.41
3808241.91	2.43920	(09122717)	
465403.41	3808241.91	2.44303	(09030119) 465423.41
3808241.91	2.49004	(09030119)	
465443.41	3808241.91	2.53667	(09030119) 465463.41
3808241.91	2.58284	(09030119)	
465483.41	3808241.91	2.62851	(09030119) 465503.41
3808241.91	2.62083	(09030119)	
465523.41	3808241.91	2.57927	(09030119) 465543.41
3808241.91	2.62217	(09030119)	
465563.41	3808241.91	2.66095	(09030119) 465583.41
3808241.91	2.68385	(09030119)	
465603.41	3808241.91	2.72488	(09030119) 465623.41
3808241.91	2.71351	(09030119)	
465643.41	3808241.91	2.66981	(09030119) 465663.41
3808241.91	2.70826	(09030119)	
465683.41	3808241.91	2.74231	(09030119) 465703.41
3808241.91	2.75499	(09030119)	
464983.41	3808261.91	5.65637	(09011918) 465003.41
3808261.91	5.46900	(09011918)	
465023.41	3808261.91	5.28223	(09011918) 465043.41
3808261.91	5.09362	(09011918)	
465063.41	3808261.91	4.90733	(09011918) 465083.41
3808261.91	4.71398	(09011918)	
465103.41	3808261.91	4.51493	(09011918) 465123.41
3808261.91	4.31356	(09011918)	
465143.41	3808261.91	4.09833	(09011918) 465163.41
3808261.91	3.87926	(09011918)	
465183.41	3808261.91	3.66955	(09011918) 465203.41
3808261.91	3.46695	(09011918)	
465223.41	3808261.91	3.25880	(09011918) 465243.41
3808261.91	3.08358	(09122717)	
465263.41	3808261.91	2.98062	(09122717) 465283.41
3808261.91	2.87888	(09122717)	
465303.41	3808261.91	2.77949	(09122717) 465323.41
3808261.91	2.68137	(09122717)	
465343.41	3808261.91	2.58121	(09122717) 465363.41
3808261.91	2.48229	(09122717)	
465383.41	3808261.91	2.43519	(09030119) 465403.41
3808261.91	2.45249	(09030119)	
465423.41	3808261.91	2.49830	(09030119) 465443.41
3808261.91	2.54376	(09030119)	
465463.41	3808261.91	2.58938	(09030119) 465483.41
3808261.91	2.63397	(09030119)	
465503.41	3808261.91	2.63544	(09030119) 465523.41
3808261.91	2.63456	(09030119)	
465543.41	3808261.91	2.67701	(09030119) 465563.41

3808261.91	2.69024	(09030119)		
465583.41	3808261.91	2.68623	(09030119)	465603.41
3808261.91	2.72626	(09030119)		
465623.41	3808261.91	2.72444	(09030119)	465643.41
3808261.91	2.71650	(09030119)		
465663.41	3808261.91	2.70601	(09030119)	465683.41
3808261.91	2.73582	(09030119)		
465703.41	3808261.91	2.76776	(09030119)	465003.41
3808281.91	5.43372	(09011918)		
465023.41	3808281.91	5.23595	(09011918)	465043.41
3808281.91	5.03656	(09011918)		
465063.41	3808281.91	4.83816	(09011918)	465083.41
3808281.91	4.62563	(09011918)		
465103.41	3808281.91	4.40993	(09011918)	465123.41
3808281.91	4.20978	(09011918)		
465143.41	3808281.91	3.99996	(09011918)	465163.41
3808281.91	3.77706	(09011918)		
465183.41	3808281.91	3.56106	(09011918)	465203.41
3808281.91	3.35258	(09011918)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 623

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808281.91	3.14910	(09011918)	465243.41
3808281.91	3.03035	(09122717)		

465263.41	3808281.91	2.92683	(09122717)	465283.41
3808281.91	2.82433	(09122717)		
465303.41	3808281.91	2.72475	(09122717)	465323.41
3808281.91	2.62645	(09122717)		
465343.41	3808281.91	2.52628	(09122717)	465363.41
3808281.91	2.49017	(09030119)		
465383.41	3808281.91	2.48568	(09030119)	465403.41
3808281.91	2.44849	(09030119)		
465423.41	3808281.91	2.47217	(09030119)	465443.41
3808281.91	2.51389	(09030119)		
465463.41	3808281.91	2.58283	(09030119)	465483.41
3808281.91	2.62656	(09030119)		
465503.41	3808281.91	2.66979	(09030119)	465523.41
3808281.91	2.71127	(09030119)		
465543.41	3808281.91	2.73101	(09030119)	465563.41
3808281.91	2.71856	(09030119)		
465583.41	3808281.91	2.67636	(09030119)	465603.41
3808281.91	2.71561	(09030119)		
465623.41	3808281.91	2.74871	(09030119)	465643.41
3808281.91	2.76060	(09030119)		
465663.41	3808281.91	2.73603	(09030119)	465683.41
3808281.91	2.70241	(09030119)		
465703.41	3808281.91	2.71858	(09030119)	465003.41
3808301.91	5.38988	(09011918)		
465023.41	3808301.91	5.18337	(09011918)	465043.41
3808301.91	4.96205	(09011918)		
465063.41	3808301.91	4.77844	(09011918)	465083.41
3808301.91	4.55739	(09011918)		
465103.41	3808301.91	4.31404	(09011918)	465123.41
3808301.91	4.09681	(09011918)		
465143.41	3808301.91	3.87681	(09011918)	465163.41
3808301.91	3.65680	(09011918)		
465183.41	3808301.91	3.45382	(09011918)	465203.41
3808301.91	3.24026	(09011918)		
465223.41	3808301.91	3.08089	(09122717)	465243.41
3808301.91	2.97541	(09122717)		
465263.41	3808301.91	2.87378	(09122717)	465283.41
3808301.91	2.77207	(09122717)		
465303.41	3808301.91	2.67249	(09122717)	465323.41
3808301.91	2.57103	(09122717)		
465343.41	3808301.91	2.52862	(09030119)	465363.41
3808301.91	2.49941	(09030119)		
465383.41	3808301.91	2.48692	(09030119)	465403.41
3808301.91	2.50883	(09030119)		
465423.41	3808301.91	2.48049	(09030119)	465443.41
3808301.91	2.48533	(09030119)		
465463.41	3808301.91	2.66221	(09030119)	465483.41
3808301.91	2.70570	(09030119)		
465503.41	3808301.91	2.74862	(09030119)	465523.41
3808301.91	2.77012	(09030119)		

465543.41	3808301.91	2.73285	(09030119)	465563.41
3808301.91	2.72953	(09030119)		
465583.41	3808301.91	2.75019	(09030119)	465603.41
3808301.91	2.78900	(09030119)		
465623.41	3808301.91	2.78854	(09030119)	465643.41
3808301.91	2.76703	(09030119)		
465663.41	3808301.91	2.78253	(09030119)	465683.41
3808301.91	2.73906	(09030119)		
465703.41	3808301.91	2.71763	(09030119)	465043.41
3808321.91	4.89863	(09011918)		
465063.41	3808321.91	4.68242	(09011918)	465083.41
3808321.91	4.45683	(09011918)		
465103.41	3808321.91	4.22553	(09011918)	465123.41
3808321.91	3.99985	(09011918)		
465143.41	3808321.91	3.77285	(09011918)	465163.41
3808321.91	3.54774	(09011918)		
465183.41	3808321.91	3.33463	(09011918)	465203.41
3808321.91	3.13227	(09122717)		
465223.41	3808321.91	3.02676	(09122717)	465243.41
3808321.91	2.92318	(09122717)		
465263.41	3808321.91	2.82024	(09122717)	465283.41
3808321.91	2.71947	(09122717)		
465303.41	3808321.91	2.61665	(09122717)	465323.41
3808321.91	2.54193	(09030119)		
465343.41	3808321.91	2.55613	(09030119)	465363.41
3808321.91	2.53914	(09030119)		
465383.41	3808321.91	2.53719	(09030119)	465403.41
3808321.91	2.53453	(09030119)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 624

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

	465423.41	3808321.91	2.51735	(09030119)	465443.41
3808321.91		2.54021 (09030119)			
	465463.41	3808321.91	2.66712	(09030119)	465483.41
3808321.91		2.70948 (09030119)			
	465503.41	3808321.91	2.75130	(09030119)	465523.41
3808321.91		2.78870 (09030119)			
	465543.41	3808321.91	2.76603	(09030119)	465563.41
3808321.91		2.78539 (09030119)			
	465583.41	3808321.91	2.82053	(09030119)	465603.41
3808321.91		2.80840 (09030119)			
	465623.41	3808321.91	2.80990	(09030119)	465643.41
3808321.91		2.77060 (09030119)			
	465663.41	3808321.91	2.75765	(09030119)	465683.41
3808321.91		2.75777 (09030119)			
	465703.41	3808321.91	2.75680	(09030119)	465083.41
3808341.91		4.35353 (09011918)			
	465103.41	3808341.91	4.12704	(09011918)	465123.41
3808341.91		3.89380 (09011918)			
	465143.41	3808341.91	3.66272	(09011918)	465163.41
3808341.91		3.43502 (09011918)			
	465183.41	3808341.91	3.20953	(09011918)	465203.41
3808341.91		3.07806 (09122717)			
	465223.41	3808341.91	2.97237	(09122717)	465243.41
3808341.91		2.86836 (09122717)			
	465263.41	3808341.91	2.76673	(09122717)	465283.41
3808341.91		2.66311 (09122717)			
	465303.41	3808341.91	2.60025	(09030119)	465323.41
3808341.91		2.57319 (09030119)			
	465343.41	3808341.91	2.52948	(09030119)	465363.41
3808341.91		2.57482 (09030119)			
	465383.41	3808341.91	2.57068	(09030119)	465403.41
3808341.91		2.53127 (09030119)			
	465423.41	3808341.91	2.55259	(09030119)	465443.41
3808341.91		2.59201 (09030119)			
	465463.41	3808341.91	2.65869	(09030119)	465483.41
3808341.91		2.70012 (09030119)			
	465503.41	3808341.91	2.74106	(09030119)	465523.41
3808341.91		2.78024 (09030119)			
	465543.41	3808341.91	2.79760	(09030119)	465563.41
3808341.91		2.83405 (09030119)			
	465583.41	3808341.91	2.86564	(09030119)	465603.41
3808341.91		2.83871 (09030119)			
	465623.41	3808341.91	2.80280	(09030119)	465643.41

3808341.91	2.81227	(09030119)		
465663.41	3808341.91	2.78502	(09030119)	465683.41
3808341.91	2.78749	(09030119)		
465703.41	3808341.91	2.79293	(09030119)	465103.41
3808361.91	4.02412	(09011918)		
465123.41	3808361.91	3.77255	(09011918)	465143.41
3808361.91	3.53410	(09011918)		
465163.41	3808361.91	3.30574	(09011918)	465183.41
3808361.91	3.12917	(09122717)		
465203.41	3808361.91	3.02443	(09122717)	465223.41
3808361.91	2.91835	(09122717)		
465243.41	3808361.91	2.81147	(09122717)	465263.41
3808361.91	2.70893	(09122717)		
465283.41	3808361.91	2.64124	(09030119)	465303.41
3808361.91	2.60894	(09030119)		
465323.41	3808361.91	2.54452	(09030119)	465343.41
3808361.91	2.50178	(09030119)		
465363.41	3808361.91	2.54542	(09030119)	465383.41
3808361.91	2.58553	(09030119)		
465403.41	3808361.91	2.60492	(09030119)	465423.41
3808361.91	2.57282	(09030119)		
465443.41	3808361.91	2.60400	(09030119)	465463.41
3808361.91	2.73604	(09030119)		
465483.41	3808361.91	2.77719	(09030119)	465503.41
3808361.91	2.81777	(09030119)		
465523.41	3808361.91	2.85132	(09030119)	465543.41
3808361.91	2.82467	(09030119)		
465563.41	3808361.91	2.83541	(09030119)	465583.41
3808361.91	2.87135	(09030119)		
465603.41	3808361.91	2.88637	(09030119)	465623.41
3808361.91	2.84011	(09030119)		
465643.41	3808361.91	2.81591	(09030119)	465663.41
3808361.91	2.84215	(09030119)		
465683.41	3808361.91	2.80578	(09030119)	465703.41
3808361.91	2.76467	(09030119)		
465183.41	3808381.91	3.07859	(09122717)	465203.41
3808381.91	2.97311	(09122717)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 625

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738

```

, L0006739      , L0006740      , L0006741      ,
                  L0006742      , L0006743      , L0006744      , L0006745      , L0006746
, L0006747      , L0006748      , L0006749      ,
                  L0006750      , L0006751      , L0006752      , L0006753      , L0006754
, L0006755      , L0006756      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808381.91	2.86554	(09122717)	465243.41
3808381.91	2.75878	(09122717)		
465263.41	3808381.91	2.65434	(09122717)	465283.41
3808381.91	2.55966	(09030119)		
465303.41	3808381.91	2.57535	(09030119)	465323.41
3808381.91	2.51636	(09030119)		
465343.41	3808381.91	2.50570	(09030119)	465363.41
3808381.91	2.54748	(09030119)		
465383.41	3808381.91	2.58910	(09030119)	465403.41
3808381.91	2.62793	(09030119)		
465423.41	3808381.91	2.63661	(09030119)	465443.41
3808381.91	2.61090	(09030119)		
465463.41	3808381.91	2.75314	(09030119)	465483.41
3808381.91	2.79296	(09030119)		
465503.41	3808381.91	2.83222	(09030119)	465523.41
3808381.91	2.86687	(09030119)		
465543.41	3808381.91	2.86854	(09030119)	465563.41
3808381.91	2.81299	(09030119)		
465583.41	3808381.91	2.81757	(09030119)	465603.41
3808381.91	2.85276	(09030119)		
465623.41	3808381.91	2.85878	(09030119)	465643.41
3808381.91	2.85658	(09030119)		
465663.41	3808381.91	2.83761	(09030119)	465683.41
3808381.91	2.81916	(09030119)		
465703.41	3808381.91	2.78842	(09030119)	465303.41
3808401.91	2.50341	(09030119)		
465323.41	3808401.91	2.51521	(09030119)	465343.41
3808401.91	2.46253	(09030119)		
465363.41	3808401.91	2.50231	(09030119)	465383.41
3808401.91	2.54205	(09030119)		
465403.41	3808401.91	2.58169	(09030119)	465423.41
3808401.91	2.62116	(09030119)		
465443.41	3808401.91	2.66040	(09030119)	465463.41
3808401.91	2.69986	(09030119)		

465483.41	3808401.91	2.73847	(09030119)	465503.41
3808401.91	2.77665	(09030119)		
465523.41	3808401.91	2.81433	(09030119)	465543.41
3808401.91	2.85146	(09030119)		
465563.41	3808401.91	2.85002	(09030119)	465583.41
3808401.91	2.82790	(09030119)		
465603.41	3808401.91	2.86187	(09030119)	465623.41
3808401.91	2.88883	(09030119)		
465643.41	3808401.91	2.89338	(09030119)	465663.41
3808401.91	2.83268	(09030119)		
465683.41	3808401.91	2.81880	(09030119)	465703.41
3808401.91	2.82138	(09030119)		
465323.41	3808421.91	2.44580	(09030119)	465343.41
3808421.91	2.48130	(09030119)		
465363.41	3808421.91	2.51920	(09030119)	465383.41
3808421.91	2.55708	(09030119)		
465403.41	3808421.91	2.59486	(09030119)	465423.41
3808421.91	2.63249	(09030119)		
465443.41	3808421.91	2.66991	(09030119)	465463.41
3808421.91	2.70705	(09030119)		
465483.41	3808421.91	2.74386	(09030119)	465503.41
3808421.91	2.78027	(09030119)		
465523.41	3808421.91	2.81621	(09030119)	465543.41
3808421.91	2.85162	(09030119)		
465563.41	3808421.91	2.88233	(09030119)	465583.41
3808421.91	2.89682	(09030119)		
465603.41	3808421.91	2.93021	(09030119)	465623.41
3808421.91	2.90712	(09030119)		
465643.41	3808421.91	2.86330	(09030119)	465663.41
3808421.91	2.87341	(09030119)		
465683.41	3808421.91	2.83373	(09030119)	465703.41
3808421.91	2.78898	(09030119)		
465323.41	3808441.91	2.44547	(09030119)	465343.41
3808441.91	2.48356	(09030119)		
465363.41	3808441.91	2.56449	(09030119)	465383.41
3808441.91	2.60730	(09030119)		
465403.41	3808441.91	2.64477	(09030119)	465423.41
3808441.91	2.68206	(09030119)		
465443.41	3808441.91	2.71909	(09030119)	465463.41
3808441.91	2.75580	(09030119)		
465483.41	3808441.91	2.79214	(09030119)	465503.41
3808441.91	2.82802	(09030119)		
465523.41	3808441.91	2.86340	(09030119)	465543.41
3808441.91	2.89820	(09030119)		
465563.41	3808441.91	2.93236	(09030119)	465583.41
3808441.91	2.96582	(09030119)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465603.41	3808441.91	2.99852	(09030119)	465623.41
3808441.91	2.96912	(09030119)		
465643.41	3808441.91	2.88738	(09030119)	465663.41
3808441.91	2.86523	(09030119)		
465683.41	3808441.91	2.84343	(09030119)	465703.41
3808441.91	2.81343	(09030119)		
465343.41	3808461.91	2.45471	(09030119)	465363.41
3808461.91	2.56970	(09030119)		
465383.41	3808461.91	2.64872	(09030119)	465403.41
3808461.91	2.69111	(09030119)		
465423.41	3808461.91	2.72783	(09030119)	465443.41
3808461.91	2.76427	(09030119)		
465463.41	3808461.91	2.80096	(09030119)	465483.41
3808461.91	2.83665	(09030119)		
465503.41	3808461.91	2.89262	(09030119)	465523.41
3808461.91	2.93427	(09030119)		
465543.41	3808461.91	2.96852	(09030119)	465563.41
3808461.91	3.00204	(09030119)		
465583.41	3808461.91	3.03477	(09030119)	465603.41
3808461.91	3.06665	(09030119)		
465623.41	3808461.91	3.03529	(09030119)	465643.41
3808461.91	2.94689	(09030119)		
465663.41	3808461.91	2.87258	(09030119)	465683.41
3808461.91	2.84559	(09030119)		
465703.41	3808461.91	2.87126	(09030119)	465343.41

3808481.91	2.42339	(09030119)		
465363.41	3808481.91	2.47213	(09030119)	465383.41
3808481.91	2.56505	(09030119)		
465403.41	3808481.91	2.66608	(09030119)	465423.41
3808481.91	2.70103	(09030119)		
465443.41	3808481.91	2.73578	(09030119)	465463.41
3808481.91	2.77026	(09030119)		
465483.41	3808481.91	2.80440	(09030119)	465503.41
3808481.91	2.90855	(09030119)		
465523.41	3808481.91	3.00531	(09030119)	465543.41
3808481.91	3.03888	(09030119)		
465563.41	3808481.91	3.07164	(09030119)	465583.41
3808481.91	3.10351	(09030119)		
465603.41	3808481.91	3.13444	(09030119)	465623.41
3808481.91	3.10115	(09030119)		
465643.41	3808481.91	3.01053	(09030119)	465663.41
3808481.91	2.93365	(09030119)		
465683.41	3808481.91	2.90546	(09030119)	465703.41
3808481.91	2.92417	(09030119)		
465463.41	3808501.91	2.79748	(09030119)	465483.41
3808501.91	2.77989	(09030119)		
465503.41	3808501.91	2.86361	(09030119)	465523.41
3808501.91	3.00801	(09030119)		
465543.41	3808501.91	3.04025	(09030119)	465563.41
3808501.91	3.10388	(09030119)		
465583.41	3808501.91	3.16695	(09030119)	465603.41
3808501.91	3.14109	(09030119)		
465623.41	3808501.91	3.11601	(09030119)	465643.41
3808501.91	3.07385	(09030119)		
465663.41	3808501.91	2.99450	(09030119)	465683.41
3808501.91	2.96511	(09030119)		
465703.41	3808501.91	2.98100	(09030119)	465523.41
3808521.91	2.94096	(09030119)		
465543.41	3808521.91	2.97243	(09030119)	465563.41
3808521.91	3.09390	(09030119)		
465583.41	3808521.91	3.20183	(09030119)	465603.41
3808521.91	3.13178	(09030119)		
465623.41	3808521.91	3.11207	(09030119)	465643.41
3808521.91	3.10958	(09030119)		
465663.41	3808521.91	3.03875	(09030119)	465683.41
3808521.91	3.01711	(09030119)		
465703.41	3808521.91	3.01201	(09030119)	464239.31
3809562.31	8.32469	(09011918)		
464277.31	3809562.31	7.62402	(09011918)	463745.31
3809591.37	8.76350	(09120417)		
463783.31	3809591.37	8.97976	(09120417)	463821.31
3809591.37	9.56504	(09120417)		
463859.31	3809591.37	11.36434	(09120417)	463897.31
3809591.37	12.89229	(09120417)		
463935.31	3809591.37	12.46513	(09120417)	464239.31

3809591.37 8.13377 (09011918)
 464277.31 3809591.37 7.39142 (09011918) 463745.31
 3809620.43 8.68733 (09120417)
 463783.31 3809620.43 8.39316 (09120417) 463821.31
 3809620.43 9.06207 (09120417)
 ▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 627

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
463859.31	3809620.43	10.40424	(09120417)	463897.31
3809620.43	12.05028 (09120417)			
463935.31	3809620.43	12.25583	(09120417)	463973.31
3809620.43	11.85184 (09011918)			
464011.31	3809620.43	11.49670	(09011918)	464049.31
3809620.43	10.99049 (09011918)			
464087.31	3809620.43	10.38839	(09011918)	464125.31
3809620.43	9.83304 (09011918)			
464163.31	3809620.43	9.23179	(09011918)	464201.31
3809620.43	8.49484 (09011918)			
464239.31	3809620.43	7.88582	(09011918)	464277.31
3809620.43	7.12261 (09011918)			
463745.31	3809649.49	8.74137	(09011918)	463783.31
3809649.49	8.28992 (09120417)			
463821.31	3809649.49	8.37080	(09120417)	463859.31
3809649.49	9.31118 (09120417)			

463897.31	3809649.49	10.98804	(09120417)	463935.31
3809649.49	11.70685	(09120417)		
463973.31	3809649.49	10.96751	(09011918)	464011.31
3809649.49	11.12443	(09011918)		
464049.31	3809649.49	10.82614	(09011918)	464087.31
3809649.49	10.16663	(09011918)		
464125.31	3809649.49	9.70113	(09011918)	464163.31
3809649.49	9.00214	(09011918)		
464201.31	3809649.49	8.33465	(09011918)	464239.31
3809649.49	7.65207	(09011918)		
464277.31	3809649.49	6.85827	(09011918)	464315.31
3809649.49	6.05272	(09011918)		
464353.31	3809649.49	5.34808	(09011918)	464391.31
3809649.49	4.65801	(09011918)		
464429.31	3809649.49	4.13202	(09030119)	464467.31
3809649.49	4.10133	(09030119)		
464505.31	3809649.49	3.92317	(09030119)	463745.31
3809678.55	8.70487	(09011918)		
463783.31	3809678.55	8.30296	(09011918)	463821.31
3809678.55	7.98441	(09120417)		
463859.31	3809678.55	8.26069	(09120417)	463897.31
3809678.55	9.82160	(09120417)		
463935.31	3809678.55	10.84934	(09120417)	463973.31
3809678.55	10.44624	(09120417)		
464011.31	3809678.55	10.40353	(09011918)	464049.31
3809678.55	10.59155	(09011918)		
464087.31	3809678.55	10.08797	(09011918)	464125.31
3809678.55	9.52668	(09011918)		
464163.31	3809678.55	8.84817	(09011918)	464201.31
3809678.55	8.19277	(09011918)		
464239.31	3809678.55	7.37096	(09011918)	464277.31
3809678.55	6.56268	(09011918)		
464315.31	3809678.55	5.78330	(09011918)	464353.31
3809678.55	5.08486	(09011918)		
464391.31	3809678.55	4.39226	(09011918)	464429.31
3809678.55	4.14955	(09030119)		
464467.31	3809678.55	4.02253	(09030119)	464505.31
3809678.55	3.92684	(09030119)		
463745.31	3809707.61	8.67488	(09011918)	463783.31
3809707.61	8.29217	(09011918)		
463821.31	3809707.61	7.88286	(09011918)	463859.31
3809707.61	7.62273	(09120417)		
463897.31	3809707.61	8.25099	(09120417)	463935.31
3809707.61	9.77490	(09120417)		
463973.31	3809707.61	9.79816	(09120417)	464011.31
3809707.61	9.95674	(09011918)		
464049.31	3809707.61	10.26909	(09011918)	464087.31
3809707.61	9.90086	(09011918)		
464125.31	3809707.61	9.36701	(09011918)	464163.31
3809707.61	8.71742	(09011918)		

464201.31	3809707.61	7.90266	(09011918)	464239.31
3809707.61	7.10086	(09011918)		
464277.31	3809707.61	6.27208	(09011918)	464315.31
3809707.61	5.53963	(09011918)		
464353.31	3809707.61	4.77787	(09011918)	464391.31
3809707.61	4.28607	(09030119)		
464429.31	3809707.61	4.07108	(09030119)	464467.31
3809707.61	4.02800	(09030119)		
464505.31	3809707.61	3.77209	(09030119)	463745.31
3809736.67	8.68060	(09011918)		
463783.31	3809736.67	8.25722	(09011918)	463821.31
3809736.67	7.85321	(09011918)		
463859.31	3809736.67	7.46398	(09011918)	463897.31
3809736.67	7.26395	(09120417)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 628

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463935.31	3809736.67	7.90744	(09120417)	463973.31
3809736.67	9.05782	(09120417)		
464011.31	3809736.67	9.79680	(09011918)	464049.31
3809736.67	9.92349	(09011918)		
464087.31	3809736.67	9.78519	(09011918)	464125.31
3809736.67	9.23756	(09011918)		
464163.31	3809736.67	8.57653	(09011918)	464201.31

3809736.67	7.66540 (09011918)		
464239.31	3809736.67	6.86979 (09011918)	464277.31
3809736.67	6.02147 (09011918)		
464315.31	3809736.67	5.22995 (09011918)	464353.31
3809736.67	4.50740 (09011918)		
464391.31	3809736.67	4.20585 (09030119)	464429.31
3809736.67	4.08227 (09030119)		
464467.31	3809736.67	3.86961 (09030119)	464505.31
3809736.67	3.84107 (09030119)		
463745.31	3809765.73	8.69370 (09011918)	463783.31
3809765.73	8.24740 (09011918)		
463821.31	3809765.73	7.82083 (09011918)	463859.31
3809765.73	7.42309 (09011918)		
463897.31	3809765.73	7.06602 (09011918)	463935.31
3809765.73	6.78132 (09011918)		
463973.31	3809765.73	6.96382 (09011918)	464011.31
3809765.73	9.15241 (09011918)		
464049.31	3809765.73	9.81277 (09011918)	464087.31
3809765.73	9.61577 (09011918)		
464125.31	3809765.73	9.13024 (09011918)	464163.31
3809765.73	8.39640 (09011918)		
464201.31	3809765.73	7.46102 (09011918)	464239.31
3809765.73	6.62594 (09011918)		
464277.31	3809765.73	5.76648 (09011918)	464315.31
3809765.73	4.95182 (09011918)		
464353.31	3809765.73	4.34854 (09030119)	464391.31
3809765.73	4.24260 (09030119)		
464429.31	3809765.73	3.97322 (09030119)	464467.31
3809765.73	3.94217 (09030119)		
464505.31	3809765.73	3.84059 (09030119)	463745.31
3809794.79	8.70702 (09011918)		
463783.31	3809794.79	8.21684 (09011918)	463821.31
3809794.79	7.78311 (09011918)		
463859.31	3809794.79	7.36627 (09011918)	463897.31
3809794.79	6.97157 (09011918)		
463935.31	3809794.79	6.54816 (09011918)	463973.31
3809794.79	6.30285 (09011918)		
464011.31	3809794.79	6.96653 (09011918)	464049.31
3809794.79	9.56198 (09011918)		
464087.31	3809794.79	9.44246 (09011918)	464125.31
3809794.79	8.85666 (09011918)		
464163.31	3809794.79	8.09173 (09011918)	464201.31
3809794.79	7.21859 (09011918)		
464239.31	3809794.79	6.31223 (09011918)	464277.31
3809794.79	5.46239 (09011918)		
464315.31	3809794.79	4.68169 (09011918)	464353.31
3809794.79	4.36396 (09030119)		
464391.31	3809794.79	4.08356 (09030119)	464429.31
3809794.79	4.04763 (09030119)		
464467.31	3809794.79	3.96673 (09030119)	464505.31

3809794.79	3.76133	(09030119)		
463745.31	3809823.85	8.71836	(09011918)	463783.31
3809823.85	8.18560	(09011918)		
463821.31	3809823.85	7.70189	(09011918)	463859.31
3809823.85	7.29440	(09011918)		
463897.31	3809823.85	6.89171	(09011918)	463935.31
3809823.85	6.47224	(09011918)		
463973.31	3809823.85	6.06216	(09011918)	464011.31
3809823.85	5.93030	(09011918)		
464049.31	3809823.85	7.53069	(09011918)	464087.31
3809823.85	8.99112	(09011918)		
464125.31	3809823.85	8.60873	(09011918)	464163.31
3809823.85	7.80878	(09011918)		
464201.31	3809823.85	6.88303	(09011918)	464239.31
3809823.85	6.00968	(09011918)		
464277.31	3809823.85	5.16533	(09011918)	464315.31
3809823.85	4.51990	(09030119)		
464353.31	3809823.85	4.20139	(09030119)	464391.31
3809823.85	4.13738	(09030119)		
464429.31	3809823.85	4.07455	(09030119)	464467.31
3809823.85	3.94379	(09030119)		
464505.31	3809823.85	3.75158	(09030119)	463745.31
3809852.91	8.75138	(09011918)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 629

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

463783.31	3809852.91	8.19773	(09011918)	463821.31	
3809852.91	7.65031 (09011918)				
463859.31	3809852.91	7.22252	(09011918)	463897.31	
3809852.91	6.79593 (09011918)				
463935.31	3809852.91	6.37941	(09011918)	463973.31	
3809852.91	5.97714 (09011918)				
464011.31	3809852.91	5.74127	(10020118)	464049.31	
3809852.91	5.76263 (09011918)				
464087.31	3809852.91	7.18565	(09011918)	464125.31	
3809852.91	7.85864 (09011918)				
464163.31	3809852.91	7.24691	(09011918)	464201.31	
3809852.91	6.36324 (09011918)				
464239.31	3809852.91	5.60649	(09011918)	464277.31	
3809852.91	4.83263 (09011918)				
464315.31	3809852.91	4.50752	(09030119)	464353.31	
3809852.91	4.23571 (09030119)				
464391.31	3809852.91	4.16602	(09030119)	464429.31	
3809852.91	3.97348 (09030119)				
464467.31	3809852.91	3.87714	(09030119)	464505.31	
3809852.91	3.76184 (10020118)				
463745.31	3809881.97	8.79886	(09011918)	463783.31	
3809881.97	8.20176 (09011918)				
463821.31	3809881.97	7.63642	(09011918)	463859.31	
3809881.97	7.16194 (09011918)				
463897.31	3809881.97	6.70300	(09011918)	463935.31	
3809881.97	6.27048 (09011918)				
463973.31	3809881.97	5.88140	(09011918)	464011.31	
3809881.97	5.70191 (10020118)				
464049.31	3809881.97	5.58012	(10020118)	464087.31	
3809881.97	5.41021 (10020118)				
464125.31	3809881.97	5.86077	(09011918)	464163.31	
3809881.97	5.72883 (09011918)				
464201.31	3809881.97	5.38820	(09011918)	464239.31	
3809881.97	4.83194 (09011918)				
464277.31	3809881.97	4.47158	(10020118)	464315.31	
3809881.97	4.36448 (09030119)				
464353.31	3809881.97	4.21047	(10020118)	464391.31	
3809881.97	4.08951 (09030119)				
464429.31	3809881.97	3.99131	(09030119)	464467.31	
3809881.97	3.87071 (10020118)				
464505.31	3809881.97	3.76870	(10020118)	463745.31	
3809911.03	8.81577 (09011918)				
463783.31	3809911.03	8.18064	(09011918)	463821.31	
3809911.03	7.62461 (09011918)				
463859.31	3809911.03	7.11231	(09011918)	463897.31	
3809911.03	6.63218 (09011918)				
463935.31	3809911.03	6.17490	(09011918)	463973.31	
3809911.03	5.78247 (10020118)				

464011.31	3809911.03	5.65291	(10020118)	464049.31
3809911.03	5.54496	(10020118)		
464087.31	3809911.03	5.40755	(10020118)	464125.31
3809911.03	5.23633	(10020118)		
464163.31	3809911.03	5.05227	(10020118)	464201.31
3809911.03	4.85893	(10020118)		
464239.31	3809911.03	4.69346	(10020118)	464277.31
3809911.03	4.51650	(10020118)		
464315.31	3809911.03	4.36385	(10020118)	464353.31
3809911.03	4.22520	(10020118)		
464391.31	3809911.03	4.10808	(09030119)	464429.31
3809911.03	3.99964	(09030119)		
464467.31	3809911.03	3.87750	(10020118)	464505.31
3809911.03	3.78230	(10020118)		
463745.31	3809940.09	8.80833	(09011918)	463783.31
3809940.09	8.15288	(09011918)		
463821.31	3809940.09	7.59794	(09011918)	463859.31
3809940.09	7.06074	(09011918)		
463897.31	3809940.09	6.57025	(09011918)	463935.31
3809940.09	6.10050	(09011918)		
463973.31	3809940.09	5.75272	(10020118)	464011.31
3809940.09	5.59078	(10020118)		
464049.31	3809940.09	5.48630	(10020118)	464087.31
3809940.09	5.36234	(10020118)		
464125.31	3809940.09	5.22580	(10020118)	464163.31
3809940.09	5.08189	(10020118)		
464201.31	3809940.09	4.89767	(10020118)	464239.31
3809940.09	4.70998	(10020118)		
464277.31	3809940.09	4.54556	(10020118)	464315.31
3809940.09	4.39158	(10020118)		
464353.31	3809940.09	4.24776	(10020118)	464391.31
3809940.09	4.11687	(10020118)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 630

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464429.31	3809940.09	3.99554	(10020118)	464467.31
3809940.09	3.89078	(10020118)		
464505.31	3809940.09	3.79975	(10020118)	463745.31
3809969.15	8.89499	(09011918)		
463783.31	3809969.15	8.15617	(09011918)	463821.31
3809969.15	7.55769	(09011918)		
463859.31	3809969.15	7.00838	(09011918)	463897.31
3809969.15	6.50068	(09011918)		
463935.31	3809969.15	6.02099	(09011918)	463973.31
3809969.15	5.74308	(10020118)		
464011.31	3809969.15	5.55478	(10020118)	464049.31
3809969.15	5.41593	(10020118)		
464087.31	3809969.15	5.30783	(10020118)	464125.31
3809969.15	5.19878	(10020118)		
464163.31	3809969.15	5.07226	(10020118)	464201.31
3809969.15	4.91945	(10020118)		
464239.31	3809969.15	4.74318	(10020118)	464277.31
3809969.15	4.58279	(10020118)		
464315.31	3809969.15	4.40238	(10020118)	464353.31
3809969.15	4.25184	(10020118)		
464391.31	3809969.15	4.12158	(10020118)	464429.31
3809969.15	4.00651	(10020118)		
464467.31	3809969.15	3.90605	(10020118)	464505.31
3809969.15	3.80198	(10020118)		
463745.31	3809998.21	9.08575	(09011918)	463783.31
3809998.21	8.22885	(09011918)		
463821.31	3809998.21	7.55508	(09011918)	463859.31
3809998.21	6.96716	(09011918)		
463897.31	3809998.21	6.43846	(09011918)	463935.31
3809998.21	5.93363	(09011918)		
463973.31	3809998.21	5.72898	(10020118)	464011.31
3809998.21	5.54483	(10020118)		
464049.31	3809998.21	5.39325	(10020118)	464087.31
3809998.21	5.27528	(10020118)		
464125.31	3809998.21	5.18113	(10020118)	464163.31
3809998.21	5.06396	(10020118)		
464201.31	3809998.21	4.93557	(10020118)	464239.31
3809998.21	4.76921	(10020118)		
464277.31	3809998.21	4.59292	(10020118)	464315.31

3809998.21	4.43810	(10020118)		
464353.31	3809998.21	4.26517	(10020118)	464391.31
3809998.21	4.13522	(10020118)		
464429.31	3809998.21	4.02211	(10020118)	464467.31
3809998.21	3.91396	(10020118)		
464505.31	3809998.21	3.80932	(10020118)	463745.31
3810027.27	9.25863	(09011918)		
463783.31	3810027.27	8.34269	(09011918)	463821.31
3810027.27	7.58903	(09011918)		
463859.31	3810027.27	6.94846	(09011918)	463897.31
3810027.27	6.39009	(09011918)		
463935.31	3810027.27	5.93199	(10020118)	463973.31
3810027.27	5.73096	(10020118)		
464011.31	3810027.27	5.54385	(10020118)	464049.31
3810027.27	5.38820	(10020118)		
464087.31	3810027.27	5.24880	(10020118)	464125.31
3810027.27	5.14670	(10020118)		
464163.31	3810027.27	5.05066	(10020118)	464201.31
3810027.27	4.93087	(10020118)		
464239.31	3810027.27	4.79100	(10020118)	464277.31
3810027.27	4.61853	(10020118)		
464315.31	3810027.27	4.44609	(10020118)	464353.31
3810027.27	4.29690	(10020118)		
464391.31	3810027.27	4.16108	(10020118)	464429.31
3810027.27	4.03409	(10020118)		
464467.31	3810027.27	3.92014	(10020118)	464505.31
3810027.27	3.81740	(10020118)		
463745.31	3810056.33	9.41993	(09011918)	463783.31
3810056.33	8.45092	(09011918)		
463821.31	3810056.33	7.61756	(09011918)	463859.31
3810056.33	6.93691	(09011918)		
463897.31	3810056.33	6.33437	(09011918)	463935.31
3810056.33	5.96436	(10020118)		
463973.31	3810056.33	5.74410	(10020118)	464011.31
3810056.33	5.54408	(10020118)		
464049.31	3810056.33	5.36897	(10020118)	464087.31
3810056.33	5.22890	(10020118)		
464125.31	3810056.33	5.10917	(10020118)	464163.31
3810056.33	5.02172	(10020118)		
464201.31	3810056.33	4.91281	(10020118)	464239.31
3810056.33	4.78635	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 631

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK395 ***

INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464277.31	3810056.33	4.64732	(10020118)	464315.31
3810056.33	4.47514	(10020118)		
464353.31	3810056.33	4.30301	(10020118)	464391.31
3810056.33	4.16223	(10020118)		
464429.31	3810056.33	4.03901	(10020118)	464467.31
3810056.33	3.92897	(10020118)		
464505.31	3810056.33	3.81790	(10020118)	463745.31
3810085.39	10.59106	(09120417)		
463783.31	3810085.39	8.54055	(09011918)	463821.31
3810085.39	7.65753	(09011918)		
463859.31	3810085.39	6.92040	(09011918)	463897.31
3810085.39	6.32984	(10020118)		
463935.31	3810085.39	6.01230	(10020118)	463973.31
3810085.39	5.76469	(10020118)		
464011.31	3810085.39	5.53960	(10020118)	464049.31
3810085.39	5.33685	(10020118)		
464087.31	3810085.39	5.20148	(10020118)	464125.31
3810085.39	5.08207	(10020118)		
464163.31	3810085.39	4.98492	(10020118)	464201.31
3810085.39	4.88293	(10020118)		
464239.31	3810085.39	4.77004	(10020118)	464277.31
3810085.39	4.63945	(10020118)		
464315.31	3810085.39	4.50402	(10020118)	464353.31
3810085.39	4.33084	(10020118)		
464391.31	3810085.39	4.17583	(10020118)	464429.31
3810085.39	4.05300	(10020118)		
464467.31	3810085.39	3.93318	(10020118)	464505.31
3810085.39	3.82137	(10020118)		
463745.31	3810114.45	13.27586	(09120417)	463783.31
3810114.45	8.64753	(09011918)		

463821.31	3810114.45	7.70901	(09011918)	463859.31
3810114.45	6.94339	(09011918)		
463897.31	3810114.45	6.42243	(10020118)	463935.31
3810114.45	6.07080	(10020118)		
463973.31	3810114.45	5.78425	(10020118)	464011.31
3810114.45	5.54561	(10020118)		
464049.31	3810114.45	5.32728	(10020118)	464087.31
3810114.45	5.17619	(10020118)		
464125.31	3810114.45	5.04217	(10020118)	464163.31
3810114.45	4.93504	(10020118)		
464201.31	3810114.45	4.83792	(10020118)	464239.31
3810114.45	4.74724	(10020118)		
464277.31	3810114.45	4.62680	(10020118)	464315.31
3810114.45	4.48811	(10020118)		
464353.31	3810114.45	4.34888	(10020118)	464391.31
3810114.45	4.21006	(10020118)		
464429.31	3810114.45	4.07534	(10020118)	464467.31
3810114.45	3.93682	(10020118)		
464505.31	3810114.45	3.80486	(10020118)	463745.31
3810143.51	14.17214	(09120417)		
463783.31	3810143.51	9.05681	(09011918)	463821.31
3810143.51	7.77762	(09011918)		
463859.31	3810143.51	7.08744	(10020118)	463897.31
3810143.51	6.51565	(10020118)		
463935.31	3810143.51	6.10801	(10020118)	463973.31
3810143.51	5.77854	(10020118)		
464011.31	3810143.51	5.55456	(10020118)	464049.31
3810143.51	5.32589	(10020118)		
464087.31	3810143.51	5.13962	(10020118)	464125.31
3810143.51	5.00366	(10020118)		
464163.31	3810143.51	4.89575	(10020118)	464201.31
3810143.51	4.79598	(10020118)		
464239.31	3810143.51	4.70307	(10020118)	464277.31
3810143.51	4.60543	(10020118)		
464315.31	3810143.51	4.46933	(10020118)	464353.31
3810143.51	4.32219	(10020118)		
464391.31	3810143.51	4.18650	(10020118)	464429.31
3810143.51	4.04916	(10020118)		
464467.31	3810143.51	3.91437	(10020118)	464505.31
3810143.51	3.77976	(10020118)		
464383.78	3807479.29	6.24424	(09121017)	464355.03
3807405.24	5.92233	(09121017)		
464402.07	3807352.10	5.88493	(09121017)	464367.23
3807296.35	5.52471	(09121017)		
464358.52	3807237.99	5.15201	(09121017)	464385.52
3807161.33	5.01854	(09121017)		
463132.27	3810926.37	22.35503	(10021119)	463237.82
3811199.31	46.01884	(10021119)		
464944.35	3809244.89	3.45450	(09030119)	465700.32
3809255.46	2.13955	(10020118)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 632

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK395 ***
 INCLUDING SOURCE(S): L0006729 , L0006730
 , L0006731 , L0006732 , L0006733 ,
 L0006734 , L0006735 , L0006736 , L0006737 , L0006738
 , L0006739 , L0006740 , L0006741 ,
 L0006742 , L0006743 , L0006744 , L0006745 , L0006746
 , L0006747 , L0006748 , L0006749 ,
 L0006750 , L0006751 , L0006752 , L0006753 , L0006754
 , L0006755 , L0006756 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465716.18	3808536.49	2.99393	(09030119)	465544.37
3808533.85	2.95531	(09030119)		
465420.13	3808486.27	2.67250	(09030119)	465348.77
3808491.56	2.42532	(09030119)		
465317.05	3808443.98	2.42415	(09030119)	465327.62
3808406.97	2.46755	(09030119)		
465108.23	3808369.97	3.92289	(09011918)	464999.86
3808301.24	5.42617	(09011918)		
464722.31	3807973.48	6.77287	(09011918)	464717.03
3807836.03	6.37125	(09011918)		
464344.33	3807936.47	8.27891	(09031218)	464349.61
3807780.52	7.31107	(09031218)		
464386.62	3807785.81	7.47198	(09031218)	464521.43
3807859.82	7.74570	(09120417)		
464537.28	3807719.72	7.63913	(09031218)	464426.27
3807613.99	7.19753	(09031218)		
464368.43	3807532.62	6.44210	(09121017)	464324.60
3807121.91	4.29642	(09121017)		
464123.31	3807123.54	7.70365	(09123118)	463930.13
3806909.26	6.22113	(09123118)		
463831.11	3806906.01	5.83809	(09011117)	463821.36

3806720.95	5.59512	(09011117)		
463727.21	3806727.44		6.16875	(09011117)
3806334.59	7.16477	(09111519)		463598.97
463001.06	3806361.54		4.04759	(10102005)

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 633

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

462160.55	3809377.75	3.02243	(09012007)	462051.48
3809270.62	2.88962	(09012007)		
462014.47	3809029.10	2.89452	(10050705)	462010.58
3808855.75	3.01530	(09021807)		
461936.56	3808886.92	2.87795	(09021807)	461936.56
3808997.94	2.80998	(10050705)		
461909.30	3808768.10	2.86101	(09021807)	461835.28
3808894.71	2.71885	(09021807)		
461845.02	3808995.99	2.69091	(09021807)	461833.33
3809114.80	2.60839	(10050705)		
461843.07	3809210.24	2.53835	(10050705)	461809.96
3809297.89	2.44436	(09012007)		
461856.71	3809385.54	2.52981	(09012007)	461841.13
3809482.92	2.49710	(09012007)		
462004.74	3809379.69	2.78304	(09012007)	461763.22
3808793.43	2.62349	(09021807)		

461753.48	3808699.93	2.67957	(09022407)	461835.28
3808686.30	2.86121 (09022407)			
461823.60	3808579.17	2.88006	(09022407)	461761.27
3808585.02	2.77787 (09022407)			
462301.19	3807807.15	7.52627	(10021620)	462304.78
3807868.16	7.55526 (10021620)			
462216.84	3807882.52	7.15419	(10021620)	462116.34
3807886.11	6.73784 (10021620)			
462114.55	3807789.20	6.76538	(10021620)	462012.25
3807887.90	6.32915 (10021620)			
462008.66	3807975.84	6.09264	(10021620)	461917.14
3807972.25	5.75714 (10021620)			
461922.52	3808187.60	3.58348	(09021520)	461908.17
3808288.10	3.04169 (10042219)			
461848.94	3808377.83	2.93706	(09022407)	461831.00
3808494.48	2.86606 (09022407)			
462421.43	3808393.98	4.45650	(09022407)	462459.11
3808501.66	4.41885 (09021807)			
462437.58	3808580.62	4.28243	(09021807)	462654.73
3809189.00	4.48873 (09022207)			
462559.49	3809194.32	4.16123	(09022207)	465763.86
3807935.19	1.90201 (09010419)			
465819.84	3807935.19	1.85927	(09010419)	465875.82
3807935.19	1.81728 (09010419)			
465931.80	3807935.19	1.77708	(09010419)	465987.78
3807935.19	1.73772 (09010419)			
466043.76	3807935.19	1.69942	(09010419)	466099.74
3807935.19	1.66212 (09010419)			
466155.72	3807935.19	1.62575	(09010419)	466211.70
3807935.19	1.59023 (09010419)			
466267.68	3807935.19	1.55569	(09010419)	466323.66
3807935.19	1.52071 (09010419)			
466379.64	3807935.19	1.48804	(09010419)	466435.62
3807935.19	1.45608 (09010419)			
466491.60	3807935.19	1.42484	(09010419)	466547.58
3807935.19	1.39120 (09010419)			
466603.56	3807935.19	1.36079	(09010419)	466659.54
3807935.19	1.33106 (09010419)			
466715.52	3807935.19	1.30206	(09010419)	466771.50
3807935.19	1.27333 (09010419)			
466827.48	3807935.19	1.24408	(09010419)	466883.46
3807935.19	1.21647 (09010419)			
465763.86	3808001.41	1.91788	(09120320)	465819.84
3808001.41	1.87065 (09120320)			
465875.82	3808001.41	1.82405	(09120320)	465931.80
3808001.41	1.78350 (09010419)			
465987.78	3808001.41	1.74758	(09010419)	466043.76
3808001.41	1.70894 (09010419)			
466099.74	3808001.41	1.67634	(09010419)	466155.72
3808001.41	1.64164 (09010419)			

466211.70	3808001.41	1.60814	(09010419)	466267.68
3808001.41	1.57497	(09010419)		
466323.66	3808001.41	1.54224	(09010419)	466379.64
3808001.41	1.51029	(09010419)		
466435.62	3808001.41	1.47904	(09010419)	466491.60
3808001.41	1.44846	(09010419)		
466547.58	3808001.41	1.41760	(09010419)	466603.56
3808001.41	1.38871	(09010419)		
466659.54	3808001.41	1.36046	(09010419)	466715.52
3808001.41	1.32956	(09010419)		
466771.50	3808001.41	1.30243	(09010419)	466827.48
3808001.41	1.27549	(09010419)		
466883.46	3808001.41	1.24789	(09010419)	465763.86
3808067.63	1.93083	(09120320)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 634

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140

, L0006141	, L0006142	, L0006143	,			
	L0006144	, L0006145	, L0006146	, L0006147	, L0006148	
, L0006149	, L0006150	, L0006151	,			
	L0006152	, L0006153	, L0006154	, L0006155	, L0006156	
, L0006157	, L0006158	, L0006159	,			
	L0006160	, L0006161	, L0006162	, L0006163	, L0006164	
, L0006165	, L0006166	, . . .	,			

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465819.84	3808067.63	1.88537	(09120320)	465875.82
3808067.63	1.84177	(09120320)		
465931.80	3808067.63	1.79914	(09120320)	465987.78
3808067.63	1.75752	(09120320)		
466043.76	3808067.63	1.71681	(09120320)	466099.74
3808067.63	1.67978	(09010419)		
466155.72	3808067.63	1.64710	(09010419)	466211.70

3808067.63	1.61487 (09010419)		
466267.68	3808067.63	1.58349 (09010419)	466323.66
3808067.63	1.55230 (09010419)		
466379.64	3808067.63	1.52181 (09010419)	466435.62
3808067.63	1.49399 (09010419)		
466491.60	3808067.63	1.46280 (09010419)	466547.58
3808067.63	1.43416 (09010419)		
466603.56	3808067.63	1.40613 (09010419)	466659.54
3808067.63	1.37874 (09010419)		
466715.52	3808067.63	1.35229 (09010419)	466771.50
3808067.63	1.32628 (09010419)		
466827.48	3808067.63	1.29934 (09010419)	466883.46
3808067.63	1.27226 (09010419)		
465763.86	3808133.85	1.93376 (09120320)	465819.84
3808133.85	1.89081 (09120320)		
465875.82	3808133.85	1.84938 (09120320)	465931.80
3808133.85	1.80893 (09120320)		
465987.78	3808133.85	1.77256 (09120320)	466043.76
3808133.85	1.73338 (09120320)		
466099.74	3808133.85	1.69509 (09120320)	466155.72
3808133.85	1.65752 (09120320)		
466211.70	3808133.85	1.62070 (09120320)	466267.68
3808133.85	1.58477 (09120320)		
466323.66	3808133.85	1.55551 (09010419)	466379.64
3808133.85	1.52737 (09010419)		
466435.62	3808133.85	1.49955 (09010419)	466491.60
3808133.85	1.47234 (09010419)		
466547.58	3808133.85	1.44482 (09010419)	466603.56
3808133.85	1.41851 (09010419)		
466659.54	3808133.85	1.39269 (09010419)	466715.52
3808133.85	1.36707 (09010419)		
466771.50	3808133.85	1.33989 (09010419)	466827.48
3808133.85	1.31560 (09010419)		
466883.46	3808133.85	1.29124 (09010419)	465763.86
3808200.07	1.92792 (09120320)		
465819.84	3808200.07	1.88752 (09120320)	465875.82
3808200.07	1.84822 (09120320)		
465931.80	3808200.07	1.81297 (09120320)	465987.78
3808200.07	1.77536 (09120320)		
466043.76	3808200.07	1.73863 (09120320)	466099.74
3808200.07	1.70262 (09120320)		
466155.72	3808200.07	1.66732 (09120320)	466211.70
3808200.07	1.63269 (09120320)		
466267.68	3808200.07	1.59876 (09120320)	466323.66
3808200.07	1.56791 (09120320)		
466379.64	3808200.07	1.53506 (09120320)	466435.62
3808200.07	1.50272 (09120320)		
466491.60	3808200.07	1.47282 (09010419)	466547.58
3808200.07	1.44723 (09010419)		
466603.56	3808200.07	1.42214 (09010419)	466659.54

3808200.07	1.39753	(09010419)		
466715.52	3808200.07	1.37343	(09010419)	466771.50
3808200.07	1.34915	(09010419)		
466827.48	3808200.07	1.32459	(09010419)	466883.46
3808200.07	1.30168	(09010419)		
465763.86	3808266.29	1.92385	(10021420)	465819.84
3808266.29	1.87577	(09120320)		
465875.82	3808266.29	1.84091	(09120320)	465931.80
3808266.29	1.80489	(09120320)		
465987.78	3808266.29	1.76972	(09120320)	466043.76
3808266.29	1.73533	(09120320)		
466099.74	3808266.29	1.70167	(09120320)	466155.72
3808266.29	1.66867	(09120320)		
466211.70	3808266.29	1.63650	(09120320)	466267.68
3808266.29	1.60614	(09120320)		
466323.66	3808266.29	1.57484	(09120320)	466379.64
3808266.29	1.54612	(09120320)		
466435.62	3808266.29	1.51607	(09120320)	466491.60
3808266.29	1.48506	(09120320)		
466547.58	3808266.29	1.45523	(09120320)	466603.56
3808266.29	1.42586	(09120320)		
466659.54	3808266.29	1.39829	(09120320)	466715.52
3808266.29	1.37176	(09010419)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 635

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

466771.50	3808266.29	1.34970	(09010419)	466827.48
3808266.29	1.32696	(09010419)		
466883.46	3808266.29	1.30527	(09010419)	465763.86
3808332.51	1.95128	(10021420)		
465819.84	3808332.51	1.90320	(10021420)	465875.82
3808332.51	1.84977	(10021420)		
465931.80	3808332.51	1.79690	(10021420)	465987.78
3808332.51	1.75565	(09120320)		
466043.76	3808332.51	1.72364	(09120320)	466099.74
3808332.51	1.69236	(09120320)		
466155.72	3808332.51	1.66260	(09120320)	466211.70
3808332.51	1.63249	(09120320)		
466267.68	3808332.51	1.60266	(09120320)	466323.66
3808332.51	1.57693	(09120320)		
466379.64	3808332.51	1.54784	(09120320)	466435.62
3808332.51	1.51912	(09120320)		
466491.60	3808332.51	1.49083	(09120320)	466547.58
3808332.51	1.46290	(09120320)		
466603.56	3808332.51	1.43863	(09120320)	466659.54
3808332.51	1.41183	(09120320)		
466715.52	3808332.51	1.38488	(09120320)	466771.50
3808332.51	1.35585	(09120320)		
466827.48	3808332.51	1.33007	(09120320)	466883.46
3808332.51	1.30445	(09120320)		
465763.86	3808398.73	1.96780	(10021420)	465819.84
3808398.73	1.92327	(10021420)		
465875.82	3808398.73	1.87377	(10021420)	465931.80
3808398.73	1.82503	(10021420)		
465987.78	3808398.73	1.77629	(10021420)	466043.76
3808398.73	1.72790	(10021420)		
466099.74	3808398.73	1.68186	(10021420)	466155.72
3808398.73	1.64734	(09120320)		
466211.70	3808398.73	1.61894	(09120320)	466267.68
3808398.73	1.59551	(09120320)		
466323.66	3808398.73	1.56793	(09120320)	466379.64
3808398.73	1.54108	(09120320)		
466435.62	3808398.73	1.51628	(09120320)	466491.60
3808398.73	1.49043	(09120320)		
466547.58	3808398.73	1.46487	(09120320)	466603.56
3808398.73	1.43996	(09120320)		
466659.54	3808398.73	1.41501	(09120320)	466715.52
3808398.73	1.38958	(09120320)		
466771.50	3808398.73	1.36501	(09120320)	466827.48
3808398.73	1.34026	(09120320)		
466883.46	3808398.73	1.31601	(09120320)	465763.86
3808464.95	1.97417	(10021420)		
465819.84	3808464.95	1.93230	(10021420)	465875.82
3808464.95	1.88618	(10021420)		

465931.80	3808464.95	1.84153	(10021420)	465987.78
3808464.95	1.79749	(10021420)		
466043.76	3808464.95	1.75521	(10021420)	466099.74
3808464.95	1.71003	(10021420)		
466155.72	3808464.95	1.66515	(10021420)	466211.70
3808464.95	1.62068	(10021420)		
466267.68	3808464.95	1.57982	(10021420)	466323.66
3808464.95	1.55020	(09120320)		
466379.64	3808464.95	1.52742	(09120320)	466435.62
3808464.95	1.50323	(09120320)		
466491.60	3808464.95	1.48133	(09120320)	466547.58
3808464.95	1.45740	(09120320)		
466603.56	3808464.95	1.43380	(09120320)	466659.54
3808464.95	1.41050	(09120320)		
466715.52	3808464.95	1.38762	(09120320)	466771.50
3808464.95	1.36500	(09120320)		
466827.48	3808464.95	1.34255	(09120320)	466883.46
3808464.95	1.32035	(09120320)		
465763.86	3808531.17	1.97297	(10021420)	465819.84
3808531.17	1.93079	(10021420)		
465875.82	3808531.17	1.88884	(10021420)	465931.80
3808531.17	1.84701	(10021420)		
465987.78	3808531.17	1.80838	(10021420)	466043.76
3808531.17	1.76815	(10021420)		
466099.74	3808531.17	1.72818	(10021420)	466155.72
3808531.17	1.68674	(10021420)		
466211.70	3808531.17	1.64568	(10021420)	466267.68
3808531.17	1.60695	(10021420)		
466323.66	3808531.17	1.56786	(10021420)	466379.64
3808531.17	1.52751	(10021420)		
466435.62	3808531.17	1.48915	(10021420)	466491.60
3808531.17	1.46222	(09120320)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 636

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM ₁₀ IN MICROGRAMS/M**3		
**				
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

466547.58	3808531.17	1.44064	(09120320)	466603.56
3808531.17	1.41929	(09120320)		
466659.54	3808531.17	1.39810	(09120320)	466715.52
3808531.17	1.37743	(09120320)		
466771.50	3808531.17	1.35638	(09120320)	466827.48
3808531.17	1.33653	(09120320)		
466883.46	3808531.17	1.31632	(09120320)	465763.86
3808597.39	1.95732	(10021420)		
465819.84	3808597.39	1.92368	(10021420)	465875.82
3808597.39	1.88515	(10021420)		
465931.80	3808597.39	1.84354	(10021420)	465987.78
3808597.39	1.80843	(10021420)		
466043.76	3808597.39	1.77406	(10021420)	466099.74
3808597.39	1.73631	(10021420)		
466155.72	3808597.39	1.69928	(10021420)	466211.70
3808597.39	1.66248	(10021420)		
466267.68	3808597.39	1.62454	(10021420)	466323.66
3808597.39	1.58956	(10021420)		
466379.64	3808597.39	1.55384	(10021420)	466435.62
3808597.39	1.51611	(10021420)		
466491.60	3808597.39	1.47968	(10021420)	466547.58
3808597.39	1.44266	(10021420)		
466603.56	3808597.39	1.40505	(10021420)	466659.54
3808597.39	1.37900	(09120320)		
466715.52	3808597.39	1.36028	(09120320)	466771.50
3808597.39	1.34164	(09120320)		
466827.48	3808597.39	1.32311	(09120320)	466883.46
3808597.39	1.30589	(09120320)		
465763.86	3808663.61	1.93146	(10021420)	465819.84
3808663.61	1.90300	(10021420)		
465875.82	3808663.61	1.86934	(10021420)	465931.80
3808663.61	1.83574	(10021420)		
465987.78	3808663.61	1.80233	(10021420)	466043.76
3808663.61	1.76854	(10021420)		
466099.74	3808663.61	1.73628	(10021420)	466155.72
3808663.61	1.70193	(10021420)		
466211.70	3808663.61	1.66719	(10021420)	466267.68
3808663.61	1.63269	(10021420)		
466323.66	3808663.61	1.60204	(10021420)	466379.64

3808663.61	1.56728	(10021420)		
466435.62	3808663.61	1.53634	(10021420)	466491.60
3808663.61	1.50130	(10021420)		
466547.58	3808663.61	1.46610	(10021420)	466603.56
3808663.61	1.43100	(10021420)		
466659.54	3808663.61	1.39597	(10021420)	466715.52
3808663.61	1.36144	(10021420)		
466771.50	3808663.61	1.32704	(10021420)	466827.48
3808663.61	1.30295	(09120320)		
466883.46	3808663.61	1.28644	(09120320)	465763.86
3808729.83	1.90126	(10021420)		
465819.84	3808729.83	1.87814	(10021420)	465875.82
3808729.83	1.84849	(10021420)		
465931.80	3808729.83	1.81727	(10021420)	465987.78
3808729.83	1.78628	(10021420)		
466043.76	3808729.83	1.75563	(10021420)	466099.74
3808729.83	1.72489	(10021420)		
466155.72	3808729.83	1.69410	(10021420)	466211.70
3808729.83	1.66287	(10021420)		
466267.68	3808729.83	1.63188	(10021420)	466323.66
3808729.83	1.60450	(10021420)		
466379.64	3808729.83	1.57462	(10021420)	466435.62
3808729.83	1.54318	(10021420)		
466491.60	3808729.83	1.51342	(10021420)	466547.58
3808729.83	1.48120	(10021420)		
466603.56	3808729.83	1.44893	(10021420)	466659.54
3808729.83	1.42007	(10021420)		
466715.52	3808729.83	1.38756	(10021420)	466771.50
3808729.83	1.35537	(10021420)		
466827.48	3808729.83	1.32415	(10021420)	466883.46
3808729.83	1.29206	(10021420)		
465763.86	3808796.05	1.87923	(10030307)	465819.84
3808796.05	1.83986	(10021420)		
465875.82	3808796.05	1.81066	(10021420)	465931.80
3808796.05	1.78539	(10021420)		
465987.78	3808796.05	1.75902	(10021420)	466043.76
3808796.05	1.73289	(10021420)		
466099.74	3808796.05	1.70646	(10021420)	466155.72
3808796.05	1.67973	(10021420)		
466211.70	3808796.05	1.65270	(10021420)	466267.68
3808796.05	1.62526	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 637

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
466323.66	3808796.05	1.59866 (10021420)	466379.64
3808796.05	1.57139 (10021420)		
466435.62	3808796.05	1.54550 (10021420)	466491.60
3808796.05	1.51670 (10021420)		
466547.58	3808796.05	1.48807 (10021420)	466603.56
3808796.05	1.46115 (10021420)		
466659.54	3808796.05	1.43185 (10021420)	466715.52
3808796.05	1.40329 (10021420)		
466771.50	3808796.05	1.37404 (10021420)	466827.48
3808796.05	1.34427 (10021420)		
466883.46	3808796.05	1.31616 (10021420)	465763.86
3808862.27	1.88783 (10030307)		
465819.84	3808862.27	1.84399 (10030307)	465875.82
3808862.27	1.79669 (10030307)		
465931.80	3808862.27	1.74286 (10030307)	465987.78
3808862.27	1.71865 (10021420)		
466043.76	3808862.27	1.69674 (10021420)	466099.74
3808862.27	1.67631 (10021420)		
466155.72	3808862.27	1.65158 (10021420)	466211.70
3808862.27	1.62842 (10021420)		
466267.68	3808862.27	1.60727 (10021420)	466323.66
3808862.27	1.58336 (10021420)		
466379.64	3808862.27	1.56026 (10021420)	466435.62
3808862.27	1.53626 (10021420)		
466491.60	3808862.27	1.51192 (10021420)	466547.58
3808862.27	1.48745 (10021420)		
466603.56	3808862.27	1.46143 (10021420)	466659.54
3808862.27	1.43725 (10021420)		
466715.52	3808862.27	1.41058 (10021420)	466771.50
3808862.27	1.38420 (10021420)		

466827.48	3808862.27	1.35828	(10021420)	466883.46
3808862.27	1.33179 (10021420)			
465763.86	3808928.49	1.87809	(10031906)	465819.84
3808928.49	1.83967 (10030307)			
465875.82	3808928.49	1.80189	(10030307)	465931.80
3808928.49	1.75933 (10030307)			
465987.78	3808928.49	1.71398	(10030307)	466043.76
3808928.49	1.66780 (10030307)			
466099.74	3808928.49	1.63453	(10021420)	466155.72
3808928.49	1.61638 (10021420)			
466211.70	3808928.49	1.59772	(10021420)	466267.68
3808928.49	1.57810 (10021420)			
466323.66	3808928.49	1.55774	(10021420)	466379.64
3808928.49	1.53691 (10021420)			
466435.62	3808928.49	1.51777	(10021420)	466491.60
3808928.49	1.49746 (10021420)			
466547.58	3808928.49	1.47576	(10021420)	466603.56
3808928.49	1.45581 (10021420)			
466659.54	3808928.49	1.43272	(10021420)	466715.52
3808928.49	1.41031 (10021420)			
466771.50	3808928.49	1.38645	(10021420)	466827.48
3808928.49	1.36392 (10021420)			
466883.46	3808928.49	1.33949	(10021420)	465763.86
3808994.71	1.88516 (10031906)			
465819.84	3808994.71	1.84017	(10031906)	465875.82
3808994.71	1.80000 (10030307)			
465931.80	3808994.71	1.76671	(10030307)	465987.78
3808994.71	1.73242 (10030307)			
466043.76	3808994.71	1.68868	(10030307)	466099.74
3808994.71	1.64177 (10030307)			
466155.72	3808994.71	1.59302	(10030307)	466211.70
3808994.71	1.55458 (10021420)			
466267.68	3808994.71	1.53943	(10021420)	466323.66
3808994.71	1.52363 (10021420)			
466379.64	3808994.71	1.50711	(10021420)	466435.62
3808994.71	1.48998 (10021420)			
466491.60	3808994.71	1.47385	(10021420)	466547.58
3808994.71	1.45811 (10021420)			
466603.56	3808994.71	1.43960	(10021420)	466659.54
3808994.71	1.41974 (10021420)			
466715.52	3808994.71	1.40288	(10021420)	466771.50
3808994.71	1.38172 (10021420)			
466827.48	3808994.71	1.36020	(10021420)	466883.46
3808994.71	1.34021 (10021420)			
465763.86	3809060.93	1.88431	(10031906)	465819.84
3809060.93	1.84531 (10031906)			
465875.82	3809060.93	1.80854	(10031906)	465931.80
3809060.93	1.77078 (10031906)			
465987.78	3809060.93	1.73383	(10030307)	466043.76
3809060.93	1.69830 (10030307)			

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 638

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	1.65462	(10030307)	466155.72
3809060.93	1.61318	(10030307)		
466211.70	3809060.93	1.56938	(10030307)	466267.68
3809060.93	1.52576	(10030307)		
466323.66	3809060.93	1.48109	(10030307)	466379.64
3809060.93	1.46637	(10021420)		
466435.62	3809060.93	1.45555	(10021420)	466491.60
3809060.93	1.44325	(10021420)		
466547.58	3809060.93	1.42848	(10021420)	466603.56
3809060.93	1.41413	(10021420)		
466659.54	3809060.93	1.40093	(10021420)	466715.52
3809060.93	1.38378	(10021420)		
466771.50	3809060.93	1.36644	(10021420)	466827.48
3809060.93	1.34936	(10021420)		
466883.46	3809060.93	1.33220	(10021420)	465763.86
3809127.15	1.87651	(10031906)		
465819.84	3809127.15	1.84496	(10031906)	465875.82
3809127.15	1.81298	(10031906)		
465931.80	3809127.15	1.77737	(10031906)	465987.78
3809127.15	1.74027	(10031906)		
466043.76	3809127.15	1.69605	(10031906)	466099.74

3809127.15	1.65475	(10030307)		
466155.72	3809127.15	1.61719	(10030307)	466211.70
3809127.15	1.58486	(10030307)		
466267.68	3809127.15	1.54779	(10030307)	466323.66
3809127.15	1.50813	(10030307)		
466379.64	3809127.15	1.46610	(10030307)	466435.62
3809127.15	1.42462	(10030307)		
466491.60	3809127.15	1.40175	(10021420)	466547.58
3809127.15	1.39201	(10021420)		
466603.56	3809127.15	1.38209	(10021420)	466659.54
3809127.15	1.36945	(10021420)		
466715.52	3809127.15	1.35715	(10021420)	466771.50
3809127.15	1.34380	(10021420)		
466827.48	3809127.15	1.32920	(10021420)	466883.46
3809127.15	1.31561	(10021420)		
465763.86	3809193.37	1.85017	(10031906)	465819.84
3809193.37	1.82918	(10031906)		
465875.82	3809193.37	1.80236	(10031906)	465931.80
3809193.37	1.77175	(10031906)		
465987.78	3809193.37	1.73408	(10031906)	466043.76
3809193.37	1.68778	(10031906)		
466099.74	3809193.37	1.65451	(10031906)	466155.72
3809193.37	1.61711	(10031906)		
466211.70	3809193.37	1.58689	(10030307)	466267.68
3809193.37	1.55634	(10030307)		
466323.66	3809193.37	1.52276	(10030307)	466379.64
3809193.37	1.48733	(10030307)		
466435.62	3809193.37	1.44891	(10030307)	466491.60
3809193.37	1.41053	(10030307)		
466547.58	3809193.37	1.37145	(10030307)	466603.56
3809193.37	1.34056	(10021420)		
466659.54	3809193.37	1.33163	(10021420)	466715.52
3809193.37	1.32350	(10021420)		
466771.50	3809193.37	1.31292	(10021420)	466827.48
3809193.37	1.30275	(10021420)		
466883.46	3809193.37	1.29116	(10021420)	465763.86
3809259.59	1.85527	(10012420)		
465819.84	3809259.59	1.79568	(10012420)	465875.82
3809259.59	1.77047	(10031906)		
465931.80	3809259.59	1.74692	(10031906)	465987.78
3809259.59	1.71491	(10031906)		
466043.76	3809259.59	1.68106	(10031906)	466099.74
3809259.59	1.64763	(10031906)		
466155.72	3809259.59	1.62004	(10031906)	466211.70
3809259.59	1.59047	(10031906)		
466267.68	3809259.59	1.55906	(10031906)	466323.66
3809259.59	1.52720	(10030307)		
466379.64	3809259.59	1.49605	(10030307)	466435.62
3809259.59	1.46385	(10030307)		
466491.60	3809259.59	1.42889	(10030307)	466547.58

```

3809259.59      1.39503 (10030307)
      466603.56  3809259.59      1.35841 (10030307)      466659.54
3809259.59      1.32174 (09021907)
      466715.52  3809259.59      1.29106 (09021907)      466771.50
3809259.59      1.27446 (10021420)
      466827.48  3809259.59      1.26756 (10021420)      466883.46
3809259.59      1.25940 (10021420)
      464503.41  3807141.91      3.67288 (10020118)      464523.41
3807141.91      3.61082 (10020118)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 639

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
      INCLUDING SOURCE(S):      L0006139      , L0006140
, L0006141      , L0006142      , L0006143      ,
      L0006144      , L0006145      , L0006146      , L0006147      , L0006148
, L0006149      , L0006150      , L0006151      ,
      L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
      L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464543.41	3807141.91	3.55447	(10020118)	464563.41
3807141.91	3.50910	(10020118)		
464583.41	3807141.91	3.43643	(10020118)	464603.41
3807141.91	3.36089	(10020118)		
464623.41	3807141.91	3.27260	(10020118)	464643.41
3807141.91	3.19225	(10020118)		
464663.41	3807141.91	3.15100	(09010519)	464683.41
3807141.91	3.11415	(09010519)		
464703.41	3807141.91	3.07341	(09010519)	464723.41
3807141.91	3.03713	(09010519)		
464743.41	3807141.91	3.00323	(09010519)	464763.41
3807141.91	2.96905	(09010519)		

464783.41	3807141.91	2.93636	(09010519)	464803.41
3807141.91	2.90402	(09010519)		
464823.41	3807141.91	2.86847	(09010519)	464843.41
3807141.91	2.83678	(09010519)		
464863.41	3807141.91	2.80716	(09010519)	464883.41
3807141.91	2.77720	(09010519)		
464903.41	3807141.91	2.74553	(09010519)	464923.41
3807141.91	2.71410	(09010519)		
464503.41	3807161.91	3.69098	(10020118)	464523.41
3807161.91	3.62339	(10020118)		
464543.41	3807161.91	3.56453	(10020118)	464563.41
3807161.91	3.51904	(10020118)		
464583.41	3807161.91	3.43919	(10020118)	464603.41
3807161.91	3.31706	(10020118)		
464623.41	3807161.91	3.23701	(09010519)	464643.41
3807161.91	3.19759	(09010519)		
464663.41	3807161.91	3.16356	(09010519)	464683.41
3807161.91	3.12189	(09010519)		
464703.41	3807161.91	3.08532	(09010519)	464723.41
3807161.91	3.05018	(09010519)		
464743.41	3807161.91	3.01516	(09010519)	464763.41
3807161.91	2.97637	(09010519)		
464783.41	3807161.91	2.94225	(09010519)	464803.41
3807161.91	2.91036	(09010519)		
464823.41	3807161.91	2.87851	(09010519)	464843.41
3807161.91	2.84786	(09010519)		
464863.41	3807161.91	2.81724	(09010519)	464883.41
3807161.91	2.78319	(09010519)		
464903.41	3807161.91	2.75263	(09010519)	464923.41
3807161.91	2.72337	(09010519)		
464503.41	3807181.91	3.69725	(10020118)	464523.41
3807181.91	3.63734	(10020118)		
464543.41	3807181.91	3.57475	(10020118)	464563.41
3807181.91	3.49276	(10020118)		
464583.41	3807181.91	3.42362	(10020118)	464603.41
3807181.91	3.30433	(10020118)		
464623.41	3807181.91	3.25631	(09010519)	464643.41
3807181.91	3.21734	(09010519)		
464663.41	3807181.91	3.17632	(09010519)	464683.41
3807181.91	3.13368	(09010519)		
464703.41	3807181.91	3.09766	(09010519)	464723.41
3807181.91	3.06009	(09010519)		
464743.41	3807181.91	3.02244	(09010519)	464763.41
3807181.91	2.98585	(09010519)		
464783.41	3807181.91	2.95219	(09010519)	464803.41
3807181.91	2.91963	(09010519)		
464823.41	3807181.91	2.88515	(09010519)	464843.41
3807181.91	2.85349	(09010519)		
464863.41	3807181.91	2.82309	(09010519)	464883.41
3807181.91	2.79101	(09010519)		

464903.41	3807181.91	2.75943	(09010519)	464923.41
3807181.91	2.72851	(09010519)		
464503.41	3807201.91	3.68146	(10020118)	464523.41
3807201.91	3.63363	(10020118)		
464543.41	3807201.91	3.56535	(10020118)	464563.41
3807201.91	3.47376	(10020118)		
464583.41	3807201.91	3.38360	(10020118)	464603.41
3807201.91	3.30385	(09010519)		
464623.41	3807201.91	3.26944	(09010519)	464643.41
3807201.91	3.22872	(09010519)		
464663.41	3807201.91	3.18777	(09010519)	464683.41
3807201.91	3.14570	(09010519)		
464703.41	3807201.91	3.10800	(09010519)	464723.41
3807201.91	3.06841	(09010519)		
464743.41	3807201.91	3.02947	(09010519)	464763.41
3807201.91	2.99570	(09010519)		
464783.41	3807201.91	2.96182	(09010519)	464803.41
3807201.91	2.92766	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 640

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3807201.91	2.89125	(09010519)	464843.41
3807201.91	2.85799	(09010519)		
464863.41	3807201.91	2.82687	(09010519)	464883.41

3807201.91	2.79734	(09010519)		
464903.41	3807201.91	2.76534	(09010519)	464923.41
3807201.91	2.73315	(09010519)		
464503.41	3807221.91	3.69384	(10020118)	464523.41
3807221.91	3.64612	(10020118)		
464543.41	3807221.91	3.57248	(10020118)	464563.41
3807221.91	3.45139	(10020118)		
464583.41	3807221.91	3.35909	(09010519)	464603.41
3807221.91	3.31661	(09010519)		
464623.41	3807221.91	3.28112	(09010519)	464643.41
3807221.91	3.23699	(09010519)		
464663.41	3807221.91	3.19573	(09010519)	464683.41
3807221.91	3.15631	(09010519)		
464703.41	3807221.91	3.11370	(09010519)	464723.41
3807221.91	3.07543	(09010519)		
464743.41	3807221.91	3.03984	(09010519)	464763.41
3807221.91	3.00571	(09010519)		
464783.41	3807221.91	2.96866	(09010519)	464803.41
3807221.91	2.93152	(09010519)		
464823.41	3807221.91	2.89891	(09010519)	464843.41
3807221.91	2.86400	(09010519)		
464863.41	3807221.91	2.82939	(09010519)	464883.41
3807221.91	2.79970	(09010519)		
464903.41	3807221.91	2.76999	(09010519)	464923.41
3807221.91	2.74002	(09010519)		
464503.41	3807241.91	3.70657	(10020118)	464523.41
3807241.91	3.63076	(10020118)		
464543.41	3807241.91	3.55120	(10020118)	464563.41
3807241.91	3.44495	(10020118)		
464583.41	3807241.91	3.37031	(09010519)	464603.41
3807241.91	3.33509	(09010519)		
464623.41	3807241.91	3.29270	(09010519)	464643.41
3807241.91	3.24732	(09010519)		
464663.41	3807241.91	3.20349	(09010519)	464683.41
3807241.91	3.16199	(09010519)		
464703.41	3807241.91	3.12172	(09010519)	464723.41
3807241.91	3.08463	(09010519)		
464743.41	3807241.91	3.04879	(09010519)	464763.41
3807241.91	3.01097	(09010519)		
464783.41	3807241.91	2.97421	(09010519)	464803.41
3807241.91	2.93838	(09010519)		
464823.41	3807241.91	2.90307	(09010519)	464843.41
3807241.91	2.86872	(09010519)		
464863.41	3807241.91	2.83575	(09010519)	464883.41
3807241.91	2.80578	(09010519)		
464903.41	3807241.91	2.77432	(09010519)	464923.41
3807241.91	2.74265	(09010519)		
464503.41	3807261.91	3.71933	(10020118)	464523.41
3807261.91	3.60671	(10020118)		
464543.41	3807261.91	3.52198	(10020118)	464563.41

3807261.91	3.43696	(10020118)		
464583.41	3807261.91	3.38159	(09010519)	464603.41
3807261.91	3.34540	(09010519)		
464623.41	3807261.91	3.30350	(09010519)	464643.41
3807261.91	3.25744	(09010519)		
464663.41	3807261.91	3.21146	(09010519)	464683.41
3807261.91	3.16743	(09010519)		
464703.41	3807261.91	3.13014	(09010519)	464723.41
3807261.91	3.09280	(09010519)		
464743.41	3807261.91	3.05524	(09010519)	464763.41
3807261.91	3.01537	(09010519)		
464783.41	3807261.91	2.97891	(09010519)	464803.41
3807261.91	2.94393	(09010519)		
464823.41	3807261.91	2.90665	(09010519)	464843.41
3807261.91	2.87260	(09010519)		
464863.41	3807261.91	2.84073	(09010519)	464883.41
3807261.91	2.81048	(09010519)		
464903.41	3807261.91	2.77692	(09010519)	464923.41
3807261.91	2.74318	(09010519)		
464503.41	3807281.91	3.73270	(10020118)	464523.41
3807281.91	3.60798	(10020118)		
464543.41	3807281.91	3.51725	(10020118)	464563.41
3807281.91	3.43133	(09010519)		
464583.41	3807281.91	3.39195	(09010519)	464603.41
3807281.91	3.35452	(09010519)		
464623.41	3807281.91	3.30731	(09010519)	464643.41
3807281.91	3.26554	(09010519)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 641

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
464663.41	3807281.91	3.22078 (09010519)	464683.41
3807281.91	3.17640 (09010519)		
464703.41	3807281.91	3.13871 (09010519)	464723.41
3807281.91	3.09801 (09010519)		
464743.41	3807281.91	3.05729 (09010519)	464763.41
3807281.91	3.02144 (09010519)		
464783.41	3807281.91	2.98322 (09010519)	464803.41
3807281.91	2.94520 (09010519)		
464823.41	3807281.91	2.91180 (09010519)	464843.41
3807281.91	2.87606 (09010519)		
464863.41	3807281.91	2.84063 (09010519)	464883.41
3807281.91	2.81022 (09010519)		
464903.41	3807281.91	2.77641 (09010519)	464923.41
3807281.91	2.74241 (09010519)		
464503.41	3807301.91	3.67187 (10020118)	464523.41
3807301.91	3.57463 (10020118)		
464543.41	3807301.91	3.49055 (09010519)	464563.41
3807301.91	3.44586 (09010519)		
464583.41	3807301.91	3.40244 (09010519)	464603.41
3807301.91	3.36344 (09010519)		
464623.41	3807301.91	3.31523 (09010519)	464643.41
3807301.91	3.27400 (09010519)		
464663.41	3807301.91	3.22919 (09010519)	464683.41
3807301.91	3.18446 (09010519)		
464703.41	3807301.91	3.14637 (09010519)	464723.41
3807301.91	3.10474 (09010519)		
464743.41	3807301.91	3.06250 (09010519)	464763.41
3807301.91	3.02379 (09010519)		
464783.41	3807301.91	2.98616 (09010519)	464803.41
3807301.91	2.95006 (09010519)		
464823.41	3807301.91	2.91718 (09010519)	464843.41
3807301.91	2.88086 (09010519)		
464863.41	3807301.91	2.84385 (09010519)	464883.41
3807301.91	2.80999 (09010519)		
464903.41	3807301.91	2.77701 (09010519)	464923.41
3807301.91	2.74534 (09010519)		
464503.41	3807321.91	3.62758 (10020118)	464523.41
3807321.91	3.56418 (10020118)		
464543.41	3807321.91	3.50006 (09010519)	464563.41
3807321.91	3.46402 (09010519)		
464583.41	3807321.91	3.41873 (09010519)	464603.41
3807321.91	3.37207 (09010519)		
464623.41	3807321.91	3.32349 (09010519)	464643.41
3807321.91	3.28183 (09010519)		

464663.41	3807321.91	3.23665	(09010519)	464683.41
3807321.91	3.19138	(09010519)		
464703.41	3807321.91	3.15162	(09010519)	464723.41
3807321.91	3.11005	(09010519)		
464743.41	3807321.91	3.06809	(09010519)	464763.41
3807321.91	3.02590	(09010519)		
464783.41	3807321.91	2.98906	(09010519)	464803.41
3807321.91	2.95494	(09010519)		
464823.41	3807321.91	2.92052	(09010519)	464843.41
3807321.91	2.88344	(09010519)		
464863.41	3807321.91	2.84587	(09010519)	464883.41
3807321.91	2.81008	(09010519)		
464903.41	3807321.91	2.77821	(09010519)	464923.41
3807321.91	2.74841	(09010519)		
464503.41	3807341.91	3.61975	(10020118)	464523.41
3807341.91	3.55377	(10020118)		
464543.41	3807341.91	3.50805	(09010519)	464563.41
3807341.91	3.47241	(09010519)		
464583.41	3807341.91	3.42665	(09010519)	464603.41
3807341.91	3.37971	(09010519)		
464623.41	3807341.91	3.33077	(09010519)	464643.41
3807341.91	3.28868	(09010519)		
464663.41	3807341.91	3.24315	(09010519)	464683.41
3807341.91	3.19674	(09010519)		
464703.41	3807341.91	3.15211	(09010519)	464723.41
3807341.91	3.11184	(09010519)		
464743.41	3807341.91	3.07320	(09010519)	464763.41
3807341.91	3.03071	(09010519)		
464783.41	3807341.91	2.99352	(09010519)	464803.41
3807341.91	2.95829	(09010519)		
464823.41	3807341.91	2.91936	(09010519)	464843.41
3807341.91	2.88079	(09010519)		
464863.41	3807341.91	2.84358	(09010519)	464883.41
3807341.91	2.81160	(09010519)		
464903.41	3807341.91	2.78080	(09010519)	464923.41
3807341.91	2.74998	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 642

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,

L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464503.41	3807361.91	3.60945	(09010519)	464523.41
3807361.91	3.56425	(09010519)		
464543.41	3807361.91	3.51762	(09010519)	464563.41
3807361.91	3.47976	(09010519)		
464583.41	3807361.91	3.43354	(09010519)	464603.41
3807361.91	3.38632	(09010519)		
464623.41	3807361.91	3.33641	(09010519)	464643.41
3807361.91	3.29039	(09010519)		
464663.41	3807361.91	3.24573	(09010519)	464683.41
3807361.91	3.20179	(09010519)		
464703.41	3807361.91	3.15594	(09010519)	464723.41
3807361.91	3.11323	(09010519)		
464743.41	3807361.91	3.07272	(09010519)	464763.41
3807361.91	3.03334	(09010519)		
464783.41	3807361.91	2.99467	(09010519)	464803.41
3807361.91	2.95621	(09010519)		
464823.41	3807361.91	2.91622	(09010519)	464843.41
3807361.91	2.87926	(09010519)		
464863.41	3807361.91	2.84469	(09010519)	464883.41
3807361.91	2.81323	(09010519)		
464903.41	3807361.91	2.78024	(09010519)	464923.41
3807361.91	2.74703	(09010519)		
464503.41	3807381.91	3.62231	(09010519)	464523.41
3807381.91	3.57236	(09010519)		
464543.41	3807381.91	3.53395	(09010519)	464563.41
3807381.91	3.48582	(09010519)		
464583.41	3807381.91	3.43788	(09010519)	464603.41
3807381.91	3.39076	(09010519)		
464623.41	3807381.91	3.34111	(09010519)	464643.41
3807381.91	3.29147	(09010519)		
464663.41	3807381.91	3.24669	(09010519)	464683.41
3807381.91	3.20411	(09010519)		
464703.41	3807381.91	3.15933	(09010519)	464723.41
3807381.91	3.11460	(09010519)		
464743.41	3807381.91	3.07149	(09010519)	464763.41

3807381.91	3.03368	(09010519)		
464783.41	3807381.91	2.99403	(09010519)	464803.41
3807381.91	2.95393	(09010519)		
464823.41	3807381.91	2.91354	(09010519)	464843.41
3807381.91	2.87831	(09010519)		
464863.41	3807381.91	2.84570	(09010519)	464883.41
3807381.91	2.81273	(09010519)		
464903.41	3807381.91	2.77793	(09010519)	464923.41
3807381.91	2.74339	(09010519)		
464503.41	3807401.91	3.63113	(09010519)	464523.41
3807401.91	3.57921	(09010519)		
464543.41	3807401.91	3.53955	(09010519)	464563.41
3807401.91	3.49018	(09010519)		
464583.41	3807401.91	3.43972	(09010519)	464603.41
3807401.91	3.39149	(09010519)		
464623.41	3807401.91	3.34521	(09010519)	464643.41
3807401.91	3.29525	(09010519)		
464663.41	3807401.91	3.24708	(09010519)	464683.41
3807401.91	3.20127	(09010519)		
464703.41	3807401.91	3.16055	(09010519)	464723.41
3807401.91	3.11698	(09010519)		
464743.41	3807401.91	3.07276	(09010519)	464763.41
3807401.91	3.03021	(09010519)		
464783.41	3807401.91	2.99184	(09010519)	464803.41
3807401.91	2.95499	(09010519)		
464823.41	3807401.91	2.91431	(09010519)	464843.41
3807401.91	2.87875	(09010519)		
464863.41	3807401.91	2.84506	(09010519)	464883.41
3807401.91	2.80769	(09010519)		
464903.41	3807401.91	2.77409	(09010519)	464923.41
3807401.91	2.74189	(09010519)		
464503.41	3807421.91	3.64571	(09010519)	464523.41
3807421.91	3.59415	(09010519)		
464543.41	3807421.91	3.54156	(09010519)	464563.41
3807421.91	3.49187	(09010519)		
464583.41	3807421.91	3.44121	(09010519)	464603.41
3807421.91	3.39170	(09010519)		
464623.41	3807421.91	3.34347	(09010519)	464643.41
3807421.91	3.29668	(09010519)		
464663.41	3807421.91	3.24877	(09010519)	464683.41
3807421.91	3.20142	(09010519)		
464703.41	3807421.91	3.15778	(09010519)	464723.41
3807421.91	3.11538	(09010519)		
464743.41	3807421.91	3.07359	(09010519)	464763.41
3807421.91	3.02984	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 , L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 , L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 , L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464783.41	3807421.91	2.98910	(09010519)	464803.41
3807421.91	2.95043	(09010519)		
464823.41	3807421.91	2.91281	(09010519)	464843.41
3807421.91	2.87581	(09010519)		
464863.41	3807421.91	2.83962	(09010519)	464883.41
3807421.91	2.80437	(09010519)		
464903.41	3807421.91	2.76969	(09010519)	464923.41
3807421.91	2.73571	(09010519)		
464503.41	3807441.91	3.64965	(09010519)	464523.41
3807441.91	3.59629	(09010519)		
464543.41	3807441.91	3.54416	(09010519)	464563.41
3807441.91	3.49026	(09010519)		
464583.41	3807441.91	3.44123	(09010519)	464603.41
3807441.91	3.39064	(09010519)		
464623.41	3807441.91	3.34084	(09010519)	464643.41
3807441.91	3.29563	(09010519)		
464663.41	3807441.91	3.24878	(09010519)	464683.41
3807441.91	3.20170	(09010519)		
464703.41	3807441.91	3.15453	(09010519)	464723.41
3807441.91	3.11202	(09010519)		
464743.41	3807441.91	3.07158	(09010519)	464763.41
3807441.91	3.02889	(09010519)		
464783.41	3807441.91	2.98618	(09010519)	464803.41
3807441.91	2.94517	(09010519)		
464823.41	3807441.91	2.91032	(09010519)	464843.41
3807441.91	2.87199	(09010519)		

464863.41	3807441.91	2.83356	(09010519)	464883.41
3807441.91	2.80099	(09010519)		
464903.41	3807441.91	2.76502	(09010519)	464923.41
3807441.91	2.72890	(09010519)		
464503.41	3807461.91	3.65169	(09010519)	464523.41
3807461.91	3.59593	(09010519)		
464543.41	3807461.91	3.54242	(09010519)	464563.41
3807461.91	3.49120	(09010519)		
464583.41	3807461.91	3.43711	(09010519)	464603.41
3807461.91	3.38784	(09010519)		
464623.41	3807461.91	3.34065	(09010519)	464643.41
3807461.91	3.29054	(09010519)		
464663.41	3807461.91	3.24498	(09010519)	464683.41
3807461.91	3.20122	(09010519)		
464703.41	3807461.91	3.15374	(09010519)	464723.41
3807461.91	3.10792	(09010519)		
464743.41	3807461.91	3.06433	(09010519)	464763.41
3807461.91	3.02563	(09010519)		
464783.41	3807461.91	2.98406	(09010519)	464803.41
3807461.91	2.94275	(09010519)		
464823.41	3807461.91	2.90754	(09010519)	464843.41
3807461.91	2.86891	(09010519)		
464863.41	3807461.91	2.83019	(09010519)	464883.41
3807461.91	2.79728	(09010519)		
464903.41	3807461.91	2.76104	(09010519)	464923.41
3807461.91	2.72465	(09010519)		
464503.41	3807481.91	3.66679	(09120320)	464523.41
3807481.91	3.60207	(09120320)		
464543.41	3807481.91	3.54022	(09120320)	464563.41
3807481.91	3.48666	(09010519)		
464583.41	3807481.91	3.43494	(09010519)	464603.41
3807481.91	3.38437	(09010519)		
464623.41	3807481.91	3.33511	(09010519)	464643.41
3807481.91	3.28730	(09010519)		
464663.41	3807481.91	3.24049	(09010519)	464683.41
3807481.91	3.19483	(09010519)		
464703.41	3807481.91	3.15047	(09010519)	464723.41
3807481.91	3.10492	(09010519)		
464743.41	3807481.91	3.06041	(09010519)	464763.41
3807481.91	3.02223	(09010519)		
464783.41	3807481.91	2.98063	(09010519)	464803.41
3807481.91	2.93903	(09010519)		
464823.41	3807481.91	2.90345	(09010519)	464843.41
3807481.91	2.86453	(09010519)		
464863.41	3807481.91	2.82498	(09010519)	464883.41
3807481.91	2.78861	(09010519)		
464903.41	3807481.91	2.75319	(09010519)	464923.41
3807481.91	2.71859	(09010519)		
464503.41	3807501.91	3.69231	(09120320)	464523.41
3807501.91	3.62573	(09120320)		

464543.41 3807501.91 3.56222 (09120320) 464563.41
 3807501.91 3.50209 (09120320)
 464583.41 3807501.91 3.44816 (09120320) 464603.41
 3807501.91 3.39167 (09120320)

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 644

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	3.33589	(09120320)	464643.41
3807501.91	3.28635	(09010419)		
464663.41	3807501.91	3.23741	(09010419)	464683.41
3807501.91	3.18905	(09010419)		
464703.41	3807501.91	3.14601	(09010419)	464723.41
3807501.91	3.10054	(09010419)		
464743.41	3807501.91	3.05612	(09010519)	464763.41
3807501.91	3.01632	(09010519)		
464783.41	3807501.91	2.97480	(09010519)	464803.41
3807501.91	2.93374	(09010519)		
464823.41	3807501.91	2.89663	(09010519)	464843.41
3807501.91	2.85779	(09010519)		
464863.41	3807501.91	2.81852	(09010519)	464883.41
3807501.91	2.77899	(09010519)		
464903.41	3807501.91	2.74539	(10032206)	464923.41
3807501.91	2.71508	(10032206)		
464503.41	3807521.91	3.70688	(09120320)	464523.41

3807521.91	3.64040	(09120320)	
464543.41	3807521.91	3.58150	(09120320) 464563.41
3807521.91	3.52573	(09120320)	
464583.41	3807521.91	3.46553	(09120320) 464603.41
3807521.91	3.41151	(09120320)	
464623.41	3807521.91	3.35989	(09120320) 464643.41
3807521.91	3.30397	(09120320)	
464663.41	3807521.91	3.25378	(09120320) 464683.41
3807521.91	3.20577	(09120320)	
464703.41	3807521.91	3.15641	(09010419) 464723.41
3807521.91	3.11309	(09010419)	
464743.41	3807521.91	3.07176	(09010419) 464763.41
3807521.91	3.02646	(09010419)	
464783.41	3807521.91	2.98611	(09010419) 464803.41
3807521.91	2.94759	(09010419)	
464823.41	3807521.91	2.90520	(09010419) 464843.41
3807521.91	2.86748	(09010419)	
464863.41	3807521.91	2.83131	(09010419) 464883.41
3807521.91	2.79053	(09010419)	
464903.41	3807521.91	2.75547	(09010419) 464923.41
3807521.91	2.72225	(09010419)	
464503.41	3807541.91	3.72031	(09120320) 464523.41
3807541.91	3.65931	(09120320)	
464543.41	3807541.91	3.59967	(09120320) 464563.41
3807541.91	3.54162	(09120320)	
464583.41	3807541.91	3.48536	(09120320) 464603.41
3807541.91	3.43025	(09120320)	
464623.41	3807541.91	3.37651	(09120320) 464643.41
3807541.91	3.32435	(09120320)	
464663.41	3807541.91	3.27316	(09120320) 464683.41
3807541.91	3.22317	(09120320)	
464703.41	3807541.91	3.17457	(09120320) 464723.41
3807541.91	3.12680	(09120320)	
464743.41	3807541.91	3.08158	(09010419) 464763.41
3807541.91	3.03959	(09010419)	
464783.41	3807541.91	3.00118	(09010419) 464803.41
3807541.91	2.96348	(09010419)	
464823.41	3807541.91	2.92018	(09010419) 464843.41
3807541.91	2.88021	(09010419)	
464863.41	3807541.91	2.84246	(09010419) 464883.41
3807541.91	2.80572	(09010419)	
464903.41	3807541.91	2.76951	(09010419) 464923.41
3807541.91	2.73404	(09010419)	
464503.41	3807561.91	3.73404	(09120320) 464523.41
3807561.91	3.67621	(09120320)	
464543.41	3807561.91	3.61570	(09120320) 464563.41
3807561.91	3.55607	(09120320)	
464583.41	3807561.91	3.50284	(09120320) 464603.41
3807561.91	3.44693	(09120320)	
464623.41	3807561.91	3.39173	(09120320) 464643.41

3807561.91	3.34247	(09120320)		
464663.41	3807561.91	3.29055	(09120320)	464683.41
3807561.91	3.23920	(09120320)		
464703.41	3807561.91	3.19338	(09120320)	464723.41
3807561.91	3.14495	(09120320)		
464743.41	3807561.91	3.09721	(09120320)	464763.41
3807561.91	3.05600	(09120320)		
464783.41	3807561.91	3.01453	(09010419)	464803.41
3807561.91	2.97593	(09010419)		
464823.41	3807561.91	2.93439	(09010419)	464843.41
3807561.91	2.89263	(09010419)		
464863.41	3807561.91	2.85268	(09010419)	464883.41
3807561.91	2.81970	(09010419)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 645

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464903.41	3807561.91	2.78246	(09010419)	464923.41
3807561.91	2.74469	(09010419)		
464503.41	3807581.91	3.75134	(09120320)	464523.41
3807581.91	3.68673	(09120320)		
464543.41	3807581.91	3.62894	(09120320)	464563.41
3807581.91	3.57390	(09120320)		
464583.41	3807581.91	3.51426	(09120320)	464603.41
3807581.91	3.46096	(09120320)		

464623.41	3807581.91	3.41013	(09120320)	464643.41
3807581.91	3.35481	(09120320)		
464663.41	3807581.91	3.30540	(09120320)	464683.41
3807581.91	3.25821	(09120320)		
464703.41	3807581.91	3.20667	(09120320)	464723.41
3807581.91	3.16063	(09120320)		
464743.41	3807581.91	3.11790	(09120320)	464763.41
3807581.91	3.07690	(09120320)		
464783.41	3807581.91	3.03195	(09120320)	464803.41
3807581.91	2.98675	(09120320)		
464823.41	3807581.91	2.94722	(09120320)	464843.41
3807581.91	2.90601	(09010419)		
464863.41	3807581.91	2.86621	(09010419)	464883.41
3807581.91	2.83338	(09010419)		
464903.41	3807581.91	2.79629	(09010419)	464923.41
3807581.91	2.75781	(09010419)		
464503.41	3807601.91	3.75911	(09120320)	464523.41
3807601.91	3.69351	(09120320)		
464543.41	3807601.91	3.63659	(09120320)	464563.41
3807601.91	3.58376	(09120320)		
464583.41	3807601.91	3.52827	(09120320)	464603.41
3807601.91	3.47392	(09120320)		
464623.41	3807601.91	3.42096	(09120320)	464643.41
3807601.91	3.36959	(09120320)		
464663.41	3807601.91	3.31920	(09120320)	464683.41
3807601.91	3.27001	(09120320)		
464703.41	3807601.91	3.22224	(09120320)	464723.41
3807601.91	3.17844	(09120320)		
464743.41	3807601.91	3.13608	(09120320)	464763.41
3807601.91	3.09096	(09120320)		
464783.41	3807601.91	3.04706	(09120320)	464803.41
3807601.91	3.00420	(09120320)		
464823.41	3807601.91	2.96187	(09120320)	464843.41
3807601.91	2.92063	(09120320)		
464863.41	3807601.91	2.88033	(09120320)	464883.41
3807601.91	2.84113	(09010419)		
464903.41	3807601.91	2.80558	(09010419)	464923.41
3807601.91	2.77033	(09010419)		
464503.41	3807621.91	3.76322	(09120320)	464523.41
3807621.91	3.70003	(09120320)		
464543.41	3807621.91	3.64414	(09120320)	464563.41
3807621.91	3.59218	(09120320)		
464583.41	3807621.91	3.53988	(09120320)	464603.41
3807621.91	3.48480	(09120320)		
464623.41	3807621.91	3.43041	(09120320)	464643.41
3807621.91	3.38209	(09120320)		
464663.41	3807621.91	3.33101	(09120320)	464683.41
3807621.91	3.28076	(09120320)		
464703.41	3807621.91	3.23763	(09120320)	464723.41
3807621.91	3.19423	(09120320)		

464743.41	3807621.91	3.15035	(09120320)	464763.41
3807621.91	3.10324	(09120320)		
464783.41	3807621.91	3.06042	(09120320)	464803.41
3807621.91	3.01935	(09120320)		
464823.41	3807621.91	2.97515	(09120320)	464843.41
3807621.91	2.93495	(09120320)		
464863.41	3807621.91	2.89635	(09120320)	464883.41
3807621.91	2.85472	(09120320)		
464903.41	3807621.91	2.81684	(09120320)	464923.41
3807621.91	2.78043	(09120320)		
464503.41	3807641.91	3.77663	(10021420)	464523.41
3807641.91	3.71025	(09120320)		
464543.41	3807641.91	3.65703	(09120320)	464563.41
3807641.91	3.60411	(09120320)		
464583.41	3807641.91	3.54533	(09120320)	464603.41
3807641.91	3.49302	(09120320)		
464623.41	3807641.91	3.44319	(09120320)	464643.41
3807641.91	3.38872	(09120320)		
464663.41	3807641.91	3.34028	(09120320)	464683.41
3807641.91	3.29548	(09120320)		
464703.41	3807641.91	3.25260	(09120320)	464723.41
3807641.91	3.20552	(09120320)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 646

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -					
	464743.41	3807641.91	3.15821	(09120320)	464763.41
3807641.91		3.11709 (09120320)			
	464783.41	3807641.91	3.07269	(09120320)	464803.41
3807641.91		3.02837 (09120320)			
	464823.41	3807641.91	2.98987	(09120320)	464843.41
3807641.91		2.94818 (09120320)			
	464863.41	3807641.91	2.90651	(09120320)	464883.41
3807641.91		2.87031 (09120320)			
	464903.41	3807641.91	2.83102	(09120320)	464923.41
3807641.91		2.79171 (09120320)			
	464503.41	3807661.91	3.79829	(10021420)	464523.41
3807661.91		3.73362 (10021420)			
	464543.41	3807661.91	3.67028	(10021420)	464563.41
3807661.91		3.60793 (09120320)			
	464583.41	3807661.91	3.55350	(09120320)	464603.41
3807661.91		3.50020 (09120320)			
	464623.41	3807661.91	3.44827	(09120320)	464643.41
3807661.91		3.39794 (09120320)			
	464663.41	3807661.91	3.34857	(09120320)	464683.41
3807661.91		3.30109 (09120320)			
	464703.41	3807661.91	3.25868	(09120320)	464723.41
3807661.91		3.21439 (09120320)			
	464743.41	3807661.91	3.16965	(09120320)	464763.41
3807661.91		3.12553 (09120320)			
	464783.41	3807661.91	3.08262	(09120320)	464803.41
3807661.91		3.04076 (09120320)			
	464823.41	3807661.91	2.99941	(09120320)	464843.41
3807661.91		2.95916 (09120320)			
	464863.41	3807661.91	2.91983	(09120320)	464883.41
3807661.91		2.88094 (09120320)			
	464903.41	3807661.91	2.84303	(09120320)	464923.41
3807661.91		2.80595 (09120320)			
	464503.41	3807681.91	3.81676	(10021420)	464523.41
3807681.91		3.75295 (10021420)			
	464543.41	3807681.91	3.69047	(10021420)	464563.41
3807681.91		3.62925 (10021420)			
	464583.41	3807681.91	3.56923	(10021420)	464603.41
3807681.91		3.50534 (09120320)			
	464623.41	3807681.91	3.45204	(09120320)	464643.41
3807681.91		3.40490 (09120320)			
	464663.41	3807681.91	3.35490	(09120320)	464683.41
3807681.91		3.30543 (09120320)			
	464703.41	3807681.91	3.26171	(09120320)	464723.41
3807681.91		3.22004 (09120320)			
	464743.41	3807681.91	3.17874	(09120320)	464763.41
3807681.91		3.13263 (09120320)			
	464783.41	3807681.91	3.09087	(09120320)	464803.41
3807681.91		3.05088 (09120320)			
	464823.41	3807681.91	3.00765	(09120320)	464843.41

3807681.91	2.96850	(09120320)		
464863.41	3807681.91	2.93096	(09120320)	464883.41
3807681.91	2.89029	(09120320)		
464903.41	3807681.91	2.85344	(09120320)	464923.41
3807681.91	2.81807	(09120320)		
464523.41	3807701.91	3.76965	(10021420)	464543.41
3807701.91	3.70806	(10021420)		
464563.41	3807701.91	3.64771	(10021420)	464583.41
3807701.91	3.58855	(10021420)		
464603.41	3807701.91	3.52942	(10021420)	464623.41
3807701.91	3.46991	(10021420)		
464643.41	3807701.91	3.40598	(09120320)	464663.41
3807701.91	3.35875	(09120320)		
464683.41	3807701.91	3.31378	(09120320)	464703.41
3807701.91	3.26418	(09120320)		
464723.41	3807701.91	3.22124	(09120320)	464743.41
3807701.91	3.18138	(09120320)		
464763.41	3807701.91	3.14143	(09120320)	464783.41
3807701.91	3.09811	(09120320)		
464803.41	3807701.91	3.05485	(09120320)	464823.41
3807701.91	3.01749	(09120320)		
464843.41	3807701.91	2.97685	(09120320)	464863.41
3807701.91	2.93620	(09120320)		
464883.41	3807701.91	2.90112	(09120320)	464903.41
3807701.91	2.86286	(09120320)		
464923.41	3807701.91	2.82454	(09120320)	464543.41
3807721.91	3.72686	(10021420)		
464563.41	3807721.91	3.67214	(10021420)	464583.41
3807721.91	3.61362	(10021420)		
464603.41	3807721.91	3.55623	(10021420)	464623.41
3807721.91	3.49821	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 647

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM ₁₀ IN MICROGRAMS/M**3				
		**				
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)		
Y-COORD (M)	CONC	(YYMMDDHH)				

464643.41	3807721.91	3.43293	(10021420)	464663.41		
3807721.91	3.37214	(10021420)				
464683.41	3807721.91	3.31478	(09120320)	464703.41		
3807721.91	3.26926	(09120320)				
464723.41	3807721.91	3.22780	(09120320)	464743.41		
3807721.91	3.18779	(09120320)				
464763.41	3807721.91	3.14483	(09120320)	464783.41		
3807721.91	3.10308	(09120320)				
464803.41	3807721.91	3.06237	(09120320)	464823.41		
3807721.91	3.02215	(09120320)				
464843.41	3807721.91	2.98301	(09120320)	464863.41		
3807721.91	2.94480	(09120320)				
464883.41	3807721.91	2.90699	(09120320)	464903.41		
3807721.91	2.87017	(09120320)				
464923.41	3807721.91	2.83417	(09120320)	464943.41		
3807721.91	2.79851	(09120320)				
464963.41	3807721.91	2.76374	(09120320)	464983.41		
3807721.91	2.72971	(09120320)				
465003.41	3807721.91	2.69596	(09120320)	465023.41		
3807721.91	2.66301	(09120320)				
465043.41	3807721.91	2.63074	(09120320)	465063.41		
3807721.91	2.59870	(09120320)				
465083.41	3807721.91	2.56739	(09120320)	465103.41		
3807721.91	2.53729	(09120320)				
465123.41	3807721.91	2.51019	(09120320)	465143.41		
3807721.91	2.48115	(09120320)				
465163.41	3807721.91	2.45207	(09120320)	465183.41		
3807721.91	2.42755	(09010419)				
465203.41	3807721.91	2.40302	(09010419)	465223.41		
3807721.91	2.37790	(09010419)				
465243.41	3807721.91	2.35292	(09010419)	465263.41		
3807721.91	2.32853	(09010419)				
465283.41	3807721.91	2.30510	(09010419)	465303.41		
3807721.91	2.28420	(09010419)				
465323.41	3807721.91	2.26161	(09010419)	465343.41		
3807721.91	2.23895	(09010419)				
465363.41	3807721.91	2.21892	(09010419)	465383.41		
3807721.91	2.19750	(09010419)				
464543.41	3807741.91	3.73704	(10021420)	464563.41		
3807741.91	3.69019	(10021420)				

464583.41	3807741.91	3.63459	(10021420)	464603.41
3807741.91	3.57855	(10021420)		
464623.41	3807741.91	3.52122	(10021420)	464643.41
3807741.91	3.45654	(10021420)		
464663.41	3807741.91	3.39457	(10021420)	464683.41
3807741.91	3.33594	(10021420)		
464703.41	3807741.91	3.28476	(10021420)	464723.41
3807741.91	3.23344	(09120320)		
464743.41	3807741.91	3.19193	(09120320)	464763.41
3807741.91	3.14701	(09120320)		
464783.41	3807741.91	3.10648	(09120320)	464803.41
3807741.91	3.06771	(09120320)		
464823.41	3807741.91	3.02562	(09120320)	464843.41
3807741.91	2.98875	(09120320)		
464863.41	3807741.91	2.95346	(09120320)	464883.41
3807741.91	2.91218	(09120320)		
464903.41	3807741.91	2.87704	(09120320)	464923.41
3807741.91	2.84383	(09120320)		
464943.41	3807741.91	2.80486	(09120320)	464963.41
3807741.91	2.77170	(09120320)		
464983.41	3807741.91	2.74033	(09120320)	465003.41
3807741.91	2.70343	(09120320)		
465023.41	3807741.91	2.67107	(09120320)	465043.41
3807741.91	2.64041	(09120320)		
465063.41	3807741.91	2.60685	(09120320)	465083.41
3807741.91	2.57743	(09120320)		
465103.41	3807741.91	2.55005	(09120320)	465123.41
3807741.91	2.52198	(09120320)		
465143.41	3807741.91	2.49162	(09120320)	465163.41
3807741.91	2.46127	(09120320)		
465183.41	3807741.91	2.43448	(09120320)	465203.41
3807741.91	2.40878	(09120320)		
465223.41	3807741.91	2.38305	(09120320)	465243.41
3807741.91	2.35673	(09010419)		
465263.41	3807741.91	2.33388	(09010419)	465283.41
3807741.91	2.31273	(09010419)		
465303.41	3807741.91	2.29096	(09010419)	465323.41
3807741.91	2.26719	(09010419)		
465343.41	3807741.91	2.24338	(09010419)	465363.41
3807741.91	2.22258	(09010419)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 648

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465383.41	3807741.91	2.20269	(09010419)	464543.41
3807761.91	3.72765 (10021420)			
464563.41	3807761.91	3.69040	(10021420)	464583.41
3807761.91	3.64364 (10021420)			
464603.41	3807761.91	3.59105	(10021420)	464623.41
3807761.91	3.53447 (10021420)			
464643.41	3807761.91	3.47053	(10021420)	464663.41
3807761.91	3.41386 (10021420)			
464683.41	3807761.91	3.36139	(10021420)	464703.41
3807761.91	3.31081 (10021420)			
464723.41	3807761.91	3.25558	(10021420)	464743.41
3807761.91	3.19999 (10021420)			
464763.41	3807761.91	3.15107	(09120320)	464783.41
3807761.91	3.10898 (09120320)			
464803.41	3807761.91	3.06693	(09120320)	464823.41
3807761.91	3.03084 (09120320)			
464843.41	3807761.91	2.99620	(09120320)	464863.41
3807761.91	2.96125 (09120320)			
464883.41	3807761.91	2.92031	(09120320)	464903.41
3807761.91	2.88551 (09120320)			
464923.41	3807761.91	2.85262	(09120320)	464943.41
3807761.91	2.81399 (09120320)			
464963.41	3807761.91	2.78115	(09120320)	464983.41
3807761.91	2.75009 (09120320)			
465003.41	3807761.91	2.71352	(09120320)	465023.41
3807761.91	2.67825 (09120320)			
465043.41	3807761.91	2.64490	(09120320)	465063.41
3807761.91	2.61630 (09120320)			
465083.41	3807761.91	2.58874	(09120320)	465103.41
3807761.91	2.56087 (09120320)			
465123.41	3807761.91	2.52869	(09120320)	465143.41

3807761.91	2.50026	(09120320)		
465163.41	3807761.91	2.47301	(09120320)	465183.41
3807761.91	2.44230	(09120320)		
465203.41	3807761.91	2.41578	(09120320)	465223.41
3807761.91	2.39108	(09120320)		
465243.41	3807761.91	2.36606	(09120320)	465263.41
3807761.91	2.34188	(09120320)		
465283.41	3807761.91	2.31884	(09010419)	465303.41
3807761.91	2.29351	(09010419)		
465323.41	3807761.91	2.27133	(09010419)	465343.41
3807761.91	2.25012	(09010419)		
465363.41	3807761.91	2.22592	(09010419)	465383.41
3807761.91	2.20527	(09010419)		
464543.41	3807781.91	3.71020	(10021420)	464563.41
3807781.91	3.67695	(10021420)		
464583.41	3807781.91	3.63371	(10021420)	464603.41
3807781.91	3.58709	(10021420)		
464623.41	3807781.91	3.53857	(10021420)	464643.41
3807781.91	3.48682	(10021420)		
464663.41	3807781.91	3.43168	(10021420)	464683.41
3807781.91	3.37668	(10021420)		
464703.41	3807781.91	3.32694	(10021420)	464723.41
3807781.91	3.27502	(10021420)		
464743.41	3807781.91	3.22247	(10021420)	464763.41
3807781.91	3.17043	(10021420)		
464783.41	3807781.91	3.11957	(10021420)	464803.41
3807781.91	3.07070	(09120320)		
464823.41	3807781.91	3.03613	(09120320)	464843.41
3807781.91	2.99927	(09120320)		
464863.41	3807781.91	2.96194	(09120320)	464883.41
3807781.91	2.92561	(09120320)		
464903.41	3807781.91	2.88976	(09120320)	464923.41
3807781.91	2.85461	(09120320)		
464943.41	3807781.91	2.82037	(09120320)	464963.41
3807781.91	2.78654	(09120320)		
464983.41	3807781.91	2.75333	(09120320)	465003.41
3807781.91	2.72094	(09120320)		
465023.41	3807781.91	2.68666	(09120320)	465043.41
3807781.91	2.65300	(09120320)		
465063.41	3807781.91	2.62567	(09120320)	465083.41
3807781.91	2.59628	(09120320)		
465103.41	3807781.91	2.56636	(09120320)	465123.41
3807781.91	2.53712	(09120320)		
465143.41	3807781.91	2.50814	(09120320)	465163.41
3807781.91	2.47961	(09120320)		
465183.41	3807781.91	2.45171	(09120320)	465203.41
3807781.91	2.42627	(09120320)		
465223.41	3807781.91	2.40153	(09120320)	465243.41
3807781.91	2.37449	(09120320)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 649

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3807781.91	2.34988	(09120320)	465283.41
3807781.91	2.32618	(09120320)		
465303.41	3807781.91	2.30045	(09120320)	465323.41
3807781.91	2.27498	(09010419)		
465343.41	3807781.91	2.25262	(09010419)	465363.41
3807781.91	2.23076	(09010419)		
465383.41	3807781.91	2.21098	(09010419)	464543.41
3807801.91	3.69013	(10021420)		
464563.41	3807801.91	3.65752	(10021420)	464583.41
3807801.91	3.61868	(10021420)		
464603.41	3807801.91	3.57989	(10021420)	464623.41
3807801.91	3.54081	(10021420)		
464643.41	3807801.91	3.49988	(10021420)	464663.41
3807801.91	3.44696	(10021420)		
464683.41	3807801.91	3.39047	(10021420)	464703.41
3807801.91	3.34158	(10021420)		
464723.41	3807801.91	3.29218	(10021420)	464743.41
3807801.91	3.24203	(10021420)		
464763.41	3807801.91	3.18819	(10021420)	464783.41
3807801.91	3.14006	(10021420)		
464803.41	3807801.91	3.09479	(10021420)	464823.41
3807801.91	3.04875	(10021420)		

464843.41	3807801.91	2.99995	(09120320)	464863.41
3807801.91	2.96159 (09120320)			
464883.41	3807801.91	2.92798	(09120320)	464903.41
3807801.91	2.89170 (09120320)			
464923.41	3807801.91	2.85557	(09120320)	464943.41
3807801.91	2.82392 (09120320)			
464963.41	3807801.91	2.78969	(09120320)	464983.41
3807801.91	2.75554 (09120320)			
465003.41	3807801.91	2.72563	(09120320)	465023.41
3807801.91	2.69322 (09120320)			
465043.41	3807801.91	2.66085	(09120320)	465063.41
3807801.91	2.63249 (09120320)			
465083.41	3807801.91	2.60171	(09120320)	465103.41
3807801.91	2.57093 (09120320)			
465123.41	3807801.91	2.54396	(09120320)	465143.41
3807801.91	2.51464 (09120320)			
465163.41	3807801.91	2.48550	(09120320)	465183.41
3807801.91	2.46100 (09120320)			
465203.41	3807801.91	2.43596	(09120320)	465223.41
3807801.91	2.41025 (09120320)			
465243.41	3807801.91	2.38191	(09120320)	465263.41
3807801.91	2.35712 (09120320)			
465283.41	3807801.91	2.33405	(09120320)	465303.41
3807801.91	2.31029 (09120320)			
465323.41	3807801.91	2.28446	(09120320)	465343.41
3807801.91	2.25873 (09120320)			
465363.41	3807801.91	2.23697	(09120320)	465383.41
3807801.91	2.21615 (09010419)			
464543.41	3807821.91	3.67186	(10021420)	464563.41
3807821.91	3.63578 (10021420)			
464583.41	3807821.91	3.60697	(10021420)	464603.41
3807821.91	3.57760 (10021420)			
464623.41	3807821.91	3.54613	(10021420)	464643.41
3807821.91	3.50654 (10021420)			
464663.41	3807821.91	3.45909	(10021420)	464683.41
3807821.91	3.40902 (10021420)			
464703.41	3807821.91	3.36083	(10021420)	464723.41
3807821.91	3.30778 (10021420)			
464743.41	3807821.91	3.25428	(10021420)	464763.41
3807821.91	3.20733 (10021420)			
464783.41	3807821.91	3.16191	(10021420)	464803.41
3807821.91	3.11621 (10021420)			
464823.41	3807821.91	3.06497	(10021420)	464843.41
3807821.91	3.01882 (10021420)			
464863.41	3807821.91	2.97437	(10021420)	464883.41
3807821.91	2.92567 (09120320)			
464903.41	3807821.91	2.89174	(09120320)	464923.41
3807821.91	2.85940 (09120320)			
464943.41	3807821.91	2.82297	(09120320)	464963.41
3807821.91	2.79098 (09120320)			

464983.41	3807821.91	2.76045	(09120320)	465003.41
3807821.91	2.72598	(09120320)		
465023.41	3807821.91	2.69571	(09120320)	465043.41
3807821.91	2.66680	(09120320)		
465063.41	3807821.91	2.63408	(09120320)	465083.41
3807821.91	2.60535	(09120320)		
465103.41	3807821.91	2.57789	(09120320)	465123.41
3807821.91	2.54675	(09120320)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 650

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465143.41	3807821.91	2.51939	(09120320)	465163.41
3807821.91	2.49419	(09120320)		
465183.41	3807821.91	2.47000	(09120320)	465203.41
3807821.91	2.44247	(09120320)		
465223.41	3807821.91	2.41443	(09120320)	465243.41
3807821.91	2.39045	(09120320)		
465263.41	3807821.91	2.36732	(09120320)	465283.41
3807821.91	2.34384	(09120320)		
465303.41	3807821.91	2.31650	(09120320)	465323.41
3807821.91	2.29238	(09120320)		
465343.41	3807821.91	2.27007	(09120320)	465363.41
3807821.91	2.24859	(09120320)		
465383.41	3807821.91	2.22418	(09120320)	464543.41

3807841.91	3.64018	(10021420)		
464563.41	3807841.91	3.60069	(10021420)	464583.41
3807841.91	3.58260	(10021420)		
464603.41	3807841.91	3.56344	(10021420)	464623.41
3807841.91	3.54001	(10021420)		
464643.41	3807841.91	3.50194	(10021420)	464663.41
3807841.91	3.46054	(10021420)		
464683.41	3807841.91	3.41723	(10021420)	464723.41
3807841.91	3.32039	(10021420)		
464743.41	3807841.91	3.27095	(10021420)	464763.41
3807841.91	3.22597	(10021420)		
464783.41	3807841.91	3.17838	(10021420)	464803.41
3807841.91	3.13021	(10021420)		
464823.41	3807841.91	3.08309	(10021420)	464843.41
3807841.91	3.03646	(10021420)		
464863.41	3807841.91	2.99056	(10021420)	464883.41
3807841.91	2.94561	(10021420)		
464903.41	3807841.91	2.90108	(10021420)	464923.41
3807841.91	2.85733	(09120320)		
464943.41	3807841.91	2.82432	(09120320)	464963.41
3807841.91	2.79170	(09120320)		
464983.41	3807841.91	2.75969	(09120320)	465003.41
3807841.91	2.72848	(09120320)		
465023.41	3807841.91	2.69761	(09120320)	465043.41
3807841.91	2.66728	(09120320)		
465063.41	3807841.91	2.63769	(09120320)	465083.41
3807841.91	2.60839	(09120320)		
465103.41	3807841.91	2.57957	(09120320)	465123.41
3807841.91	2.55142	(09120320)		
465143.41	3807841.91	2.52353	(09120320)	465163.41
3807841.91	2.49655	(09120320)		
465183.41	3807841.91	2.47276	(09120320)	465203.41
3807841.91	2.44730	(09120320)		
465223.41	3807841.91	2.42118	(09120320)	465243.41
3807841.91	2.39517	(09120320)		
465263.41	3807841.91	2.37159	(09120320)	465283.41
3807841.91	2.34893	(09120320)		
465303.41	3807841.91	2.32419	(09120320)	465323.41
3807841.91	2.30167	(09120320)		
465343.41	3807841.91	2.27975	(09120320)	465363.41
3807841.91	2.25567	(09120320)		
465383.41	3807841.91	2.23207	(09120320)	464503.41
3807861.91	3.73035	(10021420)		
464523.41	3807861.91	3.66639	(10021420)	464543.41
3807861.91	3.61287	(10021420)		
464563.41	3807861.91	3.56998	(10021420)	464583.41
3807861.91	3.55228	(10021420)		
464603.41	3807861.91	3.53868	(10021420)	464723.41
3807861.91	3.33209	(10021420)		
464743.41	3807861.91	3.28716	(10021420)	464763.41

3807861.91	3.24289	(10021420)		
464783.41	3807861.91	3.19311	(10021420)	464803.41
3807861.91	3.14258	(10021420)		
464823.41	3807861.91	3.09874	(10021420)	464843.41
3807861.91	3.05190	(10021420)		
464863.41	3807861.91	3.00518	(10021420)	464883.41
3807861.91	2.96331	(10021420)		
464903.41	3807861.91	2.91858	(10021420)	464923.41
3807861.91	2.87392	(10021420)		
464943.41	3807861.91	2.83380	(10021420)	464963.41
3807861.91	2.79112	(09120320)		
464983.41	3807861.91	2.75817	(09120320)	465003.41
3807861.91	2.72947	(09120320)		
465023.41	3807861.91	2.69822	(09120320)	465043.41
3807861.91	2.66700	(09120320)		
465063.41	3807861.91	2.63981	(09120320)	465083.41
3807861.91	2.61015	(09120320)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 651

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465103.41	3807861.91	2.58047	(09120320)	465123.41
3807861.91	2.55463	(09120320)		
465143.41	3807861.91	2.52639	(09120320)	465163.41
3807861.91	2.49812	(09120320)		

465183.41	3807861.91	2.47348	(09120320)	465203.41
3807861.91	2.44993	(09120320)		
465223.41	3807861.91	2.42632	(09120320)	465243.41
3807861.91	2.39899	(09120320)		
465263.41	3807861.91	2.37523	(09120320)	465283.41
3807861.91	2.35321	(09120320)		
465303.41	3807861.91	2.33048	(09120320)	465323.41
3807861.91	2.30871	(09120320)		
465343.41	3807861.91	2.28686	(09120320)	465363.41
3807861.91	2.26159	(09120320)		
465383.41	3807861.91	2.23881	(09120320)	464503.41
3807881.91	3.72052	(10021420)		
464523.41	3807881.91	3.65781	(10021420)	464543.41
3807881.91	3.60569	(10021420)		
464723.41	3807881.91	3.34540	(10021420)	464743.41
3807881.91	3.30122	(10021420)		
464763.41	3807881.91	3.25768	(10021420)	464783.41
3807881.91	3.20862	(10021420)		
464803.41	3807881.91	3.15769	(10021420)	464823.41
3807881.91	3.10859	(10021420)		
464843.41	3807881.91	3.06463	(10021420)	464863.41
3807881.91	3.02235	(10021420)		
464883.41	3807881.91	2.97550	(10021420)	464903.41
3807881.91	2.93348	(10021420)		
464923.41	3807881.91	2.89300	(10021420)	464943.41
3807881.91	2.84818	(10021420)		
464963.41	3807881.91	2.80789	(10021420)	464983.41
3807881.91	2.76902	(10021420)		
465003.41	3807881.91	2.72625	(09120320)	465023.41
3807881.91	2.69717	(09120320)		
465043.41	3807881.91	2.66944	(09120320)	465063.41
3807881.91	2.63785	(09120320)		
465083.41	3807881.91	2.61026	(09120320)	465103.41
3807881.91	2.58394	(09120320)		
465123.41	3807881.91	2.55389	(09120320)	465143.41
3807881.91	2.52764	(09120320)		
465163.41	3807881.91	2.50257	(09120320)	465183.41
3807881.91	2.47391	(09120320)		
465203.41	3807881.91	2.44953	(09120320)	465223.41
3807881.91	2.42698	(09120320)		
465243.41	3807881.91	2.40407	(09120320)	465263.41
3807881.91	2.38199	(09120320)		
465283.41	3807881.91	2.35956	(09120320)	465303.41
3807881.91	2.33320	(09120320)		
465323.41	3807881.91	2.31068	(09120320)	465343.41
3807881.91	2.28980	(09120320)		
465363.41	3807881.91	2.26857	(09120320)	465383.41
3807881.91	2.24486	(09120320)		
464723.41	3807901.91	3.34789	(10021420)	464743.41
3807901.91	3.31230	(10021420)		

464763.41	3807901.91	3.26450	(10021420)	464783.41
3807901.91	3.21807	(10021420)		
464803.41	3807901.91	3.17171	(10021420)	464823.41
3807901.91	3.12211	(10021420)		
464843.41	3807901.91	3.07926	(10021420)	464863.41
3807901.91	3.03843	(10021420)		
464883.41	3807901.91	2.99110	(10021420)	464903.41
3807901.91	2.94715	(10021420)		
464923.41	3807901.91	2.90531	(10021420)	464943.41
3807901.91	2.86430	(10021420)		
464963.41	3807901.91	2.82641	(10021420)	464983.41
3807901.91	2.78885	(10021420)		
465003.41	3807901.91	2.74541	(10021420)	465023.41
3807901.91	2.70493	(10021420)		
465043.41	3807901.91	2.66653	(09120320)	465063.41
3807901.91	2.63809	(09120320)		
465083.41	3807901.91	2.60993	(09120320)	465103.41
3807901.91	2.58224	(09120320)		
465123.41	3807901.91	2.55520	(09120320)	465143.41
3807901.91	2.52841	(09120320)		
465163.41	3807901.91	2.50203	(09120320)	465183.41
3807901.91	2.47626	(09120320)		
465203.41	3807901.91	2.45298	(09120320)	465223.41
3807901.91	2.43039	(09120320)		
465243.41	3807901.91	2.40541	(09120320)	465263.41
3807901.91	2.38289	(09120320)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 652

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)
465283.41	3807901.91	2.36128	(09120320)	465303.41
3807901.91	2.33755 (09120320)			
465323.41	3807901.91	2.31397	(09120320)	465343.41
3807901.91	2.29113 (09120320)			
465363.41	3807901.91	2.27103	(09120320)	465383.41
3807901.91	2.24941 (09120320)			
464723.41	3807921.91	3.34343	(10021420)	464743.41
3807921.91	3.31629 (10021420)			
464763.41	3807921.91	3.26880	(10021420)	464783.41
3807921.91	3.22463 (10021420)			
464803.41	3807921.91	3.18140	(10021420)	464823.41
3807921.91	3.13443 (10021420)			
464843.41	3807921.91	3.09165	(10021420)	464863.41
3807921.91	3.05013 (10021420)			
464883.41	3807921.91	3.00351	(10021420)	464903.41
3807921.91	2.95876 (10021420)			
464923.41	3807921.91	2.91641	(10021420)	464943.41
3807921.91	2.87998 (10021420)			
464963.41	3807921.91	2.84286	(10021420)	464983.41
3807921.91	2.80466 (10021420)			
465003.41	3807921.91	2.76183	(10021420)	465023.41
3807921.91	2.72063 (10021420)			
465043.41	3807921.91	2.68131	(10021420)	465063.41
3807921.91	2.64606 (10021420)			
465083.41	3807921.91	2.60847	(09120320)	465103.41
3807921.91	2.57992 (09120320)			
465123.41	3807921.91	2.55519	(09120320)	465143.41
3807921.91	2.52805 (09120320)			
465163.41	3807921.91	2.50085	(09120320)	465183.41
3807921.91	2.47730 (09120320)			
465203.41	3807921.91	2.45484	(09120320)	465223.41
3807921.91	2.43230 (09120320)			
465243.41	3807921.91	2.40599	(09120320)	465263.41
3807921.91	2.38246 (09120320)			
465283.41	3807921.91	2.36069	(09120320)	465303.41
3807921.91	2.34016 (09120320)			
465323.41	3807921.91	2.31674	(09120320)	465343.41
3807921.91	2.29294 (09120320)			
465363.41	3807921.91	2.27320	(09120320)	465383.41
3807921.91	2.25291 (09120320)			
464723.41	3807941.91	3.33038	(10021420)	464743.41
3807941.91	3.30701 (10021420)			
464763.41	3807941.91	3.27333	(10021420)	464783.41
3807941.91	3.22987 (10021420)			
464803.41	3807941.91	3.18352	(10021420)	464823.41

3807941.91	3.14333	(10021420)		
464843.41	3807941.91	3.09933	(10021420)	464863.41
3807941.91	3.05381	(10021420)		
464883.41	3807941.91	3.00800	(10021420)	464903.41
3807941.91	2.96783	(10021420)		
464923.41	3807941.91	2.93078	(10021420)	464943.41
3807941.91	2.89501	(10021420)		
464963.41	3807941.91	2.85500	(10021420)	464983.41
3807941.91	2.81320	(10021420)		
465003.41	3807941.91	2.77108	(10021420)	465023.41
3807941.91	2.73396	(10021420)		
465043.41	3807941.91	2.69849	(10021420)	465063.41
3807941.91	2.65896	(10021420)		
465083.41	3807941.91	2.62348	(10021420)	465103.41
3807941.91	2.58921	(10021420)		
465123.41	3807941.91	2.55137	(09120320)	465143.41
3807941.91	2.52622	(09120320)		
465163.41	3807941.91	2.50224	(09120320)	465183.41
3807941.91	2.47463	(09120320)		
465203.41	3807941.91	2.45132	(09120320)	465223.41
3807941.91	2.42984	(09120320)		
465243.41	3807941.91	2.40798	(09120320)	465263.41
3807941.91	2.38340	(09120320)		
465283.41	3807941.91	2.35872	(09120320)	465303.41
3807941.91	2.33859	(09120320)		
465323.41	3807941.91	2.31807	(09120320)	465343.41
3807941.91	2.29779	(09120320)		
465363.41	3807941.91	2.27833	(09120320)	465383.41
3807941.91	2.25583	(09120320)		
465403.41	3807941.91	2.23280	(09120320)	465423.41
3807941.91	2.21333	(09120320)		
465443.41	3807941.91	2.19454	(09120320)	465463.41
3807941.91	2.17719	(09120320)		
465483.41	3807941.91	2.15821	(09120320)	465503.41
3807941.91	2.13995	(09120320)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 653

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156

, L0006157 , L0006158 , L0006159 ,
 , L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465523.41	3807941.91	2.12133	(09120320)	465543.41
3807941.91	2.09943	(09120320)		
465563.41	3807941.91	2.08013	(09120320)	465583.41
3807941.91	2.06226	(09120320)		
465603.41	3807941.91	2.04511	(09120320)	465623.41
3807941.91	2.02538	(09120320)		
465643.41	3807941.91	2.00524	(09120320)	465663.41
3807941.91	1.98792	(09120320)		
465683.41	3807941.91	1.96859	(09120320)	465703.41
3807941.91	1.94906	(09120320)		
464723.41	3807961.91	3.30574	(10021420)	464743.41
3807961.91	3.29462	(10021420)		
464763.41	3807961.91	3.26990	(10021420)	464783.41
3807961.91	3.23246	(10021420)		
464803.41	3807961.91	3.18930	(10021420)	464823.41
3807961.91	3.14628	(10021420)		
464843.41	3807961.91	3.10444	(10021420)	464863.41
3807961.91	3.06258	(10021420)		
464883.41	3807961.91	3.01750	(10021420)	464903.41
3807961.91	2.97881	(10021420)		
464923.41	3807961.91	2.94259	(10021420)	464943.41
3807961.91	2.90315	(10021420)		
464963.41	3807961.91	2.86472	(10021420)	464983.41
3807961.91	2.82619	(10021420)		
465003.41	3807961.91	2.78470	(10021420)	465023.41
3807961.91	2.74890	(10021420)		
465043.41	3807961.91	2.71472	(10021420)	465063.41
3807961.91	2.67479	(10021420)		
465083.41	3807961.91	2.63765	(10021420)	465103.41
3807961.91	2.60222	(10021420)		
465123.41	3807961.91	2.56740	(10021420)	465143.41
3807961.91	2.53276	(10021420)		
465163.41	3807961.91	2.49875	(09120320)	465183.41
3807961.91	2.47405	(09120320)		
465203.41	3807961.91	2.44953	(09120320)	465223.41
3807961.91	2.42585	(09120320)		

465243.41	3807961.91	2.40522	(09120320)	465263.41
3807961.91	2.38293	(09120320)		
465283.41	3807961.91	2.36048	(09120320)	465303.41
3807961.91	2.34066	(09120320)		
465323.41	3807961.91	2.31896	(09120320)	465343.41
3807961.91	2.29711	(09120320)		
465363.41	3807961.91	2.27801	(09120320)	465383.41
3807961.91	2.25736	(09120320)		
465403.41	3807961.91	2.23605	(09120320)	465423.41
3807961.91	2.21476	(09120320)		
465443.41	3807961.91	2.19558	(09120320)	465463.41
3807961.91	2.18126	(09120320)		
465483.41	3807961.91	2.16063	(09120320)	465503.41
3807961.91	2.14209	(09120320)		
465523.41	3807961.91	2.12411	(09120320)	465543.41
3807961.91	2.10437	(09120320)		
465563.41	3807961.91	2.08645	(09120320)	465583.41
3807961.91	2.06899	(09120320)		
465603.41	3807961.91	2.04963	(09120320)	465623.41
3807961.91	2.03062	(09120320)		
465643.41	3807961.91	2.01187	(09120320)	465663.41
3807961.91	1.99310	(09120320)		
465683.41	3807961.91	1.97467	(09120320)	465703.41
3807961.91	1.95688	(09120320)		
464743.41	3807981.91	3.27692	(10021420)	464763.41
3807981.91	3.26018	(10021420)		
464783.41	3807981.91	3.23009	(10021420)	464803.41
3807981.91	3.19225	(10021420)		
464823.41	3807981.91	3.14585	(10021420)	464843.41
3807981.91	3.10624	(10021420)		
464863.41	3807981.91	3.06861	(10021420)	464883.41
3807981.91	3.02428	(10021420)		
464903.41	3807981.91	2.98634	(10021420)	464923.41
3807981.91	2.95050	(10021420)		
464943.41	3807981.91	2.90972	(10021420)	464963.41
3807981.91	2.87264	(10021420)		
464983.41	3807981.91	2.83683	(10021420)	465003.41
3807981.91	2.79763	(10021420)		
465023.41	3807981.91	2.76190	(10021420)	465043.41
3807981.91	2.72736	(10021420)		
465063.41	3807981.91	2.68957	(10021420)	465083.41
3807981.91	2.65119	(10021420)		
465103.41	3807981.91	2.61416	(10021420)	465123.41
3807981.91	2.58331	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807981.91	2.54811	(10021420)	465163.41
3807981.91	2.51210	(10021420)		
465183.41	3807981.91	2.48087	(10021420)	465203.41
3807981.91	2.44741	(09120320)		
465223.41	3807981.91	2.42266	(09120320)	465243.41
3807981.91	2.40239	(09120320)		
465263.41	3807981.91	2.38237	(09120320)	465283.41
3807981.91	2.36241	(09120320)		
465303.41	3807981.91	2.34172	(09120320)	465323.41
3807981.91	2.31883	(09120320)		
465343.41	3807981.91	2.29584	(09120320)	465363.41
3807981.91	2.27598	(09120320)		
465383.41	3807981.91	2.25702	(09120320)	465403.41
3807981.91	2.23795	(09120320)		
465423.41	3807981.91	2.21549	(09120320)	465443.41
3807981.91	2.19616	(09120320)		
465463.41	3807981.91	2.18407	(09120320)	465483.41
3807981.91	2.16226	(09120320)		
465503.41	3807981.91	2.14358	(09120320)	465523.41
3807981.91	2.12622	(09120320)		
465543.41	3807981.91	2.10820	(09120320)	465563.41
3807981.91	2.09102	(09120320)		
465583.41	3807981.91	2.07356	(09120320)	465603.41
3807981.91	2.05312	(09120320)		
465623.41	3807981.91	2.03489	(09120320)	465643.41
3807981.91	2.01726	(09120320)		
465663.41	3807981.91	1.99746	(09120320)	465683.41

3807981.91	1.98040 (09120320)		
465703.41	3807981.91	1.96449 (09120320)	464763.41
3808001.91	3.24160 (10021420)		
464783.41	3808001.91	3.21935 (10021420)	464803.41
3808001.91	3.18762 (10021420)		
464823.41	3808001.91	3.14210 (10021420)	464843.41
3808001.91	3.10355 (10021420)		
464863.41	3808001.91	3.06670 (10021420)	464883.41
3808001.91	3.02322 (10021420)		
464903.41	3808001.91	2.98628 (10021420)	464923.41
3808001.91	2.95219 (10021420)		
464943.41	3808001.91	2.91759 (10021420)	464963.41
3808001.91	2.87941 (10021420)		
464983.41	3808001.91	2.84092 (10021420)	465003.41
3808001.91	2.80757 (10021420)		
465023.41	3808001.91	2.77081 (10021420)	465043.41
3808001.91	2.73371 (10021420)		
465063.41	3808001.91	2.70149 (10021420)	465083.41
3808001.91	2.66534 (10021420)		
465103.41	3808001.91	2.62889 (10021420)	465123.41
3808001.91	2.59863 (10021420)		
465143.41	3808001.91	2.56399 (10021420)	465163.41
3808001.91	2.52771 (10021420)		
465183.41	3808001.91	2.49258 (10021420)	465203.41
3808001.91	2.46108 (10021420)		
465223.41	3808001.91	2.43159 (10021420)	465243.41
3808001.91	2.40307 (09120320)		
465263.41	3808001.91	2.38333 (09120320)	465283.41
3808001.91	2.36293 (09120320)		
465303.41	3808001.91	2.33853 (09120320)	465323.41
3808001.91	2.31739 (09120320)		
465343.41	3808001.91	2.29722 (09120320)	465363.41
3808001.91	2.27381 (09120320)		
465383.41	3808001.91	2.25411 (09120320)	465403.41
3808001.91	2.23597 (09120320)		
465423.41	3808001.91	2.21744 (09120320)	465443.41
3808001.91	2.19960 (09120320)		
465463.41	3808001.91	2.18320 (09120320)	465483.41
3808001.91	2.16515 (09120320)		
465503.41	3808001.91	2.14782 (09120320)	465523.41
3808001.91	2.13012 (09120320)		
465543.41	3808001.91	2.10910 (09120320)	465563.41
3808001.91	2.09113 (09120320)		
465583.41	3808001.91	2.07466 (09120320)	465603.41
3808001.91	2.05767 (09120320)		
465623.41	3808001.91	2.03859 (09120320)	465643.41
3808001.91	2.01929 (09120320)		
465663.41	3808001.91	2.00282 (09120320)	465683.41
3808001.91	1.98697 (09120320)		
465703.41	3808001.91	1.97078 (09120320)	464763.41

3808021.91 3.21036 (10021420)
 464783.41 3808021.91 3.19125 (10021420) 464803.41
 3808021.91 3.16802 (10021420)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 655

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	3.13343	(10021420)	464843.41
3808021.91	3.09896 (10021420)			
464863.41	3808021.91	3.06383	(10021420)	464883.41
3808021.91	3.02587 (10021420)			
464903.41	3808021.91	2.98805	(10021420)	464923.41
3808021.91	2.95138 (10021420)			
464943.41	3808021.91	2.91874	(10021420)	464963.41
3808021.91	2.88389 (10021420)			
464983.41	3808021.91	2.84815	(10021420)	465003.41
3808021.91	2.81236 (10021420)			
465023.41	3808021.91	2.77748	(10021420)	465043.41
3808021.91	2.74299 (10021420)			
465063.41	3808021.91	2.70856	(10021420)	465083.41
3808021.91	2.67473 (10021420)			
465103.41	3808021.91	2.64138	(10021420)	465123.41
3808021.91	2.60806 (10021420)			
465143.41	3808021.91	2.57530	(10021420)	465163.41
3808021.91	2.54246 (10021420)			

465183.41	3808021.91	2.50698	(10021420)	465203.41
3808021.91	2.47633	(10021420)		
465223.41	3808021.91	2.44749	(10021420)	465243.41
3808021.91	2.41612	(10021420)		
465263.41	3808021.91	2.38717	(10021420)	465283.41
3808021.91	2.35908	(10021420)		
465303.41	3808021.91	2.33725	(09120320)	465323.41
3808021.91	2.31562	(09120320)		
465343.41	3808021.91	2.29430	(09120320)	465363.41
3808021.91	2.27343	(09120320)		
465383.41	3808021.91	2.25470	(09120320)	465403.41
3808021.91	2.23651	(09120320)		
465423.41	3808021.91	2.21615	(09120320)	465443.41
3808021.91	2.19791	(09120320)		
465463.41	3808021.91	2.18453	(09120320)	465483.41
3808021.91	2.16482	(09120320)		
465503.41	3808021.91	2.14719	(09120320)	465523.41
3808021.91	2.13012	(09120320)		
465543.41	3808021.91	2.11126	(09120320)	465563.41
3808021.91	2.09247	(09120320)		
465583.41	3808021.91	2.07433	(09120320)	465603.41
3808021.91	2.05839	(09120320)		
465623.41	3808021.91	2.04102	(09120320)	465643.41
3808021.91	2.02355	(09120320)		
465663.41	3808021.91	2.00804	(09120320)	465683.41
3808021.91	1.99101	(09120320)		
465703.41	3808021.91	1.97348	(09120320)	464783.41
3808041.91	3.16324	(10021420)		
464803.41	3808041.91	3.14532	(10021420)	464823.41
3808041.91	3.12068	(10021420)		
464843.41	3808041.91	3.09122	(10021420)	464863.41
3808041.91	3.05930	(10021420)		
464883.41	3808041.91	3.02625	(10021420)	464903.41
3808041.91	2.98895	(10021420)		
464923.41	3808041.91	2.95116	(10021420)	464943.41
3808041.91	2.91934	(10021420)		
464963.41	3808041.91	2.88782	(10021420)	464983.41
3808041.91	2.85529	(10021420)		
465003.41	3808041.91	2.81656	(10021420)	465023.41
3808041.91	2.78251	(10021420)		
465043.41	3808041.91	2.75009	(10021420)	465063.41
3808041.91	2.71434	(10021420)		
465083.41	3808041.91	2.68186	(10021420)	465103.41
3808041.91	2.65047	(10021420)		
465123.41	3808041.91	2.61589	(10021420)	465143.41
3808041.91	2.58441	(10021420)		
465163.41	3808041.91	2.55394	(10021420)	465183.41
3808041.91	2.52044	(10021420)		
465203.41	3808041.91	2.48986	(10021420)	465223.41
3808041.91	2.46024	(10021420)		

465243.41	3808041.91	2.42772	(10021420)	465263.41
3808041.91	2.39797	(10021420)		
465283.41	3808041.91	2.36995	(10021420)	465303.41
3808041.91	2.34311	(10021420)		
465323.41	3808041.91	2.31324	(10021420)	465343.41
3808041.91	2.29089	(09120320)		
465363.41	3808041.91	2.27197	(09120320)	465383.41
3808041.91	2.25395	(09120320)		
465403.41	3808041.91	2.23580	(09120320)	465423.41
3808041.91	2.21426	(09120320)		
465443.41	3808041.91	2.19584	(09120320)	465463.41
3808041.91	2.18469	(09120320)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 656

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465483.41	3808041.91	2.16378	(09120320)	465503.41
3808041.91	2.14530	(09120320)		
465523.41	3808041.91	2.12825	(09120320)	465543.41
3808041.91	2.11211	(09120320)		
465563.41	3808041.91	2.09339	(09120320)	465583.41
3808041.91	2.07436	(09120320)		
465603.41	3808041.91	2.05873	(09120320)	465623.41
3808041.91	2.04322	(09120320)		
465643.41	3808041.91	2.02770	(09120320)	465663.41

3808041.91	2.01155	(09120320)		
465683.41	3808041.91	1.99363	(09120320)	465703.41
3808041.91	1.97569	(09120320)		
464803.41	3808061.91	3.12591	(10021420)	464823.41
3808061.91	3.10264	(10021420)		
464843.41	3808061.91	3.07847	(10021420)	464863.41
3808061.91	3.05252	(10021420)		
464883.41	3808061.91	3.02036	(10021420)	464903.41
3808061.91	2.98765	(10021420)		
464923.41	3808061.91	2.95530	(10021420)	464943.41
3808061.91	2.92416	(10021420)		
464963.41	3808061.91	2.89332	(10021420)	464983.41
3808061.91	2.86147	(10021420)		
465003.41	3808061.91	2.82341	(10021420)	465023.41
3808061.91	2.78656	(10021420)		
465043.41	3808061.91	2.75155	(10021420)	465063.41
3808061.91	2.72144	(10021420)		
465083.41	3808061.91	2.68797	(10021420)	465103.41
3808061.91	2.65413	(10021420)		
465123.41	3808061.91	2.62491	(10021420)	465143.41
3808061.91	2.59250	(10021420)		
465163.41	3808061.91	2.55970	(10021420)	465183.41
3808061.91	2.53129	(10021420)		
465203.41	3808061.91	2.49982	(10021420)	465223.41
3808061.91	2.46798	(10021420)		
465243.41	3808061.91	2.44029	(10021420)	465263.41
3808061.91	2.40969	(10021420)		
465283.41	3808061.91	2.37892	(10021420)	465303.41
3808061.91	2.35272	(10021420)		
465323.41	3808061.91	2.32603	(10021420)	465343.41
3808061.91	2.29863	(10021420)		
465363.41	3808061.91	2.26790	(10021420)	465383.41
3808061.91	2.24853	(09120320)		
465403.41	3808061.91	2.23130	(09120320)	465423.41
3808061.91	2.21369	(09120320)		
465443.41	3808061.91	2.19675	(09120320)	465463.41
3808061.91	2.18126	(09120320)		
465483.41	3808061.91	2.16410	(09120320)	465503.41
3808061.91	2.14466	(09120320)		
465523.41	3808061.91	2.12507	(09120320)	465543.41
3808061.91	2.10927	(09120320)		
465563.41	3808061.91	2.09316	(09120320)	465583.41
3808061.91	2.07705	(09120320)		
465603.41	3808061.91	2.06167	(09120320)	465623.41
3808061.91	2.04641	(09120320)		
465643.41	3808061.91	2.03058	(09120320)	465663.41
3808061.91	2.01164	(09120320)		
465683.41	3808061.91	1.99510	(09120320)	465703.41
3808061.91	1.97987	(09120320)		
464823.41	3808081.91	3.09058	(10021420)	464843.41

3808081.91	3.06489	(10021420)		
464863.41	3808081.91	3.03781	(10021420)	464883.41
3808081.91	3.01127	(10021420)		
464903.41	3808081.91	2.98500	(10021420)	464923.41
3808081.91	2.95795	(10021420)		
464943.41	3808081.91	2.92749	(10021420)	464963.41
3808081.91	2.89442	(10021420)		
464983.41	3808081.91	2.86056	(10021420)	465003.41
3808081.91	2.82734	(10021420)		
465023.41	3808081.91	2.79186	(10021420)	465043.41
3808081.91	2.75682	(10021420)		
465063.41	3808081.91	2.72837	(10021420)	465083.41
3808081.91	2.69521	(10021420)		
465103.41	3808081.91	2.66069	(10021420)	465123.41
3808081.91	2.62936	(10021420)		
465143.41	3808081.91	2.59855	(10021420)	465163.41
3808081.91	2.56815	(10021420)		
465183.41	3808081.91	2.53773	(10021420)	465203.41
3808081.91	2.50779	(10021420)		
465223.41	3808081.91	2.47822	(10021420)	465243.41
3808081.91	2.44862	(10021420)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 657

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -
 - - - - -

465263.41	3808081.91	2.41948	(10021420)	465283.41
3808081.91	2.39124	(10021420)		
465303.41	3808081.91	2.36559	(10021420)	465323.41
3808081.91	2.33792	(10021420)		
465343.41	3808081.91	2.30957	(10021420)	465363.41
3808081.91	2.28163	(10021420)		
465383.41	3808081.91	2.25579	(10021420)	465403.41
3808081.91	2.23042	(10021420)		
465423.41	3808081.91	2.20995	(09120320)	465443.41
3808081.91	2.19259	(09120320)		
465463.41	3808081.91	2.18011	(09120320)	465483.41
3808081.91	2.16128	(09120320)		
465503.41	3808081.91	2.14282	(09120320)	465523.41
3808081.91	2.12467	(09120320)		
465543.41	3808081.91	2.10649	(09120320)	465563.41
3808081.91	2.09032	(09120320)		
465583.41	3808081.91	2.07511	(09120320)	465603.41
3808081.91	2.06003	(09120320)		
465623.41	3808081.91	2.04508	(09120320)	465643.41
3808081.91	2.02982	(09120320)		
465663.41	3808081.91	2.01290	(09120320)	465683.41
3808081.91	1.99766	(09120320)		
465703.41	3808081.91	1.98281	(09120320)	464843.41
3808101.91	3.05103	(10021420)		
464863.41	3808101.91	3.02504	(10021420)	464883.41
3808101.91	3.00368	(10021420)		
464903.41	3808101.91	2.98108	(10021420)	464923.41
3808101.91	2.95667	(10021420)		
464943.41	3808101.91	2.92693	(10021420)	464963.41
3808101.91	2.89313	(10021420)		
464983.41	3808101.91	2.85856	(10021420)	465003.41
3808101.91	2.82831	(10021420)		
465023.41	3808101.91	2.79513	(10021420)	465043.41
3808101.91	2.76179	(10021420)		
465063.41	3808101.91	2.73252	(10021420)	465083.41
3808101.91	2.69946	(10021420)		
465103.41	3808101.91	2.66526	(10021420)	465123.41
3808101.91	2.63266	(10021420)		
465143.41	3808101.91	2.60410	(10021420)	465163.41
3808101.91	2.57649	(10021420)		
465183.41	3808101.91	2.54341	(10021420)	465203.41
3808101.91	2.51431	(10021420)		
465223.41	3808101.91	2.48654	(10021420)	465243.41
3808101.91	2.45579	(10021420)		
465263.41	3808101.91	2.42868	(10021420)	465283.41
3808101.91	2.40326	(10021420)		
465303.41	3808101.91	2.37696	(10021420)	465323.41
3808101.91	2.34830	(10021420)		
465343.41	3808101.91	2.31944	(10021420)	465363.41
3808101.91	2.29372	(10021420)		

465383.41	3808101.91	2.26883	(10021420)	465403.41
3808101.91	2.24374	(10021420)		
465423.41	3808101.91	2.21514	(10021420)	465443.41
3808101.91	2.18964	(10021420)		
465463.41	3808101.91	2.17787	(09120320)	465483.41
3808101.91	2.15782	(09120320)		
465503.41	3808101.91	2.14020	(09120320)	465523.41
3808101.91	2.12324	(09120320)		
465543.41	3808101.91	2.10391	(09120320)	465563.41
3808101.91	2.08757	(09120320)		
465583.41	3808101.91	2.07266	(09120320)	465603.41
3808101.91	2.05787	(09120320)		
465623.41	3808101.91	2.04321	(09120320)	465643.41
3808101.91	2.02853	(09120320)		
465663.41	3808101.91	2.01320	(09120320)	465683.41
3808101.91	1.99863	(09120320)		
465703.41	3808101.91	1.98378	(09120320)	464863.41
3808121.91	3.02306	(10021420)		
464883.41	3808121.91	3.00233	(10021420)	464903.41
3808121.91	2.97649	(10021420)		
464923.41	3808121.91	2.94829	(10021420)	464943.41
3808121.91	2.91936	(10021420)		
464963.41	3808121.91	2.88987	(10021420)	464983.41
3808121.91	2.85948	(10021420)		
465003.41	3808121.91	2.82461	(10021420)	465023.41
3808121.91	2.79403	(10021420)		
465043.41	3808121.91	2.76468	(10021420)	465063.41
3808121.91	2.73103	(10021420)		
465083.41	3808121.91	2.69724	(10021420)	465103.41
3808121.91	2.66452	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 658

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465123.41	3808121.91	2.63732	(10021420)	465143.41
3808121.91	2.61096	(10021420)		
465163.41	3808121.91	2.58395	(10021420)	465183.41
3808121.91	2.55145	(10021420)		
465203.41	3808121.91	2.51991	(10021420)	465223.41
3808121.91	2.48990	(10021420)		
465243.41	3808121.91	2.46407	(10021420)	465263.41
3808121.91	2.43897	(10021420)		
465283.41	3808121.91	2.41334	(10021420)	465303.41
3808121.91	2.38345	(10021420)		
465323.41	3808121.91	2.35684	(10021420)	465343.41
3808121.91	2.33113	(10021420)		
465363.41	3808121.91	2.30198	(10021420)	465383.41
3808121.91	2.27656	(10021420)		
465403.41	3808121.91	2.25265	(10021420)	465423.41
3808121.91	2.22826	(10021420)		
465443.41	3808121.91	2.20449	(10021420)	465463.41
3808121.91	2.18211	(10021420)		
465483.41	3808121.91	2.15797	(10021420)	465503.41
3808121.91	2.13719	(09120320)		
465523.41	3808121.91	2.11837	(09120320)	465543.41
3808121.91	2.10265	(09120320)		
465563.41	3808121.91	2.08762	(09120320)	465583.41
3808121.91	2.07294	(09120320)		
465603.41	3808121.91	2.05839	(09120320)	465623.41
3808121.91	2.04396	(09120320)		
465643.41	3808121.91	2.02896	(09120320)	465663.41
3808121.91	2.01083	(09120320)		
465683.41	3808121.91	1.99552	(09120320)	465703.41
3808121.91	1.98157	(09120320)		
464883.41	3808141.91	2.99121	(10021420)	464903.41
3808141.91	2.97005	(10021420)		
464923.41	3808141.91	2.94521	(10021420)	464943.41
3808141.91	2.91695	(10021420)		
464963.41	3808141.91	2.88896	(10021420)	464983.41
3808141.91	2.85993	(10021420)		
465003.41	3808141.91	2.82466	(10021420)	465023.41
3808141.91	2.79507	(10021420)		
465043.41	3808141.91	2.76703	(10021420)	465063.41
3808141.91	2.73300	(10021420)		
465083.41	3808141.91	2.69941	(10021420)	465103.41

3808141.91	2.66754	(10021420)		
465123.41	3808141.91	2.64192	(10021420)	465143.41
3808141.91	2.61396	(10021420)		
465163.41	3808141.91	2.58520	(10021420)	465183.41
3808141.91	2.55691	(10021420)		
465203.41	3808141.91	2.52657	(10021420)	465223.41
3808141.91	2.49653	(10021420)		
465243.41	3808141.91	2.47216	(10021420)	465263.41
3808141.91	2.44561	(10021420)		
465283.41	3808141.91	2.41832	(10021420)	465303.41
3808141.91	2.39143	(10021420)		
465323.41	3808141.91	2.36456	(10021420)	465343.41
3808141.91	2.33790	(10021420)		
465363.41	3808141.91	2.31161	(10021420)	465383.41
3808141.91	2.28742	(10021420)		
465403.41	3808141.91	2.26370	(10021420)	465423.41
3808141.91	2.23765	(10021420)		
465443.41	3808141.91	2.21368	(10021420)	465463.41
3808141.91	2.19089	(10021420)		
465483.41	3808141.91	2.16810	(10021420)	465503.41
3808141.91	2.14368	(10021420)		
465523.41	3808141.91	2.11863	(10021420)	465543.41
3808141.91	2.09838	(09120320)		
465563.41	3808141.91	2.08302	(09120320)	465583.41
3808141.91	2.06864	(09120320)		
465603.41	3808141.91	2.05437	(09120320)	465623.41
3808141.91	2.04024	(09120320)		
465643.41	3808141.91	2.02580	(09120320)	465663.41
3808141.91	2.00969	(09120320)		
465683.41	3808141.91	1.99360	(09120320)	465703.41
3808141.91	1.97809	(09120320)		
464883.41	3808161.91	2.97688	(10021420)	464903.41
3808161.91	2.96106	(10021420)		
464923.41	3808161.91	2.94021	(10021420)	464943.41
3808161.91	2.91261	(10021420)		
464963.41	3808161.91	2.88528	(10021420)	464983.41
3808161.91	2.85714	(10021420)		
465003.41	3808161.91	2.82417	(10021420)	465023.41
3808161.91	2.79463	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 659

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140

```

, L0006141      , L0006142      , L0006143      ,
                  L0006144      , L0006145      , L0006146      , L0006147      , L0006148
, L0006149      , L0006150      , L0006151      ,
                  L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
                  L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465043.41	3808161.91	2.76597	(10021420)	465063.41
3808161.91	2.73259	(10021420)		
465083.41	3808161.91	2.70063	(10021420)	465103.41
3808161.91	2.67036	(10021420)		
465123.41	3808161.91	2.64395	(10021420)	465143.41
3808161.91	2.61481	(10021420)		
465163.41	3808161.91	2.58544	(10021420)	465183.41
3808161.91	2.55974	(10021420)		
465203.41	3808161.91	2.53141	(10021420)	465223.41
3808161.91	2.50285	(10021420)		
465243.41	3808161.91	2.47777	(10021420)	465263.41
3808161.91	2.45017	(10021420)		
465283.41	3808161.91	2.42233	(10021420)	465303.41
3808161.91	2.39781	(10021420)		
465323.41	3808161.91	2.37087	(10021420)	465343.41
3808161.91	2.34369	(10021420)		
465363.41	3808161.91	2.31966	(10021420)	465383.41
3808161.91	2.29646	(10021420)		
465403.41	3808161.91	2.27301	(10021420)	465423.41
3808161.91	2.24597	(10021420)		
465443.41	3808161.91	2.22205	(10021420)	465463.41
3808161.91	2.19957	(10021420)		
465483.41	3808161.91	2.17628	(10021420)	465503.41
3808161.91	2.15382	(10021420)		
465523.41	3808161.91	2.13097	(10021420)	465543.41
3808161.91	2.10488	(10021420)		
465563.41	3808161.91	2.08176	(10021420)	465583.41
3808161.91	2.06387	(09120320)		
465603.41	3808161.91	2.04989	(09120320)	465623.41
3808161.91	2.03539	(09120320)		
465643.41	3808161.91	2.02095	(09120320)	465663.41
3808161.91	2.00735	(09120320)		

465683.41	3808161.91	1.99132	(09120320)	465703.41
3808161.91	1.97485	(09120320)		
464903.41	3808181.91	2.94834	(10021420)	464923.41
3808181.91	2.92838	(10021420)		
464943.41	3808181.91	2.90151	(10021420)	464963.41
3808181.91	2.87492	(10021420)		
464983.41	3808181.91	2.84836	(10021420)	465003.41
3808181.91	2.82123	(10021420)		
465023.41	3808181.91	2.79059	(10021420)	465043.41
3808181.91	2.75840	(10021420)		
465063.41	3808181.91	2.72571	(10021420)	465083.41
3808181.91	2.69777	(10021420)		
465103.41	3808181.91	2.67130	(10021420)	465123.41
3808181.91	2.64067	(10021420)		
465143.41	3808181.91	2.61388	(10021420)	465163.41
3808181.91	2.58816	(10021420)		
465183.41	3808181.91	2.55844	(10021420)	465203.41
3808181.91	2.53237	(10021420)		
465223.41	3808181.91	2.50730	(10021420)	465243.41
3808181.91	2.47840	(10021420)		
465263.41	3808181.91	2.45296	(10021420)	465283.41
3808181.91	2.42846	(10021420)		
465303.41	3808181.91	2.40030	(10021420)	465323.41
3808181.91	2.37543	(10021420)		
465343.41	3808181.91	2.35144	(10021420)	465363.41
3808181.91	2.32395	(10021420)		
465383.41	3808181.91	2.30020	(10021420)	465403.41
3808181.91	2.27796	(10021420)		
465423.41	3808181.91	2.25520	(10021420)	465443.41
3808181.91	2.23305	(10021420)		
465463.41	3808181.91	2.21039	(10021420)	465483.41
3808181.91	2.18405	(10021420)		
465503.41	3808181.91	2.16094	(10021420)	465523.41
3808181.91	2.13935	(10021420)		
465543.41	3808181.91	2.11713	(10021420)	465563.41
3808181.91	2.09553	(10021420)		
465583.41	3808181.91	2.07423	(10021420)	465603.41
3808181.91	2.05299	(10021420)		
465623.41	3808181.91	2.03170	(09120320)	465643.41
3808181.91	2.01492	(09120320)		
465663.41	3808181.91	2.00161	(09120320)	465683.41
3808181.91	1.98800	(09120320)		
465703.41	3808181.91	1.97369	(09120320)	464923.41
3808201.91	2.90949	(10021420)		
464943.41	3808201.91	2.88779	(10021420)	464963.41
3808201.91	2.86340	(10021420)		
464983.41	3808201.91	2.83779	(10021420)	465003.41
3808201.91	2.81242	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 660

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465023.41	3808201.91	2.78211	(10021420)	465043.41
3808201.91	2.75037	(10021420)		
465063.41	3808201.91	2.72240	(10021420)	465083.41
3808201.91	2.69441	(10021420)		
465103.41	3808201.91	2.66661	(10021420)	465123.41
3808201.91	2.63953	(10021420)		
465143.41	3808201.91	2.61239	(10021420)	465163.41
3808201.91	2.58552	(10021420)		
465183.41	3808201.91	2.55910	(10021420)	465203.41
3808201.91	2.53272	(10021420)		
465223.41	3808201.91	2.50656	(10021420)	465243.41
3808201.91	2.48082	(10021420)		
465263.41	3808201.91	2.45509	(10021420)	465283.41
3808201.91	2.42957	(10021420)		
465303.41	3808201.91	2.40443	(10021420)	465323.41
3808201.91	2.37929	(10021420)		
465343.41	3808201.91	2.35434	(10021420)	465363.41
3808201.91	2.32974	(10021420)		
465383.41	3808201.91	2.30513	(10021420)	465403.41
3808201.91	2.28111	(10021420)		
465423.41	3808201.91	2.25972	(10021420)	465443.41
3808201.91	2.23838	(10021420)		
465463.41	3808201.91	2.21670	(10021420)	465483.41

3808201.91	2.19291	(10021420)	
465503.41	3808201.91	2.17102	(10021420) 465523.41
3808201.91	2.14999	(10021420)	
465543.41	3808201.91	2.12902	(10021420) 465563.41
3808201.91	2.10629	(10021420)	
465583.41	3808201.91	2.08337	(10021420) 465603.41
3808201.91	2.06264	(10021420)	
465623.41	3808201.91	2.04037	(10021420) 465643.41
3808201.91	2.01793	(10021420)	
465663.41	3808201.91	1.99879	(09120320) 465683.41
3808201.91	1.98418	(09120320)	
465703.41	3808201.91	1.96905	(09120320) 464943.41
3808221.91	2.87288	(10021420)	
464963.41	3808221.91	2.85092	(10021420) 464983.41
3808221.91	2.82599	(10021420)	
465003.41	3808221.91	2.80131	(10021420) 465023.41
3808221.91	2.77272	(10021420)	
465043.41	3808221.91	2.74333	(10021420) 465063.41
3808221.91	2.71802	(10021420)	
465083.41	3808221.91	2.68886	(10021420) 465103.41
3808221.91	2.65951	(10021420)	
465123.41	3808221.91	2.63641	(10021420) 465143.41
3808221.91	2.60967	(10021420)	
465163.41	3808221.91	2.58215	(10021420) 465183.41
3808221.91	2.55830	(10021420)	
465203.41	3808221.91	2.53179	(10021420) 465223.41
3808221.91	2.50504	(10021420)	
465243.41	3808221.91	2.48176	(10021420) 465263.41
3808221.91	2.45594	(10021420)	
465283.41	3808221.91	2.42985	(10021420) 465303.41
3808221.91	2.40708	(10021420)	
465323.41	3808221.91	2.38186	(10021420) 465343.41
3808221.91	2.35637	(10021420)	
465363.41	3808221.91	2.33405	(10021420) 465383.41
3808221.91	2.30936	(10021420)	
465403.41	3808221.91	2.28459	(10021420) 465423.41
3808221.91	2.26376	(10021420)	
465443.41	3808221.91	2.24299	(10021420) 465463.41
3808221.91	2.22228	(10021420)	
465483.41	3808221.91	2.20162	(10021420) 465503.41
3808221.91	2.18029	(10021420)	
465523.41	3808221.91	2.15896	(10021420) 465543.41
3808221.91	2.13849	(10021420)	
465563.41	3808221.91	2.11524	(10021420) 465583.41
3808221.91	2.09160	(10021420)	
465603.41	3808221.91	2.07137	(10021420) 465623.41
3808221.91	2.05053	(10021420)	
465643.41	3808221.91	2.02969	(10021420) 465663.41
3808221.91	2.00963	(10021420)	
465683.41	3808221.91	1.98705	(10021420) 465703.41

```

3808221.91      1.96398 (10021420)
      464963.41  3808241.91      2.83766 (10021420)      464983.41
3808241.91      2.81339 (10021420)
      465003.41  3808241.91      2.78937 (10021420)      465023.41
3808241.91      2.76477 (10021420)
      465043.41  3808241.91      2.73929 (10021420)      465063.41
3808241.91      2.70949 (10021420)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 661

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
      INCLUDING SOURCE(S):      L0006139      , L0006140
, L0006141      , L0006142      , L0006143      ,
      L0006144      , L0006145      , L0006146      , L0006147      , L0006148
, L0006149      , L0006150      , L0006151      ,
      L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
      L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465083.41	3808241.91	2.67953	(10021420)	465103.41
3808241.91	2.65082	(10021420)		
465123.41	3808241.91	2.62837	(10021420)	465143.41
3808241.91	2.60534	(10021420)		
465163.41	3808241.91	2.58143	(10021420)	465183.41
3808241.91	2.55352	(10021420)		
465203.41	3808241.91	2.52925	(10021420)	465223.41
3808241.91	2.50596	(10021420)		
465243.41	3808241.91	2.47883	(10021420)	465263.41
3808241.91	2.45515	(10021420)		
465283.41	3808241.91	2.43240	(10021420)	465303.41
3808241.91	2.40595	(10021420)		
465323.41	3808241.91	2.38279	(10021420)	465343.41
3808241.91	2.36051	(10021420)		

465363.41	3808241.91	2.33467	(10021420)	465383.41
3808241.91	2.31197	(10021420)		
465403.41	3808241.91	2.29097	(10021420)	465423.41
3808241.91	2.27064	(10021420)		
465443.41	3808241.91	2.25036	(10021420)	465463.41
3808241.91	2.23014	(10021420)		
465483.41	3808241.91	2.20996	(10021420)	465503.41
3808241.91	2.18671	(10021420)		
465523.41	3808241.91	2.16296	(10021420)	465543.41
3808241.91	2.14304	(10021420)		
465563.41	3808241.91	2.12270	(10021420)	465583.41
3808241.91	2.10226	(10021420)		
465603.41	3808241.91	2.08248	(10021420)	465623.41
3808241.91	2.05989	(10021420)		
465643.41	3808241.91	2.03685	(10021420)	465663.41
3808241.91	2.01729	(10021420)		
465683.41	3808241.91	1.99735	(10021420)	465703.41
3808241.91	1.97665	(10021420)		
464983.41	3808261.91	2.78781	(10021420)	465003.41
3808261.91	2.76877	(10021420)		
465023.41	3808261.91	2.74714	(10021420)	465043.41
3808261.91	2.72363	(10021420)		
465063.41	3808261.91	2.69755	(10021420)	465083.41
3808261.91	2.67176	(10021420)		
465103.41	3808261.91	2.64616	(10021420)	465123.41
3808261.91	2.62040	(10021420)		
465143.41	3808261.91	2.59756	(10021420)	465163.41
3808261.91	2.57542	(10021420)		
465183.41	3808261.91	2.55087	(10021420)	465203.41
3808261.91	2.52624	(10021420)		
465223.41	3808261.91	2.50184	(10021420)	465243.41
3808261.91	2.47784	(10021420)		
465263.41	3808261.91	2.45616	(10021420)	465283.41
3808261.91	2.43451	(10021420)		
465303.41	3808261.91	2.40773	(10021420)	465323.41
3808261.91	2.38316	(10021420)		
465343.41	3808261.91	2.35988	(10021420)	465363.41
3808261.91	2.33694	(10021420)		
465383.41	3808261.91	2.31397	(10021420)	465403.41
3808261.91	2.29159	(10021420)		
465423.41	3808261.91	2.27183	(10021420)	465443.41
3808261.91	2.25212	(10021420)		
465463.41	3808261.91	2.23253	(10021420)	465483.41
3808261.91	2.21291	(10021420)		
465503.41	3808261.91	2.19156	(10021420)	465523.41
3808261.91	2.16999	(10021420)		
465543.41	3808261.91	2.15055	(10021420)	465563.41
3808261.91	2.12930	(10021420)		
465583.41	3808261.91	2.10784	(10021420)	465603.41
3808261.91	2.08858	(10021420)		

465623.41	3808261.91	2.06773	(10021420)	465643.41
3808261.91	2.04624	(10021420)		
465663.41	3808261.91	2.02464	(10021420)	465683.41
3808261.91	2.00484	(10021420)		
465703.41	3808261.91	1.98543	(10021420)	465003.41
3808281.91	2.74648	(10021420)		
465023.41	3808281.91	2.72724	(10021420)	465043.41
3808281.91	2.70617	(10021420)		
465063.41	3808281.91	2.68280	(10021420)	465083.41
3808281.91	2.66154	(10021420)		
465103.41	3808281.91	2.64023	(10021420)	465123.41
3808281.91	2.61319	(10021420)		
465143.41	3808281.91	2.59018	(10021420)	465163.41
3808281.91	2.56903	(10021420)		
465183.41	3808281.91	2.54690	(10021420)	465203.41
3808281.91	2.52212	(10021420)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 662

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808281.91	2.49727	(10021420)	465243.41
3808281.91	2.47698	(10021420)		
465263.41	3808281.91	2.45591	(10021420)	465283.41
3808281.91	2.43374	(10021420)		
465303.41	3808281.91	2.40749	(10021420)	465323.41

3808281.91	2.38234	(10021420)		
465343.41	3808281.91	2.35851	(10021420)	465363.41
3808281.91	2.33783	(10021420)		
465383.41	3808281.91	2.31477	(10021420)	465403.41
3808281.91	2.29144	(10021420)		
465423.41	3808281.91	2.27112	(10021420)	465443.41
3808281.91	2.25155	(10021420)		
465463.41	3808281.91	2.23412	(10021420)	465483.41
3808281.91	2.21504	(10021420)		
465503.41	3808281.91	2.19600	(10021420)	465523.41
3808281.91	2.17684	(10021420)		
465543.41	3808281.91	2.15685	(10021420)	465563.41
3808281.91	2.13477	(10021420)		
465583.41	3808281.91	2.11258	(10021420)	465603.41
3808281.91	2.09383	(10021420)		
465623.41	3808281.91	2.07443	(10021420)	465643.41
3808281.91	2.05429	(10021420)		
465663.41	3808281.91	2.03178	(10021420)	465683.41
3808281.91	2.01139	(10021420)		
465703.41	3808281.91	1.99219	(10021420)	465003.41
3808301.91	2.72576	(10021420)		
465023.41	3808301.91	2.70909	(10021420)	465043.41
3808301.91	2.69199	(10021420)		
465063.41	3808301.91	2.66415	(10021420)	465083.41
3808301.91	2.64536	(10021420)		
465103.41	3808301.91	2.62950	(10021420)	465123.41
3808301.91	2.60775	(10021420)		
465143.41	3808301.91	2.58683	(10021420)	465163.41
3808301.91	2.56533	(10021420)		
465183.41	3808301.91	2.53911	(10021420)	465203.41
3808301.91	2.51651	(10021420)		
465223.41	3808301.91	2.49589	(10021420)	465243.41
3808301.91	2.47608	(10021420)		
465263.41	3808301.91	2.45263	(10021420)	465283.41
3808301.91	2.42747	(10021420)		
465303.41	3808301.91	2.40181	(10021420)	465323.41
3808301.91	2.38002	(10021420)		
465343.41	3808301.91	2.35937	(10021420)	465363.41
3808301.91	2.33515	(10021420)		
465383.41	3808301.91	2.31406	(10021420)	465403.41
3808301.91	2.29380	(10021420)		
465423.41	3808301.91	2.27009	(10021420)	465443.41
3808301.91	2.24997	(10021420)		
465463.41	3808301.91	2.23861	(10021420)	465483.41
3808301.91	2.22001	(10021420)		
465503.41	3808301.91	2.20144	(10021420)	465523.41
3808301.91	2.18211	(10021420)		
465543.41	3808301.91	2.15914	(10021420)	465563.41
3808301.91	2.13882	(10021420)		
465583.41	3808301.91	2.11987	(10021420)	465603.41

3808301.91	2.10156	(10021420)		
465623.41	3808301.91	2.08039	(10021420)	465643.41
3808301.91	2.05868	(10021420)		
465663.41	3808301.91	2.03982	(10021420)	465683.41
3808301.91	2.01873	(10021420)		
465703.41	3808301.91	1.99741	(10021420)	465043.41
3808321.91	2.67291	(10021420)		
465063.41	3808321.91	2.65281	(10021420)	465083.41
3808321.91	2.63477	(10021420)		
465103.41	3808321.91	2.61726	(10021420)	465123.41
3808321.91	2.59705	(10021420)		
465143.41	3808321.91	2.57700	(10021420)	465163.41
3808321.91	2.55647	(10021420)		
465183.41	3808321.91	2.53356	(10021420)	465203.41
3808321.91	2.51298	(10021420)		
465223.41	3808321.91	2.49295	(10021420)	465243.41
3808321.91	2.47012	(10021420)		
465263.41	3808321.91	2.44557	(10021420)	465283.41
3808321.91	2.42088	(10021420)		
465303.41	3808321.91	2.39907	(10021420)	465323.41
3808321.91	2.37724	(10021420)		
465343.41	3808321.91	2.35556	(10021420)	465363.41
3808321.91	2.33422	(10021420)		
465383.41	3808321.91	2.31285	(10021420)	465403.41
3808321.91	2.29161	(10021420)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 663

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465423.41	3808321.91	2.27068	(10021420)	465443.41
3808321.91	2.25174	(10021420)		
465463.41	3808321.91	2.23771	(10021420)	465483.41
3808321.91	2.21964	(10021420)		
465503.41	3808321.91	2.20160	(10021420)	465523.41
3808321.91	2.18312	(10021420)		
465543.41	3808321.91	2.16263	(10021420)	465563.41
3808321.91	2.14394	(10021420)		
465583.41	3808321.91	2.12561	(10021420)	465603.41
3808321.91	2.10513	(10021420)		
465623.41	3808321.91	2.08489	(10021420)	465643.41
3808321.91	2.06482	(10021420)		
465663.41	3808321.91	2.04461	(10021420)	465683.41
3808321.91	2.02464	(10021420)		
465703.41	3808321.91	2.00482	(10021420)	465083.41
3808341.91	2.62382	(10021420)		
465103.41	3808341.91	2.60421	(10021420)	465123.41
3808341.91	2.58605	(10021420)		
465143.41	3808341.91	2.56695	(10021420)	465163.41
3808341.91	2.54757	(10021420)		
465183.41	3808341.91	2.52834	(10021420)	465203.41
3808341.91	2.50833	(10021420)		
465223.41	3808341.91	2.48740	(10021420)	465243.41
3808341.91	2.46342	(10021420)		
465263.41	3808341.91	2.43872	(10021420)	465283.41
3808341.91	2.41486	(10021420)		
465303.41	3808341.91	2.39536	(10021420)	465323.41
3808341.91	2.37255	(10021420)		
465343.41	3808341.91	2.34949	(10021420)	465363.41
3808341.91	2.33158	(10021420)		
465383.41	3808341.91	2.31054	(10021420)	465403.41
3808341.91	2.28876	(10021420)		
465423.41	3808341.91	2.26999	(10021420)	465443.41
3808341.91	2.25197	(10021420)		
465463.41	3808341.91	2.23609	(10021420)	465483.41
3808341.91	2.21854	(10021420)		
465503.41	3808341.91	2.20103	(10021420)	465523.41
3808341.91	2.18338	(10021420)		
465543.41	3808341.91	2.16490	(10021420)	465563.41
3808341.91	2.14716	(10021420)		
465583.41	3808341.91	2.12900	(10021420)	465603.41
3808341.91	2.10756	(10021420)		
465623.41	3808341.91	2.08833	(10021420)	465643.41
3808341.91	2.06961	(10021420)		
465663.41	3808341.91	2.04848	(10021420)	465683.41
3808341.91	2.02948	(10021420)		

465703.41	3808341.91	2.01096	(10021420)	465103.41
3808361.91	2.59102	(10021420)		
465123.41	3808361.91	2.57806	(10021420)	465143.41
3808361.91	2.56098	(10021420)		
465163.41	3808361.91	2.54204	(10021420)	465183.41
3808361.91	2.52324	(10021420)		
465203.41	3808361.91	2.50069	(10021420)	465223.41
3808361.91	2.47740	(10021420)		
465243.41	3808361.91	2.45824	(10021420)	465263.41
3808361.91	2.43548	(10021420)		
465283.41	3808361.91	2.41133	(10021420)	465303.41
3808361.91	2.38809	(10021420)		
465323.41	3808361.91	2.36461	(10021420)	465343.41
3808361.91	2.34210	(10021420)		
465363.41	3808361.91	2.32473	(10021420)	465383.41
3808361.91	2.30680	(10021420)		
465403.41	3808361.91	2.28807	(10021420)	465423.41
3808361.91	2.26589	(10021420)		
465443.41	3808361.91	2.24729	(10021420)	465463.41
3808361.91	2.23747	(10021420)		
465483.41	3808361.91	2.22038	(10021420)	465503.41
3808361.91	2.20333	(10021420)		
465523.41	3808361.91	2.18550	(10021420)	465543.41
3808361.91	2.16401	(10021420)		
465563.41	3808361.91	2.14562	(10021420)	465583.41
3808361.91	2.12866	(10021420)		
465603.41	3808361.91	2.11105	(10021420)	465623.41
3808361.91	2.09109	(10021420)		
465643.41	3808361.91	2.07078	(10021420)	465663.41
3808361.91	2.05333	(10021420)		
465683.41	3808361.91	2.03363	(10021420)	465703.41
3808361.91	2.01359	(10021420)		
465183.41	3808381.91	2.50767	(10021420)	465203.41
3808381.91	2.48640	(10021420)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 664

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,

L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465223.41	3808381.91	2.46535	(10021420)	465243.41
3808381.91	2.44411	(10021420)		
465263.41	3808381.91	2.42116	(10021420)	465283.41
3808381.91	2.39798	(10021420)		
465303.41	3808381.91	2.37785	(10021420)	465323.41
3808381.91	2.35566	(10021420)		
465343.41	3808381.91	2.33369	(10021420)	465363.41
3808381.91	2.31686	(10021420)		
465383.41	3808381.91	2.30009	(10021420)	465403.41
3808381.91	2.28293	(10021420)		
465423.41	3808381.91	2.26350	(10021420)	465443.41
3808381.91	2.24606	(10021420)		
465463.41	3808381.91	2.23352	(10021420)	465483.41
3808381.91	2.21695	(10021420)		
465503.41	3808381.91	2.20041	(10021420)	465523.41
3808381.91	2.18341	(10021420)		
465543.41	3808381.91	2.16439	(10021420)	465563.41
3808381.91	2.14530	(10021420)		
465583.41	3808381.91	2.12677	(10021420)	465603.41
3808381.91	2.11042	(10021420)		
465623.41	3808381.91	2.09245	(10021420)	465643.41
3808381.91	2.07378	(10021420)		
465663.41	3808381.91	2.05498	(10021420)	465683.41
3808381.91	2.03639	(10021420)		
465703.41	3808381.91	2.01793	(10021420)	465303.41
3808401.91	2.36466	(10021420)		
465323.41	3808401.91	2.34480	(10021420)	465343.41
3808401.91	2.32437	(10021420)		
465363.41	3808401.91	2.30807	(10021420)	465383.41
3808401.91	2.29182	(10021420)		
465403.41	3808401.91	2.27563	(10021420)	465423.41
3808401.91	2.25947	(10021420)		
465443.41	3808401.91	2.24336	(10021420)	465463.41
3808401.91	2.22736	(10021420)		
465483.41	3808401.91	2.21131	(10021420)	465503.41
3808401.91	2.19529	(10021420)		
465523.41	3808401.91	2.17929	(10021420)	465543.41

3808401.91	2.16331	(10021420)		
465563.41	3808401.91	2.14446	(10021420)	465583.41
3808401.91	2.12517	(10021420)		
465603.41	3808401.91	2.10932	(10021420)	465623.41
3808401.91	2.09280	(10021420)		
465643.41	3808401.91	2.07549	(10021420)	465663.41
3808401.91	2.05576	(10021420)		
465683.41	3808401.91	2.03814	(10021420)	465703.41
3808401.91	2.02099	(10021420)		
465323.41	3808421.91	2.33076	(10021420)	465343.41
3808421.91	2.31426	(10021420)		
465363.41	3808421.91	2.29848	(10021420)	465383.41
3808421.91	2.28274	(10021420)		
465403.41	3808421.91	2.26706	(10021420)	465423.41
3808421.91	2.25142	(10021420)		
465443.41	3808421.91	2.23582	(10021420)	465463.41
3808421.91	2.22026	(10021420)		
465483.41	3808421.91	2.20472	(10021420)	465503.41
3808421.91	2.18922	(10021420)		
465523.41	3808421.91	2.17373	(10021420)	465543.41
3808421.91	2.15826	(10021420)		
465563.41	3808421.91	2.14234	(10021420)	465583.41
3808421.91	2.12629	(10021420)		
465603.41	3808421.91	2.11087	(10021420)	465623.41
3808421.91	2.09254	(10021420)		
465643.41	3808421.91	2.07363	(10021420)	465663.41
3808421.91	2.05758	(10021420)		
465683.41	3808421.91	2.03925	(10021420)	465703.41
3808421.91	2.02057	(10021420)		
465323.41	3808441.91	2.31853	(10021420)	465343.41
3808441.91	2.30373	(10021420)		
465363.41	3808441.91	2.29157	(10021420)	465383.41
3808441.91	2.27735	(10021420)		
465403.41	3808441.91	2.26211	(10021420)	465423.41
3808441.91	2.24692	(10021420)		
465443.41	3808441.91	2.23177	(10021420)	465463.41
3808441.91	2.21665	(10021420)		
465483.41	3808441.91	2.20156	(10021420)	465503.41
3808441.91	2.18650	(10021420)		
465523.41	3808441.91	2.17146	(10021420)	465543.41
3808441.91	2.15644	(10021420)		
465563.41	3808441.91	2.14143	(10021420)	465583.41
3808441.91	2.12644	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***
INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465603.41	3808441.91	2.11145 (10021420)	465623.41
3808441.91	2.09310 (10021420)		
465643.41	3808441.91	2.07367 (10021420)	465663.41
3808441.91	2.05625 (10021420)		
465683.41	3808441.91	2.03903 (10021420)	465703.41
3808441.91	2.02237 (10021420)		
465343.41	3808461.91	2.29205 (10021420)	465363.41
3808461.91	2.28207 (10021420)		
465383.41	3808461.91	2.26955 (10021420)	465403.41
3808461.91	2.25573 (10021420)		
465423.41	3808461.91	2.24098 (10021420)	465443.41
3808461.91	2.22628 (10021420)		
465463.41	3808461.91	2.21169 (10021420)	465483.41
3808461.91	2.19705 (10021420)		
465503.41	3808461.91	2.18317 (10021420)	465523.41
3808461.91	2.16936 (10021420)		
465543.41	3808461.91	2.15477 (10021420)	465563.41
3808461.91	2.14019 (10021420)		
465583.41	3808461.91	2.12562 (10021420)	465603.41
3808461.91	2.11106 (10021420)		
465623.41	3808461.91	2.09315 (10021420)	465643.41
3808461.91	2.07371 (10021420)		
465663.41	3808461.91	2.05438 (10021420)	465683.41
3808461.91	2.03849 (10021420)		
465703.41	3808461.91	2.02398 (10021420)	465343.41
3808481.91	2.27859 (10021420)		
465363.41	3808481.91	2.26510 (10021420)	465383.41
3808481.91	2.25454 (10021420)		

465403.41	3808481.91	2.24445	(10021420)	465423.41
3808481.91	2.23021	(10021420)		
465443.41	3808481.91	2.21600	(10021420)	465463.41
3808481.91	2.20183	(10021420)		
465483.41	3808481.91	2.18769	(10021420)	465503.41
3808481.91	2.17672	(10021420)		
465523.41	3808481.91	2.16632	(10021420)	465543.41
3808481.91	2.15216	(10021420)		
465563.41	3808481.91	2.13800	(10021420)	465583.41
3808481.91	2.12386	(10021420)		
465603.41	3808481.91	2.10973	(10021420)	465623.41
3808481.91	2.09225	(10021420)		
465643.41	3808481.91	2.07323	(10021420)	465663.41
3808481.91	2.05434	(10021420)		
465683.41	3808481.91	2.03887	(10021420)	465703.41
3808481.91	2.02421	(10021420)		
465463.41	3808501.91	2.19495	(10021420)	465483.41
3808501.91	2.17840	(10021420)		
465503.41	3808501.91	2.16750	(10021420)	465523.41
3808501.91	2.15822	(10021420)		
465543.41	3808501.91	2.14453	(10021420)	465563.41
3808501.91	2.13263	(10021420)		
465583.41	3808501.91	2.12069	(10021420)	465603.41
3808501.91	2.10435	(10021420)		
465623.41	3808501.91	2.08823	(10021420)	465643.41
3808501.91	2.07181	(10021420)		
465663.41	3808501.91	2.05335	(10021420)	465683.41
3808501.91	2.03829	(10021420)		
465703.41	3808501.91	2.02391	(10021420)	465523.41
3808521.91	2.14800	(10021420)		
465543.41	3808521.91	2.13480	(10021420)	465563.41
3808521.91	2.12508	(10021420)		
465583.41	3808521.91	2.11528	(10021420)	465603.41
3808521.91	2.09797	(10021420)		
465623.41	3808521.91	2.08284	(10021420)	465643.41
3808521.91	2.06819	(10021420)		
465663.41	3808521.91	2.05111	(10021420)	465683.41
3808521.91	2.03613	(10021420)		
465703.41	3808521.91	2.02160	(10021420)	464239.31
3809562.31	3.70053	(09040202)		
464277.31	3809562.31	3.56066	(09040202)	463745.31
3809591.37	4.25977	(10010907)		
463783.31	3809591.37	4.15636	(10010907)	463821.31
3809591.37	4.01496	(10022820)		
463859.31	3809591.37	4.20564	(10022820)	463897.31
3809591.37	4.34462	(10022820)		
463935.31	3809591.37	4.40568	(10022820)	464239.31
3809591.37	3.67579	(09040202)		
464277.31	3809591.37	3.54811	(09040202)	463745.31
3809620.43	4.16283	(10010907)		

463783.31 3809620.43 4.07906 (10010907) 463821.31
 3809620.43 3.94838 (10010907)
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 666

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463859.31	3809620.43	4.06612	(10022820)	463897.31
3809620.43	4.21103	(10022820)		
463935.31	3809620.43	4.29479	(10022820)	463973.31
3809620.43	4.29206	(10022820)		
464011.31	3809620.43	4.22240	(10022820)	464049.31
3809620.43	4.09416	(10022820)		
464087.31	3809620.43	3.98471	(09031705)	464125.31
3809620.43	3.87714	(09031705)		
464163.31	3809620.43	3.77772	(09040202)	464201.31
3809620.43	3.71978	(09040202)		
464239.31	3809620.43	3.64239	(09040202)	464277.31
3809620.43	3.52952	(09040202)		
463745.31	3809649.49	4.06469	(10010907)	463783.31
3809649.49	4.00953	(10010907)		
463821.31	3809649.49	3.89005	(10010907)	463859.31
3809649.49	3.93033	(10022820)		
463897.31	3809649.49	4.07904	(10022820)	463935.31
3809649.49	4.17422	(10022820)		
463973.31	3809649.49	4.17913	(10022820)	464011.31

3809649.49	4.13944 (10022820)		
464049.31	3809649.49	4.04384 (10022820)	464087.31
3809649.49	3.92331 (09031705)		
464125.31	3809649.49	3.83910 (09031705)	464163.31
3809649.49	3.71108 (09031705)		
464201.31	3809649.49	3.67411 (09040202)	464239.31
3809649.49	3.60806 (09040202)		
464277.31	3809649.49	3.50768 (09040202)	464315.31
3809649.49	3.38264 (09040202)		
464353.31	3809649.49	3.24664 (09010420)	464391.31
3809649.49	3.20992 (09010420)		
464429.31	3809649.49	3.14821 (09010420)	464467.31
3809649.49	3.10335 (10011407)		
464505.31	3809649.49	3.08245 (10011407)	463745.31
3809678.55	3.96069 (10010907)		
463783.31	3809678.55	3.92238 (10010907)	463821.31
3809678.55	3.83212 (10010907)		
463859.31	3809678.55	3.79310 (10022820)	463897.31
3809678.55	3.94904 (10022820)		
463935.31	3809678.55	4.05768 (10022820)	463973.31
3809678.55	4.08562 (10022820)		
464011.31	3809678.55	4.05568 (10022820)	464049.31
3809678.55	3.98999 (10022820)		
464087.31	3809678.55	3.87008 (09031705)	464125.31
3809678.55	3.79682 (09031705)		
464163.31	3809678.55	3.68586 (09031705)	464201.31
3809678.55	3.62656 (09040202)		
464239.31	3809678.55	3.56636 (09040202)	464277.31
3809678.55	3.48027 (09040202)		
464315.31	3809678.55	3.37070 (09040202)	464353.31
3809678.55	3.24653 (09040202)		
464391.31	3809678.55	3.17229 (09010420)	464429.31
3809678.55	3.12014 (09010420)		
464467.31	3809678.55	3.05526 (09010420)	464505.31
3809678.55	3.03661 (10011407)		
463745.31	3809707.61	3.86785 (10010907)	463783.31
3809707.61	3.83840 (10010907)		
463821.31	3809707.61	3.76068 (10010907)	463859.31
3809707.61	3.66515 (10022820)		
463897.31	3809707.61	3.82244 (10022820)	463935.31
3809707.61	3.94089 (10022820)		
463973.31	3809707.61	3.99143 (10022820)	464011.31
3809707.61	3.98070 (10022820)		
464049.31	3809707.61	3.93325 (10022820)	464087.31
3809707.61	3.82952 (10022820)		
464125.31	3809707.61	3.75103 (09031705)	464163.31
3809707.61	3.66083 (09031705)		
464201.31	3809707.61	3.56566 (09040202)	464239.31
3809707.61	3.52355 (09040202)		
464277.31	3809707.61	3.44993 (09040202)	464315.31

3809707.61	3.35788	(09040202)		
464353.31	3809707.61	3.23637	(09040202)	464391.31
3809707.61	3.12750	(09010420)		
464429.31	3809707.61	3.08617	(09010420)	464467.31
3809707.61	3.02982	(09010420)		
464505.31	3809707.61	2.99226	(10011407)	463745.31
3809736.67	3.78830	(10010907)		
463783.31	3809736.67	3.75799	(10010907)	463821.31
3809736.67	3.68179	(10010907)		
463859.31	3809736.67	3.56905	(10010907)	463897.31
3809736.67	3.69676	(10022820)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 667

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463935.31	3809736.67	3.81588	(10022820)	463973.31
3809736.67	3.89435	(10022820)		
464011.31	3809736.67	3.91436	(10022820)	464049.31
3809736.67	3.87424	(10022820)		
464087.31	3809736.67	3.79583	(10022820)	464125.31
3809736.67	3.70687	(09031705)		
464163.31	3809736.67	3.63259	(09031705)	464201.31
3809736.67	3.51305	(09031705)		
464239.31	3809736.67	3.48110	(09040202)	464277.31
3809736.67	3.41987	(09040202)		

464315.31	3809736.67	3.33399	(09040202)	464353.31
3809736.67	3.22762 (09040202)			
464391.31	3809736.67	3.10432	(09040202)	464429.31
3809736.67	3.05005 (09010420)			
464467.31	3809736.67	3.00549	(09010420)	464505.31
3809736.67	2.94507 (10011407)			
463745.31	3809765.73	3.71293	(10010907)	463783.31
3809765.73	3.68872 (10010907)			
463821.31	3809765.73	3.61727	(10010907)	463859.31
3809765.73	3.51125 (10010907)			
463897.31	3809765.73	3.57389	(10022820)	463935.31
3809765.73	3.69429 (10022820)			
463973.31	3809765.73	3.77249	(10022820)	464011.31
3809765.73	3.83289 (10022820)			
464049.31	3809765.73	3.82254	(10022820)	464087.31
3809765.73	3.75548 (10022820)			
464125.31	3809765.73	3.66143	(09031705)	464163.31
3809765.73	3.60064 (09031705)			
464201.31	3809765.73	3.49421	(09031705)	464239.31
3809765.73	3.43623 (09040202)			
464277.31	3809765.73	3.38749	(09040202)	464315.31
3809765.73	3.31028 (09040202)			
464353.31	3809765.73	3.21747	(09040202)	464391.31
3809765.73	3.09901 (09040202)			
464429.31	3809765.73	3.01381	(09010420)	464467.31
3809765.73	2.98044 (09010420)			
464505.31	3809765.73	2.92077	(09010420)	463745.31
3809794.79	3.63966 (10010907)			
463783.31	3809794.79	3.61610	(10010907)	463821.31
3809794.79	3.55427 (10010907)			
463859.31	3809794.79	3.45216	(10010907)	463897.31
3809794.79	3.44604 (10022820)			
463935.31	3809794.79	3.57329	(10022820)	463973.31
3809794.79	3.66021 (10022820)			
464011.31	3809794.79	3.72847	(10022820)	464049.31
3809794.79	3.76268 (10022820)			
464087.31	3809794.79	3.71344	(10022820)	464125.31
3809794.79	3.62000 (10022820)			
464163.31	3809794.79	3.55649	(09031705)	464201.31
3809794.79	3.47127 (09031705)			
464239.31	3809794.79	3.38236	(09040202)	464277.31
3809794.79	3.34679 (09040202)			
464315.31	3809794.79	3.28476	(09040202)	464353.31
3809794.79	3.19707 (09040202)			
464391.31	3809794.79	3.09366	(09040202)	464429.31
3809794.79	2.97665 (09040202)			
464467.31	3809794.79	2.94547	(09010420)	464505.31
3809794.79	2.89853 (09010420)			
463745.31	3809823.85	3.56794	(10010907)	463783.31
3809823.85	3.54590 (10010907)			

463821.31	3809823.85	3.48172	(10010907)	463859.31
3809823.85	3.39274	(10010907)		
463897.31	3809823.85	3.31855	(10022820)	463935.31
3809823.85	3.45177	(10022820)		
463973.31	3809823.85	3.55110	(10022820)	464011.31
3809823.85	3.62119	(10022820)		
464049.31	3809823.85	3.67027	(10022820)	464087.31
3809823.85	3.66026	(10022820)		
464125.31	3809823.85	3.58892	(10022820)	464163.31
3809823.85	3.51292	(09031705)		
464201.31	3809823.85	3.43759	(09031705)	464239.31
3809823.85	3.33687	(09031705)		
464277.31	3809823.85	3.30453	(09040202)	464315.31
3809823.85	3.24995	(09040202)		
464353.31	3809823.85	3.17626	(09040202)	464391.31
3809823.85	3.08437	(09040202)		
464429.31	3809823.85	2.97276	(09040202)	464467.31
3809823.85	2.90906	(09010420)		
464505.31	3809823.85	2.86939	(09010420)	463745.31
3809852.91	3.50276	(10010907)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 668

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463783.31	3809852.91	3.48817	(10010907)	463821.31

3809852.91	3.42079	(10010907)	
463859.31	3809852.91	3.33732	(10010907) 463897.31
3809852.91	3.21593	(10010907)	
463935.31	3809852.91	3.33425	(10022820) 463973.31
3809852.91	3.44315	(10022820)	
464011.31	3809852.91	3.51766	(10022820) 464049.31
3809852.91	3.57081	(10022820)	
464087.31	3809852.91	3.57855	(10022820) 464125.31
3809852.91	3.53302	(10022820)	
464163.31	3809852.91	3.44890	(09031705) 464201.31
3809852.91	3.38871	(09031705)	
464239.31	3809852.91	3.30522	(09031705) 464277.31
3809852.91	3.25201	(09040202)	
464315.31	3809852.91	3.21342	(09040202) 464353.31
3809852.91	3.14910	(09040202)	
464391.31	3809852.91	3.06844	(09040202) 464429.31
3809852.91	2.96757	(09040202)	
464467.31	3809852.91	2.86766	(09010420) 464505.31
3809852.91	2.83898	(09010420)	
463745.31	3809881.97	3.44221	(10010907) 463783.31
3809881.97	3.42990	(10010907)	
463821.31	3809881.97	3.37121	(10010907) 463859.31
3809881.97	3.28785	(10010907)	
463897.31	3809881.97	3.16879	(10010907) 463935.31
3809881.97	3.22020	(10022820)	
463973.31	3809881.97	3.33970	(10022820) 464011.31
3809881.97	3.42273	(10022820)	
464049.31	3809881.97	3.47794	(10022820) 464087.31
3809881.97	3.49033	(10022820)	
464125.31	3809881.97	3.46004	(10022820) 464163.31
3809881.97	3.37668	(10022820)	
464201.31	3809881.97	3.33215	(09031705) 464239.31
3809881.97	3.26076	(09031705)	
464277.31	3809881.97	3.18995	(09040202) 464315.31
3809881.97	3.17175	(09040202)	
464353.31	3809881.97	3.12025	(09040202) 464391.31
3809881.97	3.05166	(09040202)	
464429.31	3809881.97	2.95959	(09040202) 464467.31
3809881.97	2.84817	(09040202)	
464505.31	3809881.97	2.80848	(09010420) 463745.31
3809911.03	3.37710	(10010907)	
463783.31	3809911.03	3.36758	(10010907) 463821.31
3809911.03	3.32330	(10010907)	
463859.31	3809911.03	3.24308	(10010907) 463897.31
3809911.03	3.13090	(10010907)	
463935.31	3809911.03	3.11871	(10022820) 463973.31
3809911.03	3.23849	(10022820)	
464011.31	3809911.03	3.32821	(10022820) 464049.31
3809911.03	3.39217	(10022820)	
464087.31	3809911.03	3.41307	(10022820) 464125.31

3809911.03	3.39241	(10022820)		
464163.31	3809911.03	3.32922	(10022820)	464201.31
3809911.03	3.27996	(09031705)		
464239.31	3809911.03	3.22186	(09031705)	464277.31
3809911.03	3.14341	(09031705)		
464315.31	3809911.03	3.12298	(09040202)	464353.31
3809911.03	3.08745	(09040202)		
464391.31	3809911.03	3.02899	(09040202)	464429.31
3809911.03	2.94678	(09040202)		
464467.31	3809911.03	2.84873	(09040202)	464505.31
3809911.03	2.77078	(09010420)		
463745.31	3809940.09	3.30923	(10010907)	463783.31
3809940.09	3.30576	(10010907)		
463821.31	3809940.09	3.27313	(10010907)	463859.31
3809940.09	3.19922	(10010907)		
463897.31	3809940.09	3.09694	(10010907)	463935.31
3809940.09	3.02911	(10022820)		
463973.31	3809940.09	3.14733	(10022820)	464011.31
3809940.09	3.23310	(10022820)		
464049.31	3809940.09	3.30138	(10022820)	464087.31
3809940.09	3.33127	(10022820)		
464125.31	3809940.09	3.32408	(10022820)	464163.31
3809940.09	3.28441	(10022820)		
464201.31	3809940.09	3.23155	(09031705)	464239.31
3809940.09	3.18977	(09031705)		
464277.31	3809940.09	3.11869	(09031705)	464315.31
3809940.09	3.07632	(09040202)		
464353.31	3809940.09	3.05169	(09040202)	464391.31
3809940.09	3.00318	(09040202)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 669

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***
 INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,
 L0006144 , L0006145 , L0006146 , L0006147 , L0006148
 , L0006149 , L0006150 , L0006151 ,
 L0006152 , L0006153 , L0006154 , L0006155 , L0006156
 , L0006157 , L0006158 , L0006159 ,
 L0006160 , L0006161 , L0006162 , L0006163 , L0006164
 , L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	(YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)

464429.31	3809940.09	2.93389	(09040202)			464467.31
3809940.09	2.84211	(09040202)				
464505.31	3809940.09	2.73401	(09040202)			463745.31
3809969.15	3.26125	(10010907)				
463783.31	3809969.15	3.25224	(10010907)			463821.31
3809969.15	3.22136	(10010907)				
463859.31	3809969.15	3.15656	(10010907)			463897.31
3809969.15	3.06214	(10010907)				
463935.31	3809969.15	2.94179	(10022820)			463973.31
3809969.15	3.06303	(10022820)				
464011.31	3809969.15	3.14811	(10022820)			464049.31
3809969.15	3.21098	(10022820)				
464087.31	3809969.15	3.25047	(10022820)			464125.31
3809969.15	3.26012	(10022820)				
464163.31	3809969.15	3.23413	(10022820)			464201.31
3809969.15	3.17884	(10022820)				
464239.31	3809969.15	3.15543	(09031705)			464277.31
3809969.15	3.09382	(09031705)				
464315.31	3809969.15	3.02851	(09040202)			464353.31
3809969.15	3.01865	(09040202)				
464391.31	3809969.15	2.97974	(09040202)			464429.31
3809969.15	2.91680	(09040202)				
464467.31	3809969.15	2.83147	(09040202)			464505.31
3809969.15	2.73581	(09040202)				
463745.31	3809998.21	3.23576	(10010907)			463783.31
3809998.21	3.21452	(10010907)				
463821.31	3809998.21	3.17954	(10010907)			463859.31
3809998.21	3.11795	(10010907)				
463897.31	3809998.21	3.03052	(10010907)			463935.31
3809998.21	2.91450	(10010907)				
463973.31	3809998.21	2.97919	(10022820)			464011.31
3809998.21	3.07140	(10022820)				
464049.31	3809998.21	3.13761	(10022820)			464087.31
3809998.21	3.18046	(10022820)				
464125.31	3809998.21	3.20208	(10022820)			464163.31
3809998.21	3.18779	(10022820)				
464201.31	3809998.21	3.14222	(10022820)			464239.31
3809998.21	3.11017	(09031705)				
464277.31	3809998.21	3.06828	(09031705)			464315.31
3809998.21	2.99328	(09031705)				
464353.31	3809998.21	2.97846	(09040202)			464391.31
3809998.21	2.94899	(09040202)				

464429.31	3809998.21	2.89431	(09040202)	464467.31
3809998.21	2.82245	(09040202)		
464505.31	3809998.21	2.73126	(09040202)	463745.31
3810027.27	3.21169	(10010907)		
463783.31	3810027.27	3.18750	(10010907)	463821.31
3810027.27	3.14732	(10010907)		
463859.31	3810027.27	3.08604	(10010907)	463897.31
3810027.27	3.00368	(10010907)		
463935.31	3810027.27	2.88987	(10010907)	463973.31
3810027.27	2.90047	(10022820)		
464011.31	3810027.27	2.99780	(10022820)	464049.31
3810027.27	3.06985	(10022820)		
464087.31	3810027.27	3.11342	(10022820)	464125.31
3810027.27	3.13806	(10022820)		
464163.31	3810027.27	3.13903	(10022820)	464201.31
3810027.27	3.10543	(10022820)		
464239.31	3810027.27	3.05919	(09031705)	464277.31
3810027.27	3.03212	(09031705)		
464315.31	3810027.27	2.97371	(09031705)	464353.31
3810027.27	2.93397	(09040202)		
464391.31	3810027.27	2.91370	(09040202)	464429.31
3810027.27	2.87203	(09040202)		
464467.31	3810027.27	2.80758	(09040202)	464505.31
3810027.27	2.72254	(09040202)		
463745.31	3810056.33	3.19104	(10010907)	463783.31
3810056.33	3.16278	(10010907)		
463821.31	3810056.33	3.11567	(10010907)	463859.31
3810056.33	3.05730	(10010907)		
463897.31	3810056.33	2.97624	(10010907)	463935.31
3810056.33	2.86914	(10010907)		
463973.31	3810056.33	2.82546	(10022820)	464011.31
3810056.33	2.92526	(10022820)		
464049.31	3810056.33	2.99866	(10022820)	464087.31
3810056.33	3.04892	(10022820)		
464125.31	3810056.33	3.07425	(10022820)	464163.31
3810056.33	3.08363	(10022820)		
464201.31	3810056.33	3.06088	(10022820)	464239.31
3810056.33	3.00940	(09031705)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 670

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
 , L0006141 , L0006142 , L0006143 ,

```

        L0006144      , L0006145      , L0006146      , L0006147      , L0006148
, L0006149      , L0006150      , L0006151      ,
        L0006152      , L0006153      , L0006154      , L0006155      , L0006156
, L0006157      , L0006158      , L0006159      ,
        L0006160      , L0006161      , L0006162      , L0006163      , L0006164
, L0006165      , L0006166      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464277.31	3810056.33	2.98970	(09031705)	464315.31
3810056.33	2.94508	(09031705)		
464353.31	3810056.33	2.89027	(09040202)	464391.31
3810056.33	2.88199	(09040202)		
464429.31	3810056.33	2.84687	(09040202)	464467.31
3810056.33	2.78735	(09040202)		
464505.31	3810056.33	2.71258	(09040202)	463745.31
3810085.39	3.17045	(10010907)		
463783.31	3810085.39	3.13903	(10010907)	463821.31
3810085.39	3.08905	(10010907)		
463859.31	3810085.39	3.02912	(10010907)	463897.31
3810085.39	2.95064	(10010907)		
463935.31	3810085.39	2.85067	(10010907)	463973.31
3810085.39	2.75318	(10022820)		
464011.31	3810085.39	2.85251	(10022820)	464049.31
3810085.39	2.92499	(10022820)		
464087.31	3810085.39	2.98266	(10022820)	464125.31
3810085.39	3.01481	(10022820)		
464163.31	3810085.39	3.02637	(10022820)	464201.31
3810085.39	3.01169	(10022820)		
464239.31	3810085.39	2.97015	(10022820)	464277.31
3810085.39	2.94615	(09031705)		
464315.31	3810085.39	2.91187	(09031705)	464353.31
3810085.39	2.85211	(09031705)		
464391.31	3810085.39	2.83950	(09040202)	464429.31
3810085.39	2.81291	(09040202)		
464467.31	3810085.39	2.76387	(09040202)	464505.31
3810085.39	2.69549	(09040202)		
463745.31	3810114.45	3.13610	(10010907)	463783.31
3810114.45	3.12296	(10010907)		
463821.31	3810114.45	3.06908	(10010907)	463859.31
3810114.45	3.01334	(10010907)		
463897.31	3810114.45	2.93110	(10010907)	463935.31

3810114.45	2.83343	(10010907)		
463973.31	3810114.45	2.71717	(10010907)	464011.31
3810114.45	2.78305	(10022820)		
464049.31	3810114.45	2.85776	(10022820)	464087.31
3810114.45	2.91755	(10022820)		
464125.31	3810114.45	2.95192	(10022820)	464163.31
3810114.45	2.96585	(10022820)		
464201.31	3810114.45	2.95781	(10022820)	464239.31
3810114.45	2.93171	(10022820)		
464277.31	3810114.45	2.90030	(09031705)	464315.31
3810114.45	2.87068	(09031705)		
464353.31	3810114.45	2.81602	(09031705)	464391.31
3810114.45	2.77909	(09040202)		
464429.31	3810114.45	2.76948	(09040202)	464467.31
3810114.45	2.72886	(09040202)		
464505.31	3810114.45	2.67538	(09040202)	463745.31
3810143.51	3.08571	(10010907)		
463783.31	3810143.51	3.09160	(10010907)	463821.31
3810143.51	3.06246	(10010907)		
463859.31	3810143.51	3.00397	(10010907)	463897.31
3810143.51	2.91105	(10010907)		
463935.31	3810143.51	2.81140	(10010907)	463973.31
3810143.51	2.69494	(10010907)		
464011.31	3810143.51	2.71512	(10022820)	464049.31
3810143.51	2.79306	(10022820)		
464087.31	3810143.51	2.85018	(10022820)	464125.31
3810143.51	2.89021	(10022820)		
464163.31	3810143.51	2.91021	(10022820)	464201.31
3810143.51	2.90721	(10022820)		
464239.31	3810143.51	2.88443	(10022820)	464277.31
3810143.51	2.85032	(09031705)		
464315.31	3810143.51	2.83027	(09031705)	464353.31
3810143.51	2.77780	(09031705)		
464391.31	3810143.51	2.72266	(09040202)	464429.31
3810143.51	2.71961	(09040202)		
464467.31	3810143.51	2.69704	(09040202)	464505.31
3810143.51	2.65344	(09040202)		
464383.78	3807479.29	4.03921	(09120320)	464355.03
3807405.24	4.12404	(10020118)		
464402.07	3807352.10	4.05732	(10020118)	464367.23
3807296.35	4.16761	(10020118)		
464358.52	3807237.99	4.37864	(09030119)	464385.52
3807161.33	4.17843	(09030119)		
463132.27	3810926.37	2.23897	(09011307)	463237.82
3811199.31	1.96545	(09031206)		
464944.35	3809244.89	2.46277	(09022206)	465700.32
3809255.46	1.92168	(10012420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 671

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK3I1 ***

INCLUDING SOURCE(S): L0006139 , L0006140
, L0006141 , L0006142 , L0006143 ,
L0006144 , L0006145 , L0006146 , L0006147 , L0006148
, L0006149 , L0006150 , L0006151 ,
L0006152 , L0006153 , L0006154 , L0006155 , L0006156
, L0006157 , L0006158 , L0006159 ,
L0006160 , L0006161 , L0006162 , L0006163 , L0006164
, L0006165 , L0006166 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465716.18	3808536.49	2.00810	(10021420)	465544.37
3808533.85	2.12793	(10021420)		
465420.13	3808486.27	2.23000	(10021420)	465348.77
3808491.56	2.26870	(10021420)		
465317.05	3808443.98	2.32215	(10021420)	465327.62
3808406.97	2.33708	(10021420)		
465108.23	3808369.97	2.58206	(10021420)	464999.86
3808301.24	2.73009	(10021420)		
464722.31	3807973.48	3.28915	(10021420)	464717.03
3807836.03	3.33389	(10021420)		
464344.33	3807936.47	4.48402	(10031906)	464349.61
3807780.52	4.21553	(10021420)		
464386.62	3807785.81	4.08177	(10021420)	464521.43
3807859.82	3.67350	(10021420)		
464537.28	3807719.72	3.74159	(10021420)	464426.27
3807613.99	3.99655	(10021420)		
464368.43	3807532.62	4.12302	(09120320)	464324.60
3807121.91	4.78016	(09030119)		
464123.31	3807123.54	4.95195	(10020118)	463930.13
3806909.26	11.14171	(09011918)		
463831.11	3806906.01	11.19335	(09120417)	463821.36
3806720.95	13.17679	(09120417)		
463727.21	3806727.44	12.40568	(09120417)	463598.97
3806334.59	15.77757	(09123118)		

463001.06 3806361.54 48.57399 (09032718)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 672

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
462160.55	3809377.75	6.45770	(09021807)	462051.48
3809270.62	6.15396	(09031106)		
462014.47	3809029.10	7.49104	(09022407)	462010.58
3808855.75	6.14468	(09022407)		
461936.56	3808886.92	5.75403	(09022407)	461936.56
3808997.94	6.79893	(09022407)		
461909.30	3808768.10	8.89283	(10042219)	461835.28
3808894.71	4.87120	(09022407)		
461845.02	3808995.99	6.00377	(09022407)	461833.33
3809114.80	6.37329	(09022407)		
461843.07	3809210.24	6.08240	(09022407)	461809.96
3809297.89	5.37611	(09022407)		
461856.71	3809385.54	5.19956	(09031106)	461841.13
3809482.92	4.72802	(09031106)		
462004.74	3809379.69	5.40866	(09031106)	461763.22
3808793.43	8.04813	(10042219)		
461753.48	3808699.93	6.51253	(10042219)	461835.28
3808686.30	7.36501	(10042219)		
461823.60	3808579.17	4.75746	(10042219)	461761.27

3808585.02	4.34647	(10042219)		
462301.19	3807807.15	28.22991	(10021207)	462304.78
3807868.16	20.52572	(10021207)		
462216.84	3807882.52	13.79579	(09020119)	462116.34
3807886.11	14.44619	(09020119)		
462114.55	3807789.20	15.64153	(10021207)	462012.25
3807887.90	14.54012	(09020119)		
462008.66	3807975.84	15.97440	(09020119)	461917.14
3807972.25	14.82656	(09020119)		
461922.52	3808187.60	26.83534	(10021620)	461908.17
3808288.10	18.65590	(10021620)		
461848.94	3808377.83	11.41498	(09021520)	461831.00
3808494.48	6.93824	(09021520)		
462421.43	3808393.98	16.13244	(09021520)	462459.11
3808501.66	8.22428	(10042219)		
462437.58	3808580.62	8.20864	(10042219)	462654.73
3809189.00	9.95797	(10050705)		
462559.49	3809194.32	9.51162	(10050705)	465763.86
3807935.19	3.20926	(09010519)		
465819.84	3807935.19	3.11087	(09010519)	465875.82
3807935.19	3.01574	(09010519)		
465931.80	3807935.19	2.92520	(09010519)	465987.78
3807935.19	2.83794	(09010519)		
466043.76	3807935.19	2.75417	(09010519)	466099.74
3807935.19	2.67375	(09010519)		
466155.72	3807935.19	2.59653	(09010519)	466211.70
3807935.19	2.52231	(09010519)		
466267.68	3807935.19	2.45119	(09010519)	466323.66
3807935.19	2.38117	(09010519)		
466379.64	3807935.19	2.31589	(09010519)	466435.62
3807935.19	2.25312	(09010519)		
466491.60	3807935.19	2.19280	(09010519)	466547.58
3807935.19	2.13054	(09010519)		
466603.56	3807935.19	2.07403	(09010519)	466659.54
3807935.19	2.01968	(09010519)		
466715.52	3807935.19	1.96749	(09010519)	466771.50
3807935.19	1.91677	(09010519)		
466827.48	3807935.19	1.86631	(09010519)	466883.46
3807935.19	1.81910	(09010519)		
465763.86	3808001.41	3.30669	(09010519)	465819.84
3808001.41	3.19571	(09010519)		
465875.82	3808001.41	3.08927	(09010519)	465931.80
3808001.41	2.98783	(09010519)		
465987.78	3808001.41	2.89372	(09010519)	466043.76
3808001.41	2.79891	(09010519)		
466099.74	3808001.41	2.71526	(09010519)	466155.72
3808001.41	2.63144	(09010519)		
466211.70	3808001.41	2.55182	(09010519)	466267.68
3808001.41	2.47509	(09010519)		
466323.66	3808001.41	2.40124	(09010519)	466379.64

3808001.41	2.33063	(09010519)		
466435.62	3808001.41	2.26301	(09010519)	466491.60
3808001.41	2.20452	(10032206)		
466547.58	3808001.41	2.14969	(10032206)	466603.56
3808001.41	2.09862	(10032206)		
466659.54	3808001.41	2.04946	(10032206)	466715.52
3808001.41	1.99759	(10032206)		
466771.50	3808001.41	1.95187	(10032206)	466827.48
3808001.41	1.90727	(10032206)		
466883.46	3808001.41	1.86252	(10032206)	465763.86
3808067.63	3.34084	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 673

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465819.84	3808067.63	3.22915	(10032206)	465875.82
3808067.63	3.12971	(10032206)		
465931.80	3808067.63	3.03480	(10032206)	465987.78
3808067.63	2.94431	(10032206)		
466043.76	3808067.63	2.85791	(10032206)	466099.74
3808067.63	2.77536	(10032206)		
466155.72	3808067.63	2.69665	(10032206)	466211.70
3808067.63	2.62085	(10032206)		
466267.68	3808067.63	2.54843	(10032206)	466323.66
3808067.63	2.47834	(10032206)		

466379.64	3808067.63	2.41117	(10032206)	466435.62
3808067.63	2.34961	(10032206)		
466491.60	3808067.63	2.28499	(10032206)	466547.58
3808067.63	2.22564	(10032206)		
466603.56	3808067.63	2.16869	(10032206)	466659.54
3808067.63	2.11408	(10032206)		
466715.52	3808067.63	2.06219	(10032206)	466771.50
3808067.63	2.01221	(10032206)		
466827.48	3808067.63	1.96212	(10032206)	466883.46
3808067.63	1.91294	(10032206)		
465763.86	3808133.85	3.48245	(10032206)	465819.84
3808133.85	3.36378	(10032206)		
465875.82	3808133.85	3.25200	(10032206)	465931.80
3808133.85	3.14598	(10032206)		
465987.78	3808133.85	3.04999	(10032206)	466043.76
3808133.85	2.95364	(10032206)		
466099.74	3808133.85	2.86208	(10032206)	466155.72
3808133.85	2.77485	(10032206)		
466211.70	3808133.85	2.69176	(10032206)	466267.68
3808133.85	2.61281	(10032206)		
466323.66	3808133.85	2.53769	(10032206)	466379.64
3808133.85	2.46655	(10032206)		
466435.62	3808133.85	2.39814	(10032206)	466491.60
3808133.85	2.33278	(10032206)		
466547.58	3808133.85	2.26897	(10032206)	466603.56
3808133.85	2.20883	(10032206)		
466659.54	3808133.85	2.15118	(10032206)	466715.52
3808133.85	2.09550	(10032206)		
466771.50	3808133.85	2.03916	(10032206)	466827.48
3808133.85	1.98847	(10032206)		
466883.46	3808133.85	1.93908	(10032206)	465763.86
3808200.07	3.54730	(10032206)		
465819.84	3808200.07	3.42059	(10032206)	465875.82
3808200.07	3.30111	(10032206)		
465931.80	3808200.07	3.19298	(10032206)	465987.78
3808200.07	3.08592	(10032206)		
466043.76	3808200.07	2.98462	(10032206)	466099.74
3808200.07	2.88847	(10032206)		
466155.72	3808200.07	2.79722	(10032206)	466211.70
3808200.07	2.71051	(10032206)		
466267.68	3808200.07	2.62812	(10032206)	466323.66
3808200.07	2.55341	(10032206)		
466379.64	3808200.07	2.47855	(10032206)	466435.62
3808200.07	2.40710	(10032206)		
466491.60	3808200.07	2.33890	(10032206)	466547.58
3808200.07	2.27375	(10032206)		
466603.56	3808200.07	2.21146	(10032206)	466659.54
3808200.07	2.15187	(10032206)		
466715.52	3808200.07	2.09493	(10032206)	466771.50
3808200.07	2.03949	(10032206)		

466827.48	3808200.07	1.98533	(10032206)	466883.46
3808200.07	1.93511	(10032206)		
465763.86	3808266.29	3.51705	(10032206)	465819.84
3808266.29	3.39447	(10032206)		
465875.82	3808266.29	3.27644	(10032206)	465931.80
3808266.29	3.16199	(10032206)		
465987.78	3808266.29	3.05391	(10032206)	466043.76
3808266.29	2.95172	(10032206)		
466099.74	3808266.29	2.85498	(10032206)	466155.72
3808266.29	2.76330	(10032206)		
466211.70	3808266.29	2.67662	(10032206)	466267.68
3808266.29	2.59615	(10032206)		
466323.66	3808266.29	2.51751	(10032206)	466379.64
3808266.29	2.44571	(10032206)		
466435.62	3808266.29	2.37477	(10032206)	466491.60
3808266.29	2.30507	(10032206)		
466547.58	3808266.29	2.23957	(10032206)	466603.56
3808266.29	2.17703	(10032206)		
466659.54	3808266.29	2.11925	(10032206)	466715.52
3808266.29	2.06087	(10032206)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 674

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466771.50	3808266.29	2.00689	(10032206)	466827.48

3808266.29	1.95367 (10032206)		
466883.46	3808266.29	1.90361 (10032206)	465763.86
3808332.51	3.40351 (10032206)		
465819.84	3808332.51	3.28820 (10032206)	465875.82
3808332.51	3.17084 (10032206)		
465931.80	3808332.51	3.06021 (10032206)	465987.78
3808332.51	2.95578 (10032206)		
466043.76	3808332.51	2.85697 (10032206)	466099.74
3808332.51	2.76355 (10032206)		
466155.72	3808332.51	2.67638 (10032206)	466211.70
3808332.51	2.59236 (10032206)		
466267.68	3808332.51	2.51220 (10032206)	466323.66
3808332.51	2.44125 (10032206)		
466379.64	3808332.51	2.36837 (10032206)	466435.62
3808332.51	2.29883 (10032206)		
466491.60	3808332.51	2.23254 (10032206)	466547.58
3808332.51	2.16924 (10032206)		
466603.56	3808332.51	2.11343 (10032206)	466659.54
3808332.51	2.05615 (10032206)		
466715.52	3808332.51	2.00070 (10032206)	466771.50
3808332.51	1.94422 (10032206)		
466827.48	3808332.51	1.89406 (10032206)	466883.46
3808332.51	1.84577 (10032206)		
465763.86	3808398.73	3.21237 (10032206)	465819.84
3808398.73	3.10545 (10032206)		
465875.82	3808398.73	2.99697 (10032206)	465931.80
3808398.73	2.89512 (10032206)		
465987.78	3808398.73	2.79834 (10032206)	466043.76
3808398.73	2.70668 (10032206)		
466099.74	3808398.73	2.62272 (10032206)	466155.72
3808398.73	2.53941 (10032206)		
466211.70	3808398.73	2.46039 (10032206)	466267.68
3808398.73	2.39172 (10032206)		
466323.66	3808398.73	2.32001 (10032206)	466379.64
3808398.73	2.25212 (10032206)		
466435.62	3808398.73	2.18971 (10032206)	466491.60
3808398.73	2.12827 (10032206)		
466547.58	3808398.73	2.06955 (10032206)	466603.56
3808398.73	2.01388 (10032206)		
466659.54	3808398.73	1.96017 (10032206)	466715.52
3808398.73	1.90775 (10032206)		
466771.50	3808398.73	1.85828 (10032206)	466827.48
3808398.73	1.81026 (10032206)		
466883.46	3808398.73	1.76450 (10032206)	465763.86
3808464.95	3.40427 (09031319)		
465819.84	3808464.95	3.26548 (09031319)	465875.82
3808464.95	3.12821 (09031319)		
465931.80	3808464.95	3.00108 (09031319)	465987.78
3808464.95	2.88208 (09031319)		
466043.76	3808464.95	2.77236 (09031319)	466099.74

3808464.95	2.66428	(09031319)		
466155.72	3808464.95	2.56225	(09031319)	466211.70
3808464.95	2.46600	(09031319)		
466267.68	3808464.95	2.37979	(09031319)	466323.66
3808464.95	2.29323	(09031319)		
466379.64	3808464.95	2.21403	(09031319)	466435.62
3808464.95	2.13648	(09031319)		
466491.60	3808464.95	2.06554	(09031319)	466547.58
3808464.95	1.99502	(09031319)		
466603.56	3808464.95	1.92801	(09031319)	466659.54
3808464.95	1.86428	(09031319)		
466715.52	3808464.95	1.80377	(09031319)	466771.50
3808464.95	1.74795	(10032206)		
466827.48	3808464.95	1.70472	(10032206)	466883.46
3808464.95	1.66325	(10032206)		
465763.86	3808531.17	3.68590	(09031319)	465819.84
3808531.17	3.53379	(09031319)		
465875.82	3808531.17	3.39051	(09031319)	465931.80
3808531.17	3.25530	(09031319)		
465987.78	3808531.17	3.13287	(09031319)	466043.76
3808531.17	3.01438	(09031319)		
466099.74	3808531.17	2.90262	(09031319)	466155.72
3808531.17	2.79429	(09031319)		
466211.70	3808531.17	2.69199	(09031319)	466267.68
3808531.17	2.59850	(09031319)		
466323.66	3808531.17	2.50903	(09031319)	466379.64
3808531.17	2.42183	(09031319)		
466435.62	3808531.17	2.34171	(09031319)	466491.60
3808531.17	2.26197	(09031319)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 675

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

466547.58	3808531.17	2.18612	(09031319)	466603.56	
3808531.17	2.11386	(09031319)			
466659.54	3808531.17	2.04491	(09031319)	466715.52	
3808531.17	1.97959	(09031319)			
466771.50	3808531.17	1.91646	(09031319)	466827.48	
3808531.17	1.85758	(09031319)			
466883.46	3808531.17	1.80061	(09031319)	465763.86	
3808597.39	3.83453	(09031319)			
465819.84	3808597.39	3.69541	(09031319)	465875.82	
3808597.39	3.55425	(09031319)			
465931.80	3808597.39	3.41444	(09031319)	465987.78	
3808597.39	3.29325	(09031319)			
466043.76	3808597.39	3.17947	(09031319)	466099.74	
3808597.39	3.06546	(09031319)			
466155.72	3808597.39	2.95825	(09031319)	466211.70	
3808597.39	2.85662	(09031319)			
466267.68	3808597.39	2.75789	(09031319)	466323.66	
3808597.39	2.66876	(09031319)			
466379.64	3808597.39	2.58258	(09031319)	466435.62	
3808597.39	2.49703	(09031319)			
466491.60	3808597.39	2.41731	(09031319)	466547.58	
3808597.39	2.34008	(09031319)			
466603.56	3808597.39	2.26506	(09031319)	466659.54	
3808597.39	2.19334	(09031319)			
466715.52	3808597.39	2.12513	(09031319)	466771.50	
3808597.39	2.05978	(09031319)			
466827.48	3808597.39	1.99721	(09031319)	466883.46	
3808597.39	1.93908	(09031319)			
465763.86	3808663.61	3.84117	(09031319)	465819.84	
3808663.61	3.71935	(09031319)			
465875.82	3808663.61	3.59271	(09031319)	465931.80	
3808663.61	3.47152	(09031319)			
465987.78	3808663.61	3.35587	(09031319)	466043.76	
3808663.61	3.24455	(09031319)			
466099.74	3808663.61	3.14086	(09031319)	466155.72	
3808663.61	3.03800	(09031319)			
466211.70	3808663.61	2.93891	(09031319)	466267.68	
3808663.61	2.84453	(09031319)			
466323.66	3808663.61	2.76096	(09031319)	466379.64	
3808663.61	2.67400	(09031319)			
466435.62	3808663.61	2.59725	(09031319)	466491.60	
3808663.61	2.51689	(09031319)			

466547.58	3808663.61	2.43951	(09031319)	466603.56
3808663.61	2.36534	(09031319)		
466659.54	3808663.61	2.29416	(09031319)	466715.52
3808663.61	2.22648	(09031319)		
466771.50	3808663.61	2.16145	(09031319)	466827.48
3808663.61	2.10222	(09031319)		
466883.46	3808663.61	2.04162	(09031319)	465763.86
3808729.83	3.98507	(09010419)		
465819.84	3808729.83	3.81287	(09010419)	465875.82
3808729.83	3.63645	(09010419)		
465931.80	3808729.83	3.46616	(09010419)	465987.78
3808729.83	3.30926	(09031319)		
466043.76	3808729.83	3.21148	(09031319)	466099.74
3808729.83	3.11696	(09031319)		
466155.72	3808729.83	3.02575	(09031319)	466211.70
3808729.83	2.93710	(09031319)		
466267.68	3808729.83	2.85219	(09031319)	466323.66
3808729.83	2.77687	(09031319)		
466379.64	3808729.83	2.70014	(09031319)	466435.62
3808729.83	2.62368	(09031319)		
466491.60	3808729.83	2.55302	(09031319)	466547.58
3808729.83	2.48085	(09031319)		
466603.56	3808729.83	2.41127	(09031319)	466659.54
3808729.83	2.35000	(09031319)		
466715.52	3808729.83	2.28489	(09031319)	466771.50
3808729.83	2.22257	(09031319)		
466827.48	3808729.83	2.16400	(09031319)	466883.46
3808729.83	2.10595	(09031319)		
465763.86	3808796.05	4.15610	(09010419)	465819.84
3808796.05	4.01284	(09010419)		
465875.82	3808796.05	3.84059	(09010419)	465931.80
3808796.05	3.68361	(09010419)		
465987.78	3808796.05	3.53101	(09010419)	466043.76
3808796.05	3.38556	(09010419)		
466099.74	3808796.05	3.24606	(09010419)	466155.72
3808796.05	3.11240	(09010419)		
466211.70	3808796.05	2.98442	(09010419)	466267.68
3808796.05	2.86179	(09010419)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 676

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,

```

        L0005097      , L0005098      , L0005099      , L0005100      , L0005101
, L0005102      , L0005103      , L0005104      ,
        L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
        L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466323.66	3808796.05	2.74651	(09010419)	466379.64
3808796.05	2.65217	(09031319)		
466435.62	3808796.05	2.58987	(09031319)	466491.60
3808796.05	2.52466	(09031319)		
466547.58	3808796.05	2.46184	(09031319)	466603.56
3808796.05	2.40399	(09031319)		
466659.54	3808796.05	2.34408	(09031319)	466715.52
3808796.05	2.28737	(09031319)		
466771.50	3808796.05	2.23133	(09031319)	466827.48
3808796.05	2.17621	(09031319)		
466883.46	3808796.05	2.12558	(09031319)	465763.86
3808862.27	4.14734	(09010419)		
465819.84	3808862.27	4.02721	(09010419)	465875.82
3808862.27	3.90276	(09010419)		
465931.80	3808862.27	3.76744	(09010419)	465987.78
3808862.27	3.63438	(09010419)		
466043.76	3808862.27	3.50442	(09010419)	466099.74
3808862.27	3.38193	(09010419)		
466155.72	3808862.27	3.25505	(09010419)	466211.70
3808862.27	3.13603	(09010419)		
466267.68	3808862.27	3.02555	(09010419)	466323.66
3808862.27	2.91422	(09010419)		
466379.64	3808862.27	2.80899	(09010419)	466435.62
3808862.27	2.70649	(09010419)		
466491.60	3808862.27	2.60779	(09010419)	466547.58
3808862.27	2.51310	(09010419)		
466603.56	3808862.27	2.41990	(09010419)	466659.54
3808862.27	2.33388	(09010419)		
466715.52	3808862.27	2.24754	(09010419)	466771.50
3808862.27	2.18991	(09031319)		
466827.48	3808862.27	2.14408	(09031319)	466883.46
3808862.27	2.09863	(09031319)		
465763.86	3808928.49	4.02130	(09120320)	465819.84

3808928.49	3.87908	(09010419)		
465875.82	3808928.49	3.79787	(09010419)	465931.80
3808928.49	3.70676	(09010419)		
465987.78	3808928.49	3.61090	(09010419)	466043.76
3808928.49	3.51507	(09010419)		
466099.74	3808928.49	3.40526	(09010419)	466155.72
3808928.49	3.30183	(09010419)		
466211.70	3808928.49	3.19995	(09010419)	466267.68
3808928.49	3.09889	(09010419)		
466323.66	3808928.49	2.99935	(09010419)	466379.64
3808928.49	2.90205	(09010419)		
466435.62	3808928.49	2.81124	(09010419)	466491.60
3808928.49	2.72137	(09010419)		
466547.58	3808928.49	2.63211	(09010419)	466603.56
3808928.49	2.54936	(09010419)		
466659.54	3808928.49	2.46410	(09010419)	466715.52
3808928.49	2.38330	(09010419)		
466771.50	3808928.49	2.30314	(09010419)	466827.48
3808928.49	2.22838	(09010419)		
466883.46	3808928.49	2.15341	(09010419)	465763.86
3808994.71	4.01055	(09120320)		
465819.84	3808994.71	3.88472	(09120320)	465875.82
3808994.71	3.76942	(09120320)		
465931.80	3808994.71	3.66134	(09120320)	465987.78
3808994.71	3.55370	(09120320)		
466043.76	3808994.71	3.42830	(09120320)	466099.74
3808994.71	3.32233	(09010419)		
466155.72	3808994.71	3.23962	(09010419)	466211.70
3808994.71	3.16038	(09010419)		
466267.68	3808994.71	3.07984	(09010419)	466323.66
3808994.71	2.99925	(09010419)		
466379.64	3808994.71	2.91874	(09010419)	466435.62
3808994.71	2.83879	(09010419)		
466491.60	3808994.71	2.76275	(09010419)	466547.58
3808994.71	2.68946	(09010419)		
466603.56	3808994.71	2.61296	(09010419)	466659.54
3808994.71	2.53621	(09010419)		
466715.52	3808994.71	2.46736	(09010419)	466771.50
3808994.71	2.39296	(09010419)		
466827.48	3808994.71	2.32036	(09010419)	466883.46
3808994.71	2.25293	(09010419)		
465763.86	3809060.93	3.86745	(09120320)	465819.84
3809060.93	3.78153	(09120320)		
465875.82	3809060.93	3.69957	(09120320)	465931.80
3809060.93	3.61496	(09120320)		
465987.78	3809060.93	3.52650	(09120320)	466043.76
3809060.93	3.43430	(09120320)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 677

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	3.32554	(09120320)	466155.72
3809060.93	3.22369	(09120320)		
466211.70	3809060.93	3.11888	(09120320)	466267.68
3809060.93	3.01694	(09120320)		
466323.66	3809060.93	2.91528	(09120320)	466379.64
3809060.93	2.85060	(09010419)		
466435.62	3809060.93	2.79354	(09010419)	466491.60
3809060.93	2.73404	(09010419)		
466547.58	3809060.93	2.67050	(09010419)	466603.56
3809060.93	2.60885	(09010419)		
466659.54	3809060.93	2.55056	(09010419)	466715.52
3809060.93	2.48612	(09010419)		
466771.50	3809060.93	2.42282	(09010419)	466827.48
3809060.93	2.36159	(09010419)		
466883.46	3809060.93	2.30187	(09010419)	465763.86
3809127.15	3.69586	(10021420)		
465819.84	3809127.15	3.57234	(09120320)	465875.82
3809127.15	3.52612	(09120320)		
465931.80	3809127.15	3.46929	(09120320)	465987.78
3809127.15	3.40717	(09120320)		
466043.76	3809127.15	3.32825	(09120320)	466099.74
3809127.15	3.24674	(09120320)		
466155.72	3809127.15	3.16820	(09120320)	466211.70
3809127.15	3.10133	(09120320)		

466267.68	3809127.15	3.02477	(09120320)	466323.66
3809127.15	2.94356 (09120320)			
466379.64	3809127.15	2.85840	(09120320)	466435.62
3809127.15	2.77575 (09120320)			
466491.60	3809127.15	2.69322	(09120320)	466547.58
3809127.15	2.61174 (09120320)			
466603.56	3809127.15	2.54363	(09010419)	466659.54
3809127.15	2.49450 (09010419)			
466715.52	3809127.15	2.44646	(09010419)	466771.50
3809127.15	2.39703 (09010419)			
466827.48	3809127.15	2.34601	(09010419)	466883.46
3809127.15	2.29774 (09010419)			
465763.86	3809193.37	3.88213	(10021420)	465819.84
3809193.37	3.71074 (10021420)			
465875.82	3809193.37	3.53118	(10021420)	465931.80
3809193.37	3.34992 (10021420)			
465987.78	3809193.37	3.18512	(09120320)	466043.76
3809193.37	3.12266 (09120320)			
466099.74	3809193.37	3.08458	(09120320)	466155.72
3809193.37	3.03597 (09120320)			
466211.70	3809193.37	2.99144	(09120320)	466267.68
3809193.37	2.94257 (09120320)			
466323.66	3809193.37	2.88681	(09120320)	466379.64
3809193.37	2.82696 (09120320)			
466435.62	3809193.37	2.76088	(09120320)	466491.60
3809193.37	2.69511 (09120320)			
466547.58	3809193.37	2.62827	(09120320)	466603.56
3809193.37	2.56285 (09120320)			
466659.54	3809193.37	2.49270	(09120320)	466715.52
3809193.37	2.42571 (09120320)			
466771.50	3809193.37	2.35572	(09120320)	466827.48
3809193.37	2.28842 (09120320)			
466883.46	3809193.37	2.24287	(09010419)	465763.86
3809259.59	3.93276 (10021420)			
465819.84	3809259.59	3.79719	(10021420)	465875.82
3809259.59	3.64810 (10021420)			
465931.80	3809259.59	3.49544	(10021420)	465987.78
3809259.59	3.32773 (10021420)			
466043.76	3809259.59	3.16125	(10021420)	466099.74
3809259.59	3.00168 (10021420)			
466155.72	3809259.59	2.86039	(10021420)	466211.70
3809259.59	2.81916 (09120320)			
466267.68	3809259.59	2.79492	(09120320)	466323.66
3809259.59	2.75716 (09120320)			
466379.64	3809259.59	2.71874	(09120320)	466435.62
3809259.59	2.67719 (09120320)			
466491.60	3809259.59	2.62928	(09120320)	466547.58
3809259.59	2.58309 (09120320)			
466603.56	3809259.59	2.53085	(09120320)	466659.54
3809259.59	2.47706 (09120320)			

466715.52	3809259.59	2.42575	(09120320)	466771.50
3809259.59	2.36812	(09120320)		
466827.48	3809259.59	2.31176	(09120320)	466883.46
3809259.59	2.25411	(09120320)		
464503.41	3807141.91	11.09773	(09011918)	464523.41
3807141.91	9.87683	(09011918)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 678

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464543.41	3807141.91	8.78101	(09011918)	464563.41
3807141.91	8.23228	(09122717)		
464583.41	3807141.91	7.67011	(09030119)	464603.41
3807141.91	8.04854	(09030119)		
464623.41	3807141.91	8.41296	(09030119)	464643.41
3807141.91	8.62702	(09030119)		
464663.41	3807141.91	8.86672	(09030119)	464683.41
3807141.91	9.09079	(09030119)		
464703.41	3807141.91	9.07863	(09030119)	464723.41
3807141.91	5.95853	(09030119)		
464743.41	3807141.91	6.09857	(09030119)	464763.41
3807141.91	6.11418	(09030119)		
464783.41	3807141.91	6.21895	(09030119)	464803.41
3807141.91	6.30284	(09030119)		
464823.41	3807141.91	6.07870	(09030119)	464843.41

3807141.91	4.99879	(09030119)		
464863.41	3807141.91	4.99400	(09030119)	464883.41
3807141.91	4.88272	(09030119)		
464903.41	3807141.91	4.85964	(09030119)	464923.41
3807141.91	4.83001	(09030119)		
464503.41	3807161.91	10.43036	(09011918)	464523.41
3807161.91	9.24559	(09011918)		
464543.41	3807161.91	8.53788	(09122717)	464563.41
3807161.91	8.00779	(09122717)		
464583.41	3807161.91	8.30531	(09030119)	464603.41
3807161.91	8.58946	(09030119)		
464623.41	3807161.91	8.81773	(09030119)	464643.41
3807161.91	9.14111	(09030119)		
464663.41	3807161.91	9.26760	(09030119)	464683.41
3807161.91	9.27034	(09030119)		
464703.41	3807161.91	9.45953	(09030119)	464723.41
3807161.91	6.25321	(09030119)		
464743.41	3807161.91	6.27357	(09030119)	464763.41
3807161.91	6.09814	(09030119)		
464783.41	3807161.91	6.15352	(09030119)	464803.41
3807161.91	6.21853	(09030119)		
464823.41	3807161.91	5.60902	(09030119)	464843.41
3807161.91	5.11279	(09030119)		
464863.41	3807161.91	4.99661	(09030119)	464883.41
3807161.91	4.97156	(09030119)		
464903.41	3807161.91	4.93905	(09030119)	464923.41
3807161.91	4.89996	(09030119)		
464503.41	3807181.91	9.74181	(09011918)	464523.41
3807181.91	8.85623	(09122717)		
464543.41	3807181.91	8.26077	(09122717)	464563.41
3807181.91	8.54572	(09030119)		
464583.41	3807181.91	8.93740	(09030119)	464603.41
3807181.91	9.19751	(09030119)		
464623.41	3807181.91	9.35939	(09030119)	464643.41
3807181.91	9.70657	(09030119)		
464663.41	3807181.91	9.77360	(09030119)	464683.41
3807181.91	6.26039	(09030119)		
464703.41	3807181.91	6.41167	(09030119)	464723.41
3807181.91	6.41382	(09030119)		
464743.41	3807181.91	6.37158	(09030119)	464763.41
3807181.91	6.19502	(09030119)		
464783.41	3807181.91	5.24319	(09030119)	464803.41
3807181.91	5.24304	(09030119)		
464823.41	3807181.91	5.13674	(09030119)	464843.41
3807181.91	5.11575	(09030119)		
464863.41	3807181.91	5.08723	(09030119)	464883.41
3807181.91	5.05213	(09030119)		
464903.41	3807181.91	5.01032	(09030119)	464923.41
3807181.91	4.97243	(09031219)		
464503.41	3807201.91	9.14451	(09122717)	464523.41

3807201.91	8.60065	(09122717)		
464543.41	3807201.91	8.78034	(09030119)	464563.41
3807201.91	9.12901	(09030119)		
464583.41	3807201.91	9.53603	(09030119)	464603.41
3807201.91	9.79449	(09030119)		
464623.41	3807201.91	9.94800	(09030119)	464643.41
3807201.91	10.20629	(09030119)		
464663.41	3807201.91	10.24001	(09030119)	464683.41
3807201.91	6.57412	(09030119)		
464703.41	3807201.91	6.59179	(09030119)	464723.41
3807201.91	6.53876	(09030119)		
464743.41	3807201.91	5.36642	(09030119)	464763.41
3807201.91	5.37444	(09030119)		
464783.41	3807201.91	5.27682	(09030119)	464803.41
3807201.91	5.26171	(09030119)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 679

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3807201.91	5.23916	(09030119)	464843.41
3807201.91	5.20833	(09030119)		
464863.41	3807201.91	5.16990	(09030119)	464883.41
3807201.91	5.12438	(09030119)		
464903.41	3807201.91	5.11613	(09031219)	464923.41
3807201.91	5.17028	(09031219)		

464503.41	3807221.91	8.90811	(09122717)	464523.41
3807221.91	9.07836 (09030119)			
464543.41	3807221.91	9.50979	(09030119)	464563.41
3807221.91	9.79952 (09030119)			
464583.41	3807221.91	9.99775	(09030119)	464603.41
3807221.91	10.25719 (09030119)			
464623.41	3807221.91	10.50586	(09030119)	464643.41
3807221.91	10.42744 (09030119)			
464663.41	3807221.91	10.48895	(09030119)	464683.41
3807221.91	6.77150 (09030119)			
464703.41	3807221.91	6.58064	(09030119)	464723.41
3807221.91	6.51387 (09030119)			
464743.41	3807221.91	5.51107	(09030119)	464763.41
3807221.91	5.50853 (09030119)			
464783.41	3807221.91	5.39210	(09030119)	464803.41
3807221.91	5.36694 (09030119)			
464823.41	3807221.91	5.33294	(09030119)	464843.41
3807221.91	5.29187 (09030119)			
464863.41	3807221.91	5.24360	(09030119)	464883.41
3807221.91	5.26599 (09031219)			
464903.41	3807221.91	5.31861	(09031219)	464923.41
3807221.91	5.36200 (09031219)			
464503.41	3807241.91	9.29754	(09030119)	464523.41
3807241.91	9.76498 (09030119)			
464543.41	3807241.91	10.17739	(09030119)	464563.41
3807241.91	10.50864 (09030119)			
464583.41	3807241.91	10.61068	(09030119)	464603.41
3807241.91	10.84819 (09030119)			
464623.41	3807241.91	11.10100	(09030119)	464643.41
3807241.91	10.88948 (09030119)			
464663.41	3807241.91	6.93118	(09030119)	464683.41
3807241.91	6.88476 (09030119)			
464703.41	3807241.91	6.69073	(09030119)	464723.41
3807241.91	5.65338 (09030119)			
464743.41	3807241.91	5.64835	(09030119)	464763.41
3807241.91	5.52757 (09030119)			
464783.41	3807241.91	5.49937	(09030119)	464803.41
3807241.91	5.46274 (09030119)			
464823.41	3807241.91	5.41819	(09030119)	464843.41
3807241.91	5.36610 (09030119)			
464863.41	3807241.91	5.42171	(09031219)	464883.41
3807241.91	5.47297 (09031219)			
464903.41	3807241.91	5.51467	(09031219)	464923.41
3807241.91	5.54662 (09031219)			
464503.41	3807261.91	10.09287	(09030119)	464523.41
3807261.91	10.43505 (09030119)			
464543.41	3807261.91	10.83732	(09030119)	464563.41
3807261.91	11.23698 (09030119)			
464583.41	3807261.91	11.27673	(09030119)	464603.41
3807261.91	11.41795 (09030119)			

464623.41	3807261.91	11.56640	(09030119)	464643.41
3807261.91	11.38051	(09030119)		
464663.41	3807261.91	7.09270	(09030119)	464683.41
3807261.91	5.79762	(09030119)		
464703.41	3807261.91	5.80170	(09030119)	464723.41
3807261.91	5.69047	(09030119)		
464743.41	3807261.91	5.66824	(09030119)	464763.41
3807261.91	5.63756	(09030119)		
464783.41	3807261.91	5.59753	(09030119)	464803.41
3807261.91	5.54911	(09030119)		
464823.41	3807261.91	5.52325	(09031219)	464843.41
3807261.91	5.58373	(09031219)		
464863.41	3807261.91	5.63363	(09031219)	464883.41
3807261.91	5.67303	(09031219)		
464903.41	3807261.91	5.70260	(09031219)	464923.41
3807261.91	5.72193	(09031219)		
464503.41	3807281.91	10.92997	(09030119)	464523.41
3807281.91	11.22437	(09030119)		
464543.41	3807281.91	11.60050	(09030119)	464563.41
3807281.91	11.97560	(09030119)		
464583.41	3807281.91	11.94552	(09030119)	464603.41
3807281.91	11.80960	(09030119)		
464623.41	3807281.91	11.64106	(09030119)	464643.41
3807281.91	11.74972	(09030119)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 680

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
-------------	-------------	------	------------	-------------

Y-COORD (M)	CONC	(YYMMDDHH)	
464663.41	3807281.91	7.39291	(09030119)
3807281.91	5.95641	(09030119)	464683.41
464703.41	3807281.91	5.94813	(09030119)
3807281.91	5.81530	(09030119)	464723.41
464743.41	3807281.91	5.78135	(09030119)
3807281.91	5.73739	(09030119)	464763.41
464783.41	3807281.91	5.68551	(09030119)
3807281.91	5.69310	(09031219)	464803.41
464823.41	3807281.91	5.75218	(09031219)
3807281.91	5.80072	(09031219)	464843.41
464863.41	3807281.91	5.83829	(09031219)
3807281.91	5.86456	(09031219)	464883.41
464903.41	3807281.91	5.88049	(09031219)
3807281.91	5.88588	(09031219)	464923.41
464503.41	3807301.91	11.61755	(09030119)
3807301.91	11.97485	(09030119)	464523.41
464543.41	3807301.91	12.23973	(09030119)
3807301.91	12.41731	(09030119)	464563.41
464583.41	3807301.91	12.52182	(09030119)
3807301.91	12.34825	(09030119)	464603.41
464623.41	3807301.91	7.83013	(09030119)
3807301.91	7.95962	(09030119)	464643.41
464663.41	3807301.91	7.68833	(09030119)
3807301.91	6.10733	(09030119)	464683.41
464703.41	3807301.91	6.08583	(09030119)
3807301.91	5.92991	(09030119)	464723.41
464743.41	3807301.91	5.88334	(09030119)
3807301.91	5.82715	(09030119)	464763.41
464783.41	3807301.91	5.86995	(09031219)
3807301.91	5.92787	(09031219)	464803.41
464823.41	3807301.91	5.97386	(09031219)
3807301.91	6.00893	(09031219)	464843.41
464863.41	3807301.91	6.03263	(09031219)
3807301.91	6.04481	(09031219)	464883.41
464903.41	3807301.91	6.04599	(09031219)
3807301.91	6.07544	(10020118)	464923.41
464503.41	3807321.91	12.26618	(09030119)
3807321.91	12.72953	(09030119)	464523.41
464543.41	3807321.91	12.86162	(09030119)
3807321.91	12.80303	(09030119)	464563.41
464583.41	3807321.91	13.08552	(09030119)
3807321.91	12.91826	(09030119)	464603.41
464623.41	3807321.91	8.18627	(09030119)
3807321.91	8.29763	(09030119)	464643.41
464663.41	3807321.91	7.97605	(09030119)
3807321.91	6.24867	(09030119)	464683.41
464703.41	3807321.91	6.08492	(09030119)
			464723.41

3807321.91	6.03390	(09030119)		
464743.41	3807321.91	5.98549	(09031219)	464763.41
3807321.91	6.05477	(09031219)		
464783.41	3807321.91	6.11095	(09031219)	464803.41
3807321.91	6.15463	(09031219)		
464823.41	3807321.91	6.18636	(09031219)	464843.41
3807321.91	6.20658	(09031219)		
464863.41	3807321.91	6.21502	(09031219)	464883.41
3807321.91	6.21789	(10020118)		
464903.41	3807321.91	6.26553	(10020118)	464923.41
3807321.91	6.30155	(10020118)		
464503.41	3807341.91	13.10060	(09030119)	464523.41
3807341.91	13.53708	(09030119)		
464543.41	3807341.91	13.60184	(09030119)	464563.41
3807341.91	13.46482	(09030119)		
464583.41	3807341.91	13.70695	(09030119)	464603.41
3807341.91	13.46576	(09030119)		
464623.41	3807341.91	8.53700	(09030119)	464643.41
3807341.91	8.62706	(09030119)		
464663.41	3807341.91	8.25292	(09030119)	464683.41
3807341.91	6.24723	(09030119)		
464703.41	3807341.91	6.19226	(09030119)	464723.41
3807341.91	6.17918	(09031219)		
464743.41	3807341.91	6.24632	(09031219)	464763.41
3807341.91	6.30149	(09031219)		
464783.41	3807341.91	6.34282	(09031219)	464803.41
3807341.91	6.37120	(09031219)		
464823.41	3807341.91	6.38763	(09031219)	464843.41
3807341.91	6.39160	(09031219)		
464863.41	3807341.91	6.41878	(10020118)	464883.41
3807341.91	6.46282	(10020118)		
464903.41	3807341.91	6.49466	(10020118)	464923.41
3807341.91	6.51437	(10020118)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 681

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117

, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464503.41	3807361.91	13.89905	(09030119)	464523.41
3807361.91	14.03558	(09030119)		
464543.41	3807361.91	14.08697	(09030119)	464563.41
3807361.91	14.10766	(09030119)		
464583.41	3807361.91	14.30286	(09030119)	464603.41
3807361.91	13.98349	(09030119)		
464623.41	3807361.91	8.70417	(09030119)	464643.41
3807361.91	8.50122	(09030119)		
464663.41	3807361.91	8.26782	(09030119)	464683.41
3807361.91	6.35533	(09030119)		
464703.41	3807361.91	6.38175	(09031219)	464723.41
3807361.91	6.44802	(09031219)		
464743.41	3807361.91	6.50024	(09031219)	464763.41
3807361.91	6.53875	(09031219)		
464783.41	3807361.91	6.56378	(09031219)	464803.41
3807361.91	6.57563	(09031219)		
464823.41	3807361.91	6.57472	(09031219)	464843.41
3807361.91	6.62759	(10020118)		
464863.41	3807361.91	6.66759	(10020118)	464883.41
3807361.91	6.69471	(10020118)		
464903.41	3807361.91	6.70890	(10020118)	464923.41
3807361.91	6.71056	(10020118)		
464503.41	3807381.91	14.55236	(09030119)	464523.41
3807381.91	14.43869	(09030119)		
464543.41	3807381.91	14.52700	(09030119)	464563.41
3807381.91	14.70315	(09030119)		
464583.41	3807381.91	14.70875	(09030119)	464603.41
3807381.91	14.34065	(09030119)		
464623.41	3807381.91	9.00643	(09030119)	464643.41
3807381.91	8.49289	(09030119)		
464663.41	3807381.91	6.52703	(09030119)	464683.41
3807381.91	6.59265	(09031219)		
464703.41	3807381.91	6.65744	(09031219)	464723.41
3807381.91	6.70778	(09031219)		
464743.41	3807381.91	6.74334	(09031219)	464763.41
3807381.91	6.76384	(09031219)		
464783.41	3807381.91	6.77090	(09031219)	464803.41
3807381.91	6.79536	(10020118)		

464823.41	3807381.91	6.84479	(10020118)	464843.41
3807381.91	6.88016	(10020118)		
464863.41	3807381.91	6.90196	(10020118)	464883.41
3807381.91	6.91041	(10020118)		
464903.41	3807381.91	6.90550	(10020118)	464923.41
3807381.91	6.88786	(10020118)		
464503.41	3807401.91	14.82393	(09030119)	464523.41
3807401.91	14.99569	(09030119)		
464543.41	3807401.91	15.16299	(09030119)	464563.41
3807401.91	15.19548	(09030119)		
464583.41	3807401.91	14.61512	(09030119)	464603.41
3807401.91	14.32483	(09030119)		
464623.41	3807401.91	9.30550	(09030119)	464643.41
3807401.91	8.72832	(09030119)		
464663.41	3807401.91	6.81521	(09031219)	464683.41
3807401.91	6.87766	(09031219)		
464703.41	3807401.91	6.92356	(09031219)	464723.41
3807401.91	6.95526	(09031219)		
464743.41	3807401.91	6.97218	(09031219)	464763.41
3807401.91	6.97412	(09031219)		
464783.41	3807401.91	7.02550	(10020118)	464803.41
3807401.91	7.07021	(10020118)		
464823.41	3807401.91	7.10075	(10020118)	464843.41
3807401.91	7.11673	(10020118)		
464863.41	3807401.91	7.11869	(10020118)	464883.41
3807401.91	7.10630	(10020118)		
464903.41	3807401.91	7.08159	(10020118)	464923.41
3807401.91	7.04468	(10020118)		
464503.41	3807421.91	15.42652	(09030119)	464523.41
3807421.91	15.62370	(09030119)		
464543.41	3807421.91	15.49405	(09030119)	464563.41
3807421.91	15.16494	(09030119)		
464583.41	3807421.91	14.77507	(09030119)	464603.41
3807421.91	9.53723	(09030119)		
464623.41	3807421.91	9.23003	(09030119)	464643.41
3807421.91	8.72071	(09030119)		
464663.41	3807421.91	7.10652	(09031219)	464683.41
3807421.91	7.15045	(09031219)		
464703.41	3807421.91	7.17740	(09031219)	464723.41
3807421.91	7.18850	(09031219)		
464743.41	3807421.91	7.20939	(10020118)	464763.41
3807421.91	7.26532	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
464783.41	3807421.91	7.30524 (10020118)	464803.41
3807421.91	7.32970 (10020118)		
464823.41	3807421.91	7.33918 (10020118)	464843.41
3807421.91	7.33367 (10020118)		
464863.41	3807421.91	7.31392 (10020118)	464883.41
3807421.91	7.28073 (10020118)		
464903.41	3807421.91	7.23447 (10020118)	464923.41
3807421.91	7.17602 (10020118)		
464503.41	3807441.91	16.08480 (09030119)	464523.41
3807441.91	16.06912 (09030119)		
464543.41	3807441.91	15.64252 (09030119)	464563.41
3807441.91	10.06584 (09030119)		
464583.41	3807441.91	9.86163 (09030119)	464603.41
3807441.91	9.51291 (09030119)		
464623.41	3807441.91	7.36016 (09031219)	464643.41
3807441.91	7.34633 (09031219)		
464663.41	3807441.91	7.38574 (09031219)	464683.41
3807441.91	7.40848 (09031219)		
464703.41	3807441.91	7.41468 (09031219)	464723.41
3807441.91	7.46432 (10020118)		
464743.41	3807441.91	7.51468 (10020118)	464763.41
3807441.91	7.54914 (10020118)		
464783.41	3807441.91	7.56739 (10020118)	464803.41
3807441.91	7.56964 (10020118)		
464823.41	3807441.91	7.55653 (10020118)	464843.41
3807441.91	7.52805 (10020118)		
464863.41	3807441.91	7.48515 (10020118)	464883.41
3807441.91	7.43065 (10020118)		
464903.41	3807441.91	7.36199 (10020118)	464923.41

3807441.91	7.28107	(10020118)		
464503.41	3807461.91	16.62530	(09030119)	464523.41
3807461.91	15.96494	(09030119)		
464543.41	3807461.91	15.61898	(09030119)	464563.41
3807461.91	10.18719	(09030119)		
464583.41	3807461.91	9.56708	(09030119)	464603.41
3807461.91	9.22846	(09030119)		
464623.41	3807461.91	7.59841	(09031219)	464643.41
3807461.91	7.63383	(09031219)		
464663.41	3807461.91	7.64999	(09031219)	464683.41
3807461.91	7.66620	(10020118)		
464703.41	3807461.91	7.72993	(10020118)	464723.41
3807461.91	7.77557	(10020118)		
464743.41	3807461.91	7.80342	(10020118)	464763.41
3807461.91	7.81373	(10020118)		
464783.41	3807461.91	7.80804	(10020118)	464803.41
3807461.91	7.78637	(10020118)		
464823.41	3807461.91	7.74935	(10020118)	464843.41
3807461.91	7.69714	(10020118)		
464863.41	3807461.91	7.63082	(10020118)	464883.41
3807461.91	7.55342	(10020118)		
464903.41	3807461.91	7.46241	(10020118)	464923.41
3807461.91	7.35983	(10020118)		
464503.41	3807481.91	17.18591	(09030119)	464523.41
3807481.91	16.29573	(09030119)		
464543.41	3807481.91	10.45342	(09030119)	464563.41
3807481.91	10.09679	(09030119)		
464583.41	3807481.91	9.51707	(09030119)	464603.41
3807481.91	7.86342	(09031219)		
464623.41	3807481.91	7.89261	(09031219)	464643.41
3807481.91	7.90271	(09031219)		
464663.41	3807481.91	7.95005	(10020118)	464683.41
3807481.91	8.00758	(10020118)		
464703.41	3807481.91	8.04633	(10020118)	464723.41
3807481.91	8.06718	(10020118)		
464743.41	3807481.91	8.06996	(10020118)	464763.41
3807481.91	8.05471	(10020118)		
464783.41	3807481.91	8.02350	(10020118)	464803.41
3807481.91	7.97646	(10020118)		
464823.41	3807481.91	7.91433	(10020118)	464843.41
3807481.91	7.83745	(10020118)		
464863.41	3807481.91	7.74679	(10020118)	464883.41
3807481.91	7.64450	(10020118)		
464903.41	3807481.91	7.53127	(10020118)	464923.41
3807481.91	7.40811	(10020118)		
464503.41	3807501.91	17.43130	(09030119)	464523.41
3807501.91	15.82416	(09030119)		
464543.41	3807501.91	10.42337	(09030119)	464563.41
3807501.91	8.18012	(09031219)		
464583.41	3807501.91	8.14031	(09031219)	464603.41

3807501.91 8.16381 (09031219)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 683

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	8.17579	(10020118)	464643.41
3807501.91	8.24656	(10020118)		
464663.41	3807501.91	8.29819	(10020118)	464683.41
3807501.91	8.33002	(10020118)		
464703.41	3807501.91	8.34165	(10020118)	464723.41
3807501.91	8.33516	(10020118)		
464743.41	3807501.91	8.31059	(10020118)	464763.41
3807501.91	8.26834	(10020118)		
464783.41	3807501.91	8.21009	(10020118)	464803.41
3807501.91	8.13639	(10020118)		
464823.41	3807501.91	8.04804	(10020118)	464843.41
3807501.91	7.94588	(10020118)		
464863.41	3807501.91	7.83082	(10020118)	464883.41
3807501.91	7.70336	(10020118)		
464903.41	3807501.91	7.56816	(10020118)	464923.41
3807501.91	7.42477	(10020118)		
464503.41	3807521.91	16.30659	(09030119)	464523.41
3807521.91	10.51029	(09030119)		
464543.41	3807521.91	10.10244	(09030119)	464563.41
3807521.91	8.43102	(09031219)		

464583.41	3807521.91	8.44848	(09031219)	464603.41
3807521.91	8.49218 (10020118)			
464623.41	3807521.91	8.55727	(10020118)	464643.41
3807521.91	8.60237 (10020118)			
464663.41	3807521.91	8.62534	(10020118)	464683.41
3807521.91	8.62772 (10020118)			
464703.41	3807521.91	8.61131	(10020118)	464723.41
3807521.91	8.57529 (10020118)			
464743.41	3807521.91	8.52129	(10020118)	464763.41
3807521.91	8.45085 (10020118)			
464783.41	3807521.91	8.36427	(10020118)	464803.41
3807521.91	8.26286 (10020118)			
464823.41	3807521.91	8.14687	(10020118)	464843.41
3807521.91	8.01938 (10020118)			
464863.41	3807521.91	7.88097	(10020118)	464883.41
3807521.91	7.73023 (10020118)			
464903.41	3807521.91	7.57302	(10020118)	464923.41
3807521.91	7.40894 (10020118)			
464503.41	3807541.91	11.10132	(09030119)	464523.41
3807541.91	10.43582 (09030119)			
464543.41	3807541.91	8.73726	(09031219)	464563.41
3807541.91	8.74585 (09031219)			
464583.41	3807541.91	8.82462	(10020118)	464603.41
3807541.91	8.88356 (10020118)			
464623.41	3807541.91	8.91970	(10020118)	464643.41
3807541.91	8.93351 (10020118)			
464663.41	3807541.91	8.92583	(10020118)	464683.41
3807541.91	8.89743 (10020118)			
464703.41	3807541.91	8.84927	(10020118)	464723.41
3807541.91	8.78252 (10020118)			
464743.41	3807541.91	8.69830	(10020118)	464763.41
3807541.91	8.59784 (10020118)			
464783.41	3807541.91	8.48239	(10020118)	464803.41
3807541.91	8.35318 (10020118)			
464823.41	3807541.91	8.21029	(10020118)	464843.41
3807541.91	8.05635 (10020118)			
464863.41	3807541.91	7.89296	(10020118)	464883.41
3807541.91	7.72120 (10020118)			
464903.41	3807541.91	7.54207	(10020118)	464923.41
3807541.91	7.35685 (10020118)			
464503.41	3807561.91	9.13360	(09031219)	464523.41
3807561.91	9.05780 (09031219)			
464543.41	3807561.91	9.09824	(10020118)	464563.41
3807561.91	9.17452 (10020118)			
464583.41	3807561.91	9.22466	(10020118)	464603.41
3807561.91	9.25178 (10020118)			
464623.41	3807561.91	9.25541	(10020118)	464643.41
3807561.91	9.23536 (10020118)			
464663.41	3807561.91	9.19441	(10020118)	464683.41
3807561.91	9.13291 (10020118)			

464703.41	3807561.91	9.05157	(10020118)	464723.41
3807561.91	8.95267	(10020118)		
464743.41	3807561.91	8.83710	(10020118)	464763.41
3807561.91	8.70620	(10020118)		
464783.41	3807561.91	8.56151	(10020118)	464803.41
3807561.91	8.40436	(10020118)		
464823.41	3807561.91	8.23542	(10020118)	464843.41
3807561.91	8.05573	(10020118)		
464863.41	3807561.91	7.86775	(10020118)	464883.41
3807561.91	7.67618	(10020118)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 684

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464903.41	3807561.91	7.47628	(10020118)	464923.41
3807561.91	7.27101	(10020118)		
464503.41	3807581.91	9.39501	(09031219)	464523.41
3807581.91	9.47351	(10020118)		
464543.41	3807581.91	9.54129	(10020118)	464563.41
3807581.91	9.58244	(10020118)		
464583.41	3807581.91	9.59962	(10020118)	464603.41
3807581.91	9.59055	(10020118)		
464623.41	3807581.91	9.55742	(10020118)	464643.41
3807581.91	9.50274	(10020118)		
464663.41	3807581.91	9.42582	(10020118)	464683.41

3807581.91	9.32888 (10020118)		
464703.41	3807581.91	9.21401 (10020118)	464723.41
3807581.91	9.08183 (10020118)		
464743.41	3807581.91	8.93427 (10020118)	464763.41
3807581.91	8.77303 (10020118)		
464783.41	3807581.91	8.59883 (10020118)	464803.41
3807581.91	8.41346 (10020118)		
464823.41	3807581.91	8.22017 (10020118)	464843.41
3807581.91	8.01717 (10020118)		
464863.41	3807581.91	7.80715 (10020118)	464883.41
3807581.91	7.59531 (10020118)		
464903.41	3807581.91	7.37692 (10020118)	464923.41
3807581.91	7.15432 (10020118)		
464503.41	3807601.91	9.86819 (10020118)	464523.41
3807601.91	9.92921 (10020118)		
464543.41	3807601.91	9.95987 (10020118)	464563.41
3807601.91	9.96264 (10020118)		
464583.41	3807601.91	9.94032 (10020118)	464603.41
3807601.91	9.89297 (10020118)		
464623.41	3807601.91	9.82191 (10020118)	464643.41
3807601.91	9.72859 (10020118)		
464663.41	3807601.91	9.61472 (10020118)	464683.41
3807601.91	9.48192 (10020118)		
464703.41	3807601.91	9.33190 (10020118)	464723.41
3807601.91	9.16633 (10020118)		
464743.41	3807601.91	8.98699 (10020118)	464763.41
3807601.91	8.79501 (10020118)		
464783.41	3807601.91	8.59261 (10020118)	464803.41
3807601.91	8.38131 (10020118)		
464823.41	3807601.91	8.16226 (10020118)	464843.41
3807601.91	7.93747 (10020118)		
464863.41	3807601.91	7.70828 (10020118)	464883.41
3807601.91	7.47573 (10020118)		
464903.41	3807601.91	7.24133 (10020118)	464923.41
3807601.91	7.00575 (10020118)		
464503.41	3807621.91	10.33533 (10020118)	464523.41
3807621.91	10.35518 (10020118)		
464543.41	3807621.91	10.34454 (10020118)	464563.41
3807621.91	10.30572 (10020118)		
464583.41	3807621.91	10.24117 (10020118)	464603.41
3807621.91	10.15288 (10020118)		
464623.41	3807621.91	10.04158 (10020118)	464643.41
3807621.91	9.90847 (10020118)		
464663.41	3807621.91	9.75655 (10020118)	464683.41
3807621.91	9.58714 (10020118)		
464703.41	3807621.91	9.40206 (10020118)	464723.41
3807621.91	9.20331 (10020118)		
464743.41	3807621.91	8.99263 (10020118)	464763.41
3807621.91	8.77093 (10020118)		
464783.41	3807621.91	8.54158 (10020118)	464803.41

3807621.91	8.30576	(10020118)		
464823.41	3807621.91	8.06288	(10020118)	464843.41
3807621.91	7.81783	(10020118)		
464863.41	3807621.91	7.57091	(10020118)	464883.41
3807621.91	7.32059	(10020118)		
464903.41	3807621.91	7.07204	(10020118)	464923.41
3807621.91	6.82501	(10020118)		
464503.41	3807641.91	10.76906	(10020118)	464523.41
3807641.91	10.74233	(10020118)		
464543.41	3807641.91	10.68633	(10020118)	464563.41
3807641.91	10.60326	(10020118)		
464583.41	3807641.91	10.49611	(10020118)	464603.41
3807641.91	10.36418	(10020118)		
464623.41	3807641.91	10.21046	(10020118)	464643.41
3807641.91	10.03779	(10020118)		
464663.41	3807641.91	9.84714	(10020118)	464683.41
3807641.91	9.64106	(10020118)		
464703.41	3807641.91	9.42172	(10020118)	464723.41
3807641.91	9.19018	(10020118)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 685

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464743.41	3807641.91	8.94862	(10020118)	464763.41
3807641.91	8.70086	(10020118)		

464783.41	3807641.91	8.44532	(10020118)	464803.41
3807641.91	8.18484	(10020118)		
464823.41	3807641.91	7.92413	(10020118)	464843.41
3807641.91	7.65977	(10020118)		
464863.41	3807641.91	7.39461	(10020118)	464883.41
3807641.91	7.13335	(10020118)		
464903.41	3807641.91	6.87159	(10020118)	464923.41
3807641.91	6.61210	(10020118)		
464503.41	3807661.91	11.16086	(10020118)	464523.41
3807661.91	11.08534	(10020118)		
464543.41	3807661.91	10.98125	(10020118)	464563.41
3807661.91	10.85086	(10020118)		
464583.41	3807661.91	10.69694	(10020118)	464603.41
3807661.91	10.52090	(10020118)		
464623.41	3807661.91	10.32501	(10020118)	464643.41
3807661.91	10.11159	(10020118)		
464663.41	3807661.91	9.88222	(10020118)	464683.41
3807661.91	9.63970	(10020118)		
464703.41	3807661.91	9.38743	(10020118)	464723.41
3807661.91	9.12572	(10020118)		
464743.41	3807661.91	8.85662	(10020118)	464763.41
3807661.91	8.58189	(10020118)		
464783.41	3807661.91	8.30387	(10020118)	464803.41
3807661.91	8.02407	(10020118)		
464823.41	3807661.91	7.74361	(10020118)	464843.41
3807661.91	7.46413	(10020118)		
464863.41	3807661.91	7.18672	(10020118)	464883.41
3807661.91	6.91209	(10020118)		
464903.41	3807661.91	6.64153	(10020118)	464923.41
3807661.91	6.37575	(10020118)		
464503.41	3807681.91	11.50138	(10020118)	464523.41
3807681.91	11.37429	(10020118)		
464543.41	3807681.91	11.21983	(10020118)	464563.41
3807681.91	11.04051	(10020118)		
464583.41	3807681.91	10.83892	(10020118)	464603.41
3807681.91	10.61819	(10020118)		
464623.41	3807681.91	10.38003	(10020118)	464643.41
3807681.91	10.12647	(10020118)		
464663.41	3807681.91	9.85965	(10020118)	464683.41
3807681.91	9.58217	(10020118)		
464703.41	3807681.91	9.29811	(10020118)	464723.41
3807681.91	9.00873	(10020118)		
464743.41	3807681.91	8.71512	(10020118)	464763.41
3807681.91	8.41636	(10020118)		
464783.41	3807681.91	8.11863	(10020118)	464803.41
3807681.91	7.82217	(10020118)		
464823.41	3807681.91	7.52523	(10020118)	464843.41
3807681.91	7.23346	(10020118)		
464863.41	3807681.91	6.94643	(10020118)	464883.41
3807681.91	6.66180	(10020118)		

464903.41	3807681.91	6.38509	(10020118)	464923.41
3807681.91	6.21588	(10102019)		
464523.41	3807701.91	11.60074	(10020118)	464543.41
3807701.91	11.39444	(10020118)		
464563.41	3807701.91	11.16564	(10020118)	464583.41
3807701.91	10.91718	(10020118)		
464603.41	3807701.91	10.65190	(10020118)	464623.41
3807701.91	10.37216	(10020118)		
464643.41	3807701.91	10.07906	(10020118)	464663.41
3807701.91	9.77780	(10020118)		
464683.41	3807701.91	9.46984	(10020118)	464703.41
3807701.91	9.15405	(10020118)		
464723.41	3807701.91	8.83840	(10020118)	464743.41
3807701.91	8.52301	(10020118)		
464763.41	3807701.91	8.20769	(10020118)	464783.41
3807701.91	7.89196	(10020118)		
464803.41	3807701.91	7.57891	(10020118)	464823.41
3807701.91	7.27360	(10020118)		
464843.41	3807701.91	6.97105	(10020118)	464863.41
3807701.91	6.67416	(10020118)		
464883.41	3807701.91	6.47725	(10102019)	464903.41
3807701.91	6.30439	(10102019)		
464923.41	3807701.91	6.13099	(10102019)	464543.41
3807721.91	11.49776	(10020118)		
464563.41	3807721.91	11.22085	(10020118)	464583.41
3807721.91	10.92652	(10020118)		
464603.41	3807721.91	10.61874	(10020118)	464623.41
3807721.91	10.30000	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 686

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

464643.41	3807721.91	9.97108	(10020118)	464663.41	
3807721.91	9.63629	(10020118)			
464683.41	3807721.91	9.29839	(10020118)	464703.41	
3807721.91	8.95918	(10020118)			
464723.41	3807721.91	8.62223	(10020118)	464743.41	
3807721.91	8.28766	(10020118)			
464763.41	3807721.91	7.95432	(10020118)	464783.41	
3807721.91	7.62592	(10020118)			
464803.41	3807721.91	7.30349	(10020118)	464823.41	
3807721.91	6.98765	(10020118)			
464843.41	3807721.91	6.75710	(10102019)	464863.41	
3807721.91	6.57280	(10102019)			
464883.41	3807721.91	6.38847	(10102019)	464903.41	
3807721.91	6.20509	(10102019)			
464923.41	3807721.91	6.02307	(10102019)	464943.41	
3807721.91	5.84253	(10102019)			
464963.41	3807721.91	5.66429	(10102019)	464983.41	
3807721.91	5.48863	(10102019)			
465003.41	3807721.91	5.31550	(10102019)	465023.41	
3807721.91	5.14560	(10102019)			
465043.41	3807721.91	4.97906	(10102019)	465063.41	
3807721.91	4.81575	(10102019)			
465083.41	3807721.91	4.65624	(10102019)	465103.41	
3807721.91	4.50107	(10102019)			
465123.41	3807721.91	4.35183	(10102019)	465143.41	
3807721.91	4.20452	(10102019)			
465163.41	3807721.91	4.06079	(10102019)	465183.41	
3807721.91	3.92318	(10102019)			
465203.41	3807721.91	3.78799	(10102019)	465223.41	
3807721.91	3.65604	(10102019)			
465243.41	3807721.91	3.52789	(10102019)	465263.41	
3807721.91	3.40386	(10102019)			
465283.41	3807721.91	3.28423	(10102019)	465303.41	
3807721.91	3.17010	(10102019)			
465323.41	3807721.91	3.05823	(10102019)	465343.41	
3807721.91	2.94982	(10102019)			
465363.41	3807721.91	2.84673	(10102019)	465383.41	
3807721.91	2.83005	(09010519)			
464543.41	3807741.91	11.52320	(10020118)	464563.41	
3807741.91	11.20174	(10020118)			
464583.41	3807741.91	10.86415	(10020118)	464603.41	
3807741.91	10.51666	(10020118)			
464623.41	3807741.91	10.16192	(10020118)	464643.41	

3807741.91	9.80054	(10020118)		
464663.41	3807741.91	9.43591	(10020118)	464683.41
3807741.91	9.07224	(10020118)		
464703.41	3807741.91	8.71444	(10020118)	464723.41
3807741.91	8.35955	(10020118)		
464743.41	3807741.91	8.00890	(10020118)	464763.41
3807741.91	7.66187	(10020118)		
464783.41	3807741.91	7.32450	(10020118)	464803.41
3807741.91	7.06009	(10102019)		
464823.41	3807741.91	6.86045	(10102019)	464843.41
3807741.91	6.66421	(10102019)		
464863.41	3807741.91	6.46955	(10102019)	464883.41
3807741.91	6.27150	(10102019)		
464903.41	3807741.91	6.07948	(10102019)	464923.41
3807741.91	5.89089	(10102019)		
464943.41	3807741.91	5.70013	(10102019)	464963.41
3807741.91	5.51660	(10102019)		
464983.41	3807741.91	5.33746	(10102019)	465003.41
3807741.91	5.15706	(10102019)		
465023.41	3807741.91	4.98376	(10102019)	465043.41
3807741.91	4.81548	(10102019)		
465063.41	3807741.91	4.64851	(10102019)	465083.41
3807741.91	4.48885	(10102019)		
465103.41	3807741.91	4.33480	(10102019)	465123.41
3807741.91	4.18413	(10102019)		
465143.41	3807741.91	4.03568	(10102019)	465163.41
3807741.91	3.89129	(10102019)		
465183.41	3807741.91	3.75382	(10102019)	465203.41
3807741.91	3.62122	(10102019)		
465223.41	3807741.91	3.49257	(10102019)	465243.41
3807741.91	3.36521	(10102019)		
465263.41	3807741.91	3.24443	(10102019)	465283.41
3807741.91	3.12875	(10102019)		
465303.41	3807741.91	3.01637	(10102019)	465323.41
3807741.91	2.98971	(09010519)		
465343.41	3807741.91	2.97457	(09010519)	465363.41
3807741.91	2.96113	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 687

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101

```

, L0005102      , L0005103      , L0005104      ,
                  L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
                  L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
465383.41	3807741.91	2.94783	(09010519)	464543.41
3807761.91	11.45354	(10020118)		
464563.41	3807761.91	11.09902	(10020118)	464583.41
3807761.91	10.72626	(10020118)		
464603.41	3807761.91	10.34374	(10020118)	464623.41
3807761.91	9.95677	(10020118)		
464643.41	3807761.91	9.56510	(10020118)	464663.41
3807761.91	9.17845	(10020118)		
464683.41	3807761.91	8.79761	(10020118)	464703.41
3807761.91	8.42285	(10020118)		
464723.41	3807761.91	8.05175	(10020118)	464743.41
3807761.91	7.68784	(10020118)		
464763.41	3807761.91	7.38571	(10102019)	464783.41
3807761.91	7.17199	(10102019)		
464803.41	3807761.91	6.95810	(10102019)	464823.41
3807761.91	6.74911	(10102019)		
464843.41	3807761.91	6.54244	(10102019)	464863.41
3807761.91	6.33739	(10102019)		
464883.41	3807761.91	6.13031	(10102019)	464903.41
3807761.91	5.93044	(10102019)		
464923.41	3807761.91	5.73511	(10102019)	464943.41
3807761.91	5.53878	(10102019)		
464963.41	3807761.91	5.35058	(10102019)	464983.41
3807761.91	5.16768	(10102019)		
465003.41	3807761.91	4.98447	(10102019)	465023.41
3807761.91	4.80643	(10102019)		
465043.41	3807761.91	4.63423	(10102019)	465063.41
3807761.91	4.47040	(10102019)		
465083.41	3807761.91	4.31181	(10102019)	465103.41
3807761.91	4.15740	(10102019)		
465123.41	3807761.91	4.00405	(10102019)	465143.41
3807761.91	3.85817	(10102019)		
465163.41	3807761.91	3.71766	(10102019)	465183.41
3807761.91	3.57885	(10102019)		

465203.41	3807761.91	3.44768	(10102019)	465223.41
3807761.91	3.32216	(10102019)		
465243.41	3807761.91	3.20055	(10102019)	465263.41
3807761.91	3.16622	(09010519)		
465283.41	3807761.91	3.15139	(09010519)	465303.41
3807761.91	3.13303	(09010519)		
465323.41	3807761.91	3.11648	(09010519)	465343.41
3807761.91	3.10012	(09010519)		
465363.41	3807761.91	3.08073	(09010519)	465383.41
3807761.91	3.06374	(09010519)		
464543.41	3807781.91	11.28723	(10020118)	464563.41
3807781.91	10.90314	(10020118)		
464583.41	3807781.91	10.50045	(10020118)	464603.41
3807781.91	10.09188	(10020118)		
464623.41	3807781.91	9.68229	(10020118)	464643.41
3807781.91	9.27369	(10020118)		
464663.41	3807781.91	8.86827	(10020118)	464683.41
3807781.91	8.46986	(10020118)		
464703.41	3807781.91	8.08319	(10020118)	464723.41
3807781.91	7.73696	(10102019)		
464743.41	3807781.91	7.50738	(10102019)	464763.41
3807781.91	7.27827	(10102019)		
464783.41	3807781.91	7.05086	(10102019)	464803.41
3807781.91	6.82630	(10102019)		
464823.41	3807781.91	6.60694	(10102019)	464843.41
3807781.91	6.38864	(10102019)		
464863.41	3807781.91	6.17319	(10102019)	464883.41
3807781.91	5.96204	(10102019)		
464903.41	3807781.91	5.75515	(10102019)	464923.41
3807781.91	5.55297	(10102019)		
464943.41	3807781.91	5.35589	(10102019)	464963.41
3807781.91	5.16373	(10102019)		
464983.41	3807781.91	4.97680	(10102019)	465003.41
3807781.91	4.79535	(10102019)		
465023.41	3807781.91	4.61729	(10102019)	465043.41
3807781.91	4.44465	(10102019)		
465063.41	3807781.91	4.28215	(10102019)	465083.41
3807781.91	4.12291	(10102019)		
465103.41	3807781.91	3.96819	(10102019)	465123.41
3807781.91	3.81891	(10102019)		
465143.41	3807781.91	3.67468	(10102019)	465163.41
3807781.91	3.53558	(10102019)		
465183.41	3807781.91	3.40164	(10102019)	465203.41
3807781.91	3.35528	(09010519)		
465223.41	3807781.91	3.33855	(09010519)	465243.41
3807781.91	3.31932	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3807781.91	3.30136	(09010519)	465283.41
3807781.91	3.28354	(09010519)		
465303.41	3807781.91	3.26349	(09010519)	465323.41
3807781.91	3.24301	(09010519)		
465343.41	3807781.91	3.22227	(09010519)	465363.41
3807781.91	3.20144	(09010519)		
465383.41	3807781.91	3.18197	(09010519)	464543.41
3807801.91	11.02896	(10020118)		
464563.41	3807801.91	10.61724	(10020118)	464583.41
3807801.91	10.19283	(10020118)		
464603.41	3807801.91	9.76836	(10020118)	464623.41
3807801.91	9.34618	(10020118)		
464643.41	3807801.91	8.92770	(10020118)	464663.41
3807801.91	8.50938	(10020118)		
464683.41	3807801.91	8.11299	(10102019)	464703.41
3807801.91	7.86784	(10102019)		
464723.41	3807801.91	7.62278	(10102019)	464743.41
3807801.91	7.37854	(10102019)		
464763.41	3807801.91	7.13374	(10102019)	464783.41
3807801.91	6.89562	(10102019)		
464803.41	3807801.91	6.66285	(10102019)	464823.41
3807801.91	6.43329	(10102019)		
464843.41	3807801.91	6.20587	(10102019)	464863.41
3807801.91	5.98302	(10102019)		
464883.41	3807801.91	5.76859	(10102019)	464903.41

3807801.91	5.55713	(10102019)		
464923.41	3807801.91	5.35094	(10102019)	464943.41
3807801.91	5.15362	(10102019)		
464963.41	3807801.91	4.95970	(10102019)	464983.41
3807801.91	4.77134	(10102019)		
465003.41	3807801.91	4.59188	(10102019)	465023.41
3807801.91	4.41596	(10102019)		
465043.41	3807801.91	4.24559	(10102019)	465063.41
3807801.91	4.08386	(10102019)		
465083.41	3807801.91	3.92562	(10102019)	465103.41
3807801.91	3.77272	(10102019)		
465123.41	3807801.91	3.62799	(10102019)	465143.41
3807801.91	3.56587	(09010519)		
465163.41	3807801.91	3.54361	(09010519)	465183.41
3807801.91	3.52436	(09010519)		
465203.41	3807801.91	3.50399	(09010519)	465223.41
3807801.91	3.48240	(09010519)		
465243.41	3807801.91	3.45795	(09010519)	465263.41
3807801.91	3.43591	(09010519)		
465283.41	3807801.91	3.41482	(09010519)	465303.41
3807801.91	3.39265	(09010519)		
465323.41	3807801.91	3.36816	(09010519)	465343.41
3807801.91	3.34326	(09010519)		
465363.41	3807801.91	3.32153	(09010519)	465383.41
3807801.91	3.29897	(09010519)		
464543.41	3807821.91	10.69091	(10020118)	464563.41
3807821.91	10.24926	(10020118)		
464583.41	3807821.91	9.81867	(10020118)	464603.41
3807821.91	9.38804	(10020118)		
464623.41	3807821.91	8.95886	(10020118)	464643.41
3807821.91	8.53018	(10020118)		
464663.41	3807821.91	8.25915	(10102019)	464683.41
3807821.91	7.99378	(10102019)		
464703.41	3807821.91	7.73137	(10102019)	464723.41
3807821.91	7.46822	(10102019)		
464743.41	3807821.91	7.20786	(10102019)	464763.41
3807821.91	6.95608	(10102019)		
464783.41	3807821.91	6.70980	(10102019)	464803.41
3807821.91	6.46818	(10102019)		
464823.41	3807821.91	6.22778	(10102019)	464843.41
3807821.91	5.99660	(10102019)		
464863.41	3807821.91	5.77246	(10102019)	464883.41
3807821.91	5.55092	(10102019)		
464903.41	3807821.91	5.33909	(10102019)	464923.41
3807821.91	5.13462	(10102019)		
464943.41	3807821.91	4.93308	(10102019)	464963.41
3807821.91	4.74125	(10102019)		
464983.41	3807821.91	4.55672	(10102019)	465003.41
3807821.91	4.37521	(10102019)		
465023.41	3807821.91	4.20307	(10102019)	465043.41

3807821.91 4.03794 (10102019)
 465063.41 3807821.91 3.87573 (10102019) 465083.41
 3807821.91 3.79921 (09010519)
 465103.41 3807821.91 3.77597 (09010519) 465123.41
 3807821.91 3.74887 (09010519)
 ▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 689

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
465143.41	3807821.91	3.72410	(09010519)	465163.41
3807821.91	3.70046 (09010519)			
465183.41	3807821.91	3.67703	(09010519)	465203.41
3807821.91	3.65011 (09010519)			
465223.41	3807821.91	3.62210	(09010519)	465243.41
3807821.91	3.59717 (09010519)			
465263.41	3807821.91	3.57250	(09010519)	465283.41
3807821.91	3.54708 (09010519)			
465303.41	3807821.91	3.51768	(09010519)	465323.41
3807821.91	3.49082 (09010519)			
465343.41	3807821.91	3.46531	(09010519)	465363.41
3807821.91	3.44025 (09010519)			
465383.41	3807821.91	3.41211	(09010519)	464543.41
3807841.91	10.25131 (10020118)			
464563.41	3807841.91	9.78604	(10020118)	464583.41
3807841.91	9.36389 (10020118)			

464603.41	3807841.91	8.93999	(10020118)	464623.41
3807841.91	8.65517 (10102019)			
464643.41	3807841.91	8.37937	(10102019)	464663.41
3807841.91	8.10134 (10102019)			
464683.41	3807841.91	7.82414	(10102019)	464723.41
3807841.91	7.27402 (10102019)			
464743.41	3807841.91	7.00567	(10102019)	464763.41
3807841.91	6.74621 (10102019)			
464783.41	3807841.91	6.49091	(10102019)	464803.41
3807841.91	6.24155 (10102019)			
464823.41	3807841.91	5.99953	(10102019)	464843.41
3807841.91	5.76464 (10102019)			
464863.41	3807841.91	5.53718	(10102019)	464883.41
3807841.91	5.31738 (10102019)			
464903.41	3807841.91	5.10488	(10102019)	464923.41
3807841.91	4.89985 (10102019)			
464943.41	3807841.91	4.70239	(10102019)	464963.41
3807841.91	4.51206 (10102019)			
464983.41	3807841.91	4.32892	(10102019)	465003.41
3807841.91	4.15301 (10102019)			
465023.41	3807841.91	4.05750	(09010519)	465043.41
3807841.91	4.02915 (09010519)			
465063.41	3807841.91	4.00048	(09010519)	465083.41
3807841.91	3.97120 (09010519)			
465103.41	3807841.91	3.94153	(09010519)	465123.41
3807841.91	3.91170 (09010519)			
465143.41	3807841.91	3.88140	(09010519)	465163.41
3807841.91	3.85130 (09010519)			
465183.41	3807841.91	3.82358	(09010519)	465203.41
3807841.91	3.79380 (09010519)			
465223.41	3807841.91	3.76292	(09010519)	465243.41
3807841.91	3.73166 (09010519)			
465263.41	3807841.91	3.70234	(09010519)	465283.41
3807841.91	3.67354 (09010519)			
465303.41	3807841.91	3.64240	(09010519)	465323.41
3807841.91	3.61311 (09010519)			
465343.41	3807841.91	3.58415	(09010519)	465363.41
3807841.91	3.55283 (09010519)			
465383.41	3807841.91	3.52173	(09010519)	464503.41
3807861.91	10.82757 (10020118)			
464523.41	3807861.91	10.27216	(10020118)	464543.41
3807861.91	9.75196 (10020118)			
464563.41	3807861.91	9.26740	(10020118)	464583.41
3807861.91	8.97556 (10102019)			
464603.41	3807861.91	8.72563	(10102019)	464723.41
3807861.91	7.04417 (10102019)			
464743.41	3807861.91	6.77124	(10102019)	464763.41
3807861.91	6.50606 (10102019)			
464783.41	3807861.91	6.24456	(10102019)	464803.41
3807861.91	5.99012 (10102019)			

464823.41	3807861.91	5.74849	(10102019)	464843.41
3807861.91	5.51250	(10102019)		
464863.41	3807861.91	5.28442	(10102019)	464883.41
3807861.91	5.06790	(10102019)		
464903.41	3807861.91	4.85694	(10102019)	464923.41
3807861.91	4.65365	(10102019)		
464943.41	3807861.91	4.46138	(10102019)	464963.41
3807861.91	4.34383	(09010519)		
464983.41	3807861.91	4.30999	(09010519)	465003.41
3807861.91	4.27869	(09010519)		
465023.41	3807861.91	4.24434	(09010519)	465043.41
3807861.91	4.20911	(09010519)		
465063.41	3807861.91	4.17668	(09010519)	465083.41
3807861.91	4.14130	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 690

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465103.41	3807861.91	4.10520	(09010519)	465123.41
3807861.91	4.07208	(09010519)		
465143.41	3807861.91	4.03613	(09010519)	465163.41
3807861.91	3.99958	(09010519)		
465183.41	3807861.91	3.96616	(09010519)	465203.41
3807861.91	3.93343	(09010519)		
465223.41	3807861.91	3.90027	(09010519)	465243.41

3807861.91	3.86303	(09010519)		
465263.41	3807861.91	3.82911	(09010519)	465283.41
3807861.91	3.79672	(09010519)		
465303.41	3807861.91	3.76337	(09010519)	465323.41
3807861.91	3.73083	(09010519)		
465343.41	3807861.91	3.69802	(09010519)	465363.41
3807861.91	3.66154	(09010519)		
465383.41	3807861.91	3.62750	(09010519)	464503.41
3807881.91	10.34404	(10020118)		
464523.41	3807881.91	9.77300	(10020118)	464543.41
3807881.91	9.36428	(10102019)		
464723.41	3807881.91	6.78384	(10102019)	464743.41
3807881.91	6.50668	(10102019)		
464763.41	3807881.91	6.23877	(10102019)	464783.41
3807881.91	5.97603	(10102019)		
464803.41	3807881.91	5.72082	(10102019)	464823.41
3807881.91	5.47570	(10102019)		
464843.41	3807881.91	5.24328	(10102019)	464863.41
3807881.91	5.02083	(10102019)		
464883.41	3807881.91	4.80347	(10102019)	464903.41
3807881.91	4.66221	(09010519)		
464923.41	3807881.91	4.62593	(09010519)	464943.41
3807881.91	4.58511	(09010519)		
464963.41	3807881.91	4.54708	(09010519)	464983.41
3807881.91	4.50946	(09010519)		
465003.41	3807881.91	4.46740	(09010519)	465023.41
3807881.91	4.42841	(09010519)		
465043.41	3807881.91	4.39002	(09010519)	465063.41
3807881.91	4.34730	(09010519)		
465083.41	3807881.91	4.30786	(09010519)	465103.41
3807881.91	4.26916	(09010519)		
465123.41	3807881.91	4.22625	(09010519)	465143.41
3807881.91	4.18674	(09010519)		
465163.41	3807881.91	4.14811	(09010519)	465183.41
3807881.91	4.10536	(09010519)		
465203.41	3807881.91	4.06684	(09010519)	465223.41
3807881.91	4.03006	(09010519)		
465243.41	3807881.91	3.99268	(09010519)	465263.41
3807881.91	3.95603	(09010519)		
465283.41	3807881.91	3.91886	(09010519)	465303.41
3807881.91	3.87735	(09010519)		
465323.41	3807881.91	3.83990	(09010519)	465343.41
3807881.91	3.80418	(09010519)		
465363.41	3807881.91	3.76803	(09010519)	465383.41
3807881.91	3.72915	(09010519)		
464723.41	3807901.91	6.48778	(10102019)	464743.41
3807901.91	6.21537	(10102019)		
464763.41	3807901.91	5.94439	(10102019)	464783.41
3807901.91	5.68447	(10102019)		
464803.41	3807901.91	5.43459	(10102019)	464823.41

3807901.91	5.19214	(10102019)		
464843.41	3807901.91	5.02138	(09010519)	464863.41
3807901.91	4.97957	(09010519)		
464883.41	3807901.91	4.93162	(09010519)	464903.41
3807901.91	4.88523	(09010519)		
464923.41	3807901.91	4.83971	(09010519)	464943.41
3807901.91	4.79410	(09010519)		
464963.41	3807901.91	4.75060	(09010519)	464983.41
3807901.91	4.70681	(09010519)		
465003.41	3807901.91	4.65701	(09010519)	465023.41
3807901.91	4.60935	(09010519)		
465043.41	3807901.91	4.56298	(09010519)	465063.41
3807901.91	4.51689	(09010519)		
465083.41	3807901.91	4.47067	(09010519)	465103.41
3807901.91	4.42459	(09010519)		
465123.41	3807901.91	4.37890	(09010519)	465143.41
3807901.91	4.33320	(09010519)		
465163.41	3807901.91	4.28773	(09010519)	465183.41
3807901.91	4.24274	(09010519)		
465203.41	3807901.91	4.20041	(09010519)	465223.41
3807901.91	4.15875	(09010519)		
465243.41	3807901.91	4.11435	(09010519)	465263.41
3807901.91	4.07267	(09010519)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 691

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465283.41	3807901.91	4.03202	(09010519)	465303.41	
3807901.91	3.98899 (09010519)				
465323.41	3807901.91	3.94614	(09010519)	465343.41	
3807901.91	3.90419 (09010519)				
465363.41	3807901.91	3.86548	(09010519)	465383.41	
3807901.91	3.82509 (09010519)				
464723.41	3807921.91	6.16287	(10102019)	464743.41	
3807921.91	5.89906 (10102019)				
464763.41	3807921.91	5.63107	(10102019)	464783.41	
3807921.91	5.42479 (09010519)				
464803.41	3807921.91	5.37473	(09010519)	464823.41	
3807921.91	5.32074 (09010519)				
464843.41	3807921.91	5.26896	(09010519)	464863.41	
3807921.91	5.21736 (09010519)				
464883.41	3807921.91	5.16064	(09010519)	464903.41	
3807921.91	5.10457 (09010519)				
464923.41	3807921.91	5.04994	(09010519)	464943.41	
3807921.91	5.00034 (09010519)				
464963.41	3807921.91	4.94970	(09010519)	464983.41	
3807921.91	4.89769 (09010519)				
465003.41	3807921.91	4.84077	(09010519)	465023.41	
3807921.91	4.78497 (09010519)				
465043.41	3807921.91	4.73078	(09010519)	465063.41	
3807921.91	4.68073 (09010519)				
465083.41	3807921.91	4.62773	(09010519)	465103.41	
3807921.91	4.57450 (09010519)				
465123.41	3807921.91	4.52549	(09010519)	465143.41	
3807921.91	4.47363 (09010519)				
465163.41	3807921.91	4.42162	(09010519)	465183.41	
3807921.91	4.37387 (09010519)				
465203.41	3807921.91	4.32744	(09010519)	465223.41	
3807921.91	4.28096 (09010519)				
465243.41	3807921.91	4.23012	(09010519)	465263.41	
3807921.91	4.18266 (09010519)				
465283.41	3807921.91	4.13742	(09010519)	465303.41	
3807921.91	4.09382 (09010519)				
465323.41	3807921.91	4.04691	(09010519)	465343.41	
3807921.91	3.99972 (09010519)				
465363.41	3807921.91	3.95761	(09010519)	465383.41	
3807921.91	3.91506 (09010519)				
464723.41	3807941.91	5.84807	(09010519)	464743.41	
3807941.91	5.80747 (09010519)				
464763.41	3807941.91	5.75593	(09010519)	464783.41	
3807941.91	5.69567 (09010519)				
464803.41	3807941.91	5.63219	(09010519)	464823.41	
3807941.91	5.57304 (09010519)				
464843.41	3807941.91	5.51005	(09010519)	464863.41	
3807941.91	5.44501 (09010519)				

464883.41	3807941.91	5.37891	(09010519)	464903.41
3807941.91	5.31773	(09010519)		
464923.41	3807941.91	5.25936	(09010519)	464943.41
3807941.91	5.20203	(09010519)		
464963.41	3807941.91	5.14037	(09010519)	464983.41
3807941.91	5.07666	(09010519)		
465003.41	3807941.91	5.01229	(09010519)	465023.41
3807941.91	4.95324	(09010519)		
465043.41	3807941.91	4.89604	(09010519)	465063.41
3807941.91	4.83429	(09010519)		
465083.41	3807941.91	4.77719	(09010519)	465103.41
3807941.91	4.72165	(09010519)		
465123.41	3807941.91	4.66167	(09010519)	465143.41
3807941.91	4.60637	(09010519)		
465163.41	3807941.91	4.55266	(09010519)	465183.41
3807941.91	4.49462	(09010519)		
465203.41	3807941.91	4.44209	(09010519)	465223.41
3807941.91	4.39206	(09010519)		
465243.41	3807941.91	4.34179	(09010519)	465263.41
3807941.91	4.28838	(09010519)		
465283.41	3807941.91	4.23509	(09010519)	465303.41
3807941.91	4.18781	(09010519)		
465323.41	3807941.91	4.14032	(09010519)	465343.41
3807941.91	4.09344	(09010519)		
465363.41	3807941.91	4.04789	(09010519)	465383.41
3807941.91	3.99889	(09010519)		
465403.41	3807941.91	3.94953	(09010519)	465423.41
3807941.91	3.90499	(09010519)		
465443.41	3807941.91	3.86165	(09010519)	465463.41
3807941.91	3.82044	(09010519)		
465483.41	3807941.91	3.77754	(09010519)	465503.41
3807941.91	3.73590	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 692

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM ₁₀ IN MICROGRAMS/M**3		
**				
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465523.41	3807941.91	3.69417	(09010519)	465543.41
3807941.91	3.64875	(09010519)		
465563.41	3807941.91	3.60691	(09010519)	465583.41
3807941.91	3.56720	(09010519)		
465603.41	3807941.91	3.52875	(09010519)	465623.41
3807941.91	3.48746	(09010519)		
465643.41	3807941.91	3.44600	(09010519)	465663.41
3807941.91	3.40841	(09010519)		
465683.41	3807941.91	3.36866	(09010519)	465703.41
3807941.91	3.32899	(09010519)		
464723.41	3807961.91	6.11741	(09010519)	464743.41
3807961.91	6.08131	(09010519)		
464763.41	3807961.91	6.02723	(09010519)	464783.41
3807961.91	5.96038	(09010519)		
464803.41	3807961.91	5.88808	(09010519)	464823.41
3807961.91	5.81551	(09010519)		
464843.41	3807961.91	5.74375	(09010519)	464863.41
3807961.91	5.67174	(09010519)		
464883.41	3807961.91	5.59628	(09010519)	464903.41
3807961.91	5.52718	(09010519)		
464923.41	3807961.91	5.46069	(09010519)	464943.41
3807961.91	5.39095	(09010519)		
464963.41	3807961.91	5.32239	(09010519)	464983.41
3807961.91	5.25387	(09010519)		
465003.41	3807961.91	5.18218	(09010519)	465023.41
3807961.91	5.11711	(09010519)		
465043.41	3807961.91	5.05420	(09010519)	465063.41
3807961.91	4.98487	(09010519)		
465083.41	3807961.91	4.91906	(09010519)	465103.41
3807961.91	4.85564	(09010519)		
465123.41	3807961.91	4.79332	(09010519)	465143.41
3807961.91	4.73159	(09010519)		
465163.41	3807961.91	4.67071	(09010519)	465183.41
3807961.91	4.61094	(09010519)		
465203.41	3807961.91	4.55177	(09010519)	465223.41
3807961.91	4.49408	(09010519)		
465243.41	3807961.91	4.44078	(09010519)	465263.41
3807961.91	4.38570	(09010519)		
465283.41	3807961.91	4.33084	(09010519)	465303.41

3807961.91	4.27983	(09010519)		
465323.41	3807961.91	4.22681	(09010519)	465343.41
3807961.91	4.17402	(09010519)		
465363.41	3807961.91	4.12527	(09010519)	465383.41
3807961.91	4.07494	(09010519)		
465403.41	3807961.91	4.02421	(09010519)	465423.41
3807961.91	3.97394	(09010519)		
465443.41	3807961.91	3.92689	(09010519)	465463.41
3807961.91	3.88654	(09010519)		
465483.41	3807961.91	3.83854	(09010519)	465503.41
3807961.91	3.79365	(09010519)		
465523.41	3807961.91	3.74992	(09010519)	465543.41
3807961.91	3.70440	(09010519)		
465563.41	3807961.91	3.66166	(09010519)	465583.41
3807961.91	3.61995	(09010519)		
465603.41	3807961.91	3.57625	(09010519)	465623.41
3807961.91	3.53344	(09010519)		
465643.41	3807961.91	3.49139	(09010519)	465663.41
3807961.91	3.44974	(09010519)		
465683.41	3807961.91	3.40893	(09010519)	465703.41
3807961.91	3.36937	(09010519)		
464743.41	3807981.91	6.33998	(09010519)	464763.41
3807981.91	6.28489	(09010519)		
464783.41	3807981.91	6.21366	(09010519)	464803.41
3807981.91	6.13460	(09010519)		
464823.41	3807981.91	6.04718	(09010519)	464843.41
3807981.91	5.96666	(09010519)		
464863.41	3807981.91	5.88844	(09010519)	464883.41
3807981.91	5.80343	(09010519)		
464903.41	3807981.91	5.72554	(09010519)	464923.41
3807981.91	5.65037	(09010519)		
464943.41	3807981.91	5.57016	(09010519)	464963.41
3807981.91	5.49451	(09010519)		
464983.41	3807981.91	5.42084	(09010519)	465003.41
3807981.91	5.34373	(09010519)		
465023.41	3807981.91	5.27122	(09010519)	465043.41
3807981.91	5.20071	(09010519)		
465063.41	3807981.91	5.12684	(09010519)	465083.41
3807981.91	5.05268	(09010519)		
465103.41	3807981.91	4.98068	(09010519)	465123.41
3807981.91	4.91726	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 693

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK43 ***

INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465143.41	3807981.91	4.84881 (09010519)	465163.41
3807981.91	4.77984 (09010519)		
465183.41	3807981.91	4.71783 (09010519)	465203.41
3807981.91	4.65314 (09010519)		
465223.41	3807981.91	4.58913 (09010519)	465243.41
3807981.91	4.53186 (09010519)		
465263.41	3807981.91	4.47546 (09010519)	465283.41
3807981.91	4.41969 (09010519)		
465303.41	3807981.91	4.36348 (09010519)	465323.41
3807981.91	4.30491 (09010519)		
465343.41	3807981.91	4.24674 (09010519)	465363.41
3807981.91	4.19340 (09010519)		
465383.41	3807981.91	4.14185 (09010519)	465403.41
3807981.91	4.09068 (09010519)		
465423.41	3807981.91	4.03553 (09010519)	465443.41
3807981.91	3.98515 (09010519)		
465463.41	3807981.91	3.94496 (09010519)	465483.41
3807981.91	3.89243 (09010519)		
465503.41	3807981.91	3.84456 (09010519)	465523.41
3807981.91	3.79898 (09010519)		
465543.41	3807981.91	3.75307 (09010519)	465563.41
3807981.91	3.70877 (09010519)		
465583.41	3807981.91	3.66463 (09010519)	465603.41
3807981.91	3.61715 (09010519)		
465623.41	3807981.91	3.57305 (09010519)	465643.41
3807981.91	3.53024 (09010519)		
465663.41	3807981.91	3.48508 (09010519)	465683.41
3807981.91	3.44400 (09010519)		
465703.41	3807981.91	3.40492 (09010519)	464763.41
3808001.91	6.52056 (09010519)		

464783.41	3808001.91	6.44779	(09010519)	464803.41
3808001.91	6.36370	(09010519)		
464823.41	3808001.91	6.26498	(09010519)	464843.41
3808001.91	6.17455	(09010519)		
464863.41	3808001.91	6.08676	(09010519)	464883.41
3808001.91	5.99195	(09010519)		
464903.41	3808001.91	5.90551	(09010519)	464923.41
3808001.91	5.82324	(09010519)		
464943.41	3808001.91	5.74119	(09010519)	464963.41
3808001.91	5.65571	(09010519)		
464983.41	3808001.91	5.57060	(09010519)	465003.41
3808001.91	5.49267	(09010519)		
465023.41	3808001.91	5.41136	(09010519)	465043.41
3808001.91	5.33043	(09010519)		
465063.41	3808001.91	5.25655	(09010519)	465083.41
3808001.91	5.17852	(09010519)		
465103.41	3808001.91	5.10085	(09010519)	465123.41
3808001.91	5.03222	(09010519)		
465143.41	3808001.91	4.95863	(09010519)	465163.41
3808001.91	4.88360	(09010519)		
465183.41	3808001.91	4.81082	(09010519)	465203.41
3808001.91	4.74391	(09010519)		
465223.41	3808001.91	4.68063	(09010519)	465243.41
3808001.91	4.61937	(09010519)		
465263.41	3808001.91	4.55916	(09010519)	465283.41
3808001.91	4.49874	(09010519)		
465303.41	3808001.91	4.43348	(09010519)	465323.41
3808001.91	4.37348	(09010519)		
465343.41	3808001.91	4.31554	(09010519)	465363.41
3808001.91	4.25374	(09010519)		
465383.41	3808001.91	4.19784	(09010519)	465403.41
3808001.91	4.14481	(09010519)		
465423.41	3808001.91	4.09191	(09010519)	465443.41
3808001.91	4.04060	(09010519)		
465463.41	3808001.91	3.99190	(09010519)	465483.41
3808001.91	3.94158	(09010519)		
465503.41	3808001.91	3.89286	(09010519)	465523.41
3808001.91	3.84428	(09010519)		
465543.41	3808001.91	3.79186	(09010519)	465563.41
3808001.91	3.74416	(09010519)		
465583.41	3808001.91	3.69907	(09010519)	465603.41
3808001.91	3.65389	(09010519)		
465623.41	3808001.91	3.60648	(09010519)	465643.41
3808001.91	3.55936	(09010519)		
465663.41	3808001.91	3.51660	(09010519)	465683.41
3808001.91	3.47522	(09010519)		
465703.41	3808001.91	3.43391	(09010519)	464763.41
3808021.91	6.72107	(09010519)		
464783.41	3808021.91	6.64452	(09010519)	464803.41
3808021.91	6.56127	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 694

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	6.46368	(09010519)	464843.41
3808021.91	6.36729	(09010519)		
464863.41	3808021.91	6.27116	(09010519)	464883.41
3808021.91	6.17267	(09010519)		
464903.41	3808021.91	6.07550	(09010519)	464923.41
3808021.91	5.98093	(09010519)		
464943.41	3808021.91	5.89271	(09010519)	464963.41
3808021.91	5.80287	(09010519)		
464983.41	3808021.91	5.71307	(09010519)	465003.41
3808021.91	5.62439	(09010519)		
465023.41	3808021.91	5.53803	(09010519)	465043.41
3808021.91	5.45335	(09010519)		
465063.41	3808021.91	5.36989	(09010519)	465083.41
3808021.91	5.28836	(09010519)		
465103.41	3808021.91	5.20859	(09010519)	465123.41
3808021.91	5.12996	(09010519)		
465143.41	3808021.91	5.05317	(09010519)	465163.41
3808021.91	4.97735	(09010519)		
465183.41	3808021.91	4.89877	(09010519)	465203.41
3808021.91	4.82808	(09010519)		
465223.41	3808021.91	4.76098	(09010519)	465243.41

3808021.91	4.69126	(09010519)		
465263.41	3808021.91	4.62599	(09010519)	465283.41
3808021.91	4.56288	(09010519)		
465303.41	3808021.91	4.49754	(09010519)	465323.41
3808021.91	4.43323	(09010519)		
465343.41	3808021.91	4.37019	(09010519)	465363.41
3808021.91	4.30864	(09010519)		
465383.41	3808021.91	4.25097	(09010519)	465403.41
3808021.91	4.19487	(09010519)		
465423.41	3808021.91	4.13644	(09010519)	465443.41
3808021.91	4.08181	(09010519)		
465463.41	3808021.91	4.03476	(09010519)	465483.41
3808021.91	3.97954	(09010519)		
465503.41	3808021.91	3.92796	(09010519)	465523.41
3808021.91	3.87786	(09010519)		
465543.41	3808021.91	3.82601	(09010519)	465563.41
3808021.91	3.77494	(09010519)		
465583.41	3808021.91	3.72545	(09010519)	465603.41
3808021.91	3.67966	(09010519)		
465623.41	3808021.91	3.63255	(09010519)	465643.41
3808021.91	3.58594	(09010519)		
465663.41	3808021.91	3.54263	(09010519)	465683.41
3808021.91	3.49788	(09010519)		
465703.41	3808021.91	3.45303	(09010519)	464783.41
3808041.91	6.81827	(09010519)		
464803.41	3808041.91	6.73456	(09010519)	464823.41
3808041.91	6.64055	(09010519)		
464843.41	3808041.91	6.54059	(09010519)	464863.41
3808041.91	6.43862	(09010519)		
464883.41	3808041.91	6.33666	(09010519)	464903.41
3808041.91	6.23065	(09010519)		
464923.41	3808041.91	6.12551	(09010519)	464943.41
3808041.91	6.03002	(09010519)		
464963.41	3808041.91	5.93647	(09010519)	464983.41
3808041.91	5.84310	(09010519)		
465003.41	3808041.91	5.74295	(09010519)	465023.41
3808041.91	5.65056	(09010519)		
465043.41	3808041.91	5.56187	(09010519)	465063.41
3808041.91	5.47000	(09010519)		
465083.41	3808041.91	5.38409	(09010519)	465103.41
3808041.91	5.30108	(09010519)		
465123.41	3808041.91	5.21492	(09010519)	465143.41
3808041.91	5.13447	(09010519)		
465163.41	3808041.91	5.05677	(09010519)	465183.41
3808041.91	4.97596	(09010519)		
465203.41	3808041.91	4.90060	(09010519)	465223.41
3808041.91	4.82784	(09010519)		
465243.41	3808041.91	4.75201	(09010519)	465263.41
3808041.91	4.68139	(09010519)		
465283.41	3808041.91	4.61444	(09010519)	465303.41


```

3808041.91      4.55031 (09010519)
      465323.41  3808041.91      4.48279 (09010519)      465343.41
3808041.91      4.41539 (09010519)
      465363.41  3808041.91      4.35362 (09010519)      465383.41
3808041.91      4.29408 (09010519)
      465403.41  3808041.91      4.23524 (09010519)      465423.41
3808041.91      4.17231 (09010519)
      465443.41  3808041.91      4.11483 (09010519)      465463.41
3808041.91      4.06867 (09010519)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 695

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
      INCLUDING SOURCE(S):      L0005092      , L0005093
, L0005094      , L0005095      , L0005096      ,
      L0005097      , L0005098      , L0005099      , L0005100      , L0005101
, L0005102      , L0005103      , L0005104      ,
      L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
      L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465483.41	3808041.91	4.00930	(09010519)	465503.41
3808041.91	3.95422	(09010519)		
465523.41	3808041.91	3.90196	(09010519)	465543.41
3808041.91	3.85178	(09010519)		
465563.41	3808041.91	3.79871	(09010519)	465583.41
3808041.91	3.74597	(09010519)		
465603.41	3808041.91	3.69874	(09010519)	465623.41
3808041.91	3.65240	(09010519)		
465643.41	3808041.91	3.60671	(09010519)	465663.41
3808041.91	3.56082	(09010519)		
465683.41	3808041.91	3.51319	(09010519)	465703.41
3808041.91	3.46618	(09010519)		

464803.41	3808061.91	6.89086	(09010519)	464823.41
3808061.91	6.79001 (09010519)			
464843.41	3808061.91	6.68874	(09010519)	464863.41
3808061.91	6.58604 (09010519)			
464883.41	3808061.91	6.47606	(09010519)	464903.41
3808061.91	6.36728 (09010519)			
464923.41	3808061.91	6.26099	(09010519)	464943.41
3808061.91	6.15834 (09010519)			
464963.41	3808061.91	6.05799	(09010519)	464983.41
3808061.91	5.95815 (09010519)			
465003.41	3808061.91	5.85167	(09010519)	465023.41
3808061.91	5.74851 (09010519)			
465043.41	3808061.91	5.64965	(09010519)	465063.41
3808061.91	5.55955 (09010519)			
465083.41	3808061.91	5.46630	(09010519)	465103.41
3808061.91	5.37410 (09010519)			
465123.41	3808061.91	5.29026	(09010519)	465143.41
3808061.91	5.20328 (09010519)			
465163.41	3808061.91	5.11722	(09010519)	465183.41
3808061.91	5.03914 (09010519)			
465203.41	3808061.91	4.95795	(09010519)	465223.41
3808061.91	4.87756 (09010519)			
465243.41	3808061.91	4.80478	(09010519)	465263.41
3808061.91	4.72892 (09010519)			
465283.41	3808061.91	4.65405	(09010519)	465303.41
3808061.91	4.58737 (09010519)			
465323.41	3808061.91	4.52115	(09010519)	465343.41
3808061.91	4.45502 (09010519)			
465363.41	3808061.91	4.38497	(09010519)	465383.41
3808061.91	4.32163 (09010519)			
465403.41	3808061.91	4.26165	(09010519)	465423.41
3808061.91	4.20204 (09010519)			
465443.41	3808061.91	4.14438	(09010519)	465463.41
3808061.91	4.08976 (09010519)			
465483.41	3808061.91	4.03357	(09010519)	465503.41
3808061.91	3.97496 (09010519)			
465523.41	3808061.91	3.91702	(09010519)	465543.41
3808061.91	3.86544 (09010519)			
465563.41	3808061.91	3.81424	(09010519)	465583.41
3808061.91	3.76384 (09010519)			
465603.41	3808061.91	3.71525	(09010519)	465623.41
3808061.91	3.66759 (09010519)			
465643.41	3808061.91	3.61988	(09010519)	465663.41
3808061.91	3.56857 (09010519)			
465683.41	3808061.91	3.52135	(09010519)	465703.41
3808061.91	3.47667 (09010519)			
464823.41	3808081.91	6.92749	(09010519)	464843.41
3808081.91	6.81498 (09010519)			
464863.41	3808081.91	6.70215	(09010519)	464883.41
3808081.91	6.59221 (09010519)			

464903.41	3808081.91	6.48467	(09010519)	464923.41
3808081.91	6.37802	(09010519)		
464943.41	3808081.91	6.26866	(09010519)	464963.41
3808081.91	6.15792	(09010519)		
464983.41	3808081.91	6.04829	(09010519)	465003.41
3808081.91	5.94176	(09010519)		
465023.41	3808081.91	5.83407	(09010519)	465043.41
3808081.91	5.72902	(09010519)		
465063.41	3808081.91	5.63564	(09010519)	465083.41
3808081.91	5.53728	(09010519)		
465103.41	3808081.91	5.43874	(09010519)	465123.41
3808081.91	5.34675	(09010519)		
465143.41	3808081.91	5.25733	(09010519)	465163.41
3808081.91	5.17024	(09010519)		
465183.41	3808081.91	5.08479	(09010519)	465203.41
3808081.91	5.00169	(09010519)		
465223.41	3808081.91	4.92072	(09010519)	465243.41
3808081.91	4.84123	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 696

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3808081.91	4.76390	(09010519)	465283.41
3808081.91	4.68939	(09010519)		
465303.41	3808081.91	4.62027	(09010519)	465323.41

3808081.91	4.54938	(09010519)		
465343.41	3808081.91	4.47876	(09010519)	465363.41
3808081.91	4.41001	(09010519)		
465383.41	3808081.91	4.34571	(09010519)	465403.41
3808081.91	4.28333	(09010519)		
465423.41	3808081.91	4.21867	(09010519)	465443.41
3808081.91	4.15829	(09010519)		
465463.41	3808081.91	4.10623	(09010519)	465483.41
3808081.91	4.04560	(09010519)		
465503.41	3808081.91	3.98653	(09010519)	465523.41
3808081.91	3.92886	(09010519)		
465543.41	3808081.91	3.87208	(09010519)	465563.41
3808081.91	3.81916	(09010519)		
465583.41	3808081.91	3.76852	(09010519)	465603.41
3808081.91	3.71888	(09010519)		
465623.41	3808081.91	3.67023	(09010519)	465643.41
3808081.91	3.62195	(09010519)		
465663.41	3808081.91	3.57797	(10032206)	465683.41
3808081.91	3.53721	(10032206)		
465703.41	3808081.91	3.49755	(10032206)	464843.41
3808101.91	6.91856	(09010519)		
464863.41	3808101.91	6.79953	(09010519)	464883.41
3808101.91	6.69052	(09010519)		
464903.41	3808101.91	6.58133	(09010519)	464923.41
3808101.91	6.47145	(09010519)		
464943.41	3808101.91	6.35607	(09010519)	464963.41
3808101.91	6.23740	(09010519)		
464983.41	3808101.91	6.12017	(09010519)	465003.41
3808101.91	6.01182	(09010519)		
465023.41	3808101.91	5.90155	(09010519)	465043.41
3808101.91	5.79335	(09010519)		
465063.41	3808101.91	5.69352	(09010519)	465083.41
3808101.91	5.59019	(09010519)		
465103.41	3808101.91	5.48719	(09010519)	465123.41
3808101.91	5.38859	(09010519)		
465143.41	3808101.91	5.29825	(09010519)	465163.41
3808101.91	5.21128	(09010519)		
465183.41	3808101.91	5.11769	(09010519)	465203.41
3808101.91	5.03206	(09010519)		
465223.41	3808101.91	4.95025	(09010519)	465243.41
3808101.91	4.86545	(09010519)		
465263.41	3808101.91	4.78799	(09010519)	465283.41
3808101.91	4.71471	(09010519)		
465303.41	3808101.91	4.64157	(09010519)	465323.41
3808101.91	4.56626	(09010519)		
465343.41	3808101.91	4.49205	(09010519)	465363.41
3808101.91	4.42410	(09010519)		
465383.41	3808101.91	4.35878	(09010519)	465403.41
3808101.91	4.29440	(09010519)		
465423.41	3808101.91	4.22588	(09010519)	465443.41

3808101.91	4.16335	(09010519)		
465463.41	3808101.91	4.11903	(10032206)	465483.41
3808101.91	4.06209	(10032206)		
465503.41	3808101.91	4.00955	(10032206)	465523.41
3808101.91	3.95873	(10032206)		
465543.41	3808101.91	3.90509	(10032206)	465563.41
3808101.91	3.85666	(10032206)		
465583.41	3808101.91	3.81101	(10032206)	465603.41
3808101.91	3.76621	(10032206)		
465623.41	3808101.91	3.72222	(10032206)	465643.41
3808101.91	3.67884	(10032206)		
465663.41	3808101.91	3.63515	(10032206)	465683.41
3808101.91	3.59315	(10032206)		
465703.41	3808101.91	3.55134	(10032206)	464863.41
3808121.91	6.89344	(09010519)		
464883.41	3808121.91	6.77809	(09010519)	464903.41
3808121.91	6.65677	(09010519)		
464923.41	3808121.91	6.53456	(09010519)	464943.41
3808121.91	6.41416	(09010519)		
464963.41	3808121.91	6.29580	(09010519)	464983.41
3808121.91	6.17894	(09010519)		
465003.41	3808121.91	6.05803	(09010519)	465023.41
3808121.91	5.94636	(09010519)		
465043.41	3808121.91	5.83917	(09010519)	465063.41
3808121.91	5.72788	(09010519)		
465083.41	3808121.91	5.61870	(09010519)	465103.41
3808121.91	5.51346	(09010519)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 697

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465123.41	3808121.91	5.41922 (09010519)	465143.41
3808121.91	5.32842 (09010519)		
465163.41	3808121.91	5.23866 (09010519)	465183.41
3808121.91	5.14238 (09010519)		
465203.41	3808121.91	5.04950 (09010519)	465223.41
3808121.91	4.96088 (09010519)		
465243.41	3808121.91	4.88076 (09010519)	465263.41
3808121.91	4.80855 (10032206)		
465283.41	3808121.91	4.74109 (10032206)	465303.41
3808121.91	4.66825 (10032206)		
465323.41	3808121.91	4.60173 (10032206)	465343.41
3808121.91	4.53781 (10032206)		
465363.41	3808121.91	4.46964 (10032206)	465383.41
3808121.91	4.40843 (10032206)		
465403.41	3808121.91	4.35066 (10032206)	465423.41
3808121.91	4.29318 (10032206)		
465443.41	3808121.91	4.23765 (10032206)	465463.41
3808121.91	4.18522 (10032206)		
465483.41	3808121.91	4.13103 (10032206)	465503.41
3808121.91	4.07416 (10032206)		
465523.41	3808121.91	4.01777 (10032206)	465543.41
3808121.91	3.96698 (10032206)		
465563.41	3808121.91	3.91800 (10032206)	465583.41
3808121.91	3.87031 (10032206)		
465603.41	3808121.91	3.82354 (10032206)	465623.41
3808121.91	3.77766 (10032206)		
465643.41	3808121.91	3.73161 (10032206)	465663.41
3808121.91	3.68166 (10032206)		
465683.41	3808121.91	3.63656 (10032206)	465703.41
3808121.91	3.59412 (10032206)		
464883.41	3808141.91	6.82728 (09010519)	464903.41
3808141.91	6.70790 (09010519)		
464923.41	3808141.91	6.58523 (09010519)	464943.41
3808141.91	6.46021 (09010519)		
464963.41	3808141.91	6.33881 (09010519)	464983.41
3808141.91	6.21891 (09010519)		
465003.41	3808141.91	6.09239 (09010519)	465023.41
3808141.91	5.97763 (09010519)		
465043.41	3808141.91	5.86810 (09010519)	465063.41
3808141.91	5.75327 (10032206)		
465083.41	3808141.91	5.65194 (10032206)	465103.41
3808141.91	5.55519 (10032206)		
465123.41	3808141.91	5.47028 (10032206)	465143.41
3808141.91	5.38345 (10032206)		

465163.41	3808141.91	5.29714	(10032206)	465183.41
3808141.91	5.21329	(10032206)		
465203.41	3808141.91	5.12783	(10032206)	465223.41
3808141.91	5.04443	(10032206)		
465243.41	3808141.91	4.97167	(10032206)	465263.41
3808141.91	4.89693	(10032206)		
465283.41	3808141.91	4.82245	(10032206)	465303.41
3808141.91	4.75003	(10032206)		
465323.41	3808141.91	4.67901	(10032206)	465343.41
3808141.91	4.60965	(10032206)		
465363.41	3808141.91	4.54217	(10032206)	465383.41
3808141.91	4.47931	(10032206)		
465403.41	3808141.91	4.41838	(10032206)	465423.41
3808141.91	4.35491	(10032206)		
465443.41	3808141.91	4.29588	(10032206)	465463.41
3808141.91	4.23980	(10032206)		
465483.41	3808141.91	4.18475	(10032206)	465503.41
3808141.91	4.12816	(10032206)		
465523.41	3808141.91	4.07158	(10032206)	465543.41
3808141.91	4.01585	(10032206)		
465563.41	3808141.91	3.96414	(10032206)	465583.41
3808141.91	3.91475	(10032206)		
465603.41	3808141.91	3.86635	(10032206)	465623.41
3808141.91	3.81890	(10032206)		
465643.41	3808141.91	3.77174	(10032206)	465663.41
3808141.91	3.72279	(10032206)		
465683.41	3808141.91	3.67463	(10032206)	465703.41
3808141.91	3.62806	(10032206)		
464883.41	3808161.91	6.85564	(10032206)	464903.41
3808161.91	6.75525	(10032206)		
464923.41	3808161.91	6.64796	(10032206)	464943.41
3808161.91	6.53212	(10032206)		
464963.41	3808161.91	6.41946	(10032206)	464983.41
3808161.91	6.30821	(10032206)		
465003.41	3808161.91	6.19200	(10032206)	465023.41
3808161.91	6.08373	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 698

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,

```

          L0005105      , L0005106      , L0005107      , L0005108      , L0005109
, L0005110      , L0005111      , L0005112      ,
          L0005113      , L0005114      , L0005115      , L0005116      , L0005117
, L0005118      , L0005119      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465043.41	3808161.91	5.97932	(10032206)	465063.41
3808161.91	5.86978	(10032206)		
465083.41	3808161.91	5.76471	(10032206)	465103.41
3808161.91	5.66454	(10032206)		
465123.41	3808161.91	5.57279	(10032206)	465143.41
3808161.91	5.47865	(10032206)		
465163.41	3808161.91	5.38611	(10032206)	465183.41
3808161.91	5.30148	(10032206)		
465203.41	3808161.91	5.21441	(10032206)	465223.41
3808161.91	5.12874	(10032206)		
465243.41	3808161.91	5.05051	(10032206)	465263.41
3808161.91	4.96981	(10032206)		
465283.41	3808161.91	4.89034	(10032206)	465303.41
3808161.91	4.81787	(10032206)		
465323.41	3808161.91	4.74294	(10032206)	465343.41
3808161.91	4.66907	(10032206)		
465363.41	3808161.91	4.60181	(10032206)	465383.41
3808161.91	4.53725	(10032206)		
465403.41	3808161.91	4.47359	(10032206)	465423.41
3808161.91	4.40535	(10032206)		
465443.41	3808161.91	4.34344	(10032206)	465463.41
3808161.91	4.28504	(10032206)		
465483.41	3808161.91	4.22650	(10032206)	465503.41
3808161.91	4.17037	(10032206)		
465523.41	3808161.91	4.11471	(10032206)	465543.41
3808161.91	4.05490	(10032206)		
465563.41	3808161.91	4.00087	(10032206)	465583.41
3808161.91	3.95000	(10032206)		
465603.41	3808161.91	3.90018	(10032206)	465623.41
3808161.91	3.85036	(10032206)		
465643.41	3808161.91	3.80146	(10032206)	465663.41
3808161.91	3.75463	(10032206)		
465683.41	3808161.91	3.70484	(10032206)	465703.41
3808161.91	3.65513	(10032206)		
464903.41	3808181.91	6.88681	(10032206)	464923.41

3808181.91	6.77404	(10032206)		
464943.41	3808181.91	6.65207	(10032206)	464963.41
3808181.91	6.53361	(10032206)		
464983.41	3808181.91	6.41814	(10032206)	465003.41
3808181.91	6.30462	(10032206)		
465023.41	3808181.91	6.18817	(10032206)	465043.41
3808181.91	6.07186	(10032206)		
465063.41	3808181.91	5.95728	(10032206)	465083.41
3808181.91	5.85316	(10032206)		
465103.41	3808181.91	5.75394	(10032206)	465123.41
3808181.91	5.65007	(10032206)		
465143.41	3808181.91	5.55492	(10032206)	465163.41
3808181.91	5.46373	(10032206)		
465183.41	3808181.91	5.36792	(10032206)	465203.41
3808181.91	5.28027	(10032206)		
465223.41	3808181.91	5.19625	(10032206)	465243.41
3808181.91	5.10768	(10032206)		
465263.41	3808181.91	5.02675	(10032206)	465283.41
3808181.91	4.94915	(10032206)		
465303.41	3808181.91	4.86708	(10032206)	465323.41
3808181.91	4.79219	(10032206)		
465343.41	3808181.91	4.72036	(10032206)	465363.41
3808181.91	4.64416	(10032206)		
465383.41	3808181.91	4.57574	(10032206)	465403.41
3808181.91	4.51125	(10032206)		
465423.41	3808181.91	4.44725	(10032206)	465443.41
3808181.91	4.38555	(10032206)		
465463.41	3808181.91	4.32431	(10032206)	465483.41
3808181.91	4.25826	(10032206)		
465503.41	3808181.91	4.19872	(10032206)	465523.41
3808181.91	4.14281	(10032206)		
465543.41	3808181.91	4.08700	(10032206)	465563.41
3808181.91	4.03326	(10032206)		
465583.41	3808181.91	3.98102	(10032206)	465603.41
3808181.91	3.92988	(10032206)		
465623.41	3808181.91	3.87538	(10032206)	465643.41
3808181.91	3.82117	(10032206)		
465663.41	3808181.91	3.77336	(10032206)	465683.41
3808181.91	3.72588	(10032206)		
465703.41	3808181.91	3.67810	(10032206)	464923.41
3808201.91	6.86084	(10032206)		
464943.41	3808201.91	6.74199	(10032206)	464963.41
3808201.91	6.62131	(10032206)		
464983.41	3808201.91	6.50162	(10032206)	465003.41
3808201.91	6.38544	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465023.41	3808201.91	6.26381	(10032206)	465043.41
3808201.91	6.14264	(10032206)		
465063.41	3808201.91	6.03086	(10032206)	465083.41
3808201.91	5.92176	(10032206)		
465103.41	3808201.91	5.81562	(10032206)	465123.41
3808201.91	5.71325	(10032206)		
465143.41	3808201.91	5.61322	(10032206)	465163.41
3808201.91	5.51598	(10032206)		
465183.41	3808201.91	5.42179	(10032206)	465203.41
3808201.91	5.32982	(10032206)		
465223.41	3808201.91	5.24034	(10032206)	465243.41
3808201.91	5.15360	(10032206)		
465263.41	3808201.91	5.06883	(10032206)	465283.41
3808201.91	4.98629	(10032206)		
465303.41	3808201.91	4.90622	(10032206)	465323.41
3808201.91	4.82789	(10032206)		
465343.41	3808201.91	4.75156	(10032206)	465363.41
3808201.91	4.67747	(10032206)		
465383.41	3808201.91	4.60493	(10032206)	465403.41
3808201.91	4.53493	(10032206)		
465423.41	3808201.91	4.47084	(10032206)	465443.41
3808201.91	4.40822	(10032206)		
465463.41	3808201.91	4.34635	(10032206)	465483.41
3808201.91	4.28228	(10032206)		
465503.41	3808201.91	4.22263	(10032206)	465523.41
3808201.91	4.16563	(10032206)		

465543.41	3808201.91	4.10988	(10032206)	465563.41
3808201.91	4.05241	(10032206)		
465583.41	3808201.91	3.99575	(10032206)	465603.41
3808201.91	3.94370	(10032206)		
465623.41	3808201.91	3.89021	(10032206)	465643.41
3808201.91	3.83744	(10032206)		
465663.41	3808201.91	3.78874	(10032206)	465683.41
3808201.91	3.73842	(10032206)		
465703.41	3808201.91	3.68811	(10032206)	464943.41
3808221.91	6.80253	(10032206)		
464963.41	3808221.91	6.68140	(10032206)	464983.41
3808221.91	6.55805	(10032206)		
465003.41	3808221.91	6.43841	(10032206)	465023.41
3808221.91	6.31497	(10032206)		
465043.41	3808221.91	6.19327	(10032206)	465063.41
3808221.91	6.08188	(10032206)		
465083.41	3808221.91	5.96654	(10032206)	465103.41
3808221.91	5.85362	(10032206)		
465123.41	3808221.91	5.75455	(10032206)	465143.41
3808221.91	5.65156	(10032206)		
465163.41	3808221.91	5.54968	(10032206)	465183.41
3808221.91	5.45666	(10032206)		
465203.41	3808221.91	5.36126	(10032206)	465223.41
3808221.91	5.26763	(10032206)		
465243.41	3808221.91	5.18225	(10032206)	465263.41
3808221.91	5.09445	(10032206)		
465283.41	3808221.91	5.00817	(10032206)	465303.41
3808221.91	4.92959	(10032206)		
465323.41	3808221.91	4.84857	(10032206)	465343.41
3808221.91	4.76886	(10032206)		
465363.41	3808221.91	4.69636	(10032206)	465383.41
3808221.91	4.62141	(10032206)		
465403.41	3808221.91	4.54791	(10032206)	465423.41
3808221.91	4.48276	(10032206)		
465443.41	3808221.91	4.41914	(10032206)	465463.41
3808221.91	4.35701	(10032206)		
465483.41	3808221.91	4.29630	(10032206)	465503.41
3808221.91	4.23579	(10032206)		
465523.41	3808221.91	4.17655	(10032206)	465543.41
3808221.91	4.11994	(10032206)		
465563.41	3808221.91	4.06000	(10032206)	465583.41
3808221.91	4.00058	(10032206)		
465603.41	3808221.91	3.94787	(10032206)	465623.41
3808221.91	3.89524	(10032206)		
465643.41	3808221.91	3.84365	(10032206)	465663.41
3808221.91	3.79431	(10032206)		
465683.41	3808221.91	3.74191	(10032206)	465703.41
3808221.91	3.68968	(10032206)		
464963.41	3808241.91	6.71314	(10032206)	464983.41
3808241.91	6.58714	(10032206)		

465003.41	3808241.91	6.46502	(10032206)	465023.41
3808241.91	6.34515	(10032206)		
465043.41	3808241.91	6.22688	(10032206)	465063.41
3808241.91	6.10389	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 700

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465083.41	3808241.91	5.98360	(10032206)	465103.41
3808241.91	5.86854	(10032206)		
465123.41	3808241.91	5.76783	(10032206)	465143.41
3808241.91	5.66864	(10032206)		
465163.41	3808241.91	5.57041	(10032206)	465183.41
3808241.91	5.46746	(10032206)		
465203.41	3808241.91	5.37344	(10032206)	465223.41
3808241.91	5.28348	(10032206)		
465243.41	3808241.91	5.18887	(10032206)	465263.41
3808241.91	5.10256	(10032206)		
465283.41	3808241.91	5.01994	(10032206)	465303.41
3808241.91	4.93275	(10032206)		
465323.41	3808241.91	4.85330	(10032206)	465343.41
3808241.91	4.77722	(10032206)		
465363.41	3808241.91	4.69666	(10032206)	465383.41
3808241.91	4.62333	(10032206)		
465403.41	3808241.91	4.55460	(10032206)	465423.41

3808241.91	4.48859	(10032206)		
465443.41	3808241.91	4.42416	(10032206)	465463.41
3808241.91	4.36124	(10032206)		
465483.41	3808241.91	4.29980	(10032206)	465503.41
3808241.91	4.23459	(10032206)		
465523.41	3808241.91	4.16990	(10032206)	465543.41
3808241.91	4.11289	(10032206)		
465563.41	3808241.91	4.05640	(10032206)	465583.41
3808241.91	4.00094	(10032206)		
465603.41	3808241.91	3.94770	(10032206)	465623.41
3808241.91	3.89102	(10032206)		
465643.41	3808241.91	3.83469	(10032206)	465663.41
3808241.91	3.78509	(10032206)		
465683.41	3808241.91	3.73586	(10032206)	465703.41
3808241.91	3.68637	(10032206)		
464983.41	3808261.91	6.56385	(10032206)	465003.41
3808261.91	6.44939	(10032206)		
465023.41	3808261.91	6.33289	(10032206)	465043.41
3808261.91	6.21593	(10032206)		
465063.41	3808261.91	6.09724	(10032206)	465083.41
3808261.91	5.98225	(10032206)		
465103.41	3808261.91	5.87058	(10032206)	465123.41
3808261.91	5.76150	(10032206)		
465143.41	3808261.91	5.66062	(10032206)	465163.41
3808261.91	5.56362	(10032206)		
465183.41	3808261.91	5.46472	(10032206)	465203.41
3808261.91	5.36814	(10032206)		
465223.41	3808261.91	5.27433	(10032206)	465243.41
3808261.91	5.18352	(10032206)		
465263.41	3808261.91	5.09907	(10032206)	465283.41
3808261.91	5.01672	(10032206)		
465303.41	3808261.91	4.92731	(10032206)	465323.41
3808261.91	4.84378	(10032206)		
465343.41	3808261.91	4.76444	(10032206)	465363.41
3808261.91	4.68753	(10032206)		
465383.41	3808261.91	4.61232	(10032206)	465403.41
3808261.91	4.53983	(10032206)		
465423.41	3808261.91	4.47356	(10032206)	465443.41
3808261.91	4.40888	(10032206)		
465463.41	3808261.91	4.34590	(10032206)	465483.41
3808261.91	4.28426	(10032206)		
465503.41	3808261.91	4.22110	(10032206)	465523.41
3808261.91	4.15893	(10032206)		
465543.41	3808261.91	4.10165	(10032206)	465563.41
3808261.91	4.04263	(10032206)		
465583.41	3808261.91	3.98449	(10032206)	465603.41
3808261.91	3.93116	(10032206)		
465623.41	3808261.91	3.87637	(10032206)	465643.41
3808261.91	3.82166	(10032206)		
465663.41	3808261.91	3.76784	(10032206)	465683.41

3808261.91	3.71800	(10032206)		
465703.41	3808261.91	3.66981	(10032206)	465003.41
3808281.91	6.40361	(10032206)		
465023.41	3808281.91	6.29087	(10032206)	465043.41
3808281.91	6.17746	(10032206)		
465063.41	3808281.91	6.06257	(10032206)	465083.41
3808281.91	5.95487	(10032206)		
465103.41	3808281.91	5.84993	(10032206)	465123.41
3808281.91	5.73694	(10032206)		
465143.41	3808281.91	5.63440	(10032206)	465163.41
3808281.91	5.53799	(10032206)		
465183.41	3808281.91	5.44226	(10032206)	465203.41
3808281.91	5.34411	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 701

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808281.91	5.24826	(10032206)	465243.41
3808281.91	5.16302	(10032206)		
465263.41	3808281.91	5.07852	(10032206)	465283.41
3808281.91	4.99413	(10032206)		
465303.41	3808281.91	4.90457	(10032206)	465323.41
3808281.91	4.81893	(10032206)		
465343.41	3808281.91	4.73758	(10032206)	465363.41
3808281.91	4.66371	(10032206)		

465383.41	3808281.91	4.58737	(10032206)	465403.41
3808281.91	4.51226	(10032206)		
465423.41	3808281.91	4.44413	(10032206)	465443.41
3808281.91	4.37890	(10032206)		
465463.41	3808281.91	4.31884	(10032206)	465483.41
3808281.91	4.25734	(10032206)		
465503.41	3808281.91	4.19729	(10032206)	465523.41
3808281.91	4.13838	(10032206)		
465543.41	3808281.91	4.07941	(10032206)	465563.41
3808281.91	4.01827	(10032206)		
465583.41	3808281.91	3.95822	(10032206)	465603.41
3808281.91	3.90505	(10032206)		
465623.41	3808281.91	3.85198	(10032206)	465643.41
3808281.91	3.79881	(10032206)		
465663.41	3808281.91	3.74288	(10032206)	465683.41
3808281.91	3.69147	(10032206)		
465703.41	3808281.91	3.64303	(10032206)	465003.41
3808301.91	6.33506	(10032206)		
465023.41	3808301.91	6.22764	(10032206)	465043.41
3808301.91	6.12208	(10032206)		
465063.41	3808301.91	5.99757	(10032206)	465083.41
3808301.91	5.89453	(10032206)		
465103.41	3808301.91	5.79987	(10032206)	465123.41
3808301.91	5.69637	(10032206)		
465143.41	3808301.91	5.59714	(10032206)	465163.41
3808301.91	5.49945	(10032206)		
465183.41	3808301.91	5.39551	(10032206)	465203.41
3808301.91	5.30083	(10032206)		
465223.41	3808301.91	5.21216	(10032206)	465243.41
3808301.91	5.12720	(10032206)		
465263.41	3808301.91	5.03783	(10032206)	465283.41
3808301.91	4.94756	(10032206)		
465303.41	3808301.91	4.85844	(10032206)	465323.41
3808301.91	4.77830	(10032206)		
465343.41	3808301.91	4.70214	(10032206)	465363.41
3808301.91	4.62141	(10032206)		
465383.41	3808301.91	4.54807	(10032206)	465403.41
3808301.91	4.47790	(10032206)		
465423.41	3808301.91	4.40328	(10032206)	465443.41
3808301.91	4.33661	(10032206)		
465463.41	3808301.91	4.28663	(10032206)	465483.41
3808301.91	4.22543	(10032206)		
465503.41	3808301.91	4.16568	(10032206)	465523.41
3808301.91	4.10602	(10032206)		
465543.41	3808301.91	4.04167	(10032206)	465563.41
3808301.91	3.98302	(10032206)		
465583.41	3808301.91	3.92790	(10032206)	465603.41
3808301.91	3.87503	(10032206)		
465623.41	3808301.91	3.81865	(10032206)	465643.41
3808301.91	3.76253	(10032206)		

465663.41	3808301.91	3.71217	(10032206)	465683.41
3808301.91	3.65925	(10032206)		
465703.41	3808301.91	3.60697	(10032206)	465043.41
3808321.91	6.03397	(10032206)		
465063.41	3808321.91	5.92575	(10032206)	465083.41
3808321.91	5.82455	(10032206)		
465103.41	3808321.91	5.72702	(10032206)	465123.41
3808321.91	5.62678	(10032206)		
465143.41	3808321.91	5.52946	(10032206)	465163.41
3808321.91	5.43379	(10032206)		
465183.41	3808321.91	5.33613	(10032206)	465203.41
3808321.91	5.24526	(10032206)		
465223.41	3808321.91	5.15769	(10032206)	465243.41
3808321.91	5.06727	(10032206)		
465263.41	3808321.91	4.97595	(10032206)	465283.41
3808321.91	4.88652	(10032206)		
465303.41	3808321.91	4.80436	(10032206)	465323.41
3808321.91	4.72412	(10032206)		
465343.41	3808321.91	4.64607	(10032206)	465363.41
3808321.91	4.57045	(10032206)		
465383.41	3808321.91	4.49652	(10032206)	465403.41
3808321.91	4.42454	(10032206)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 702

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -					
	465423.41	3808321.91	4.35475	(10032206)	465443.41
3808321.91	4.29004	(10032206)			
	465463.41	3808321.91	4.23529	(10032206)	465483.41
3808321.91	4.17493	(10032206)			
	465503.41	3808321.91	4.11599	(10032206)	465523.41
3808321.91	4.05765	(10032206)			
	465543.41	3808321.91	3.99730	(10032206)	465563.41
3808321.91	3.94124	(10032206)			
	465583.41	3808321.91	3.88698	(10032206)	465603.41
3808321.91	3.83042	(10032206)			
	465623.41	3808321.91	3.77543	(10032206)	465643.41
3808321.91	3.72186	(10032206)			
	465663.41	3808321.91	3.66917	(10032206)	465683.41
3808321.91	3.61792	(10032206)			
	465703.41	3808321.91	3.56794	(10032206)	465083.41
3808341.91	5.73413	(10032206)			
	465103.41	3808341.91	5.63350	(10032206)	465123.41
3808341.91	5.53832	(10032206)			
	465143.41	3808341.91	5.44379	(10032206)	465163.41
3808341.91	5.35116	(10032206)			
	465183.41	3808341.91	5.26116	(10032206)	465203.41
3808341.91	5.17204	(10032206)			
	465223.41	3808341.91	5.08347	(10032206)	465243.41
3808341.91	4.99161	(10032206)			
	465263.41	3808341.91	4.90062	(10032206)	465283.41
3808341.91	4.81323	(10032206)			
	465303.41	3808341.91	4.73577	(10032206)	465323.41
3808341.91	4.65424	(10032206)			
	465343.41	3808341.91	4.57413	(10032206)	465363.41
3808341.91	4.50506	(10032206)			
	465383.41	3808341.91	4.43209	(10032206)	465403.41
3808341.91	4.35949	(10032206)			
	465423.41	3808341.91	4.29382	(10032206)	465443.41
3808341.91	4.23098	(10032206)			
	465463.41	3808341.91	4.17325	(10032206)	465483.41
3808341.91	4.11403	(10032206)			
	465503.41	3808341.91	4.05621	(10032206)	465523.41
3808341.91	3.99948	(10032206)			
	465543.41	3808341.91	3.94264	(10032206)	465563.41
3808341.91	3.88829	(10032206)			
	465583.41	3808341.91	3.83444	(10032206)	465603.41
3808341.91	3.77648	(10032206)			
	465623.41	3808341.91	3.72327	(10032206)	465643.41
3808341.91	3.67200	(10032206)			
	465663.41	3808341.91	3.61795	(10032206)	465683.41
3808341.91	3.56836	(10032206)			
	465703.41	3808341.91	3.52057	(10032206)	465103.41
3808361.91	5.52173	(10032206)			
	465123.41	3808361.91	5.43843	(10032206)	465143.41

3808361.91	5.34926	(10032206)		
465163.41	3808361.91	5.25885	(10032206)	465183.41
3808361.91	5.17099	(10032206)		
465203.41	3808361.91	5.07852	(10032206)	465223.41
3808361.91	4.98694	(10032206)		
465243.41	3808361.91	4.90504	(10032206)	465263.41
3808361.91	4.81869	(10032206)		
465283.41	3808361.91	4.73188	(10032206)	465303.41
3808361.91	4.64865	(10032206)		
465323.41	3808361.91	4.56687	(10032206)	465343.41
3808361.91	4.48864	(10032206)		
465363.41	3808361.91	4.42141	(10032206)	465383.41
3808361.91	4.35476	(10032206)		
465403.41	3808361.91	4.28826	(10032206)	465423.41
3808361.91	4.21728	(10032206)		
465443.41	3808361.91	4.15408	(10032206)	465463.41
3808361.91	4.10731	(10032206)		
465483.41	3808361.91	4.04936	(10032206)	465503.41
3808361.91	3.99278	(10032206)		
465523.41	3808361.91	3.93621	(10032206)	465543.41
3808361.91	3.87492	(10032206)		
465563.41	3808361.91	3.81997	(10032206)	465583.41
3808361.91	3.76854	(10032206)		
465603.41	3808361.91	3.71718	(10032206)	465623.41
3808361.91	3.66317	(10032206)		
465643.41	3808361.91	3.60972	(10032206)	465663.41
3808361.91	3.56192	(10032206)		
465683.41	3808361.91	3.51153	(10032206)	465703.41
3808361.91	3.46161	(10032206)		
465183.41	3808381.91	5.04718	(10032206)	465203.41
3808381.91	4.95904	(10032206)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 703

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM ₁₀ IN MICROGRAMS/M**3		
		**		
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465223.41	3808381.91	4.87343	(10032206)	465243.41
3808381.91	4.78954	(10032206)		
465263.41	3808381.91	4.70452	(10032206)	465283.41
3808381.91	4.62101	(10032206)		
465303.41	3808381.91	4.54490	(10032206)	465323.41
3808381.91	4.46686	(10032206)		
465343.41	3808381.91	4.39093	(10032206)	465363.41
3808381.91	4.32590	(10032206)		
465383.41	3808381.91	4.26248	(10032206)	465403.41
3808381.91	4.19984	(10032206)		
465423.41	3808381.91	4.13473	(10032206)	465443.41
3808381.91	4.07448	(10032206)		
465463.41	3808381.91	4.02388	(10032206)	465483.41
3808381.91	3.96769	(10032206)		
465503.41	3808381.91	3.91281	(10032206)	465523.41
3808381.91	3.85840	(10032206)		
465543.41	3808381.91	3.80195	(10032206)	465563.41
3808381.91	3.74659	(10032206)		
465583.41	3808381.91	3.69329	(10032206)	465603.41
3808381.91	3.64462	(10032206)		
465623.41	3808381.91	3.59443	(10032206)	465643.41
3808381.91	3.54421	(10032206)		
465663.41	3808381.91	3.49479	(10032206)	465683.41
3808381.91	3.44672	(10032206)		
465703.41	3808381.91	3.39984	(10032206)	465303.41
3808401.91	4.50889	(09031319)		
465323.41	3808401.91	4.42188	(09031319)	465343.41
3808401.91	4.33607	(09031319)		
465363.41	3808401.91	4.25984	(09031319)	465383.41
3808401.91	4.18564	(09031319)		
465403.41	3808401.91	4.11340	(09031319)	465423.41
3808401.91	4.04305	(09031319)		
465443.41	3808401.91	3.98429	(10032206)	465463.41
3808401.91	3.92902	(10032206)		
465483.41	3808401.91	3.87489	(10032206)	465503.41
3808401.91	3.82200	(10032206)		
465523.41	3808401.91	3.77032	(10032206)	465543.41
3808401.91	3.71979	(10032206)		
465563.41	3808401.91	3.66581	(10032206)	465583.41
3808401.91	3.61224	(10032206)		

465603.41	3808401.91	3.56522	(10032206)	465623.41
3808401.91	3.51817	(10032206)		
465643.41	3808401.91	3.47088	(10032206)	465663.41
3808401.91	3.42080	(10032206)		
465683.41	3808401.91	3.37499	(10032206)	465703.41
3808401.91	3.33084	(10032206)		
465323.41	3808421.91	4.57942	(09031319)	465343.41
3808421.91	4.49723	(09031319)		
465363.41	3808421.91	4.41846	(09031319)	465383.41
3808421.91	4.34176	(09031319)		
465403.41	3808421.91	4.26707	(09031319)	465423.41
3808421.91	4.19430	(09031319)		
465443.41	3808421.91	4.12341	(09031319)	465463.41
3808421.91	4.05432	(09031319)		
465483.41	3808421.91	3.98696	(09031319)	465503.41
3808421.91	3.92129	(09031319)		
465523.41	3808421.91	3.85725	(09031319)	465543.41
3808421.91	3.79478	(09031319)		
465563.41	3808421.91	3.73305	(09031319)	465583.41
3808421.91	3.67259	(09031319)		
465603.41	3808421.91	3.61458	(09031319)	465623.41
3808421.91	3.55330	(09031319)		
465643.41	3808421.91	3.49250	(09031319)	465663.41
3808421.91	3.43759	(09031319)		
465683.41	3808421.91	3.38038	(09031319)	465703.41
3808421.91	3.32390	(09031319)		
465323.41	3808441.91	4.72582	(09031319)	465343.41
3808441.91	4.64404	(09031319)		
465363.41	3808441.91	4.56950	(09031319)	465383.41
3808441.91	4.49274	(09031319)		
465403.41	3808441.91	4.41590	(09031319)	465423.41
3808441.91	4.34102	(09031319)		
465443.41	3808441.91	4.26804	(09031319)	465463.41
3808441.91	4.19688	(09031319)		
465483.41	3808441.91	4.12750	(09031319)	465503.41
3808441.91	4.05983	(09031319)		
465523.41	3808441.91	3.99382	(09031319)	465543.41
3808441.91	3.92940	(09031319)		
465563.41	3808441.91	3.86654	(09031319)	465583.41
3808441.91	3.80518	(09031319)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 704

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***

			INCLUDING SOURCE(S):	L0005092	, L0005093
, L0005094	, L0005095	, L0005096	,		
	L0005097	, L0005098	, L0005099	, L0005100	, L0005101
, L0005102	, L0005103	, L0005104	,		
	L0005105	, L0005106	, L0005107	, L0005108	, L0005109
, L0005110	, L0005111	, L0005112	,		
	L0005113	, L0005114	, L0005115	, L0005116	, L0005117
, L0005118	, L0005119	, . . .	,		

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
465603.41	3808441.91	3.74526	(09031319)	465623.41
3808441.91	3.68122	(09031319)		
465643.41	3808441.91	3.61682	(09031319)	465663.41
3808441.91	3.55714	(09031319)		
465683.41	3808441.91	3.49915	(09031319)	465703.41
3808441.91	3.44336	(09031319)		
465343.41	3808461.91	4.77305	(09031319)	465363.41
3808461.91	4.70099	(09031319)		
465383.41	3808461.91	4.62541	(09031319)	465403.41
3808461.91	4.54899	(09031319)		
465423.41	3808461.91	4.47260	(09031319)	465443.41
3808461.91	4.39811	(09031319)		
465463.41	3808461.91	4.32561	(09031319)	465483.41
3808461.91	4.25472	(09031319)		
465503.41	3808461.91	4.18689	(09031319)	465523.41
3808461.91	4.12079	(09031319)		
465543.41	3808461.91	4.05483	(09031319)	465563.41
3808461.91	3.99042	(09031319)		
465583.41	3808461.91	3.92753	(09031319)	465603.41
3808461.91	3.86610	(09031319)		
465623.41	3808461.91	3.80039	(09031319)	465643.41
3808461.91	3.73352	(09031319)		
465663.41	3808461.91	3.66829	(09031319)	465683.41
3808461.91	3.61029	(09031319)		
465703.41	3808461.91	3.55592	(09031319)	465343.41
3808481.91	4.88100	(09031319)		
465363.41	3808481.91	4.80024	(09031319)	465383.41
3808481.91	4.72754	(09031319)		
465403.41	3808481.91	4.65740	(09031319)	465423.41
3808481.91	4.58034	(09031319)		
465443.41	3808481.91	4.50515	(09031319)	465463.41

3808481.91	4.43177	(09031319)		
465483.41	3808481.91	4.36014	(09031319)	465503.41
3808481.91	4.29622	(09031319)		
465523.41	3808481.91	4.23476	(09031319)	465543.41
3808481.91	4.16772	(09031319)		
465563.41	3808481.91	4.10223	(09031319)	465583.41
3808481.91	4.03825	(09031319)		
465603.41	3808481.91	3.97573	(09031319)	465623.41
3808481.91	3.90877	(09031319)		
465643.41	3808481.91	3.84058	(09031319)	465663.41
3808481.91	3.77403	(09031319)		
465683.41	3808481.91	3.71488	(09031319)	465703.41
3808481.91	3.65844	(09031319)		
465463.41	3808501.91	4.52921	(09031319)	465483.41
3808501.91	4.45146	(09031319)		
465503.41	3808501.91	4.38669	(09031319)	465523.41
3808501.91	4.32643	(09031319)		
465543.41	3808501.91	4.25903	(09031319)	465563.41
3808501.91	4.19648	(09031319)		
465583.41	3808501.91	4.13521	(09031319)	465603.41
3808501.91	4.06729	(09031319)		
465623.41	3808501.91	4.00123	(09031319)	465643.41
3808501.91	3.93606	(09031319)		
465663.41	3808501.91	3.86863	(09031319)	465683.41
3808501.91	3.80871	(09031319)		
465703.41	3808501.91	3.75127	(09031319)	465523.41
3808521.91	4.39976	(09031319)		
465543.41	3808521.91	4.33260	(09031319)	465563.41
3808521.91	4.27362	(09031319)		
465583.41	3808521.91	4.21566	(09031319)	465603.41
3808521.91	4.14485	(09031319)		
465623.41	3808521.91	4.07958	(09031319)	465643.41
3808521.91	4.01661	(09031319)		
465663.41	3808521.91	3.95049	(09031319)	465683.41
3808521.91	3.88958	(09031319)		
465703.41	3808521.91	3.83078	(09031319)	464239.31
3809562.31	7.44643	(10011407)		
464277.31	3809562.31	7.38700	(10011407)	463745.31
3809591.37	7.68183	(10010907)		
463783.31	3809591.37	7.85546	(10010907)	463821.31
3809591.37	7.86118	(10010907)		
463859.31	3809591.37	7.75562	(10010907)	463897.31
3809591.37	8.21307	(10022820)		
463935.31	3809591.37	8.46808	(10022820)	464239.31
3809591.37	7.20286	(10011407)		
464277.31	3809591.37	7.19620	(10011407)	463745.31
3809620.43	7.37369	(10010907)		
463783.31	3809620.43	7.57429	(10010907)	463821.31
3809620.43	7.63616	(10010907)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 705

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463859.31	3809620.43	7.53781	(10010907)	463897.31
3809620.43	7.84362	(10022820)		
463935.31	3809620.43	8.14811	(10022820)	463973.31
3809620.43	8.21498	(10022820)		
464011.31	3809620.43	8.08107	(10022820)	464049.31
3809620.43	7.86759	(09031705)		
464087.31	3809620.43	7.66583	(09040202)	464125.31
3809620.43	7.57847	(09040202)		
464163.31	3809620.43	7.35958	(09040202)	464201.31
3809620.43	7.05147	(09010420)		
464239.31	3809620.43	6.97579	(09010420)	464277.31
3809620.43	6.98615	(10011407)		
463745.31	3809649.49	7.07459	(10010907)	463783.31
3809649.49	7.32340	(10010907)		
463821.31	3809649.49	7.39913	(10010907)	463859.31
3809649.49	7.32724	(10010907)		
463897.31	3809649.49	7.48788	(10022820)	463935.31
3809649.49	7.81236	(10022820)		
463973.31	3809649.49	7.89719	(10022820)	464011.31
3809649.49	7.84269	(10022820)		
464049.31	3809649.49	7.65934	(09031705)	464087.31
3809649.49	7.45090	(09031705)		

464125.31	3809649.49	7.39844	(09040202)	464163.31
3809649.49	7.22622 (09040202)			
464201.31	3809649.49	6.94985	(09040202)	464239.31
3809649.49	6.82123 (09010420)			
464277.31	3809649.49	6.76684	(10011407)	464315.31
3809649.49	6.75088 (10011407)			
464353.31	3809649.49	6.65552	(10011407)	464391.31
3809649.49	6.46619 (10011407)			
464429.31	3809649.49	6.55280	(10022819)	464467.31
3809649.49	6.57001 (10022819)			
464505.31	3809649.49	6.49896	(10022819)	463745.31
3809678.55	6.77348 (10010907)			
463783.31	3809678.55	7.03987	(10010907)	463821.31
3809678.55	7.17253 (10010907)			
463859.31	3809678.55	7.11098	(10010907)	463897.31
3809678.55	7.14612 (10022820)			
463935.31	3809678.55	7.49441	(10022820)	463973.31
3809678.55	7.63349 (10022820)			
464011.31	3809678.55	7.60626	(10022820)	464049.31
3809678.55	7.46111 (10022820)			
464087.31	3809678.55	7.31818	(09031705)	464125.31
3809678.55	7.20912 (09040202)			
464163.31	3809678.55	7.09258	(09040202)	464201.31
3809678.55	6.87803 (09040202)			
464239.31	3809678.55	6.64665	(09010420)	464277.31
3809678.55	6.54242 (09010420)			
464315.31	3809678.55	6.57232	(10011407)	464353.31
3809678.55	6.52904 (10011407)			
464391.31	3809678.55	6.38615	(10011407)	464429.31
3809678.55	6.31756 (10022819)			
464467.31	3809678.55	6.38591	(10022819)	464505.31
3809678.55	6.34954 (10022819)			
463745.31	3809707.61	6.50805	(10010907)	463783.31
3809707.61	6.77454 (10010907)			
463821.31	3809707.61	6.92136	(10010907)	463859.31
3809707.61	6.91472 (10010907)			
463897.31	3809707.61	6.82103	(10022820)	463935.31
3809707.61	7.18352 (10022820)			
463973.31	3809707.61	7.37383	(10022820)	464011.31
3809707.61	7.39540 (10022820)			
464049.31	3809707.61	7.30083	(10022820)	464087.31
3809707.61	7.15783 (09031705)			
464125.31	3809707.61	7.01336	(09040202)	464163.31
3809707.61	6.95848 (09040202)			
464201.31	3809707.61	6.76881	(09040202)	464239.31
3809707.61	6.48628 (09040202)			
464277.31	3809707.61	6.40782	(09010420)	464315.31
3809707.61	6.38975 (10011407)			
464353.31	3809707.61	6.36954	(10011407)	464391.31
3809707.61	6.27902 (10011407)			

464429.31	3809707.61	6.08974	(10011407)	464467.31
3809707.61	6.17059	(10022819)		
464505.31	3809707.61	6.19507	(10022819)	463745.31
3809736.67	6.28038	(10010907)		
463783.31	3809736.67	6.52713	(10010907)	463821.31
3809736.67	6.66183	(10010907)		
463859.31	3809736.67	6.68917	(10010907)	463897.31
3809736.67	6.57948	(10010907)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 706

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

463935.31	3809736.67	6.86062	(10022820)	463973.31
3809736.67	7.11279	(10022820)		
464011.31	3809736.67	7.20899	(10022820)	464049.31
3809736.67	7.13691	(10022820)		
464087.31	3809736.67	7.00743	(09031705)	464125.31
3809736.67	6.85255	(09031705)		
464163.31	3809736.67	6.81614	(09040202)	464201.31
3809736.67	6.66268	(09040202)		
464239.31	3809736.67	6.43147	(09040202)	464277.31
3809736.67	6.27128	(09010420)		
464315.31	3809736.67	6.18004	(10011407)	464353.31
3809736.67	6.21066	(10011407)		
464391.31	3809736.67	6.15924	(10011407)	464429.31

3809736.67	6.01499 (10011407)		
464467.31	3809736.67	5.95632 (10022819)	464505.31
3809736.67	6.02587 (10022819)		
463745.31	3809765.73	6.06889 (10010907)	463783.31
3809765.73	6.31325 (10010907)		
463821.31	3809765.73	6.44570 (10010907)	463859.31
3809765.73	6.47903 (10010907)		
463897.31	3809765.73	6.40431 (10010907)	463935.31
3809765.73	6.55332 (10022820)		
463973.31	3809765.73	6.79889 (10022820)	464011.31
3809765.73	6.98986 (10022820)		
464049.31	3809765.73	6.99243 (10022820)	464087.31
3809765.73	6.84343 (09031705)		
464125.31	3809765.73	6.74696 (09031705)	464163.31
3809765.73	6.66519 (09040202)		
464201.31	3809765.73	6.55456 (09040202)	464239.31
3809765.73	6.36633 (09040202)		
464277.31	3809765.73	6.12756 (09010420)	464315.31
3809765.73	6.05169 (09010420)		
464353.31	3809765.73	6.04634 (10011407)	464391.31
3809765.73	6.02208 (10011407)		
464429.31	3809765.73	5.93227 (10011407)	464467.31
3809765.73	5.77398 (10011407)		
464505.31	3809765.73	5.82883 (10022819)	463745.31
3809794.79	5.86833 (10010907)		
463783.31	3809794.79	6.09914 (10010907)	463821.31
3809794.79	6.24065 (10010907)		
463859.31	3809794.79	6.27347 (10010907)	463897.31
3809794.79	6.21480 (10010907)		
463935.31	3809794.79	6.25460 (10022820)	463973.31
3809794.79	6.51422 (10022820)		
464011.31	3809794.79	6.72071 (10022820)	464049.31
3809794.79	6.83050 (10022820)		
464087.31	3809794.79	6.72125 (10022820)	464125.31
3809794.79	6.61235 (09031705)		
464163.31	3809794.79	6.48683 (09040202)	464201.31
3809794.79	6.43545 (09040202)		
464239.31	3809794.79	6.27576 (09040202)	464277.31
3809794.79	6.03046 (09040202)		
464315.31	3809794.79	5.93394 (09010420)	464353.31
3809794.79	5.85707 (10011407)		
464391.31	3809794.79	5.88163 (10011407)	464429.31
3809794.79	5.83706 (10011407)		
464467.31	3809794.79	5.70298 (10011407)	464505.31
3809794.79	5.62966 (10022819)		
463745.31	3809823.85	5.69793 (09102505)	463783.31
3809823.85	5.89715 (10010907)		
463821.31	3809823.85	6.02119 (10010907)	463859.31
3809823.85	6.07442 (10010907)		
463897.31	3809823.85	6.02303 (10010907)	463935.31

3809823.85	5.96171	(10022820)		
463973.31	3809823.85	6.24306	(10022820)	464011.31
3809823.85	6.45009	(10022820)		
464049.31	3809823.85	6.59487	(10022820)	464087.31
3809823.85	6.58201	(10022820)		
464125.31	3809823.85	6.48028	(09031705)	464163.31
3809823.85	6.33637	(09031705)		
464201.31	3809823.85	6.29079	(09040202)	464239.31
3809823.85	6.18003	(09040202)		
464277.31	3809823.85	5.97518	(09040202)	464315.31
3809823.85	5.79315	(09010420)		
464353.31	3809823.85	5.71987	(09010420)	464391.31
3809823.85	5.72962	(10011407)		
464429.31	3809823.85	5.71172	(10011407)	464467.31
3809823.85	5.62157	(10011407)		
464505.31	3809823.85	5.45762	(10011407)	463745.31
3809852.91	5.59367	(09102505)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 707

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463783.31	3809852.91	5.72765	(10010907)	463821.31
3809852.91	5.83459	(10010907)		
463859.31	3809852.91	5.89145	(10010907)	463897.31
3809852.91	5.84006	(10010907)		

463935.31	3809852.91	5.69322	(10010907)	463973.31
3809852.91	5.98041 (10022820)			
464011.31	3809852.91	6.19348	(10022820)	464049.31
3809852.91	6.34655 (10022820)			
464087.31	3809852.91	6.37813	(10022820)	464125.31
3809852.91	6.29313 (09031705)			
464163.31	3809852.91	6.19439	(09031705)	464201.31
3809852.91	6.11190 (09040202)			
464239.31	3809852.91	6.04953	(09040202)	464277.31
3809852.91	5.89231 (09040202)			
464315.31	3809852.91	5.64896	(09040202)	464353.31
3809852.91	5.60552 (09010420)			
464391.31	3809852.91	5.56142	(10011407)	464429.31
3809852.91	5.58027 (10011407)			
464467.31	3809852.91	5.52197	(10011407)	464505.31
3809852.91	5.39845 (10011407)			
463745.31	3809881.97	5.50024	(09102505)	463783.31
3809881.97	5.56204 (10010907)			
463821.31	3809881.97	5.67823	(10010907)	463859.31
3809881.97	5.72781 (10010907)			
463897.31	3809881.97	5.67666	(10010907)	463935.31
3809881.97	5.54031 (10010907)			
463973.31	3809881.97	5.73342	(10022820)	464011.31
3809881.97	5.96145 (10022820)			
464049.31	3809881.97	6.11754	(10022820)	464087.31
3809881.97	6.16165 (10022820)			
464125.31	3809881.97	6.09002	(10022820)	464163.31
3809881.97	6.01262 (09031705)			
464201.31	3809881.97	5.91781	(09040202)	464239.31
3809881.97	5.88933 (09040202)			
464277.31	3809881.97	5.78404	(09040202)	464315.31
3809881.97	5.59787 (09040202)			
464353.31	3809881.97	5.48562	(09010420)	464391.31
3809881.97	5.41940 (09010420)			
464429.31	3809881.97	5.44034	(10011407)	464467.31
3809881.97	5.41327 (10011407)			
464505.31	3809881.97	5.33283	(10011407)	463745.31
3809911.03	5.39856 (09102505)			
463783.31	3809911.03	5.39290	(10010907)	463821.31
3809911.03	5.53010 (10010907)			
463859.31	3809911.03	5.57965	(10010907)	463897.31
3809911.03	5.53960 (10010907)			
463935.31	3809911.03	5.41196	(10010907)	463973.31
3809911.03	5.49644 (10022820)			
464011.31	3809911.03	5.73487	(10022820)	464049.31
3809911.03	5.90859 (10022820)			
464087.31	3809911.03	5.97308	(10022820)	464125.31
3809911.03	5.92731 (10022820)			
464163.31	3809911.03	5.85490	(09031705)	464201.31
3809911.03	5.75649 (09031705)			

464239.31	3809911.03	5.74312	(09040202)	464277.31
3809911.03	5.67985	(09040202)		
464315.31	3809911.03	5.52707	(09040202)	464353.31
3809911.03	5.35599	(09010420)		
464391.31	3809911.03	5.32112	(09010420)	464429.31
3809911.03	5.28857	(10011407)		
464467.31	3809911.03	5.30345	(10011407)	464505.31
3809911.03	5.24444	(10011407)		
463745.31	3809940.09	5.29218	(09102505)	463783.31
3809940.09	5.22949	(10010907)		
463821.31	3809940.09	5.38153	(10010907)	463859.31
3809940.09	5.43789	(10010907)		
463897.31	3809940.09	5.41553	(10010907)	463935.31
3809940.09	5.30676	(10010907)		
463973.31	3809940.09	5.28568	(10022820)	464011.31
3809940.09	5.51143	(10022820)		
464049.31	3809940.09	5.69207	(10022820)	464087.31
3809940.09	5.77696	(10022820)		
464125.31	3809940.09	5.76456	(10022820)	464163.31
3809940.09	5.70554	(09031705)		
464201.31	3809940.09	5.65610	(09031705)	464239.31
3809940.09	5.61358	(09040202)		
464277.31	3809940.09	5.57354	(09040202)	464315.31
3809940.09	5.45766	(09040202)		
464353.31	3809940.09	5.26401	(09040202)	464391.31
3809940.09	5.21402	(09010420)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 708

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109
 , L0005110 , L0005111 , L0005112 ,
 L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)
464429.31	3809940.09	5.14275	(09010420)	464467.31
3809940.09	5.17464 (10011407)			
464505.31	3809940.09	5.14690	(10011407)	463745.31
3809969.15	5.22735 (09102505)			
463783.31	3809969.15	5.08695	(10010907)	463821.31
3809969.15	5.23386 (10010907)			
463859.31	3809969.15	5.30279	(10010907)	463897.31
3809969.15	5.29324 (10010907)			
463935.31	3809969.15	5.20380	(10010907)	463973.31
3809969.15	5.09317 (10022820)			
464011.31	3809969.15	5.31393	(10022820)	464049.31
3809969.15	5.48040 (10022820)			
464087.31	3809969.15	5.58608	(10022820)	464125.31
3809969.15	5.61334 (10022820)			
464163.31	3809969.15	5.54686	(10022820)	464201.31
3809969.15	5.53957 (09031705)			
464239.31	3809969.15	5.48011	(09040202)	464277.31
3809969.15	5.46668 (09040202)			
464315.31	3809969.15	5.38261	(09040202)	464353.31
3809969.15	5.23040 (09040202)			
464391.31	3809969.15	5.11071	(09010420)	464429.31
3809969.15	5.06173 (09010420)			
464467.31	3809969.15	5.03596	(10011407)	464505.31
3809969.15	5.04670 (10011407)			
463745.31	3809998.21	5.21196	(09011120)	463783.31
3809998.21	4.97927 (10010907)			
463821.31	3809998.21	5.11048	(10010907)	463859.31
3809998.21	5.18003 (10010907)			
463897.31	3809998.21	5.18138	(10010907)	463935.31
3809998.21	5.10140 (10010907)			
463973.31	3809998.21	4.96351	(10010907)	464011.31
3809998.21	5.13731 (10022820)			
464049.31	3809998.21	5.30910	(10022820)	464087.31
3809998.21	5.42176 (10022820)			
464125.31	3809998.21	5.47686	(10022820)	464163.31
3809998.21	5.43970 (10022820)			
464201.31	3809998.21	5.41555	(09031705)	464239.31
3809998.21	5.34128 (09031705)			
464277.31	3809998.21	5.35844	(09040202)	464315.31
3809998.21	5.29969 (09040202)			
464353.31	3809998.21	5.17788	(09040202)	464391.31
3809998.21	4.99105 (09010420)			
464429.31	3809998.21	4.96701	(09010420)	464467.31
3809998.21	4.90109 (10011407)			
464505.31	3809998.21	4.92973	(10011407)	463745.31

3810027.27	5.20405	(09011120)		
463783.31	3810027.27	4.89562	(10010907)	463821.31
3810027.27	5.00987	(10010907)		
463859.31	3810027.27	5.07461	(10010907)	463897.31
3810027.27	5.08291	(10010907)		
463935.31	3810027.27	5.00586	(10010907)	463973.31
3810027.27	4.88368	(10010907)		
464011.31	3810027.27	4.97000	(10022820)	464049.31
3810027.27	5.15228	(10022820)		
464087.31	3810027.27	5.26613	(10022820)	464125.31
3810027.27	5.32871	(10022820)		
464163.31	3810027.27	5.32776	(10022820)	464201.31
3810027.27	5.29269	(09031705)		
464239.31	3810027.27	5.23926	(09031705)	464277.31
3810027.27	5.22733	(09040202)		
464315.31	3810027.27	5.21068	(09040202)	464353.31
3810027.27	5.11302	(09040202)		
464391.31	3810027.27	4.94360	(09040202)	464429.31
3810027.27	4.87133	(09010420)		
464467.31	3810027.27	4.81550	(09010420)	464505.31
3810027.27	4.80261	(10011407)		
463745.31	3810056.33	5.20381	(09011120)	463783.31
3810056.33	4.81888	(10010907)		
463821.31	3810056.33	4.91324	(10010907)	463859.31
3810056.33	4.97869	(10010907)		
463897.31	3810056.33	4.98591	(10010907)	463935.31
3810056.33	4.92141	(10010907)		
463973.31	3810056.33	4.80910	(10010907)	464011.31
3810056.33	4.80754	(10022820)		
464049.31	3810056.33	4.99055	(10022820)	464087.31
3810056.33	5.11799	(10022820)		
464125.31	3810056.33	5.18278	(10022820)	464163.31
3810056.33	5.20212	(10022820)		
464201.31	3810056.33	5.15467	(09031705)	464239.31
3810056.33	5.13924	(09031705)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 709

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK43 ***
 INCLUDING SOURCE(S): L0005092 , L0005093
 , L0005094 , L0005095 , L0005096 ,
 L0005097 , L0005098 , L0005099 , L0005100 , L0005101
 , L0005102 , L0005103 , L0005104 ,
 L0005105 , L0005106 , L0005107 , L0005108 , L0005109

, L0005110 , L0005111 , L0005112 ,
 , L0005113 , L0005114 , L0005115 , L0005116 , L0005117
 , L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464277.31	3810056.33	5.08405	(09040202)	464315.31
3810056.33	5.10146	(09040202)		
464353.31	3810056.33	5.04717	(09040202)	464391.31
3810056.33	4.91111	(09040202)		
464429.31	3810056.33	4.76868	(09010420)	464467.31
3810056.33	4.73013	(09010420)		
464505.31	3810056.33	4.67289	(10011407)	463745.31
3810085.39	5.20349	(09011120)		
463783.31	3810085.39	4.80416	(09102505)	463821.31
3810085.39	4.82929	(10010907)		
463859.31	3810085.39	4.88656	(10010907)	463897.31
3810085.39	4.89543	(10010907)		
463935.31	3810085.39	4.84414	(10010907)	463973.31
3810085.39	4.73784	(10010907)		
464011.31	3810085.39	4.64715	(10022820)	464049.31
3810085.39	4.82611	(10022820)		
464087.31	3810085.39	4.96808	(10022820)	464125.31
3810085.39	5.04787	(10022820)		
464163.31	3810085.39	5.07357	(10022820)	464201.31
3810085.39	5.03170	(10022820)		
464239.31	3810085.39	5.02374	(09031705)	464277.31
3810085.39	4.95482	(09031705)		
464315.31	3810085.39	4.98274	(09040202)	464353.31
3810085.39	4.95412	(09040202)		
464391.31	3810085.39	4.85283	(09040202)	464429.31
3810085.39	4.67625	(09040202)		
464467.31	3810085.39	4.63661	(09010420)	464505.31
3810085.39	4.56937	(09010420)		
463745.31	3810114.45	5.17376	(09011120)	463783.31
3810114.45	4.80564	(09102505)		
463821.31	3810114.45	4.76072	(10010907)	463859.31
3810114.45	4.82225	(10010907)		
463897.31	3810114.45	4.82007	(10010907)	463935.31
3810114.45	4.77163	(10010907)		
463973.31	3810114.45	4.66613	(10010907)	464011.31
3810114.45	4.50553	(10010907)		

464049.31	3810114.45	4.67723	(10022820)	464087.31
3810114.45	4.82256	(10022820)		
464125.31	3810114.45	4.90723	(10022820)	464163.31
3810114.45	4.93927	(10022820)		
464201.31	3810114.45	4.91417	(10022820)	464239.31
3810114.45	4.90445	(09031705)		
464277.31	3810114.45	4.86724	(09031705)	464315.31
3810114.45	4.84789	(09040202)		
464353.31	3810114.45	4.83411	(09040202)	464391.31
3810114.45	4.75365	(09040202)		
464429.31	3810114.45	4.62050	(09040202)	464467.31
3810114.45	4.51862	(09010420)		
464505.31	3810114.45	4.48844	(09010420)	463745.31
3810143.51	5.11034	(09011120)		
463783.31	3810143.51	4.77709	(09102505)	463821.31
3810143.51	4.72004	(10010907)		
463859.31	3810143.51	4.77285	(10010907)	463897.31
3810143.51	4.74577	(10010907)		
463935.31	3810143.51	4.69097	(10010907)	463973.31
3810143.51	4.58409	(10010907)		
464011.31	3810143.51	4.44657	(10010907)	464049.31
3810143.51	4.53554	(10022820)		
464087.31	3810143.51	4.67431	(10022820)	464125.31
3810143.51	4.77071	(10022820)		
464163.31	3810143.51	4.81659	(10022820)	464201.31
3810143.51	4.80440	(10022820)		
464239.31	3810143.51	4.76807	(09031705)	464277.31
3810143.51	4.77022	(09031705)		
464315.31	3810143.51	4.71634	(09040202)	464353.31
3810143.51	4.71016	(09040202)		
464391.31	3810143.51	4.66058	(09040202)	464429.31
3810143.51	4.54847	(09040202)		
464467.31	3810143.51	4.40728	(09010420)	464505.31
3810143.51	4.40249	(09010420)		
464383.78	3807479.29	15.81684	(09030119)	464355.03
3807405.24	11.84319	(09030119)		
464402.07	3807352.10	11.00621	(09030119)	464367.23
3807296.35	14.89250	(09011918)		
464358.52	3807237.99	18.22952	(09011918)	464385.52
3807161.33	18.64714	(09011918)		
463132.27	3810926.37	2.92917	(09040203)	463237.82
3811199.31	2.80092	(09011307)		
464944.35	3809244.89	6.31296	(10031906)	465700.32
3809255.46	4.08744	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK43 ***
INCLUDING SOURCE(S): L0005092 , L0005093
, L0005094 , L0005095 , L0005096 ,
L0005097 , L0005098 , L0005099 , L0005100 , L0005101
, L0005102 , L0005103 , L0005104 ,
L0005105 , L0005106 , L0005107 , L0005108 , L0005109
, L0005110 , L0005111 , L0005112 ,
L0005113 , L0005114 , L0005115 , L0005116 , L0005117
, L0005118 , L0005119 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465716.18	3808536.49	3.84015	(09031319)	465544.37
3808533.85	4.36556	(09031319)		
465420.13	3808486.27	4.61391	(09031319)	465348.77
3808491.56	4.90498	(09031319)		
465317.05	3808443.98	4.76696	(09031319)	465327.62
3808406.97	4.44481	(09031319)		
465108.23	3808369.97	5.45085	(10032206)	464999.86
3808301.24	6.35859	(10032206)		
464722.31	3807973.48	6.26566	(09010519)	464717.03
3807836.03	7.42158	(10102019)		
464344.33	3807936.47	14.65664	(10020118)	464349.61
3807780.52	14.13001	(10020118)		
464386.62	3807785.81	13.82711	(10020118)	464521.43
3807859.82	10.37497	(10020118)		
464537.28	3807719.72	11.56936	(10020118)	464426.27
3807613.99	9.94685	(09031219)		
464368.43	3807532.62	8.68723	(09030119)	464324.60
3807121.91	22.71375	(09011918)		
464123.31	3807123.54	22.99446	(10112518)	463930.13
3806909.26	19.82589	(09123118)		
463831.11	3806906.01	22.26663	(09123118)	463821.36
3806720.95	18.57281	(09123118)		
463727.21	3806727.44	16.77748	(09111519)	463598.97
3806334.59	14.52373	(09111519)		
463001.06	3806361.54	13.85299	(09032718)	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 711

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 , L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 , L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 , L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
462160.55	3809377.75	5.82075	(09022407)	462051.48
3809270.62	6.07891	(09022407)		
462014.47	3809029.10	6.32978	(10042219)	462010.58
3808855.75	6.94676	(10042219)		
461936.56	3808886.92	6.77390	(10042219)	461936.56
3808997.94	7.09041	(10042219)		
461909.30	3808768.10	4.53232	(10042219)	461835.28
3808894.71	6.15591	(10042219)		
461845.02	3808995.99	6.85047	(10042219)	461833.33
3809114.80	5.57994	(10042219)		
461843.07	3809210.24	4.80305	(09022407)	461809.96
3809297.89	4.88857	(09022407)		
461856.71	3809385.54	5.22237	(09022407)	461841.13
3809482.92	4.90910	(09022407)		
462004.74	3809379.69	5.64790	(09022407)	461763.22
3808793.43	3.96723	(10042219)		
461753.48	3808699.93	4.18024	(09021520)	461835.28
3808686.30	4.53989	(09021520)		
461823.60	3808579.17	7.22615	(09021520)	461761.27
3808585.02	6.78051	(09021520)		
462301.19	3807807.15	23.01892	(10021207)	462304.78
3807868.16	16.61877	(10021207)		

462216.84	3807882.52	9.65655	(10021207)	462116.34
3807886.11	9.47081 (09020119)			
462114.55	3807789.20	12.89066	(10021207)	462012.25
3807887.90	10.04715 (09020119)			
462008.66	3807975.84	12.59721	(09020119)	461917.14
3807972.25	12.14949 (09020119)			
461922.52	3808187.60	18.95368	(10021620)	461908.17
3808288.10	22.11541 (10021620)			
461848.94	3808377.83	16.69342	(10021620)	461831.00
3808494.48	9.89606 (09021520)			
462421.43	3808393.98	25.98444	(10021620)	462459.11
3808501.66	15.05650 (09021520)			
462437.58	3808580.62	10.93783	(09021520)	462654.73
3809189.00	8.83552 (09031106)			
462559.49	3809194.32	8.14360	(09031106)	465763.86
3807935.19	3.13519 (09010519)			
465819.84	3807935.19	3.06650	(09010519)	465875.82
3807935.19	2.99761 (09010519)			
465931.80	3807935.19	2.93009	(09010519)	465987.78
3807935.19	2.86308 (09010519)			
466043.76	3807935.19	2.79709	(09010519)	466099.74
3807935.19	2.73222 (09010519)			
466155.72	3807935.19	2.66859	(09010519)	466211.70
3807935.19	2.60620 (09010519)			
466267.68	3807935.19	2.54537	(09010519)	466323.66
3807935.19	2.48421 (09010519)			
466379.64	3807935.19	2.42661	(09010519)	466435.62
3807935.19	2.37042 (09010519)			
466491.60	3807935.19	2.31571	(09010519)	466547.58
3807935.19	2.25800 (09010519)			
466603.56	3807935.19	2.20541	(09010519)	466659.54
3807935.19	2.15430 (09010519)			
466715.52	3807935.19	2.10476	(09010519)	466771.50
3807935.19	2.05611 (09010519)			
466827.48	3807935.19	2.00712	(09010519)	466883.46
3807935.19	1.96106 (09010519)			
465763.86	3808001.41	3.42767	(09010519)	465819.84
3808001.41	3.33499 (09010519)			
465875.82	3808001.41	3.24395	(09010519)	465931.80
3808001.41	3.15537 (09010519)			
465987.78	3808001.41	3.07195	(09010519)	466043.76
3808001.41	2.98584 (09010519)			
466099.74	3808001.41	2.90939	(09010519)	466155.72
3808001.41	2.83125 (09010519)			
466211.70	3808001.41	2.75607	(09010519)	466267.68
3808001.41	2.68266 (09010519)			
466323.66	3808001.41	2.61116	(09010519)	466379.64
3808001.41	2.54207 (09010519)			
466435.62	3808001.41	2.47527	(09010519)	466491.60
3808001.41	2.41068 (09010519)			

466547.58	3808001.41	2.34689	(09010519)	466603.56
3808001.41	2.28718	(09010519)		
466659.54	3808001.41	2.22959	(09010519)	466715.52
3808001.41	2.16904	(09010519)		
466771.50	3808001.41	2.11528	(09010519)	466827.48
3808001.41	2.06280	(09010519)		
466883.46	3808001.41	2.01024	(09010519)	465763.86
3808067.63	3.67071	(09010519)		

*** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 712

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465819.84	3808067.63	3.55375	(09010519)	465875.82
3808067.63	3.44242	(09010519)		
465931.80	3808067.63	3.33539	(09010519)	465987.78
3808067.63	3.23268	(09010519)		
466043.76	3808067.63	3.13406	(09010519)	466099.74
3808067.63	3.03937	(09010519)		
466155.72	3808067.63	2.94870	(09010519)	466211.70
3808067.63	2.86110	(09010519)		
466267.68	3808067.63	2.77714	(09010519)	466323.66
3808067.63	2.69571	(09010519)		
466379.64	3808067.63	2.61751	(09010519)	466435.62
3808067.63	2.54548	(09010519)		
466491.60	3808067.63	2.47024	(09010519)	466547.58

3808067.63	2.40082 (09010519)		
466603.56	3808067.63	2.33417 (09010519)	466659.54
3808067.63	2.27020 (09010519)		
466715.52	3808067.63	2.20933 (09010519)	466771.50
3808067.63	2.15069 (09010519)		
466827.48	3808067.63	2.09211 (09010519)	466883.46
3808067.63	2.03467 (09010519)		
465763.86	3808133.85	3.84429 (09010519)	465819.84
3808133.85	3.70697 (09010519)		
465875.82	3808133.85	3.57705 (09010519)	465931.80
3808133.85	3.45342 (09010519)		
465987.78	3808133.85	3.34077 (09010519)	466043.76
3808133.85	3.22794 (09010519)		
466099.74	3808133.85	3.12053 (09010519)	466155.72
3808133.85	3.01807 (09010519)		
466211.70	3808133.85	2.92035 (09010519)	466267.68
3808133.85	2.82743 (09010519)		
466323.66	3808133.85	2.73895 (09010519)	466379.64
3808133.85	2.65509 (09010519)		
466435.62	3808133.85	2.57451 (09010519)	466491.60
3808133.85	2.49752 (09010519)		
466547.58	3808133.85	2.42252 (09010519)	466603.56
3808133.85	2.35178 (09010519)		
466659.54	3808133.85	2.28402 (09010519)	466715.52
3808133.85	2.21868 (09010519)		
466771.50	3808133.85	2.16034 (10032206)	466827.48
3808133.85	2.10915 (10032206)		
466883.46	3808133.85	2.05904 (10032206)	465763.86
3808200.07	3.93518 (09010519)		
465819.84	3808200.07	3.78251 (09010519)	465875.82
3808200.07	3.63851 (09010519)		
465931.80	3808200.07	3.50767 (09010519)	465987.78
3808200.07	3.37877 (09010519)		
466043.76	3808200.07	3.25688 (09010519)	466099.74
3808200.07	3.15150 (10032206)		
466155.72	3808200.07	3.05536 (10032206)	466211.70
3808200.07	2.96362 (10032206)		
466267.68	3808200.07	2.87609 (10032206)	466323.66
3808200.07	2.79653 (10032206)		
466379.64	3808200.07	2.71645 (10032206)	466435.62
3808200.07	2.63978 (10032206)		
466491.60	3808200.07	2.56638 (10032206)	466547.58
3808200.07	2.49608 (10032206)		
466603.56	3808200.07	2.42871 (10032206)	466659.54
3808200.07	2.36411 (10032206)		
466715.52	3808200.07	2.30226 (10032206)	466771.50
3808200.07	2.24190 (10032206)		
466827.48	3808200.07	2.18280 (10032206)	466883.46
3808200.07	2.12796 (10032206)		
465763.86	3808266.29	4.05021 (10032206)	465819.84

3808266.29	3.90773	(10032206)		
465875.82	3808266.29	3.77037	(10032206)	465931.80
3808266.29	3.63708	(10032206)		
465987.78	3808266.29	3.51105	(10032206)	466043.76
3808266.29	3.39176	(10032206)		
466099.74	3808266.29	3.27873	(10032206)	466155.72
3808266.29	3.17153	(10032206)		
466211.70	3808266.29	3.07012	(10032206)	466267.68
3808266.29	2.97589	(10032206)		
466323.66	3808266.29	2.88383	(10032206)	466379.64
3808266.29	2.79968	(10032206)		
466435.62	3808266.29	2.71661	(10032206)	466491.60
3808266.29	2.63501	(10032206)		
466547.58	3808266.29	2.55832	(10032206)	466603.56
3808266.29	2.48508	(10032206)		
466659.54	3808266.29	2.41741	(10032206)	466715.52
3808266.29	2.34911	(10032206)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 713

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466771.50	3808266.29	2.28593	(10032206)	466827.48
3808266.29	2.22368	(10032206)		
466883.46	3808266.29	2.16513	(10032206)	465763.86
3808332.51	4.16531	(10032206)		

465819.84	3808332.51	4.01344	(10032206)	465875.82
3808332.51	3.86025 (10032206)			
465931.80	3808332.51	3.71627	(10032206)	465987.78
3808332.51	3.58075 (10032206)			
466043.76	3808332.51	3.45292	(10032206)	466099.74
3808332.51	3.33238 (10032206)			
466155.72	3808332.51	3.22012	(10032206)	466211.70
3808332.51	3.11230 (10032206)			
466267.68	3808332.51	3.00975	(10032206)	466323.66
3808332.51	2.91883 (10032206)			
466379.64	3808332.51	2.82609	(10032206)	466435.62
3808332.51	2.73782 (10032206)			
466491.60	3808332.51	2.65389	(10032206)	466547.58
3808332.51	2.57392 (10032206)			
466603.56	3808332.51	2.50330	(10032206)	466659.54
3808332.51	2.43125 (10032206)			
466715.52	3808332.51	2.36168	(10032206)	466771.50
3808332.51	2.29118 (10032206)			
466827.48	3808332.51	2.22849	(10032206)	466883.46
3808332.51	2.16828 (10032206)			
465763.86	3808398.73	4.16151	(10032206)	465819.84
3808398.73	4.00378 (10032206)			
465875.82	3808398.73	3.84625	(10032206)	465931.80
3808398.73	3.69930 (10032206)			
465987.78	3808398.73	3.56066	(10032206)	466043.76
3808398.73	3.43020 (10032206)			
466099.74	3808398.73	3.31104	(10032206)	466155.72
3808398.73	3.19399 (10032206)			
466211.70	3808398.73	3.08359	(10032206)	466267.68
3808398.73	2.98734 (10032206)			
466323.66	3808398.73	2.88822	(10032206)	466379.64
3808398.73	2.79481 (10032206)			
466435.62	3808398.73	2.70908	(10032206)	466491.60
3808398.73	2.62530 (10032206)			
466547.58	3808398.73	2.54557	(10032206)	466603.56
3808398.73	2.47028 (10032206)			
466659.54	3808398.73	2.39800	(10032206)	466715.52
3808398.73	2.32783 (10032206)			
466771.50	3808398.73	2.26180	(10032206)	466827.48
3808398.73	2.19800 (10032206)			
466883.46	3808398.73	2.13741	(10032206)	465763.86
3808464.95	4.03857 (10032206)			
465819.84	3808464.95	3.88215	(10032206)	465875.82
3808464.95	3.72749 (10032206)			
465931.80	3808464.95	3.58489	(10032206)	465987.78
3808464.95	3.45186 (10032206)			
466043.76	3808464.95	3.32978	(10032206)	466099.74
3808464.95	3.20929 (10032206)			
466155.72	3808464.95	3.09577	(10032206)	466211.70
3808464.95	2.98885 (10032206)			

466267.68	3808464.95	2.89382	(10032206)	466323.66
3808464.95	2.79786	(10032206)		
466379.64	3808464.95	2.71051	(10032206)	466435.62
3808464.95	2.62469	(10032206)		
466491.60	3808464.95	2.54662	(10032206)	466547.58
3808464.95	2.46856	(10032206)		
466603.56	3808464.95	2.39439	(10032206)	466659.54
3808464.95	2.32384	(10032206)		
466715.52	3808464.95	2.25688	(10032206)	466771.50
3808464.95	2.19306	(10032206)		
466827.48	3808464.95	2.13206	(10032206)	466883.46
3808464.95	2.07384	(10032206)		
465763.86	3808531.17	3.81137	(10032206)	465819.84
3808531.17	3.65902	(10032206)		
465875.82	3808531.17	3.51644	(10032206)	465931.80
3808531.17	3.38266	(10032206)		
465987.78	3808531.17	3.26259	(10032206)	466043.76
3808531.17	3.14670	(10032206)		
466099.74	3808531.17	3.03787	(10032206)	466155.72
3808531.17	2.93252	(10032206)		
466211.70	3808531.17	2.83338	(10032206)	466267.68
3808531.17	2.74344	(10032206)		
466323.66	3808531.17	2.65750	(10032206)	466379.64
3808531.17	2.57365	(10032206)		
466435.62	3808531.17	2.49710	(10032206)	466491.60
3808531.17	2.42055	(10032206)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 714

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
466547.58	3808531.17	2.34783 (10032206)	466603.56
3808531.17	2.27861 (10032206)		
466659.54	3808531.17	2.21259 (10032206)	466715.52
3808531.17	2.15014 (10032206)		
466771.50	3808531.17	2.08966 (10032206)	466827.48
3808531.17	2.03350 (10032206)		
466883.46	3808531.17	1.97903 (10032206)	465763.86
3808597.39	4.13853 (09031319)		
465819.84	3808597.39	3.95477 (09031319)	465875.82
3808597.39	3.77327 (09031319)		
465931.80	3808597.39	3.59732 (09031319)	465987.78
3808597.39	3.44523 (09031319)		
466043.76	3808597.39	3.30416 (09031319)	466099.74
3808597.39	3.16557 (09031319)		
466155.72	3808597.39	3.03666 (09031319)	466211.70
3808597.39	2.91582 (09031319)		
466267.68	3808597.39	2.79997 (09031319)	466323.66
3808597.39	2.69590 (09031319)		
466379.64	3808597.39	2.59640 (09031319)	466435.62
3808597.39	2.49892 (09031319)		
466491.60	3808597.39	2.40870 (09031319)	466547.58
3808597.39	2.32214 (09031319)		
466603.56	3808597.39	2.23886 (09031319)	466659.54
3808597.39	2.15986 (09031319)		
466715.52	3808597.39	2.08523 (09031319)	466771.50
3808597.39	2.01424 (09031319)		
466827.48	3808597.39	1.94672 (09031319)	466883.46
3808597.39	1.88427 (09031319)		
465763.86	3808663.61	4.43605 (09031319)	465819.84
3808663.61	4.25107 (09031319)		
465875.82	3808663.61	4.06597 (09031319)	465931.80
3808663.61	3.89234 (09031319)		
465987.78	3808663.61	3.72968 (09031319)	466043.76
3808663.61	3.57600 (09031319)		
466099.74	3808663.61	3.43460 (09031319)	466155.72
3808663.61	3.29730 (09031319)		
466211.70	3808663.61	3.16711 (09031319)	466267.68
3808663.61	3.04476 (09031319)		
466323.66	3808663.61	2.93666 (09031319)	466379.64
3808663.61	2.82684 (09031319)		
466435.62	3808663.61	2.73002 (09031319)	466491.60
3808663.61	2.63093 (09031319)		
466547.58	3808663.61	2.53659 (09031319)	466603.56
3808663.61	2.44710 (09031319)		
466659.54	3808663.61	2.36205 (09031319)	466715.52

3808663.61	2.28186	(09031319)		
466771.50	3808663.61	2.20552	(09031319)	466827.48
3808663.61	2.13621	(09031319)		
466883.46	3808663.61	2.06631	(09031319)	465763.86
3808729.83	4.56690	(09031319)		
465819.84	3808729.83	4.39616	(09031319)	465875.82
3808729.83	4.21947	(09031319)		
465931.80	3808729.83	4.04890	(09031319)	465987.78
3808729.83	3.88818	(09031319)		
466043.76	3808729.83	3.73704	(09031319)	466099.74
3808729.83	3.59394	(09031319)		
466155.72	3808729.83	3.45847	(09031319)	466211.70
3808729.83	3.32937	(09031319)		
466267.68	3808729.83	3.20766	(09031319)	466323.66
3808729.83	3.09982	(09031319)		
466379.64	3808729.83	2.99271	(09031319)	466435.62
3808729.83	2.88811	(09031319)		
466491.60	3808729.83	2.79212	(09031319)	466547.58
3808729.83	2.69625	(09031319)		
466603.56	3808729.83	2.60496	(09031319)	466659.54
3808729.83	2.52449	(09031319)		
466715.52	3808729.83	2.44111	(09031319)	466771.50
3808729.83	2.36209	(09031319)		
466827.48	3808729.83	2.28836	(09031319)	466883.46
3808729.83	2.21625	(09031319)		
465763.86	3808796.05	4.60772	(09010419)	465819.84
3808796.05	4.39316	(09010419)		
465875.82	3808796.05	4.19003	(09031319)	465931.80
3808796.05	4.04326	(09031319)		
465987.78	3808796.05	3.90077	(09031319)	466043.76
3808796.05	3.76557	(09031319)		
466099.74	3808796.05	3.63614	(09031319)	466155.72
3808796.05	3.51226	(09031319)		
466211.70	3808796.05	3.39369	(09031319)	466267.68
3808796.05	3.27996	(09031319)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 715

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118

, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466323.66	3808796.05	3.17350	(09031319)	466379.64
3808796.05	3.07078	(09031319)		
466435.62	3808796.05	2.97589	(09031319)	466491.60
3808796.05	2.87967	(09031319)		
466547.58	3808796.05	2.78829	(09031319)	466603.56
3808796.05	2.70458	(09031319)		
466659.54	3808796.05	2.62013	(09031319)	466715.52
3808796.05	2.54094	(09031319)		
466771.50	3808796.05	2.46394	(09031319)	466827.48
3808796.05	2.38933	(09031319)		
466883.46	3808796.05	2.32102	(09031319)	465763.86
3808862.27	4.86640	(09010419)		
465819.84	3808862.27	4.66199	(09010419)	465875.82
3808862.27	4.45981	(09010419)		
465931.80	3808862.27	4.25173	(09010419)	465987.78
3808862.27	4.05304	(09010419)		
466043.76	3808862.27	3.86405	(09010419)	466099.74
3808862.27	3.68914	(09010419)		
466155.72	3808862.27	3.51417	(09010419)	466211.70
3808862.27	3.35260	(09010419)		
466267.68	3808862.27	3.24426	(09031319)	466323.66
3808862.27	3.14916	(09031319)		
466379.64	3808862.27	3.05981	(09031319)	466435.62
3808862.27	2.97237	(09031319)		
466491.60	3808862.27	2.88800	(09031319)	466547.58
3808862.27	2.80697	(09031319)		
466603.56	3808862.27	2.72631	(09031319)	466659.54
3808862.27	2.65274	(09031319)		
466715.52	3808862.27	2.57742	(09031319)	466771.50
3808862.27	2.50579	(09031319)		
466827.48	3808862.27	2.43801	(09031319)	466883.46
3808862.27	2.37194	(09031319)		
465763.86	3808928.49	4.87986	(09010419)	465819.84
3808928.49	4.71232	(09010419)		
465875.82	3808928.49	4.55345	(09010419)	465931.80
3808928.49	4.38800	(09010419)		

465987.78	3808928.49	4.22244	(09010419)	466043.76
3808928.49	4.06242 (09010419)			
466099.74	3808928.49	3.89070	(09010419)	466155.72
3808928.49	3.73164 (09010419)			
466211.70	3808928.49	3.57895	(09010419)	466267.68
3808928.49	3.43139 (09010419)			
466323.66	3808928.49	3.28944	(09010419)	466379.64
3808928.49	3.15357 (09010419)			
466435.62	3808928.49	3.02828	(09010419)	466491.60
3808928.49	2.90692 (09010419)			
466547.58	3808928.49	2.78891	(09010419)	466603.56
3808928.49	2.68093 (09031319)			
466659.54	3808928.49	2.61358	(09031319)	466715.52
3808928.49	2.55008 (09031319)			
466771.50	3808928.49	2.48619	(09031319)	466827.48
3808928.49	2.42725 (09031319)			
466883.46	3808928.49	2.36694	(09031319)	465763.86
3808994.71	4.78032 (09120320)			
465819.84	3808994.71	4.58621	(09010419)	465875.82
3808994.71	4.46219 (09010419)			
465931.80	3808994.71	4.34712	(09010419)	465987.78
3808994.71	4.23238 (09010419)			
466043.76	3808994.71	4.09526	(09010419)	466099.74
3808994.71	3.95412 (09010419)			
466155.72	3808994.71	3.81272	(09010419)	466211.70
3808994.71	3.67978 (09010419)			
466267.68	3808994.71	3.54912	(09010419)	466323.66
3808994.71	3.42199 (09010419)			
466379.64	3808994.71	3.29835	(09010419)	466435.62
3808994.71	3.17853 (09010419)			
466491.60	3808994.71	3.06618	(09010419)	466547.58
3808994.71	2.95966 (09010419)			
466603.56	3808994.71	2.85190	(09010419)	466659.54
3808994.71	2.74622 (09010419)			
466715.52	3808994.71	2.65158	(09010419)	466771.50
3808994.71	2.55270 (09010419)			
466827.48	3808994.71	2.45772	(09010419)	466883.46
3808994.71	2.37015 (09010419)			
465763.86	3809060.93	4.77349	(09120320)	465819.84
3809060.93	4.60745 (09120320)			
465875.82	3809060.93	4.45199	(09120320)	465931.80
3809060.93	4.29817 (09120320)			
465987.78	3809060.93	4.14435	(09120320)	466043.76
3809060.93	3.99055 (09120320)			

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	3.85880	(09010419)	466155.72
3809060.93	3.75582	(09010419)		
466211.70	3809060.93	3.64859	(09010419)	466267.68
3809060.93	3.54418	(09010419)		
466323.66	3809060.93	3.43940	(09010419)	466379.64
3809060.93	3.33533	(09010419)		
466435.62	3809060.93	3.23825	(09010419)	466491.60
3809060.93	3.14076	(09010419)		
466547.58	3809060.93	3.04089	(09010419)	466603.56
3809060.93	2.94563	(09010419)		
466659.54	3809060.93	2.85650	(09010419)	466715.52
3809060.93	2.76222	(09010419)		
466771.50	3809060.93	2.67127	(09010419)	466827.48
3809060.93	2.58455	(09010419)		
466883.46	3809060.93	2.50126	(09010419)	465763.86
3809127.15	4.58390	(09120320)		
465819.84	3809127.15	4.47765	(09120320)	465875.82
3809127.15	4.36861	(09120320)		
465931.80	3809127.15	4.24911	(09120320)	465987.78
3809127.15	4.12639	(09120320)		
466043.76	3809127.15	3.98594	(09120320)	466099.74
3809127.15	3.84616	(09120320)		
466155.72	3809127.15	3.71388	(09120320)	466211.70
3809127.15	3.59947	(09120320)		
466267.68	3809127.15	3.47630	(09120320)	466323.66
3809127.15	3.35396	(09010419)		
466379.64	3809127.15	3.27342	(09010419)	466435.62

3809127.15	3.19506 (09010419)		
466491.60	3809127.15	3.11605 (09010419)	466547.58
3809127.15	3.03748 (09010419)		
466603.56	3809127.15	2.96044 (09010419)	466659.54
3809127.15	2.87919 (09010419)		
466715.52	3809127.15	2.80112 (09010419)	466771.50
3809127.15	2.72315 (09010419)		
466827.48	3809127.15	2.64499 (09010419)	466883.46
3809127.15	2.57167 (09010419)		
465763.86	3809193.37	4.53277 (10021420)	465819.84
3809193.37	4.28168 (10021420)		
465875.82	3809193.37	4.11586 (09120320)	465931.80
3809193.37	4.04381 (09120320)		
465987.78	3809193.37	3.95016 (09120320)	466043.76
3809193.37	3.83130 (09120320)		
466099.74	3809193.37	3.74702 (09120320)	466155.72
3809193.37	3.65156 (09120320)		
466211.70	3809193.37	3.56377 (09120320)	466267.68
3809193.37	3.47283 (09120320)		
466323.66	3809193.37	3.37567 (09120320)	466379.64
3809193.37	3.27589 (09120320)		
466435.62	3809193.37	3.17093 (09120320)	466491.60
3809193.37	3.06873 (09120320)		
466547.58	3809193.37	2.96753 (09120320)	466603.56
3809193.37	2.88964 (09010419)		
466659.54	3809193.37	2.82699 (09010419)	466715.52
3809193.37	2.76725 (09010419)		
466771.50	3809193.37	2.70311 (09010419)	466827.48
3809193.37	2.64134 (09010419)		
466883.46	3809193.37	2.57795 (09010419)	465763.86
3809259.59	4.68853 (10021420)		
465819.84	3809259.59	4.47945 (10021420)	465875.82
3809259.59	4.25781 (10021420)		
465931.80	3809259.59	4.03645 (10021420)	465987.78
3809259.59	3.80152 (10021420)		
466043.76	3809259.59	3.58990 (09120320)	466099.74
3809259.59	3.53080 (09120320)		
466155.72	3809259.59	3.48431 (09120320)	466211.70
3809259.59	3.43102 (09120320)		
466267.68	3809259.59	3.37189 (09120320)	466323.66
3809259.59	3.29714 (09120320)		
466379.64	3809259.59	3.22329 (09120320)	466435.62
3809259.59	3.14731 (09120320)		
466491.60	3809259.59	3.06523 (09120320)	466547.58
3809259.59	2.98705 (09120320)		
466603.56	3809259.59	2.90326 (09120320)	466659.54
3809259.59	2.81936 (09120320)		
466715.52	3809259.59	2.74012 (09120320)	466771.50
3809259.59	2.65502 (09120320)		
466827.48	3809259.59	2.57302 (09120320)	466883.46

3809259.59 2.52155 (09010419)
 464503.41 3807141.91 21.74375 (09011918) 464523.41
 3807141.91 22.36458 (09011918)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 717

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464543.41	3807141.91	22.90537	(09011918)	464563.41
3807141.91	23.24718	(09011918)		
464583.41	3807141.91	23.00348	(09011918)	464603.41
3807141.91	22.71378	(09011918)		
464623.41	3807141.91	22.26519	(09011918)	464643.41
3807141.91	21.40449	(09011918)		
464663.41	3807141.91	20.53934	(09011918)	464683.41
3807141.91	19.57450	(09011918)		
464703.41	3807141.91	18.32014	(09011918)	464723.41
3807141.91	17.18764	(09011918)		
464743.41	3807141.91	16.06554	(09011918)	464763.41
3807141.91	14.85580	(09011918)		
464783.41	3807141.91	13.65578	(09011918)	464803.41
3807141.91	12.44903	(09011918)		
464823.41	3807141.91	11.21507	(09011918)	464843.41
3807141.91	10.09769	(09011918)		
464863.41	3807141.91	9.04583	(09011918)	464883.41
3807141.91	8.15035	(09122717)		

464903.41	3807141.91	7.64302	(09122717)	464923.41
3807141.91	7.10674	(09122717)		
464503.41	3807161.91	22.71333	(09011918)	464523.41
3807161.91	23.19621	(09011918)		
464543.41	3807161.91	23.59712	(09011918)	464563.41
3807161.91	23.78906	(09011918)		
464583.41	3807161.91	23.38684	(09011918)	464603.41
3807161.91	22.75106	(09011918)		
464623.41	3807161.91	21.96735	(09011918)	464643.41
3807161.91	21.25874	(09011918)		
464663.41	3807161.91	20.18398	(09011918)	464683.41
3807161.91	18.95701	(09011918)		
464703.41	3807161.91	17.87409	(09011918)	464723.41
3807161.91	16.73798	(09011918)		
464743.41	3807161.91	15.51647	(09011918)	464763.41
3807161.91	14.13080	(09011918)		
464783.41	3807161.91	12.90470	(09011918)	464803.41
3807161.91	11.73716	(09011918)		
464823.41	3807161.91	10.58891	(09011918)	464843.41
3807161.91	9.49283	(09011918)		
464863.41	3807161.91	8.45328	(09011918)	464883.41
3807161.91	7.85891	(09122717)		
464903.41	3807161.91	7.38343	(09122717)	464923.41
3807161.91	6.90483	(09122717)		
464503.41	3807181.91	23.42982	(09011918)	464523.41
3807181.91	23.90625	(09011918)		
464543.41	3807181.91	24.08123	(09011918)	464563.41
3807181.91	23.97158	(09011918)		
464583.41	3807181.91	23.60688	(09011918)	464603.41
3807181.91	22.85355	(09011918)		
464623.41	3807181.91	21.88909	(09011918)	464643.41
3807181.91	21.10206	(09011918)		
464663.41	3807181.91	19.89778	(09011918)	464683.41
3807181.91	18.54905	(09011918)		
464703.41	3807181.91	17.42518	(09011918)	464723.41
3807181.91	16.13170	(09011918)		
464743.41	3807181.91	14.79330	(09011918)	464763.41
3807181.91	13.48691	(09011918)		
464783.41	3807181.91	12.27087	(09011918)	464803.41
3807181.91	11.09282	(09011918)		
464823.41	3807181.91	9.93970	(09011918)	464843.41
3807181.91	8.87804	(09011918)		
464863.41	3807181.91	8.13240	(09122717)	464883.41
3807181.91	7.62574	(09122717)		
464903.41	3807181.91	7.06683	(09122717)	464923.41
3807181.91	6.56925	(09122717)		
464503.41	3807201.91	24.07342	(09011918)	464523.41
3807201.91	24.55093	(09011918)		
464543.41	3807201.91	24.49094	(09011918)	464563.41
3807201.91	24.06135	(09011918)		

464583.41	3807201.91	23.65006	(09011918)	464603.41
3807201.91	22.83006	(09011918)		
464623.41	3807201.91	21.78583	(09011918)	464643.41
3807201.91	20.78723	(09011918)		
464663.41	3807201.91	19.50433	(09011918)	464683.41
3807201.91	18.12516	(09011918)		
464703.41	3807201.91	16.86037	(09011918)	464723.41
3807201.91	15.45889	(09011918)		
464743.41	3807201.91	14.07528	(09011918)	464763.41
3807201.91	12.85193	(09011918)		
464783.41	3807201.91	11.62786	(09011918)	464803.41
3807201.91	10.43951	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 718

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 , L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 , L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 , L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3807201.91	9.30943	(09011918)	464843.41
3807201.91	8.28408	(09011918)		
464863.41	3807201.91	7.72983	(09122717)	464883.41
3807201.91	7.30252	(09122717)		
464903.41	3807201.91	6.78350	(09122717)	464923.41
3807201.91	6.43618	(09030119)		
464503.41	3807221.91	24.85193	(09011918)	464523.41
3807221.91	25.16700	(09011918)		
464543.41	3807221.91	24.93201	(09011918)	464563.41

3807221.91	24.27986	(09011918)	
464583.41	3807221.91	23.41058	(09011918) 464603.41
3807221.91	22.54661	(09011918)	
464623.41	3807221.91	21.55206	(09011918) 464643.41
3807221.91	20.17726	(09011918)	
464663.41	3807221.91	18.90425	(09011918) 464683.41
3807221.91	17.60205	(09011918)	
464703.41	3807221.91	16.09670	(09011918) 464723.41
3807221.91	14.74348	(09011918)	
464743.41	3807221.91	13.46143	(09011918) 464763.41
3807221.91	12.20952	(09011918)	
464783.41	3807221.91	10.94693	(09011918) 464803.41
3807221.91	9.76817	(09011918)	
464823.41	3807221.91	8.70025	(09011918) 464843.41
3807221.91	7.93533	(09122717)	
464863.41	3807221.91	7.32135	(09122717) 464883.41
3807221.91	6.91230	(09122717)	
464903.41	3807221.91	6.71510	(09030119) 464923.41
3807221.91	6.91643	(09030119)	
464503.41	3807241.91	25.51861	(09011918) 464523.41
3807241.91	25.45197	(09011918)	
464543.41	3807241.91	25.09642	(09011918) 464563.41
3807241.91	24.44155	(09011918)	
464583.41	3807241.91	23.35504	(09011918) 464603.41
3807241.91	22.36194	(09011918)	
464623.41	3807241.91	21.26618	(09011918) 464643.41
3807241.91	19.74346	(09011918)	
464663.41	3807241.91	18.28031	(09011918) 464683.41
3807241.91	16.85082	(09011918)	
464703.41	3807241.91	15.43010	(09011918) 464723.41
3807241.91	14.10056	(09011918)	
464743.41	3807241.91	12.79642	(09011918) 464763.41
3807241.91	11.48840	(09011918)	
464783.41	3807241.91	10.26855	(09011918) 464803.41
3807241.91	9.13642	(09011918)	
464823.41	3807241.91	8.19087	(09122717) 464843.41
3807241.91	7.58951	(09122717)	
464863.41	3807241.91	7.10888	(09122717) 464883.41
3807241.91	6.85808	(09030119)	
464903.41	3807241.91	6.92661	(09030119) 464923.41
3807241.91	7.07190	(09030119)	
464503.41	3807261.91	26.09939	(09011918) 464523.41
3807261.91	25.64472	(09011918)	
464543.41	3807261.91	25.17019	(09011918) 464563.41
3807261.91	24.50067	(09011918)	
464583.41	3807261.91	23.26141	(09011918) 464603.41
3807261.91	22.06794	(09011918)	
464623.41	3807261.91	20.79629	(09011918) 464643.41
3807261.91	19.26201	(09011918)	
464663.41	3807261.91	17.65311	(09011918) 464683.41

3807261.91	16.09570	(09011918)		
464703.41	3807261.91	14.77046	(09011918)	464723.41
3807261.91	13.41733	(09011918)		
464743.41	3807261.91	12.08035	(09011918)	464763.41
3807261.91	10.77822	(09011918)		
464783.41	3807261.91	9.59802	(09011918)	464803.41
3807261.91	8.51944	(09011918)		
464823.41	3807261.91	7.82140	(09122717)	464843.41
3807261.91	7.28620	(09122717)		
464863.41	3807261.91	6.80845	(09122717)	464883.41
3807261.91	7.09548	(09030119)		
464903.41	3807261.91	7.09932	(09030119)	464923.41
3807261.91	6.81402	(09030119)		
464503.41	3807281.91	26.60705	(09011918)	464523.41
3807281.91	25.95996	(09011918)		
464543.41	3807281.91	25.29711	(09011918)	464563.41
3807281.91	24.44535	(09011918)		
464583.41	3807281.91	23.05885	(09011918)	464603.41
3807281.91	21.56153	(09011918)		
464623.41	3807281.91	20.03875	(09011918)	464643.41
3807281.91	18.65290	(09011918)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 719

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -
 - - - - -

464663.41	3807281.91	17.06035	(09011918)	464683.41
3807281.91	15.47229	(09011918)		
464703.41	3807281.91	14.09857	(09011918)	464723.41
3807281.91	12.66959	(09011918)		
464743.41	3807281.91	11.31564	(09011918)	464763.41
3807281.91	10.09684	(09011918)		
464783.41	3807281.91	8.95321	(09011918)	464803.41
3807281.91	8.06805	(09122717)		
464823.41	3807281.91	7.59751	(09122717)	464843.41
3807281.91	6.99578	(09122717)		
464863.41	3807281.91	6.66389	(09030119)	464883.41
3807281.91	6.98054	(09030119)		
464903.41	3807281.91	6.84361	(09030119)	464923.41
3807281.91	6.65378	(09030119)		
464503.41	3807301.91	26.72310	(09011918)	464523.41
3807301.91	26.08510	(09011918)		
464543.41	3807301.91	25.16084	(09011918)	464563.41
3807301.91	24.00645	(09011918)		
464583.41	3807301.91	22.68066	(09011918)	464603.41
3807301.91	21.10326	(09011918)		
464623.41	3807301.91	19.46108	(09011918)	464643.41
3807301.91	18.02674	(09011918)		
464663.41	3807301.91	16.40010	(09011918)	464683.41
3807301.91	14.79376	(09011918)		
464703.41	3807301.91	13.38326	(09011918)	464723.41
3807301.91	11.95347	(09011918)		
464743.41	3807301.91	10.60917	(09011918)	464763.41
3807301.91	9.41344	(09011918)		
464783.41	3807301.91	8.38051	(09122717)	464803.41
3807301.91	7.84834	(09122717)		
464823.41	3807301.91	7.38815	(09122717)	464843.41
3807301.91	7.26342	(09030119)		
464863.41	3807301.91	6.87763	(09030119)	464883.41
3807301.91	6.99522	(09030119)		
464903.41	3807301.91	6.95761	(09030119)	464923.41
3807301.91	6.89989	(09030119)		
464503.41	3807321.91	26.73859	(09011918)	464523.41
3807321.91	26.10321	(09011918)		
464543.41	3807321.91	24.92960	(09011918)	464563.41
3807321.91	23.49497	(09011918)		
464583.41	3807321.91	22.21284	(09011918)	464603.41
3807321.91	20.58011	(09011918)		
464623.41	3807321.91	18.86109	(09011918)	464643.41
3807321.91	17.33885	(09011918)		
464663.41	3807321.91	15.67818	(09011918)	464683.41
3807321.91	14.06224	(09011918)		
464703.41	3807321.91	12.61372	(09011918)	464723.41
3807321.91	11.21562	(09011918)		
464743.41	3807321.91	9.92517	(09011918)	464763.41
3807321.91	8.75883	(09011918)		

464783.41	3807321.91	8.11861	(09122717)	464803.41
3807321.91	7.60164	(09122717)		
464823.41	3807321.91	7.77325	(09030119)	464843.41
3807321.91	7.63375	(09030119)		
464863.41	3807321.91	7.19131	(09030119)	464883.41
3807321.91	7.11781	(09030119)		
464903.41	3807321.91	7.07592	(09030119)	464923.41
3807321.91	7.28080	(09030119)		
464503.41	3807341.91	26.89899	(09011918)	464523.41
3807341.91	26.05591	(09011918)		
464543.41	3807341.91	24.70546	(09011918)	464563.41
3807341.91	23.12430	(09011918)		
464583.41	3807341.91	21.69175	(09011918)	464603.41
3807341.91	19.96098	(09011918)		
464623.41	3807341.91	18.17904	(09011918)	464643.41
3807341.91	16.58212	(09011918)		
464663.41	3807341.91	14.90150	(09011918)	464683.41
3807341.91	13.28305	(09011918)		
464703.41	3807341.91	11.79854	(09011918)	464723.41
3807341.91	10.46355	(09011918)		
464743.41	3807341.91	9.28998	(09122717)	464763.41
3807341.91	8.46064	(09122717)		
464783.41	3807341.91	7.90909	(09122717)	464803.41
3807341.91	7.97651	(09030119)		
464823.41	3807341.91	7.82024	(09030119)	464843.41
3807341.91	7.37055	(09030119)		
464863.41	3807341.91	7.16777	(09030119)	464883.41
3807341.91	7.26564	(09030119)		
464903.41	3807341.91	7.47569	(09030119)	464923.41
3807341.91	7.51756	(09030119)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 720

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464503.41	3807361.91	26.89096	(09011918)	464523.41
3807361.91	25.64643	(09011918)		
464543.41	3807361.91	24.20303	(09011918)	464563.41
3807361.91	22.63783	(09011918)		
464583.41	3807361.91	21.06506	(09011918)	464603.41
3807361.91	19.25060	(09011918)		
464623.41	3807361.91	17.40428	(09011918)	464643.41
3807361.91	15.68524	(09011918)		
464663.41	3807361.91	14.04055	(09011918)	464683.41
3807361.91	12.48585	(09011918)		
464703.41	3807361.91	11.03455	(09011918)	464723.41
3807361.91	9.73360	(09011918)		
464743.41	3807361.91	8.85833	(09122717)	464763.41
3807361.91	8.21336	(09122717)		
464783.41	3807361.91	8.00090	(09030119)	464803.41
3807361.91	8.02667	(09030119)		
464823.41	3807361.91	7.56075	(09030119)	464843.41
3807361.91	7.50815	(09030119)		
464863.41	3807361.91	7.45037	(09030119)	464883.41
3807361.91	7.67383	(09030119)		
464903.41	3807361.91	7.54734	(09030119)	464923.41
3807361.91	6.39930	(09030119)		
464503.41	3807381.91	26.64937	(09011918)	464523.41
3807381.91	25.12138	(09011918)		
464543.41	3807381.91	23.61315	(09011918)	464563.41
3807381.91	22.02940	(09011918)		
464583.41	3807381.91	20.28923	(09011918)	464603.41
3807381.91	18.42667	(09011918)		
464623.41	3807381.91	16.57114	(09011918)	464643.41
3807381.91	14.78477	(09011918)		
464663.41	3807381.91	13.16725	(09011918)	464683.41
3807381.91	11.66004	(09011918)		
464703.41	3807381.91	10.26629	(09011918)	464723.41
3807381.91	9.21372	(09122717)		
464743.41	3807381.91	8.43715	(09122717)	464763.41
3807381.91	8.37839	(09030119)		
464783.41	3807381.91	8.40717	(09030119)	464803.41
3807381.91	7.93234	(09030119)		
464823.41	3807381.91	7.69887	(09030119)	464843.41
3807381.91	7.64969	(09030119)		
464863.41	3807381.91	7.87531	(09030119)	464883.41

3807381.91	7.91187	(09030119)		
464903.41	3807381.91	6.68995	(09030119)	464923.41
3807381.91	5.93615	(09030119)		
464503.41	3807401.91	26.06585	(09011918)	464523.41
3807401.91	24.63289	(09011918)		
464543.41	3807401.91	23.04551	(09011918)	464563.41
3807401.91	21.29283	(09011918)		
464583.41	3807401.91	19.32732	(09011918)	464603.41
3807401.91	17.48420	(09011918)		
464623.41	3807401.91	15.69188	(09011918)	464643.41
3807401.91	13.92337	(09011918)		
464663.41	3807401.91	12.30349	(09011918)	464683.41
3807401.91	10.83714	(09011918)		
464703.41	3807401.91	9.76925	(09122717)	464723.41
3807401.91	8.97346	(09122717)		
464743.41	3807401.91	8.60711	(09030119)	464763.41
3807401.91	8.44646	(09030119)		
464783.41	3807401.91	8.32398	(09030119)	464803.41
3807401.91	8.48384	(09030119)		
464823.41	3807401.91	8.18302	(09030119)	464843.41
3807401.91	8.09634	(09030119)		
464863.41	3807401.91	8.14370	(09030119)	464883.41
3807401.91	6.73858	(09030119)		
464903.41	3807401.91	6.55708	(09030119)	464923.41
3807401.91	6.12457	(09030119)		
464503.41	3807421.91	25.64671	(09011918)	464523.41
3807421.91	24.08793	(09011918)		
464543.41	3807421.91	22.26520	(09011918)	464563.41
3807421.91	20.33835	(09011918)		
464583.41	3807421.91	18.41395	(09011918)	464603.41
3807421.91	16.52631	(09011918)		
464623.41	3807421.91	14.71927	(09011918)	464643.41
3807421.91	13.02180	(09011918)		
464663.41	3807421.91	11.45191	(09011918)	464683.41
3807421.91	10.10977	(09122717)		
464703.41	3807421.91	9.35698	(09122717)	464723.41
3807421.91	9.08253	(09030119)		
464743.41	3807421.91	9.31032	(09030119)	464763.41
3807421.91	8.89774	(09030119)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 721

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102


```

, L0006103      , L0006104      , L0006105      ,
                  L0006106      , L0006107      , L0006108      , L0006109      , L0006110
, L0006111      , L0006112      , L0006113      ,
                  L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
                  L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464783.41	3807421.91	8.53467	(09030119)	464803.41
3807421.91	8.61087	(09030119)		
464823.41	3807421.91	8.49311	(09030119)	464843.41
3807421.91	8.18606	(09030119)		
464863.41	3807421.91	6.93658	(09030119)	464883.41
3807421.91	6.86576	(09030119)		
464903.41	3807421.91	6.05941	(09030119)	464923.41
3807421.91	5.94310	(09030119)		
464503.41	3807441.91	25.15373	(09011918)	464523.41
3807441.91	23.36819	(09011918)		
464543.41	3807441.91	21.37151	(09011918)	464563.41
3807441.91	19.34906	(09011918)		
464583.41	3807441.91	17.44655	(09011918)	464603.41
3807441.91	15.54600	(09011918)		
464623.41	3807441.91	13.75595	(09011918)	464643.41
3807441.91	12.11028	(09011918)		
464663.41	3807441.91	10.67451	(09122717)	464683.41
3807441.91	9.82656	(09122717)		
464703.41	3807441.91	9.31923	(09030119)	464723.41
3807441.91	9.57170	(09030119)		
464743.41	3807441.91	9.80565	(09030119)	464763.41
3807441.91	9.53176	(09030119)		
464783.41	3807441.91	8.88984	(09030119)	464803.41
3807441.91	8.55751	(09030119)		
464823.41	3807441.91	8.79181	(09030119)	464843.41
3807441.91	7.27622	(09030119)		
464863.41	3807441.91	6.44080	(09030119)	464883.41
3807441.91	6.47073	(09030119)		
464903.41	3807441.91	6.10548	(09030119)	464923.41
3807441.91	6.08658	(09030119)		
464503.41	3807461.91	24.49876	(09011918)	464523.41
3807461.91	22.39496	(09011918)		

464543.41	3807461.91	20.39452	(09011918)	464563.41
3807461.91	18.41284	(09011918)		
464583.41	3807461.91	16.39936	(09011918)	464603.41
3807461.91	14.55132	(09011918)		
464623.41	3807461.91	12.81655	(09011918)	464643.41
3807461.91	11.22019	(09011918)		
464663.41	3807461.91	10.28846	(09122717)	464683.41
3807461.91	10.31448	(09030119)		
464703.41	3807461.91	10.11496	(09030119)	464723.41
3807461.91	10.05182	(09030119)		
464743.41	3807461.91	9.61163	(09030119)	464763.41
3807461.91	9.78791	(09030119)		
464783.41	3807461.91	9.45224	(09030119)	464803.41
3807461.91	9.04625	(09030119)		
464823.41	3807461.91	9.26407	(09030119)	464843.41
3807461.91	7.59670	(09030119)		
464863.41	3807461.91	6.65338	(09030119)	464883.41
3807461.91	6.66890	(09030119)		
464903.41	3807461.91	6.25226	(09030119)	464923.41
3807461.91	6.21920	(09030119)		
464503.41	3807481.91	23.74852	(09011918)	464523.41
3807481.91	21.51723	(09011918)		
464543.41	3807481.91	19.38356	(09011918)	464563.41
3807481.91	17.34175	(09011918)		
464583.41	3807481.91	15.39360	(09011918)	464603.41
3807481.91	13.56419	(09011918)		
464623.41	3807481.91	11.87867	(09011918)	464643.41
3807481.91	10.69941	(09122717)		
464663.41	3807481.91	10.36810	(09030119)	464683.41
3807481.91	10.66312	(09030119)		
464703.41	3807481.91	10.90170	(09030119)	464723.41
3807481.91	10.59530	(09030119)		
464743.41	3807481.91	10.06450	(09030119)	464763.41
3807481.91	10.42153	(09030119)		
464783.41	3807481.91	10.02213	(09030119)	464803.41
3807481.91	9.53728	(09030119)		
464823.41	3807481.91	9.73434	(09030119)	464843.41
3807481.91	7.91327	(09030119)		
464863.41	3807481.91	6.85510	(09030119)	464883.41
3807481.91	6.42644	(09030119)		
464903.41	3807481.91	6.38908	(09030119)	464923.41
3807481.91	6.34059	(09030119)		
464503.41	3807501.91	22.81186	(09011918)	464523.41
3807501.91	20.52043	(09011918)		
464543.41	3807501.91	18.32622	(09011918)	464563.41
3807501.91	16.26746	(09011918)		
464583.41	3807501.91	14.37026	(09011918)	464603.41
3807501.91	12.58585	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 722

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	11.05090	(09122717)	464643.41
3807501.91	10.68745	(09030119)		
464663.41	3807501.91	10.97980	(09030119)	464683.41
3807501.91	10.97336	(09030119)		
464703.41	3807501.91	11.43476	(09030119)	464723.41
3807501.91	11.31163	(09030119)		
464743.41	3807501.91	10.54122	(09030119)	464763.41
3807501.91	10.81818	(09030119)		
464783.41	3807501.91	10.54481	(09030119)	464803.41
3807501.91	10.01724	(09030119)		
464823.41	3807501.91	9.94956	(09030119)	464843.41
3807501.91	8.19980	(09030119)		
464863.41	3807501.91	7.04679	(09030119)	464883.41
3807501.91	6.56717	(09030119)		
464903.41	3807501.91	6.51375	(09030119)	464923.41
3807501.91	6.44930	(09030119)		
464503.41	3807521.91	21.64513	(09011918)	464523.41
3807521.91	19.33969	(09011918)		
464543.41	3807521.91	17.22912	(09011918)	464563.41
3807521.91	15.23018	(09011918)		
464583.41	3807521.91	13.33858	(09011918)	464603.41
3807521.91	11.62821	(09011918)		
464623.41	3807521.91	11.23231	(09030119)	464643.41

3807521.91	11.26596	(09030119)		
464663.41	3807521.91	11.54940	(09030119)	464683.41
3807521.91	11.80371	(09030119)		
464703.41	3807521.91	11.39780	(09030119)	464723.41
3807521.91	11.09236	(09030119)		
464743.41	3807521.91	11.17280	(09030119)	464763.41
3807521.91	10.81099	(09030119)		
464783.41	3807521.91	10.36366	(09030119)	464803.41
3807521.91	10.27504	(09030119)		
464823.41	3807521.91	8.25349	(09030119)	464843.41
3807521.91	7.91028	(09030119)		
464863.41	3807521.91	7.22954	(09030119)	464883.41
3807521.91	6.69416	(09030119)		
464903.41	3807521.91	6.62440	(09030119)	464923.41
3807521.91	6.68021	(09031219)		
464503.41	3807541.91	20.45601	(09011918)	464523.41
3807541.91	18.24251	(09011918)		
464543.41	3807541.91	16.12676	(09011918)	464563.41
3807541.91	14.15022	(09011918)		
464583.41	3807541.91	12.33613	(09011918)	464603.41
3807541.91	11.30023	(09030119)		
464623.41	3807541.91	11.63949	(09030119)	464643.41
3807541.91	11.91468	(09030119)		
464663.41	3807541.91	11.88875	(09030119)	464683.41
3807541.91	12.01076	(09030119)		
464703.41	3807541.91	11.65486	(09030119)	464723.41
3807541.91	11.25932	(09030119)		
464743.41	3807541.91	11.19784	(09030119)	464763.41
3807541.91	10.88825	(09030119)		
464783.41	3807541.91	10.83244	(09030119)	464803.41
3807541.91	10.72461	(09030119)		
464823.41	3807541.91	8.34848	(09030119)	464843.41
3807541.91	7.10690	(09030119)		
464863.41	3807541.91	6.88262	(09030119)	464883.41
3807541.91	6.83285	(09031219)		
464903.41	3807541.91	6.90742	(09031219)	464923.41
3807541.91	6.96623	(09031219)		
464503.41	3807561.91	19.28184	(09011918)	464523.41
3807561.91	17.11103	(09011918)		
464543.41	3807561.91	15.01659	(09011918)	464563.41
3807561.91	13.10657	(09011918)		
464583.41	3807561.91	11.66584	(09030119)	464603.41
3807561.91	12.00389	(09030119)		
464623.41	3807561.91	12.00932	(09030119)	464643.41
3807561.91	12.52965	(09030119)		
464663.41	3807561.91	12.40165	(09030119)	464683.41
3807561.91	11.55723	(09030119)		
464703.41	3807561.91	11.86545	(09030119)	464723.41
3807561.91	11.56435	(09030119)		
464743.41	3807561.91	10.99080	(09030119)	464763.41

```

3807561.91      11.17374 (09030119)
      464783.41  3807561.91      11.07028 (09030119)      464803.41
3807561.91      10.66207 (09030119)
      464823.41  3807561.91      8.60332 (09030119)      464843.41
3807561.91      7.07981 (09030119)
      464863.41  3807561.91      7.07303 (09031219)      464883.41
3807561.91      7.14466 (09031219)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 723

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
      INCLUDING SOURCE(S):      L0006101      , L0006102
, L0006103      , L0006104      , L0006105      ,
      L0006106      , L0006107      , L0006108      , L0006109      , L0006110
, L0006111      , L0006112      , L0006113      ,
      L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
      L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464903.41	3807561.91	7.20061	(09031219)	464923.41
3807561.91	7.24001	(09031219)		
464503.41	3807581.91	18.15772	(09011918)	464523.41
3807581.91	15.92851	(09011918)		
464543.41	3807581.91	13.91096	(09011918)	464563.41
3807581.91	12.28492	(09030119)		
464583.41	3807581.91	12.33694	(09030119)	464603.41
3807581.91	12.66391	(09030119)		
464623.41	3807581.91	12.95587	(09030119)	464643.41
3807581.91	12.51583	(09030119)		
464663.41	3807581.91	12.18391	(09030119)	464683.41
3807581.91	12.27579	(09030119)		
464703.41	3807581.91	11.87666	(09030119)	464723.41
3807581.91	11.38072	(09030119)		

464743.41	3807581.91	11.53256	(09030119)	464763.41
3807581.91	11.67898	(09030119)		
464783.41	3807581.91	10.94262	(09030119)	464803.41
3807581.91	8.85207	(09030119)		
464823.41	3807581.91	8.61655	(09030119)	464843.41
3807581.91	7.32335	(09031219)		
464863.41	3807581.91	7.39380	(09031219)	464883.41
3807581.91	7.44513	(09031219)		
464903.41	3807581.91	7.48005	(09031219)	464923.41
3807581.91	7.49789	(09031219)		
464503.41	3807601.91	16.91975	(09011918)	464523.41
3807601.91	14.76901	(09011918)		
464543.41	3807601.91	12.86423	(09011918)	464563.41
3807601.91	12.76736	(09030119)		
464583.41	3807601.91	13.08704	(09030119)	464603.41
3807601.91	13.06970	(09030119)		
464623.41	3807601.91	13.21442	(09030119)	464643.41
3807601.91	12.82628	(09030119)		
464663.41	3807601.91	12.39218	(09030119)	464683.41
3807601.91	12.32411	(09030119)		
464703.41	3807601.91	11.97866	(09030119)	464723.41
3807601.91	11.91017	(09030119)		
464743.41	3807601.91	11.81024	(09030119)	464763.41
3807601.91	9.63455	(09030119)		
464783.41	3807601.91	9.36108	(09030119)	464803.41
3807601.91	8.07817	(09030119)		
464823.41	3807601.91	7.58761	(09031219)	464843.41
3807601.91	7.65433	(09031219)		
464863.41	3807601.91	7.70223	(09031219)	464883.41
3807601.91	7.73167	(09031219)		
464903.41	3807601.91	7.74295	(09031219)	464923.41
3807601.91	7.75741	(10020118)		
464503.41	3807621.91	15.69773	(09011918)	464523.41
3807621.91	13.65970	(09011918)		
464543.41	3807621.91	12.77339	(09030119)	464563.41
3807621.91	13.21127	(09030119)		
464583.41	3807621.91	13.80223	(09030119)	464603.41
3807621.91	13.66986	(09030119)		
464623.41	3807621.91	12.73984	(09030119)	464643.41
3807621.91	13.08497	(09030119)		
464663.41	3807621.91	12.75147	(09030119)	464683.41
3807621.91	12.11347	(09030119)		
464703.41	3807621.91	12.30795	(09030119)	464723.41
3807621.91	12.18282	(09030119)		
464743.41	3807621.91	11.71897	(09030119)	464763.41
3807621.91	9.43118	(09030119)		
464783.41	3807621.91	8.32263	(09030119)	464803.41
3807621.91	7.94391	(09031219)		
464823.41	3807621.91	7.92867	(09031219)	464843.41
3807621.91	7.97149	(09031219)		

464863.41	3807621.91	7.99459	(09031219)	464883.41
3807621.91	7.99931	(09031219)		
464903.41	3807621.91	8.04449	(10020118)	464923.41
3807621.91	8.09583	(10020118)		
464503.41	3807641.91	14.51515	(09011918)	464523.41
3807641.91	13.20757	(09030119)		
464543.41	3807641.91	13.92871	(09030119)	464563.41
3807641.91	14.29890	(09030119)		
464583.41	3807641.91	13.82040	(09030119)	464603.41
3807641.91	13.45835	(09030119)		
464623.41	3807641.91	13.56405	(09030119)	464643.41
3807641.91	13.12129	(09030119)		
464663.41	3807641.91	12.56784	(09030119)	464683.41
3807641.91	12.72743	(09030119)		
464703.41	3807641.91	12.87685	(09030119)	464723.41
3807641.91	12.04840	(09030119)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 724

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464743.41	3807641.91	9.72026	(09030119)	464763.41
3807641.91	9.44352	(09030119)		
464783.41	3807641.91	8.15758	(09031219)	464803.41
3807641.91	8.21665	(09031219)		
464823.41	3807641.91	8.25326	(09031219)	464843.41

3807641.91	8.27015	(09031219)		
464863.41	3807641.91	8.28035	(10020118)	464883.41
3807641.91	8.34473	(10020118)		
464903.41	3807641.91	8.38937	(10020118)	464923.41
3807641.91	8.41406	(10020118)		
464503.41	3807661.91	13.37032	(09011918)	464523.41
3807661.91	13.37744	(09030119)		
464543.41	3807661.91	14.03917	(09030119)	464563.41
3807661.91	14.62341	(09030119)		
464583.41	3807661.91	14.19835	(09030119)	464603.41
3807661.91	13.71954	(09030119)		
464623.41	3807661.91	13.64361	(09030119)	464643.41
3807661.91	13.25529	(09030119)		
464663.41	3807661.91	12.56540	(09030119)	464683.41
3807661.91	10.54439	(09030119)		
464703.41	3807661.91	10.58352	(09030119)	464723.41
3807661.91	10.30023	(09030119)		
464743.41	3807661.91	8.85739	(09030119)	464763.41
3807661.91	8.46515	(09031219)		
464783.41	3807661.91	8.51850	(09031219)	464803.41
3807661.91	8.54935	(09031219)		
464823.41	3807661.91	8.55836	(09031219)	464843.41
3807661.91	8.60114	(10020118)		
464863.41	3807661.91	8.65917	(10020118)	464883.41
3807661.91	8.69582	(10020118)		
464903.41	3807661.91	8.71153	(10020118)	464923.41
3807661.91	8.70697	(10020118)		
464503.41	3807681.91	12.37852	(09030119)	464523.41
3807681.91	12.97596	(09030119)		
464543.41	3807681.91	13.53150	(09030119)	464563.41
3807681.91	14.03789	(09030119)		
464583.41	3807681.91	14.48882	(09030119)	464603.41
3807681.91	14.14682	(09030119)		
464623.41	3807681.91	13.42026	(09030119)	464643.41
3807681.91	13.30369	(09030119)		
464663.41	3807681.91	10.90254	(09030119)	464683.41
3807681.91	9.30406	(09030119)		
464703.41	3807681.91	9.01557	(09030119)	464723.41
3807681.91	8.91303	(09030119)		
464743.41	3807681.91	8.88250	(09031219)	464763.41
3807681.91	8.83659	(09031219)		
464783.41	3807681.91	8.85983	(09031219)	464803.41
3807681.91	8.86412	(10020118)		
464823.41	3807681.91	8.93801	(10020118)	464843.41
3807681.91	8.98820	(10020118)		
464863.41	3807681.91	9.01571	(10020118)	464883.41
3807681.91	9.02134	(10020118)		
464903.41	3807681.91	9.00558	(10020118)	464923.41
3807681.91	8.96963	(10020118)		
464523.41	3807701.91	12.79559	(09030119)	464543.41

3807701.91	13.24131	(09030119)		
464563.41	3807701.91	13.63666	(09030119)	464583.41
3807701.91	13.97697	(09030119)		
464603.41	3807701.91	13.96704	(09030119)	464623.41
3807701.91	13.81910	(09030119)		
464643.41	3807701.91	11.02929	(09030119)	464663.41
3807701.91	10.51848	(09030119)		
464683.41	3807701.91	9.54096	(09030119)	464703.41
3807701.91	9.06677	(09031219)		
464723.41	3807701.91	9.13216	(09031219)	464743.41
3807701.91	9.17112	(09031219)		
464763.41	3807701.91	9.18524	(09031219)	464783.41
3807701.91	9.22517	(10020118)		
464803.41	3807701.91	9.29147	(10020118)	464823.41
3807701.91	9.33244	(10020118)		
464843.41	3807701.91	9.34995	(10020118)	464863.41
3807701.91	9.34402	(10020118)		
464883.41	3807701.91	9.31590	(10020118)	464903.41
3807701.91	9.26634	(10020118)		
464923.41	3807701.91	9.19644	(10020118)	464543.41
3807721.91	12.97662	(09030119)		
464563.41	3807721.91	14.16827	(09030119)	464583.41
3807721.91	14.44483	(09030119)		
464603.41	3807721.91	14.65836	(09030119)	464623.41
3807721.91	14.46745	(09030119)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 725

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464643.41	3807721.91	11.17164	(09030119)	464663.41
3807721.91	9.41518 (09031219)			
464683.41	3807721.91	9.43279	(09031219)	464703.41
3807721.91	9.49237 (09031219)			
464723.41	3807721.91	9.52349	(09031219)	464743.41
3807721.91	9.52777 (09031219)			
464763.41	3807721.91	9.60480	(10020118)	464783.41
3807721.91	9.66208 (10020118)			
464803.41	3807721.91	9.69319	(10020118)	464823.41
3807721.91	9.69893 (10020118)			
464843.41	3807721.91	9.68016	(10020118)	464863.41
3807721.91	9.63799 (10020118)			
464883.41	3807721.91	9.57366	(10020118)	464903.41
3807721.91	9.48861 (10020118)			
464923.41	3807721.91	9.38428	(10020118)	464943.41
3807721.91	9.26201 (10020118)			
464963.41	3807721.91	9.12326	(10020118)	464983.41
3807721.91	8.96981 (10020118)			
465003.41	3807721.91	8.80283	(10020118)	465023.41
3807721.91	8.62434 (10020118)			
465043.41	3807721.91	8.43583	(10020118)	465063.41
3807721.91	8.23844 (10020118)			
465083.41	3807721.91	8.03397	(10020118)	465103.41
3807721.91	7.82420 (10020118)			
465123.41	3807721.91	7.61206	(10020118)	465143.41
3807721.91	7.39436 (10020118)			
465163.41	3807721.91	7.17385	(10020118)	465183.41
3807721.91	6.95441 (10020118)			
465203.41	3807721.91	6.73276	(10020118)	465223.41
3807721.91	6.51064 (10020118)			
465243.41	3807721.91	6.28946	(10020118)	465263.41
3807721.91	6.07035 (10020118)			
465283.41	3807721.91	5.85434	(10020118)	465303.41
3807721.91	5.64347 (10020118)			
465323.41	3807721.91	5.43424	(10020118)	465343.41
3807721.91	5.27088 (10102019)			
465363.41	3807721.91	5.15511	(10102019)	465383.41
3807721.91	5.03729 (10102019)			
464543.41	3807741.91	10.41447	(09030119)	464563.41
3807741.91	13.98269 (09030119)			
464583.41	3807741.91	14.51458	(09030119)	464603.41
3807741.91	14.67548 (09030119)			
464623.41	3807741.91	14.39430	(09030119)	464643.41
3807741.91	11.22061 (09030119)			
464663.41	3807741.91	9.82022	(09031219)	464683.41
3807741.91	9.87283 (09031219)			

464703.41	3807741.91	9.89413	(09031219)	464723.41
3807741.91	9.92870	(10020118)		
464743.41	3807741.91	10.00390	(10020118)	464763.41
3807741.91	10.05164	(10020118)		
464783.41	3807741.91	10.07087	(10020118)	464803.41
3807741.91	10.06325	(10020118)		
464823.41	3807741.91	10.03013	(10020118)	464843.41
3807741.91	9.97252	(10020118)		
464863.41	3807741.91	9.89215	(10020118)	464883.41
3807741.91	9.78951	(10020118)		
464903.41	3807741.91	9.66788	(10020118)	464923.41
3807741.91	9.52860	(10020118)		
464943.41	3807741.91	9.37042	(10020118)	464963.41
3807741.91	9.19946	(10020118)		
464983.41	3807741.91	9.01621	(10020118)	465003.41
3807741.91	8.81743	(10020118)		
465023.41	3807741.91	8.61157	(10020118)	465043.41
3807741.91	8.39848	(10020118)		
465063.41	3807741.91	8.17575	(10020118)	465083.41
3807741.91	7.95089	(10020118)		
465103.41	3807741.91	7.72346	(10020118)	465123.41
3807741.91	7.49224	(10020118)		
465143.41	3807741.91	7.25692	(10020118)	465163.41
3807741.91	7.02049	(10020118)		
465183.41	3807741.91	6.78740	(10020118)	465203.41
3807741.91	6.55617	(10020118)		
465223.41	3807741.91	6.32649	(10020118)	465243.41
3807741.91	6.09578	(10020118)		
465263.41	3807741.91	5.87130	(10020118)	465283.41
3807741.91	5.65191	(10020118)		
465303.41	3807741.91	5.46656	(10102019)	465323.41
3807741.91	5.34068	(10102019)		
465343.41	3807741.91	5.21392	(10102019)	465363.41
3807741.91	5.08955	(10102019)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 726

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,

L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465383.41	3807741.91	4.96591	(10102019)	464543.41
3807761.91	10.31224 (09030119)			
464563.41	3807761.91	10.23164	(09030119)	464583.41
3807761.91	10.77581 (09030119)			
464603.41	3807761.91	11.98594	(09030119)	464623.41
3807761.91	11.62910 (09030119)			
464643.41	3807761.91	10.23090	(09031219)	464663.41
3807761.91	10.27395 (09031219)			
464683.41	3807761.91	10.28476	(09031219)	464703.41
3807761.91	10.35878 (10020118)			
464723.41	3807761.91	10.42487	(10020118)	464743.41
3807761.91	10.46070 (10020118)			
464763.41	3807761.91	10.46614	(10020118)	464783.41
3807761.91	10.44392 (10020118)			
464803.41	3807761.91	10.39449	(10020118)	464823.41
3807761.91	10.31966 (10020118)			
464843.41	3807761.91	10.22126	(10020118)	464863.41
3807761.91	10.10094 (10020118)			
464883.41	3807761.91	9.95954	(10020118)	464903.41
3807761.91	9.80053 (10020118)			
464923.41	3807761.91	9.62546	(10020118)	464943.41
3807761.91	9.43325 (10020118)			
464963.41	3807761.91	9.23014	(10020118)	464983.41
3807761.91	9.01671 (10020118)			
465003.41	3807761.91	8.78980	(10020118)	465023.41
3807761.91	8.55522 (10020118)			
465043.41	3807761.91	8.31541	(10020118)	465063.41
3807761.91	8.07484 (10020118)			
465083.41	3807761.91	7.83155	(10020118)	465103.41
3807761.91	7.58558 (10020118)			
465123.41	3807761.91	7.33442	(10020118)	465143.41
3807761.91	7.08652 (10020118)			
465163.41	3807761.91	6.84056	(10020118)	465183.41
3807761.91	6.59284 (10020118)			
465203.41	3807761.91	6.35171	(10020118)	465223.41
3807761.91	6.11548 (10020118)			
465243.41	3807761.91	5.88263	(10020118)	465263.41

3807761.91	5.67298	(10102019)		
465283.41	3807761.91	5.54178	(10102019)	465303.41
3807761.91	5.40635	(10102019)		
465323.41	3807761.91	5.27343	(10102019)	465343.41
3807761.91	5.14137	(10102019)		
465363.41	3807761.91	5.00663	(10102019)	465383.41
3807761.91	4.87589	(10102019)		
464543.41	3807781.91	10.63643	(09030119)	464563.41
3807781.91	10.52257	(09030119)		
464583.41	3807781.91	10.50446	(09031219)	464603.41
3807781.91	10.60349	(09031219)		
464623.41	3807781.91	10.66769	(09031219)	464643.41
3807781.91	10.69870	(09031219)		
464663.41	3807781.91	10.72856	(10020118)	464683.41
3807781.91	10.81547	(10020118)		
464703.41	3807781.91	10.86840	(10020118)	464723.41
3807781.91	10.88989	(10020118)		
464743.41	3807781.91	10.88052	(10020118)	464763.41
3807781.91	10.84133	(10020118)		
464783.41	3807781.91	10.77378	(10020118)	464803.41
3807781.91	10.67971	(10020118)		
464823.41	3807781.91	10.56134	(10020118)	464843.41
3807781.91	10.42030	(10020118)		
464863.41	3807781.91	10.25853	(10020118)	464883.41
3807781.91	10.07822	(10020118)		
464903.41	3807781.91	9.88128	(10020118)	464923.41
3807781.91	9.66962	(10020118)		
464943.41	3807781.91	9.44537	(10020118)	464963.41
3807781.91	9.21021	(10020118)		
464983.41	3807781.91	8.96615	(10020118)	465003.41
3807781.91	8.71524	(10020118)		
465023.41	3807781.91	8.45692	(10020118)	465043.41
3807781.91	8.19456	(10020118)		
465063.41	3807781.91	7.93515	(10020118)	465083.41
3807781.91	7.67233	(10020118)		
465103.41	3807781.91	7.40866	(10020118)	465123.41
3807781.91	7.14635	(10020118)		
465143.41	3807781.91	6.88600	(10020118)	465163.41
3807781.91	6.62864	(10020118)		
465183.41	3807781.91	6.37524	(10020118)	465203.41
3807781.91	6.12832	(10020118)		
465223.41	3807781.91	5.89117	(10102019)	465243.41
3807781.91	5.74954	(10102019)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***

*** 16:42:19

PAGE 727

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3807781.91	5.60946	(10102019)	465283.41
3807781.91	5.46990	(10102019)		
465303.41	3807781.91	5.32843	(10102019)	465323.41
3807781.91	5.18747	(10102019)		
465343.41	3807781.91	5.04748	(10102019)	465363.41
3807781.91	4.90891	(10102019)		
465383.41	3807781.91	4.77360	(10102019)	464543.41
3807801.91	10.91457	(09030119)		
464563.41	3807801.91	10.97571	(09031219)	464583.41
3807801.91	11.07466	(09031219)		
464603.41	3807801.91	11.13289	(09031219)	464623.41
3807801.91	11.15164	(09031219)		
464643.41	3807801.91	11.22094	(10020118)	464663.41
3807801.91	11.29602	(10020118)		
464683.41	3807801.91	11.33664	(10020118)	464703.41
3807801.91	11.34183	(10020118)		
464723.41	3807801.91	11.31444	(10020118)	464743.41
3807801.91	11.25606	(10020118)		
464763.41	3807801.91	11.16840	(10020118)	464783.41
3807801.91	11.05303	(10020118)		
464803.41	3807801.91	10.91258	(10020118)	464823.41
3807801.91	10.74908	(10020118)		
464843.41	3807801.91	10.56438	(10020118)	464863.41
3807801.91	10.36071	(10020118)		
464883.41	3807801.91	10.14165	(10020118)	464903.41
3807801.91	9.90724	(10020118)		
464923.41	3807801.91	9.65997	(10020118)	464943.41
3807801.91	9.40480	(10020118)		

464963.41	3807801.91	9.13941	(10020118)	464983.41
3807801.91	8.86726 (10020118)			
465003.41	3807801.91	8.59360	(10020118)	465023.41
3807801.91	8.31454 (10020118)			
465043.41	3807801.91	8.03354	(10020118)	465063.41
3807801.91	7.75566 (10020118)			
465083.41	3807801.91	7.47620	(10020118)	465103.41
3807801.91	7.19842 (10020118)			
465123.41	3807801.91	6.92710	(10020118)	465143.41
3807801.91	6.65703 (10020118)			
465163.41	3807801.91	6.39142	(10020118)	465183.41
3807801.91	6.13548 (10020118)			
465203.41	3807801.91	5.97657	(10102019)	465223.41
3807801.91	5.82667 (10102019)			
465243.41	3807801.91	5.67388	(10102019)	465263.41
3807801.91	5.52468 (10102019)			
465283.41	3807801.91	5.37767	(10102019)	465303.41
3807801.91	5.23077 (10102019)			
465323.41	3807801.91	5.08296	(10102019)	465343.41
3807801.91	4.93660 (10102019)			
465363.41	3807801.91	4.79583	(10102019)	465383.41
3807801.91	4.65637 (10102019)			
464543.41	3807821.91	11.43510	(09031219)	464563.41
3807821.91	11.54027 (09031219)			
464583.41	3807821.91	11.60733	(09031219)	464603.41
3807821.91	11.64084 (10020118)			
464623.41	3807821.91	11.74472	(10020118)	464643.41
3807821.91	11.80545 (10020118)			
464663.41	3807821.91	11.82865	(10020118)	464683.41
3807821.91	11.81607 (10020118)			
464703.41	3807821.91	11.76865	(10020118)	464723.41
3807821.91	11.68926 (10020118)			
464743.41	3807821.91	11.57882	(10020118)	464763.41
3807821.91	11.43986 (10020118)			
464783.41	3807821.91	11.27508	(10020118)	464803.41
3807821.91	11.08688 (10020118)			
464823.41	3807821.91	10.87692	(10020118)	464843.41
3807821.91	10.64893 (10020118)			
464863.41	3807821.91	10.40516	(10020118)	464883.41
3807821.91	10.14564 (10020118)			
464903.41	3807821.91	9.87611	(10020118)	464923.41
3807821.91	9.59788 (10020118)			
464943.41	3807821.91	9.30901	(10020118)	464963.41
3807821.91	9.01768 (10020118)			
464983.41	3807821.91	8.72370	(10020118)	465003.41
3807821.91	8.42404 (10020118)			
465023.41	3807821.91	8.12728	(10020118)	465043.41
3807821.91	7.83239 (10020118)			
465063.41	3807821.91	7.53567	(10020118)	465083.41
3807821.91	7.24565 (10020118)			

465103.41 3807821.91 6.96073 (10020118) 465123.41
 3807821.91 6.67679 (10020118)
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 728

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807821.91	6.40204	(10020118)	465163.41
3807821.91	6.21699	(10102019)		
465183.41	3807821.91	6.05895	(10102019)	465203.41
3807821.91	5.89745	(10102019)		
465223.41	3807821.91	5.73558	(10102019)	465243.41
3807821.91	5.57843	(10102019)		
465263.41	3807821.91	5.42308	(10102019)	465283.41
3807821.91	5.26868	(10102019)		
465303.41	3807821.91	5.11207	(10102019)	465323.41
3807821.91	4.96051	(10102019)		
465343.41	3807821.91	4.81286	(10102019)	465363.41
3807821.91	4.66826	(10102019)		
465383.41	3807821.91	4.52328	(10102019)	464543.41
3807841.91	11.98328	(09031219)		
464563.41	3807841.91	12.03653	(09031219)	464583.41
3807841.91	12.15182	(10020118)		
464603.41	3807841.91	12.27590	(10020118)	464623.41
3807841.91	12.33944	(10020118)		
464643.41	3807841.91	12.34786	(10020118)	464663.41

3807841.91	12.31543	(10020118)		
464683.41	3807841.91	12.24551	(10020118)	464723.41
3807841.91	12.00551	(10020118)		
464743.41	3807841.91	11.84032	(10020118)	464763.41
3807841.91	11.64878	(10020118)		
464783.41	3807841.91	11.43332	(10020118)	464803.41
3807841.91	11.19661	(10020118)		
464823.41	3807841.91	10.94154	(10020118)	464843.41
3807841.91	10.67062	(10020118)		
464863.41	3807841.91	10.38631	(10020118)	464883.41
3807841.91	10.09121	(10020118)		
464903.41	3807841.91	9.78743	(10020118)	464923.41
3807841.91	9.47731	(10020118)		
464943.41	3807841.91	9.16326	(10020118)	464963.41
3807841.91	8.84678	(10020118)		
464983.41	3807841.91	8.52974	(10020118)	465003.41
3807841.91	8.21389	(10020118)		
465023.41	3807841.91	7.90017	(10020118)	465043.41
3807841.91	7.59001	(10020118)		
465063.41	3807841.91	7.28468	(10020118)	465083.41
3807841.91	6.98468	(10020118)		
465103.41	3807841.91	6.69100	(10020118)	465123.41
3807841.91	6.47440	(10102019)		
465143.41	3807841.91	6.30212	(10102019)	465163.41
3807841.91	6.13064	(10102019)		
465183.41	3807841.91	5.96279	(10102019)	465203.41
3807841.91	5.79399	(10102019)		
465223.41	3807841.91	5.62570	(10102019)	465243.41
3807841.91	5.45904	(10102019)		
465263.41	3807841.91	5.29674	(10102019)	465283.41
3807841.91	5.13748	(10102019)		
465303.41	3807841.91	4.97850	(10102019)	465323.41
3807841.91	4.82431	(10102019)		
465343.41	3807841.91	4.67345	(10102019)	465363.41
3807841.91	4.52341	(10102019)		
465383.41	3807841.91	4.37689	(10102019)	464503.41
3807861.91	12.43716	(09031219)		
464523.41	3807861.91	12.47377	(09031219)	464543.41
3807861.91	12.48466	(09031219)		
464563.41	3807861.91	12.61146	(10020118)	464583.41
3807861.91	12.75305	(10020118)		
464603.41	3807861.91	12.84384	(10020118)	464723.41
3807861.91	12.25463	(10020118)		
464743.41	3807861.91	12.03360	(10020118)	464763.41
3807861.91	11.78873	(10020118)		
464783.41	3807861.91	11.52253	(10020118)	464803.41
3807861.91	11.23760	(10020118)		
464823.41	3807861.91	10.93894	(10020118)	464843.41
3807861.91	10.62662	(10020118)		
464863.41	3807861.91	10.30369	(10020118)	464883.41

3807861.91	9.97590	(10020118)		
464903.41	3807861.91	9.64072	(10020118)	464923.41
3807861.91	9.30210	(10020118)		
464943.41	3807861.91	8.96595	(10020118)	464963.41
3807861.91	8.62781	(10020118)		
464983.41	3807861.91	8.29149	(10020118)	465003.41
3807861.91	7.96247	(10020118)		
465023.41	3807861.91	7.63541	(10020118)	465043.41
3807861.91	7.31379	(10020118)		
465063.41	3807861.91	7.00261	(10020118)	465083.41
3807861.91	6.75300	(10102019)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 729

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465103.41	3807861.91	6.56728	(10102019)	465123.41
3807861.91	6.38549	(10102019)		
465143.41	3807861.91	6.20168	(10102019)	465163.41
3807861.91	6.01875	(10102019)		
465183.41	3807861.91	5.84115	(10102019)	465203.41
3807861.91	5.66649	(10102019)		
465223.41	3807861.91	5.49385	(10102019)	465243.41
3807861.91	5.31974	(10102019)		
465263.41	3807861.91	5.15209	(10102019)	465283.41
3807861.91	4.98913	(10102019)		

465303.41	3807861.91	4.82851	(10102019)	465323.41
3807861.91	4.67209 (10102019)			
465343.41	3807861.91	4.51893	(10102019)	465363.41
3807861.91	4.36599 (10102019)			
465383.41	3807861.91	4.21905	(10102019)	464503.41
3807881.91	13.06357 (09031219)			
464523.41	3807881.91	13.09059	(10020118)	464543.41
3807881.91	13.18758 (10020118)			
464723.41	3807881.91	12.42934	(10020118)	464743.41
3807881.91	12.15206 (10020118)			
464763.41	3807881.91	11.85432	(10020118)	464783.41
3807881.91	11.53891 (10020118)			
464803.41	3807881.91	11.20820	(10020118)	464823.41
3807881.91	10.86518 (10020118)			
464843.41	3807881.91	10.51528	(10020118)	464863.41
3807881.91	10.16011 (10020118)			
464883.41	3807881.91	9.79751	(10020118)	464903.41
3807881.91	9.43679 (10020118)			
464923.41	3807881.91	9.07762	(10020118)	464943.41
3807881.91	8.71654 (10020118)			
464963.41	3807881.91	8.36301	(10020118)	464983.41
3807881.91	8.01568 (10020118)			
465003.41	3807881.91	7.67033	(10020118)	465023.41
3807881.91	7.33614 (10020118)			
465043.41	3807881.91	7.05375	(10102019)	465063.41
3807881.91	6.85328 (10102019)			
465083.41	3807881.91	6.65699	(10102019)	465103.41
3807881.91	6.46272 (10102019)			
465123.41	3807881.91	6.26568	(10102019)	465143.41
3807881.91	6.07439 (10102019)			
465163.41	3807881.91	5.88648	(10102019)	465183.41
3807881.91	5.69708 (10102019)			
465203.41	3807881.91	5.51518	(10102019)	465223.41
3807881.91	5.33832 (10102019)			
465243.41	3807881.91	5.16430	(10102019)	465263.41
3807881.91	4.99459 (10102019)			
465283.41	3807881.91	4.82812	(10102019)	465303.41
3807881.91	4.66147 (10102019)			
465323.41	3807881.91	4.50263	(10102019)	465343.41
3807881.91	4.34938 (10102019)			
465363.41	3807881.91	4.19974	(10102019)	465383.41
3807881.91	4.05179 (10102019)			
464723.41	3807901.91	12.52205	(10020118)	464743.41
3807901.91	12.19041 (10020118)			
464763.41	3807901.91	11.84110	(10020118)	464783.41
3807901.91	11.47860 (10020118)			
464803.41	3807901.91	11.10583	(10020118)	464823.41
3807901.91	10.72372 (10020118)			
464843.41	3807901.91	10.33967	(10020118)	464863.41
3807901.91	9.95465 (10020118)			

464883.41	3807901.91	9.56476	(10020118)	464903.41
3807901.91	9.17906	(10020118)		
464923.41	3807901.91	8.79884	(10020118)	464943.41
3807901.91	8.42459	(10020118)		
464963.41	3807901.91	8.05986	(10020118)	464983.41
3807901.91	7.70310	(10020118)		
465003.41	3807901.91	7.37619	(10102019)	465023.41
3807901.91	7.16211	(10102019)		
465043.41	3807901.91	6.95016	(10102019)	465063.41
3807901.91	6.73987	(10102019)		
465083.41	3807901.91	6.53135	(10102019)	465103.41
3807901.91	6.32533	(10102019)		
465123.41	3807901.91	6.12247	(10102019)	465143.41
3807901.91	5.92272	(10102019)		
465163.41	3807901.91	5.72662	(10102019)	465183.41
3807901.91	5.53468	(10102019)		
465203.41	3807901.91	5.34922	(10102019)	465223.41
3807901.91	5.16839	(10102019)		
465243.41	3807901.91	4.98909	(10102019)	465263.41
3807901.91	4.81663	(10102019)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 730

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465283.41	3807901.91	4.64941	(10102019)	465303.41

3807901.91	4.48442	(10102019)		
465323.41	3807901.91	4.32406	(10102019)	465343.41
3807901.91	4.16895	(10102019)		
465363.41	3807901.91	4.02102	(10102019)	465383.41
3807901.91	3.87604	(10102019)		
464723.41	3807921.91	12.52537	(10020118)	464743.41
3807921.91	12.14450	(10020118)		
464763.41	3807921.91	11.74644	(10020118)	464783.41
3807921.91	11.34044	(10020118)		
464803.41	3807921.91	10.92928	(10020118)	464823.41
3807921.91	10.51343	(10020118)		
464843.41	3807921.91	10.09904	(10020118)	464863.41
3807921.91	9.68733	(10020118)		
464883.41	3807921.91	9.27547	(10020118)	464903.41
3807921.91	8.87032	(10020118)		
464923.41	3807921.91	8.47434	(10020118)	464943.41
3807921.91	8.09244	(10020118)		
464963.41	3807921.91	7.72841	(10102019)	464983.41
3807921.91	7.50049	(10102019)		
465003.41	3807921.91	7.26871	(10102019)	465023.41
3807921.91	7.03947	(10102019)		
465043.41	3807921.91	6.81393	(10102019)	465063.41
3807921.91	6.59521	(10102019)		
465083.41	3807921.91	6.37660	(10102019)	465103.41
3807921.91	6.16121	(10102019)		
465123.41	3807921.91	5.95381	(10102019)	465143.41
3807921.91	5.74764	(10102019)		
465163.41	3807921.91	5.54564	(10102019)	465183.41
3807921.91	5.35220	(10102019)		
465203.41	3807921.91	5.16454	(10102019)	465223.41
3807921.91	4.98146	(10102019)		
465243.41	3807921.91	4.79920	(10102019)	465263.41
3807921.91	4.62482	(10102019)		
465283.41	3807921.91	4.45725	(10102019)	465303.41
3807921.91	4.29584	(10102019)		
465323.41	3807921.91	4.13645	(10102019)	465343.41
3807921.91	3.98164	(10102019)		
465363.41	3807921.91	3.83570	(10102019)	465383.41
3807921.91	3.69400	(10102019)		
464723.41	3807941.91	12.42694	(10020118)	464743.41
3807941.91	12.00804	(10020118)		
464763.41	3807941.91	11.57025	(10020118)	464783.41
3807941.91	11.12516	(10020118)		
464803.41	3807941.91	10.67763	(10020118)	464823.41
3807941.91	10.23532	(10020118)		
464843.41	3807941.91	9.79464	(10020118)	464863.41
3807941.91	9.35846	(10020118)		
464883.41	3807941.91	8.92937	(10020118)	464903.41
3807941.91	8.51469	(10020118)		
464923.41	3807941.91	8.11351	(10020118)	464943.41

3807941.91	7.85905	(10102019)		
464963.41	3807941.91	7.61223	(10102019)	464983.41
3807941.91	7.36518	(10102019)		
465003.41	3807941.91	7.11979	(10102019)	465023.41
3807941.91	6.88252	(10102019)		
465043.41	3807941.91	6.65048	(10102019)	465063.41
3807941.91	6.41788	(10102019)		
465083.41	3807941.91	6.19402	(10102019)	465103.41
3807941.91	5.97613	(10102019)		
465123.41	3807941.91	5.75877	(10102019)	465143.41
3807941.91	5.55078	(10102019)		
465163.41	3807941.91	5.34931	(10102019)	465183.41
3807941.91	5.14908	(10102019)		
465203.41	3807941.91	4.95912	(10102019)	465223.41
3807941.91	4.77661	(10102019)		
465243.41	3807941.91	4.59909	(10102019)	465263.41
3807941.91	4.42419	(10102019)		
465283.41	3807941.91	4.25468	(10102019)	465303.41
3807941.91	4.09534	(10102019)		
465323.41	3807941.91	3.94087	(10102019)	465343.41
3807941.91	3.79185	(10102019)		
465363.41	3807941.91	3.64874	(10102019)	465383.41
3807941.91	3.62057	(09010519)		
465403.41	3807941.91	3.59622	(09010519)	465423.41
3807941.91	3.57484	(09010519)		
465443.41	3807941.91	3.55358	(09010519)	465463.41
3807941.91	3.53326	(09010519)		
465483.41	3807941.91	3.51078	(09010519)	465503.41
3807941.91	3.48857	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 731

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	(YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)

465523.41	3807941.91	3.46559	(09010519)			465543.41
3807941.91	3.43884	(09010519)				
465563.41	3807941.91	3.41437	(09010519)			465583.41
3807941.91	3.39105	(09010519)				
465603.41	3807941.91	3.36819	(09010519)			465623.41
3807941.91	3.34232	(09010519)				
465643.41	3807941.91	3.31570	(09010519)			465663.41
3807941.91	3.29188	(09010519)				
465683.41	3807941.91	3.26563	(09010519)			465703.41
3807941.91	3.23891	(09010519)				
464723.41	3807961.91	12.21462	(10020118)			464743.41
3807961.91	11.77605	(10020118)				
464763.41	3807961.91	11.31008	(10020118)			464783.41
3807961.91	10.83408	(10020118)				
464803.41	3807961.91	10.35936	(10020118)			464823.41
3807961.91	9.89105	(10020118)				
464843.41	3807961.91	9.43217	(10020118)			464863.41
3807961.91	8.98355	(10020118)				
464883.41	3807961.91	8.54355	(10020118)			464903.41
3807961.91	8.24410	(10102019)				
464923.41	3807961.91	7.98082	(10102019)			464943.41
3807961.91	7.71662	(10102019)				
464963.41	3807961.91	7.45618	(10102019)			464983.41
3807961.91	7.19913	(10102019)				
465003.41	3807961.91	6.94299	(10102019)			465023.41
3807961.91	6.69733	(10102019)				
465043.41	3807961.91	6.45835	(10102019)			465063.41
3807961.91	6.21851	(10102019)				
465083.41	3807961.91	5.98718	(10102019)			465103.41
3807961.91	5.76356	(10102019)				
465123.41	3807961.91	5.54655	(10102019)			465143.41
3807961.91	5.33581	(10102019)				
465163.41	3807961.91	5.13162	(10102019)			465183.41
3807961.91	4.93423	(10102019)				
465203.41	3807961.91	4.74319	(10102019)			465223.41
3807961.91	4.55920	(10102019)				
465243.41	3807961.91	4.38454	(10102019)			465263.41
3807961.91	4.21403	(10102019)				
465283.41	3807961.91	4.04927	(10102019)			465303.41
3807961.91	3.89293	(10102019)				
465323.41	3807961.91	3.85371	(09010519)			465343.41
3807961.91	3.82768	(09010519)				

465363.41	3807961.91	3.80388	(09010519)	465383.41
3807961.91	3.77783	(09010519)		
465403.41	3807961.91	3.75049	(09010519)	465423.41
3807961.91	3.72261	(09010519)		
465443.41	3807961.91	3.69654	(09010519)	465463.41
3807961.91	3.67528	(09010519)		
465483.41	3807961.91	3.64682	(09010519)	465503.41
3807961.91	3.62022	(09010519)		
465523.41	3807961.91	3.59389	(09010519)	465543.41
3807961.91	3.56534	(09010519)		
465563.41	3807961.91	3.53850	(09010519)	465583.41
3807961.91	3.51191	(09010519)		
465603.41	3807961.91	3.48299	(09010519)	465623.41
3807961.91	3.45423	(09010519)		
465643.41	3807961.91	3.42557	(09010519)	465663.41
3807961.91	3.39671	(09010519)		
465683.41	3807961.91	3.36806	(09010519)	465703.41
3807961.91	3.34004	(09010519)		
464743.41	3807981.91	11.44926	(10020118)	464763.41
3807981.91	10.96546	(10020118)		
464783.41	3807981.91	10.46953	(10020118)	464803.41
3807981.91	9.97606	(10020118)		
464823.41	3807981.91	9.48719	(10020118)	464843.41
3807981.91	9.01686	(10020118)		
464863.41	3807981.91	8.67078	(10102019)	464883.41
3807981.91	8.37769	(10102019)		
464903.41	3807981.91	8.09301	(10102019)	464923.41
3807981.91	7.81380	(10102019)		
464943.41	3807981.91	7.53398	(10102019)	464963.41
3807981.91	7.26257	(10102019)		
464983.41	3807981.91	6.99777	(10102019)	465003.41
3807981.91	6.73524	(10102019)		
465023.41	3807981.91	6.48241	(10102019)	465043.41
3807981.91	6.23723	(10102019)		
465063.41	3807981.91	5.99524	(10102019)	465083.41
3807981.91	5.75926	(10102019)		
465103.41	3807981.91	5.53156	(10102019)	465123.41
3807981.91	5.31769	(10102019)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 732

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,


```

, L0006111      L0006106      , L0006107      , L0006108      , L0006109      , L0006110
, L0006112      , L0006112      , L0006113      ,
, L0006114      , L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
, L0006122      , L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807981.91	5.10591	(10102019)	465163.41
3807981.91	4.90016	(10102019)		
465183.41	3807981.91	4.70656	(10102019)	465203.41
3807981.91	4.51705	(10102019)		
465223.41	3807981.91	4.33432	(10102019)	465243.41
3807981.91	4.16296	(10102019)		
465263.41	3807981.91	4.11182	(09010519)	465283.41
3807981.91	4.08454	(09010519)		
465303.41	3807981.91	4.05574	(09010519)	465323.41
3807981.91	4.02386	(09010519)		
465343.41	3807981.91	3.99117	(09010519)	465363.41
3807981.91	3.96147	(09010519)		
465383.41	3807981.91	3.93230	(09010519)	465403.41
3807981.91	3.90252	(09010519)		
465423.41	3807981.91	3.86841	(09010519)	465443.41
3807981.91	3.83753	(09010519)		
465463.41	3807981.91	3.81466	(09010519)	465483.41
3807981.91	3.78034	(09010519)		
465503.41	3807981.91	3.74929	(09010519)	465523.41
3807981.91	3.71953	(09010519)		
465543.41	3807981.91	3.68881	(09010519)	465563.41
3807981.91	3.65886	(09010519)		
465583.41	3807981.91	3.62843	(09010519)	465603.41
3807981.91	3.59442	(09010519)		
465623.41	3807981.91	3.56284	(09010519)	465643.41
3807981.91	3.53187	(09010519)		
465663.41	3807981.91	3.49821	(09010519)	465683.41
3807981.91	3.46778	(09010519)		
465703.41	3807981.91	3.43871	(09010519)	464763.41
3808001.91	10.53642	(10020118)		
464783.41	3808001.91	10.03246	(10020118)	464803.41
3808001.91	9.53002	(10020118)		
464823.41	3808001.91	9.12309	(10102019)	464843.41

3808001.91	8.80996	(10102019)		
464863.41	3808001.91	8.50175	(10102019)	464883.41
3808001.91	8.19094	(10102019)		
464903.41	3808001.91	7.89180	(10102019)	464923.41
3808001.91	7.60127	(10102019)		
464943.41	3808001.91	7.31638	(10102019)	464963.41
3808001.91	7.03454	(10102019)		
464983.41	3808001.91	6.75934	(10102019)	465003.41
3808001.91	6.49690	(10102019)		
465023.41	3808001.91	6.23842	(10102019)	465043.41
3808001.91	5.98725	(10102019)		
465063.41	3808001.91	5.74907	(10102019)	465083.41
3808001.91	5.51455	(10102019)		
465103.41	3808001.91	5.28748	(10102019)	465123.41
3808001.91	5.07482	(10102019)		
465143.41	3808001.91	4.86518	(10102019)	465163.41
3808001.91	4.66138	(10102019)		
465183.41	3808001.91	4.46623	(10102019)	465203.41
3808001.91	4.39585	(09010519)		
465223.41	3808001.91	4.36369	(09010519)	465243.41
3808001.91	4.33184	(09010519)		
465263.41	3808001.91	4.29958	(09010519)	465283.41
3808001.91	4.26592	(09010519)		
465303.41	3808001.91	4.22700	(09010519)	465323.41
3808001.91	4.19134	(09010519)		
465343.41	3808001.91	4.15637	(09010519)	465363.41
3808001.91	4.11698	(09010519)		
465383.41	3808001.91	4.08174	(09010519)	465403.41
3808001.91	4.04808	(09010519)		
465423.41	3808001.91	4.01365	(09010519)	465443.41
3808001.91	3.97979	(09010519)		
465463.41	3808001.91	3.94746	(09010519)	465483.41
3808001.91	3.91291	(09010519)		
465503.41	3808001.91	3.87908	(09010519)	465523.41
3808001.91	3.84468	(09010519)		
465543.41	3808001.91	3.80613	(09010519)	465563.41
3808001.91	3.77122	(09010519)		
465583.41	3808001.91	3.73808	(09010519)	465603.41
3808001.91	3.70428	(09010519)		
465623.41	3808001.91	3.66788	(09010519)	465643.41
3808001.91	3.63117	(09010519)		
465663.41	3808001.91	3.59803	(09010519)	465683.41
3808001.91	3.56570	(09010519)		
465703.41	3808001.91	3.53299	(09010519)	464763.41
3808021.91	10.01831	(10020118)		
464783.41	3808021.91	9.59002	(10102019)	464803.41
3808021.91	9.26841	(10102019)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 733

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	8.93530	(10102019)	464843.41
3808021.91	8.60716	(10102019)		
464863.41	3808021.91	8.28407	(10102019)	464883.41
3808021.91	7.96455	(10102019)		
464903.41	3808021.91	7.65242	(10102019)	464923.41
3808021.91	7.34929	(10102019)		
464943.41	3808021.91	7.05869	(10102019)	464963.41
3808021.91	6.77409	(10102019)		
464983.41	3808021.91	6.49719	(10102019)	465003.41
3808021.91	6.22904	(10102019)		
465023.41	3808021.91	5.97067	(10102019)	465043.41
3808021.91	5.72159	(10102019)		
465063.41	3808021.91	5.48138	(10102019)	465083.41
3808021.91	5.25054	(10102019)		
465103.41	3808021.91	5.02882	(10102019)	465123.41
3808021.91	4.81559	(10102019)		
465143.41	3808021.91	4.72504	(09010519)	465163.41
3808021.91	4.68400	(09010519)		
465183.41	3808021.91	4.63902	(09010519)	465203.41
3808021.91	4.59902	(09010519)		
465223.41	3808021.91	4.56062	(09010519)	465243.41
3808021.91	4.51861	(09010519)		
465263.41	3808021.91	4.47911	(09010519)	465283.41
3808021.91	4.44026	(09010519)		

465303.41	3808021.91	4.39828	(09010519)	465323.41
3808021.91	4.35607	(09010519)		
465343.41	3808021.91	4.31388	(09010519)	465363.41
3808021.91	4.27197	(09010519)		
465383.41	3808021.91	4.23259	(09010519)	465403.41
3808021.91	4.19372	(09010519)		
465423.41	3808021.91	4.15185	(09010519)	465443.41
3808021.91	4.11261	(09010519)		
465463.41	3808021.91	4.07956	(09010519)	465483.41
3808021.91	4.03829	(09010519)		
465503.41	3808021.91	3.99964	(09010519)	465523.41
3808021.91	3.96169	(09010519)		
465543.41	3808021.91	3.92148	(09010519)	465563.41
3808021.91	3.88136	(09010519)		
465583.41	3808021.91	3.84213	(09010519)	465603.41
3808021.91	3.80584	(09010519)		
465623.41	3808021.91	3.76778	(09010519)	465643.41
3808021.91	3.72968	(09010519)		
465663.41	3808021.91	3.69427	(09010519)	465683.41
3808021.91	3.65701	(09010519)		
465703.41	3808021.91	3.61923	(09010519)	464783.41
3808041.91	9.35458	(10102019)		
464803.41	3808041.91	9.02541	(10102019)	464823.41
3808041.91	8.68890	(10102019)		
464843.41	3808041.91	8.35210	(10102019)	464863.41
3808041.91	8.02013	(10102019)		
464883.41	3808041.91	7.69561	(10102019)	464903.41
3808041.91	7.37572	(10102019)		
464923.41	3808041.91	7.06496	(10102019)	464943.41
3808041.91	6.77082	(10102019)		
464963.41	3808041.91	6.48686	(10102019)	464983.41
3808041.91	6.21178	(10102019)		
465003.41	3808041.91	5.94027	(10102019)	465023.41
3808041.91	5.68364	(10102019)		
465043.41	3808041.91	5.43853	(10102019)	465063.41
3808041.91	5.19960	(10102019)		
465083.41	3808041.91	5.08649	(09010519)	465103.41
3808041.91	5.04091	(09010519)		
465123.41	3808041.91	4.99089	(09010519)	465143.41
3808041.91	4.94378	(09010519)		
465163.41	3808041.91	4.89730	(09010519)	465183.41
3808041.91	4.84657	(09010519)		
465203.41	3808041.91	4.79899	(09010519)	465223.41
3808041.91	4.75222	(09010519)		
465243.41	3808041.91	4.70137	(09010519)	465263.41
3808041.91	4.65382	(09010519)		
465283.41	3808041.91	4.60835	(09010519)	465303.41
3808041.91	4.56429	(09010519)		
465323.41	3808041.91	4.51606	(09010519)	465343.41
3808041.91	4.46685	(09010519)		

465363.41	3808041.91	4.42183	(09010519)	465383.41
3808041.91	4.37796	(09010519)		
465403.41	3808041.91	4.33387	(09010519)	465423.41
3808041.91	4.28507	(09010519)		
465443.41	3808041.91	4.24061	(09010519)	465463.41
3808041.91	4.20610	(09010519)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 734

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465483.41	3808041.91	4.15841	(09010519)	465503.41
3808041.91	4.11407	(09010519)		
465523.41	3808041.91	4.07180	(09010519)	465543.41
3808041.91	4.03090	(09010519)		
465563.41	3808041.91	3.98665	(09010519)	465583.41
3808041.91	3.94214	(09010519)		
465603.41	3808041.91	3.90247	(09010519)	465623.41
3808041.91	3.86315	(09010519)		
465643.41	3808041.91	3.82402	(09010519)	465663.41
3808041.91	3.78425	(09010519)		
465683.41	3808041.91	3.74233	(09010519)	465703.41
3808041.91	3.70061	(09010519)		
464803.41	3808061.91	8.72978	(10102019)	464823.41
3808061.91	8.38440	(10102019)		
464843.41	3808061.91	8.04552	(10102019)	464863.41

3808061.91	7.71322	(10102019)		
464883.41	3808061.91	7.38358	(10102019)	464903.41
3808061.91	7.06449	(10102019)		
464923.41	3808061.91	6.75716	(10102019)	464943.41
3808061.91	6.46248	(10102019)		
464963.41	3808061.91	6.17934	(10102019)	464983.41
3808061.91	5.90632	(10102019)		
465003.41	3808061.91	5.63820	(10102019)	465023.41
3808061.91	5.49328	(09010519)		
465043.41	3808061.91	5.43606	(09010519)	465063.41
3808061.91	5.38380	(09010519)		
465083.41	3808061.91	5.32692	(09010519)	465103.41
3808061.91	5.26891	(09010519)		
465123.41	3808061.91	5.21618	(09010519)	465143.41
3808061.91	5.15902	(09010519)		
465163.41	3808061.91	5.10096	(09010519)	465183.41
3808061.91	5.04838	(09010519)		
465203.41	3808061.91	4.99155	(09010519)	465223.41
3808061.91	4.93400	(09010519)		
465243.41	3808061.91	4.88206	(09010519)	465263.41
3808061.91	4.82603	(09010519)		
465283.41	3808061.91	4.76968	(09010519)	465303.41
3808061.91	4.71989	(09010519)		
465323.41	3808061.91	4.66949	(09010519)	465343.41
3808061.91	4.61819	(09010519)		
465363.41	3808061.91	4.56220	(09010519)	465383.41
3808061.91	4.51170	(09010519)		
465403.41	3808061.91	4.46361	(09010519)	465423.41
3808061.91	4.41509	(09010519)		
465443.41	3808061.91	4.36771	(09010519)	465463.41
3808061.91	4.32258	(09010519)		
465483.41	3808061.91	4.27528	(09010519)	465503.41
3808061.91	4.22497	(09010519)		
465523.41	3808061.91	4.17467	(09010519)	465543.41
3808061.91	4.13009	(09010519)		
465563.41	3808061.91	4.08534	(09010519)	465583.41
3808061.91	4.04088	(09010519)		
465603.41	3808061.91	3.99775	(09010519)	465623.41
3808061.91	3.95509	(09010519)		
465643.41	3808061.91	3.91195	(09010519)	465663.41
3808061.91	3.86480	(09010519)		
465683.41	3808061.91	3.82134	(09010519)	465703.41
3808061.91	3.78007	(09010519)		
464823.41	3808081.91	8.04381	(10102019)	464843.41
3808081.91	7.69738	(10102019)		
464863.41	3808081.91	7.36052	(10102019)	464883.41
3808081.91	7.03640	(10102019)		
464903.41	3808081.91	6.72462	(10102019)	464923.41
3808081.91	6.42404	(10102019)		
464943.41	3808081.91	6.13216	(10102019)	464963.41

3808081.91	5.95886	(09010519)		
464983.41	3808081.91	5.89412	(09010519)	465003.41
3808081.91	5.82935	(09010519)		
465023.41	3808081.91	5.76126	(09010519)	465043.41
3808081.91	5.69298	(09010519)		
465063.41	3808081.91	5.63243	(09010519)	465083.41
3808081.91	5.56569	(09010519)		
465103.41	3808081.91	5.49682	(09010519)	465123.41
3808081.91	5.43188	(09010519)		
465143.41	3808081.91	5.36754	(09010519)	465163.41
3808081.91	5.30372	(09010519)		
465183.41	3808081.91	5.23988	(09010519)	465203.41
3808081.91	5.17679	(09010519)		
465223.41	3808081.91	5.11434	(09010519)	465243.41
3808081.91	5.05201	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 735

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3808081.91	4.99053	(09010519)	465283.41
3808081.91	4.93063	(09010519)		
465303.41	3808081.91	4.87488	(09010519)	465323.41
3808081.91	4.81643	(09010519)		
465343.41	3808081.91	4.75730	(09010519)	465363.41
3808081.91	4.69911	(09010519)		

465383.41	3808081.91	4.64446	(09010519)	465403.41
3808081.91	4.59094	(09010519)		
465423.41	3808081.91	4.53441	(09010519)	465443.41
3808081.91	4.48144	(09010519)		
465463.41	3808081.91	4.43615	(09010519)	465483.41
3808081.91	4.38170	(09010519)		
465503.41	3808081.91	4.32820	(09010519)	465523.41
3808081.91	4.27553	(09010519)		
465543.41	3808081.91	4.22325	(09010519)	465563.41
3808081.91	4.17439	(09010519)		
465583.41	3808081.91	4.12738	(09010519)	465603.41
3808081.91	4.08098	(09010519)		
465623.41	3808081.91	4.03517	(09010519)	465643.41
3808081.91	3.98935	(09010519)		
465663.41	3808081.91	3.94155	(09010519)	465683.41
3808081.91	3.89663	(09010519)		
465703.41	3808081.91	3.85274	(09010519)	464843.41
3808101.91	7.31483	(10102019)		
464863.41	3808101.91	6.98048	(10102019)	464883.41
3808101.91	6.66573	(10102019)		
464903.41	3808101.91	6.46478	(09010519)	464923.41
3808101.91	6.40026	(09010519)		
464943.41	3808101.91	6.32856	(09010519)	464963.41
3808101.91	6.25162	(09010519)		
464983.41	3808101.91	6.17326	(09010519)	465003.41
3808101.91	6.09988	(09010519)		
465023.41	3808101.91	6.02268	(09010519)	465043.41
3808101.91	5.94506	(09010519)		
465063.41	3808101.91	5.87276	(09010519)	465083.41
3808101.91	5.79549	(09010519)		
465103.41	3808101.91	5.71661	(09010519)	465123.41
3808101.91	5.63996	(09010519)		
465143.41	3808101.91	5.56937	(09010519)	465163.41
3808101.91	5.50051	(09010519)		
465183.41	3808101.91	5.42393	(09010519)	465203.41
3808101.91	5.35359	(09010519)		
465223.41	3808101.91	5.28571	(09010519)	465243.41
3808101.91	5.21370	(09010519)		
465263.41	3808101.91	5.14780	(09010519)	465283.41
3808101.91	5.08502	(09010519)		
465303.41	3808101.91	5.02142	(09010519)	465323.41
3808101.91	4.95473	(09010519)		
465343.41	3808101.91	4.88825	(09010519)	465363.41
3808101.91	4.82728	(09010519)		
465383.41	3808101.91	4.76823	(09010519)	465403.41
3808101.91	4.70943	(09010519)		
465423.41	3808101.91	4.64570	(09010519)	465443.41
3808101.91	4.58748	(09010519)		
465463.41	3808101.91	4.54123	(09010519)	465483.41
3808101.91	4.48018	(09010519)		

465503.41	3808101.91	4.42344	(09010519)	465523.41
3808101.91	4.36829	(09010519)		
465543.41	3808101.91	4.30995	(09010519)	465563.41
3808101.91	4.25688	(09010519)		
465583.41	3808101.91	4.20658	(09010519)	465603.41
3808101.91	4.15701	(09010519)		
465623.41	3808101.91	4.10815	(09010519)	465643.41
3808101.91	4.05980	(09010519)		
465663.41	3808101.91	4.01102	(09010519)	465683.41
3808101.91	3.96391	(09010519)		
465703.41	3808101.91	3.91692	(09010519)	464863.41
3808121.91	6.93936	(09010519)		
464883.41	3808121.91	6.86829	(09010519)	464903.41
3808121.91	6.78870	(09010519)		
464923.41	3808121.91	6.70541	(09010519)	464943.41
3808121.91	6.62095	(09010519)		
464963.41	3808121.91	6.53574	(09010519)	464983.41
3808121.91	6.44949	(09010519)		
465003.41	3808121.91	6.35746	(09010519)	465023.41
3808121.91	6.27143	(09010519)		
465043.41	3808121.91	6.18748	(09010519)	465063.41
3808121.91	6.09793	(09010519)		
465083.41	3808121.91	6.00842	(09010519)	465103.41
3808121.91	5.92082	(09010519)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 736

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
-------------	-------------	------	------------	-------------

Y-COORD (M)	CONC	(YYMMDDHH)	
465123.41	3808121.91	5.84219	(09010519) 465143.41
3808121.91	5.76546	(09010519)	
465163.41	3808121.91	5.68842	(09010519) 465183.41
3808121.91	5.60372	(09010519)	
465203.41	3808121.91	5.52104	(09010519) 465223.41
3808121.91	5.44141	(09010519)	
465243.41	3808121.91	5.36931	(09010519) 465263.41
3808121.91	5.29915	(09010519)	
465283.41	3808121.91	5.22894	(09010519) 465303.41
3808121.91	5.15267	(09010519)	
465323.41	3808121.91	5.08250	(09010519) 465343.41
3808121.91	5.01462	(09010519)	
465363.41	3808121.91	4.94189	(09010519) 465383.41
3808121.91	4.87612	(09010519)	
465403.41	3808121.91	4.81366	(09010519) 465423.41
3808121.91	4.75121	(09010519)	
465443.41	3808121.91	4.69055	(09010519) 465463.41
3808121.91	4.63292	(09010519)	
465483.41	3808121.91	4.57323	(09010519) 465503.41
3808121.91	4.51053	(09010519)	
465523.41	3808121.91	4.44815	(09010519) 465543.41
3808121.91	4.39153	(09010519)	
465563.41	3808121.91	4.33669	(09010519) 465583.41
3808121.91	4.28309	(09010519)	
465603.41	3808121.91	4.23033	(09010519) 465623.41
3808121.91	4.17843	(09010519)	
465643.41	3808121.91	4.12627	(09010519) 465663.41
3808121.91	4.06993	(09010519)	
465683.41	3808121.91	4.01864	(09010519) 465703.41
3808121.91	3.97011	(09010519)	
464883.41	3808141.91	7.18933	(09010519) 464903.41
3808141.91	7.10188	(09010519)	
464923.41	3808141.91	7.00858	(09010519) 464943.41
3808141.91	6.91068	(09010519)	
464963.41	3808141.91	6.81373	(09010519) 464983.41
3808141.91	6.71601	(09010519)	
465003.41	3808141.91	6.61030	(09010519) 465023.41
3808141.91	6.51339	(09010519)	
465043.41	3808141.91	6.41961	(09010519) 465063.41
3808141.91	6.31796	(09010519)	
465083.41	3808141.91	6.21759	(09010519) 465103.41
3808141.91	6.12067	(09010519)	
465123.41	3808141.91	6.03471	(09010519) 465143.41
3808141.91	5.94604	(09010519)	
465163.41	3808141.91	5.85716	(09010519) 465183.41
3808141.91	5.77010	(09010519)	
465203.41	3808141.91	5.68074	(09010519) 465223.41

3808141.91	5.59286	(09010519)		
465243.41	3808141.91	5.51552	(09010519)	465263.41
3808141.91	5.43564	(09010519)		
465283.41	3808141.91	5.35560	(09010519)	465303.41
3808141.91	5.27730	(09010519)		
465323.41	3808141.91	5.20012	(09010519)	465343.41
3808141.91	5.12433	(09010519)		
465363.41	3808141.91	5.05024	(09010519)	465383.41
3808141.91	4.98079	(09010519)		
465403.41	3808141.91	4.91315	(09010519)	465423.41
3808141.91	4.84257	(09010519)		
465443.41	3808141.91	4.77655	(09010519)	465463.41
3808141.91	4.71349	(09010519)		
465483.41	3808141.91	4.65137	(09010519)	465503.41
3808141.91	4.58748	(09010519)		
465523.41	3808141.91	4.52348	(09010519)	465543.41
3808141.91	4.46029	(09010519)		
465563.41	3808141.91	4.40130	(09010519)	465583.41
3808141.91	4.34471	(09010519)		
465603.41	3808141.91	4.28910	(09010519)	465623.41
3808141.91	4.23446	(09010519)		
465643.41	3808141.91	4.18008	(09010519)	465663.41
3808141.91	4.12378	(09010519)		
465683.41	3808141.91	4.06829	(09010519)	465703.41
3808141.91	4.01449	(09010519)		
464883.41	3808161.91	7.49185	(09010519)	464903.41
3808161.91	7.39896	(09010519)		
464923.41	3808161.91	7.29710	(09010519)	464943.41
3808161.91	7.18556	(09010519)		
464963.41	3808161.91	7.07562	(09010519)	464983.41
3808161.91	6.96578	(09010519)		
465003.41	3808161.91	6.85015	(09010519)	465023.41
3808161.91	6.74095	(09010519)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 737

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126

, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465043.41	3808161.91	6.63453	(09010519)	465063.41
3808161.91	6.52219	(09010519)		
465083.41	3808161.91	6.41328	(09010519)	465103.41
3808161.91	6.30845	(09010519)		
465123.41	3808161.91	6.21146	(09010519)	465143.41
3808161.91	6.11138	(09010519)		
465163.41	3808161.91	6.01233	(09010519)	465183.41
3808161.91	5.92093	(09010519)		
465203.41	3808161.91	5.82650	(09010519)	465223.41
3808161.91	5.73307	(09010519)		
465243.41	3808161.91	5.64706	(09010519)	465263.41
3808161.91	5.55809	(09010519)		
465283.41	3808161.91	5.47006	(09010519)	465303.41
3808161.91	5.38919	(09010519)		
465323.41	3808161.91	5.30541	(09010519)	465343.41
3808161.91	5.22252	(09010519)		
465363.41	3808161.91	5.14652	(09010519)	465383.41
3808161.91	5.07323	(09010519)		
465403.41	3808161.91	5.00075	(09010519)	465423.41
3808161.91	4.92319	(09010519)		
465443.41	3808161.91	4.85234	(09010519)	465463.41
3808161.91	4.78517	(09010519)		
465483.41	3808161.91	4.71774	(09010519)	465503.41
3808161.91	4.65285	(09010519)		
465523.41	3808161.91	4.58840	(09010519)	465543.41
3808161.91	4.51943	(09010519)		
465563.41	3808161.91	4.45666	(09010519)	465583.41
3808161.91	4.39729	(09010519)		
465603.41	3808161.91	4.33901	(09010519)	465623.41
3808161.91	4.28073	(09010519)		
465643.41	3808161.91	4.22344	(09010519)	465663.41
3808161.91	4.16839	(09010519)		
465683.41	3808161.91	4.11018	(09010519)	465703.41
3808161.91	4.05208	(09010519)		
464903.41	3808181.91	7.67306	(09010519)	464923.41
3808181.91	7.55870	(09010519)		
464943.41	3808181.91	7.43387	(09010519)	464963.41
3808181.91	7.31132	(09010519)		

464983.41	3808181.91	7.19069	(09010519)	465003.41
3808181.91	7.07109	(09010519)		
465023.41	3808181.91	6.94784	(09010519)	465043.41
3808181.91	6.82391	(09010519)		
465063.41	3808181.91	6.70087	(09010519)	465083.41
3808181.91	6.58780	(09010519)		
465103.41	3808181.91	6.47921	(09010519)	465123.41
3808181.91	6.36528	(09010519)		
465143.41	3808181.91	6.25993	(09010519)	465163.41
3808181.91	6.15832	(09010519)		
465183.41	3808181.91	6.05148	(09010519)	465203.41
3808181.91	5.95290	(09010519)		
465223.41	3808181.91	5.85788	(09010519)	465243.41
3808181.91	5.75774	(09010519)		
465263.41	3808181.91	5.66553	(09010519)	465283.41
3808181.91	5.57671	(09010519)		
465303.41	3808181.91	5.48286	(09010519)	465323.41
3808181.91	5.39662	(09010519)		
465343.41	3808181.91	5.31357	(09010519)	465363.41
3808181.91	5.22563	(09010519)		
465383.41	3808181.91	5.14607	(09010519)	465403.41
3808181.91	5.07073	(09010519)		
465423.41	3808181.91	4.99586	(09010519)	465443.41
3808181.91	4.92344	(09010519)		
465463.41	3808181.91	4.85148	(09010519)	465483.41
3808181.91	4.77429	(09010519)		
465503.41	3808181.91	4.70416	(09010519)	465523.41
3808181.91	4.63801	(09010519)		
465543.41	3808181.91	4.57197	(09010519)	465563.41
3808181.91	4.50820	(09010519)		
465583.41	3808181.91	4.44610	(09010519)	465603.41
3808181.91	4.38521	(09010519)		
465623.41	3808181.91	4.32075	(09010519)	465643.41
3808181.91	4.25663	(09010519)		
465663.41	3808181.91	4.19953	(09010519)	465683.41
3808181.91	4.14283	(09010519)		
465703.41	3808181.91	4.08587	(09010519)	464923.41
3808201.91	7.78616	(09010519)		
464943.41	3808201.91	7.65691	(09010519)	464963.41
3808201.91	7.52482	(09010519)		
464983.41	3808201.91	7.39297	(09010519)	465003.41
3808201.91	7.26405	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***
INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC (YYMMDDHH)	CONC (YYMMDDHH)	X-COORD (M)
465023.41	3808201.91	7.12909 (09010519)	465043.41
3808201.91	6.99400 (09010519)		
465063.41	3808201.91	6.86812 (09010519)	465083.41
3808201.91	6.74463 (09010519)		
465103.41	3808201.91	6.62389 (09010519)	465123.41
3808201.91	6.50681 (09010519)		
465143.41	3808201.91	6.39194 (09010519)	465163.41
3808201.91	6.27981 (09010519)		
465183.41	3808201.91	6.17073 (09010519)	465203.41
3808201.91	6.06388 (09010519)		
465223.41	3808201.91	5.95957 (09010519)	465243.41
3808201.91	5.85810 (09010519)		
465263.41	3808201.91	5.75867 (09010519)	465283.41
3808201.91	5.66159 (09010519)		
465303.41	3808201.91	5.56715 (09010519)	465323.41
3808201.91	5.47458 (09010519)		
465343.41	3808201.91	5.38417 (09010519)	465363.41
3808201.91	5.29621 (09010519)		
465383.41	3808201.91	5.20996 (09010519)	465403.41
3808201.91	5.12652 (09010519)		
465423.41	3808201.91	5.04964 (09010519)	465443.41
3808201.91	4.97442 (09010519)		
465463.41	3808201.91	4.90006 (09010519)	465483.41
3808201.91	4.82333 (09010519)		
465503.41	3808201.91	4.75153 (09010519)	465523.41
3808201.91	4.68271 (09010519)		
465543.41	3808201.91	4.61533 (09010519)	465563.41
3808201.91	4.54615 (09010519)		
465583.41	3808201.91	4.47797 (09010519)	465603.41

3808201.91	4.41490	(09010519)		
465623.41	3808201.91	4.35037	(09010519)	465643.41
3808201.91	4.28672	(09010519)		
465663.41	3808201.91	4.22762	(09010519)	465683.41
3808201.91	4.16686	(09010519)		
465703.41	3808201.91	4.10621	(09010519)	464943.41
3808221.91	7.85326	(09010519)		
464963.41	3808221.91	7.71322	(09010519)	464983.41
3808221.91	7.57033	(09010519)		
465003.41	3808221.91	7.43100	(09010519)	465023.41
3808221.91	7.28741	(09010519)		
465043.41	3808221.91	7.14541	(09010519)	465063.41
3808221.91	7.01418	(09010519)		
465083.41	3808221.91	6.87856	(09010519)	465103.41
3808221.91	6.74537	(09010519)		
465123.41	3808221.91	6.62709	(09010519)	465143.41
3808221.91	6.50449	(09010519)		
465163.41	3808221.91	6.38304	(09010519)	465183.41
3808221.91	6.27127	(09010519)		
465203.41	3808221.91	6.15689	(09010519)	465223.41
3808221.91	6.04446	(09010519)		
465243.41	3808221.91	5.94117	(09010519)	465263.41
3808221.91	5.83524	(09010519)		
465283.41	3808221.91	5.73105	(09010519)	465303.41
3808221.91	5.63549	(09010519)		
465323.41	3808221.91	5.53727	(09010519)	465343.41
3808221.91	5.44061	(09010519)		
465363.41	3808221.91	5.35209	(09010519)	465383.41
3808221.91	5.26092	(09010519)		
465403.41	3808221.91	5.17147	(09010519)	465423.41
3808221.91	5.09149	(09010519)		
465443.41	3808221.91	5.01334	(09010519)	465463.41
3808221.91	4.93694	(09010519)		
465483.41	3808221.91	4.86226	(09010519)	465503.41
3808221.91	4.78793	(09010519)		
465523.41	3808221.91	4.71515	(09010519)	465543.41
3808221.91	4.64541	(09010519)		
465563.41	3808221.91	4.57215	(09010519)	465583.41
3808221.91	4.49962	(09010519)		
465603.41	3808221.91	4.43464	(09010519)	465623.41
3808221.91	4.36990	(09010519)		
465643.41	3808221.91	4.30645	(09010519)	465663.41
3808221.91	4.24562	(09010519)		
465683.41	3808221.91	4.18159	(09010519)	465703.41
3808221.91	4.11789	(09010519)		
464963.41	3808241.91	7.87395	(09010519)	464983.41
3808241.91	7.72076	(09010519)		
465003.41	3808241.91	7.57177	(09010519)	465023.41
3808241.91	7.42524	(09010519)		
465043.41	3808241.91	7.28055	(09010519)	465063.41

3808241.91 7.13081 (09010519)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

PAGE 739

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465083.41	3808241.91	6.98405	(09010519)	465103.41
3808241.91	6.84310 (09010519)			
465123.41	3808241.91	6.71828	(09010519)	465143.41
3808241.91	6.59527 (09010519)			
465163.41	3808241.91	6.47349	(09010519)	465183.41
3808241.91	6.34665 (09010519)			
465203.41	3808241.91	6.22995	(09010519)	465223.41
3808241.91	6.11799 (09010519)			
465243.41	3808241.91	6.00100	(09010519)	465263.41
3808241.91	5.89353 (09010519)			
465283.41	3808241.91	5.79042	(09010519)	465303.41
3808241.91	5.68235 (09010519)			
465323.41	3808241.91	5.58322	(09010519)	465343.41
3808241.91	5.48811 (09010519)			
465363.41	3808241.91	5.38812	(09010519)	465383.41
3808241.91	5.29653 (09010519)			
465403.41	3808241.91	5.21035	(09010519)	465423.41
3808241.91	5.12744 (09010519)			
465443.41	3808241.91	5.04650	(09010519)	465463.41
3808241.91	4.96747 (09010519)			

465483.41	3808241.91	4.89030	(09010519)	465503.41
3808241.91	4.80913	(09010519)		
465523.41	3808241.91	4.72876	(09010519)	465543.41
3808241.91	4.65718	(09010519)		
465563.41	3808241.91	4.58639	(09010519)	465583.41
3808241.91	4.51695	(09010519)		
465603.41	3808241.91	4.45018	(09010519)	465623.41
3808241.91	4.37980	(09010519)		
465643.41	3808241.91	4.31001	(09010519)	465663.41
3808241.91	4.25265	(10032206)		
465683.41	3808241.91	4.19864	(10032206)	465703.41
3808241.91	4.14425	(10032206)		
464983.41	3808261.91	7.81392	(09010519)	465003.41
3808261.91	7.66676	(09010519)		
465023.41	3808261.91	7.51741	(09010519)	465043.41
3808261.91	7.36784	(09010519)		
465063.41	3808261.91	7.21668	(09010519)	465083.41
3808261.91	7.07005	(09010519)		
465103.41	3808261.91	6.92757	(09010519)	465123.41
3808261.91	6.78839	(09010519)		
465143.41	3808261.91	6.65892	(09010519)	465163.41
3808261.91	6.53422	(09010519)		
465183.41	3808261.91	6.40775	(09010519)	465203.41
3808261.91	6.28429	(09010519)		
465223.41	3808261.91	6.16434	(09010519)	465243.41
3808261.91	6.04819	(09010519)		
465263.41	3808261.91	5.93963	(09010519)	465283.41
3808261.91	5.83382	(09010519)		
465303.41	3808261.91	5.72033	(09010519)	465323.41
3808261.91	5.61385	(09010519)		
465343.41	3808261.91	5.51251	(09010519)	465363.41
3808261.91	5.41425	(09010519)		
465383.41	3808261.91	5.31827	(09010519)	465403.41
3808261.91	5.22571	(09010519)		
465423.41	3808261.91	5.14056	(09010519)	465443.41
3808261.91	5.05751	(09010519)		
465463.41	3808261.91	4.97878	(10032206)	465483.41
3808261.91	4.90911	(10032206)		
465503.41	3808261.91	4.83762	(10032206)	465523.41
3808261.91	4.76716	(10032206)		
465543.41	3808261.91	4.70207	(10032206)	465563.41
3808261.91	4.63496	(10032206)		
465583.41	3808261.91	4.56878	(10032206)	465603.41
3808261.91	4.50792	(10032206)		
465623.41	3808261.91	4.44537	(10032206)	465643.41
3808261.91	4.38286	(10032206)		
465663.41	3808261.91	4.32131	(10032206)	465683.41
3808261.91	4.26418	(10032206)		
465703.41	3808261.91	4.20887	(10032206)	465003.41
3808281.91	7.72641	(09010519)		

465023.41	3808281.91	7.57510	(09010519)	465043.41
3808281.91	7.42347	(09010519)		
465063.41	3808281.91	7.27067	(09010519)	465083.41
3808281.91	7.12687	(09010519)		
465103.41	3808281.91	6.98686	(09010519)	465123.41
3808281.91	6.83813	(09010519)		
465143.41	3808281.91	6.70214	(09010519)	465163.41
3808281.91	6.57384	(09010519)		
465183.41	3808281.91	6.44690	(09010519)	465203.41
3808281.91	6.31774	(09010519)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 740

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808281.91	6.19179	(09010519)	465243.41
3808281.91	6.07864	(09010519)		
465263.41	3808281.91	5.96686	(09010519)	465283.41
3808281.91	5.86346	(10032206)		
465303.41	3808281.91	5.75851	(10032206)	465323.41
3808281.91	5.65791	(10032206)		
465343.41	3808281.91	5.56215	(10032206)	465363.41
3808281.91	5.47497	(10032206)		
465383.41	3808281.91	5.38486	(10032206)	465403.41
3808281.91	5.29610	(10032206)		
465423.41	3808281.91	5.21541	(10032206)	465443.41

3808281.91	5.13803	(10032206)		
465463.41	3808281.91	5.06661	(10032206)	465483.41
3808281.91	4.99348	(10032206)		
465503.41	3808281.91	4.92201	(10032206)	465523.41
3808281.91	4.85185	(10032206)		
465543.41	3808281.91	4.78163	(10032206)	465563.41
3808281.91	4.70893	(10032206)		
465583.41	3808281.91	4.63748	(10032206)	465603.41
3808281.91	4.57398	(10032206)		
465623.41	3808281.91	4.51061	(10032206)	465643.41
3808281.91	4.44714	(10032206)		
465663.41	3808281.91	4.38052	(10032206)	465683.41
3808281.91	4.31912	(10032206)		
465703.41	3808281.91	4.26117	(10032206)	465003.41
3808301.91	7.75771	(09010519)		
465023.41	3808301.91	7.60666	(09010519)	465043.41
3808301.91	7.45848	(09010519)		
465063.41	3808301.91	7.28812	(09010519)	465083.41
3808301.91	7.14460	(09010519)		
465103.41	3808301.91	7.02546	(10032206)	465123.41
3808301.91	6.89758	(10032206)		
465143.41	3808301.91	6.77473	(10032206)	465163.41
3808301.91	6.65374	(10032206)		
465183.41	3808301.91	6.52553	(10032206)	465203.41
3808301.91	6.40823	(10032206)		
465223.41	3808301.91	6.29809	(10032206)	465243.41
3808301.91	6.19239	(10032206)		
465263.41	3808301.91	6.08162	(10032206)	465283.41
3808301.91	5.96987	(10032206)		
465303.41	3808301.91	5.85952	(10032206)	465323.41
3808301.91	5.75990	(10032206)		
465343.41	3808301.91	5.66509	(10032206)	465363.41
3808301.91	5.56492	(10032206)		
465383.41	3808301.91	5.47364	(10032206)	465403.41
3808301.91	5.38621	(10032206)		
465423.41	3808301.91	5.29355	(10032206)	465443.41
3808301.91	5.21048	(10032206)		
465463.41	3808301.91	5.14735	(10032206)	465483.41
3808301.91	5.07093	(10032206)		
465503.41	3808301.91	4.99631	(10032206)	465523.41
3808301.91	4.92190	(10032206)		
465543.41	3808301.91	4.84208	(10032206)	465563.41
3808301.91	4.76907	(10032206)		
465583.41	3808301.91	4.70032	(10032206)	465603.41
3808301.91	4.63432	(10032206)		
465623.41	3808301.91	4.56430	(10032206)	465643.41
3808301.91	4.49466	(10032206)		
465663.41	3808301.91	4.43190	(10032206)	465683.41
3808301.91	4.36623	(10032206)		
465703.41	3808301.91	4.30139	(10032206)	465043.41

3808321.91	7.56986	(10032206)		
465063.41	3808321.91	7.42666	(10032206)	465083.41
3808321.91	7.29242	(10032206)		
465103.41	3808321.91	7.16290	(10032206)	465123.41
3808321.91	7.03031	(10032206)		
465143.41	3808321.91	6.90160	(10032206)	465163.41
3808321.91	6.77522	(10032206)		
465183.41	3808321.91	6.64678	(10032206)	465203.41
3808321.91	6.52692	(10032206)		
465223.41	3808321.91	6.41139	(10032206)	465243.41
3808321.91	6.29274	(10032206)		
465263.41	3808321.91	6.17329	(10032206)	465283.41
3808321.91	6.05639	(10032206)		
465303.41	3808321.91	5.94865	(10032206)	465323.41
3808321.91	5.84352	(10032206)		
465343.41	3808321.91	5.74133	(10032206)	465363.41
3808321.91	5.64235	(10032206)		
465383.41	3808321.91	5.54568	(10032206)	465403.41
3808321.91	5.45163	(10032206)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 741

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465423.41	3808321.91	5.36047	(10032206)	465443.41
3808321.91	5.27576	(10032206)		

465463.41	3808321.91	5.20342	(10032206)	465483.41
3808321.91	5.12438	(10032206)		
465503.41	3808321.91	5.04728	(10032206)	465523.41
3808321.91	4.97109	(10032206)		
465543.41	3808321.91	4.89268	(10032206)	465563.41
3808321.91	4.81963	(10032206)		
465583.41	3808321.91	4.74894	(10032206)	465603.41
3808321.91	4.67567	(10032206)		
465623.41	3808321.91	4.60448	(10032206)	465643.41
3808321.91	4.53515	(10032206)		
465663.41	3808321.91	4.46706	(10032206)	465683.41
3808321.91	4.40086	(10032206)		
465703.41	3808321.91	4.33635	(10032206)	465083.41
3808341.91	7.41208	(10032206)		
465103.41	3808341.91	7.26980	(10032206)	465123.41
3808341.91	7.13508	(10032206)		
465143.41	3808341.91	7.00176	(10032206)	465163.41
3808341.91	6.87144	(10032206)		
465183.41	3808341.91	6.74503	(10032206)	465203.41
3808341.91	6.62030	(10032206)		
465223.41	3808341.91	6.49684	(10032206)	465243.41
3808341.91	6.36983	(10032206)		
465263.41	3808341.91	6.24441	(10032206)	465283.41
3808341.91	6.12397	(10032206)		
465303.41	3808341.91	6.01654	(10032206)	465323.41
3808341.91	5.90441	(10032206)		
465343.41	3808341.91	5.79446	(10032206)	465363.41
3808341.91	5.69889	(10032206)		
465383.41	3808341.91	5.59875	(10032206)	465403.41
3808341.91	5.49946	(10032206)		
465423.41	3808341.91	5.40925	(10032206)	465443.41
3808341.91	5.32293	(10032206)		
465463.41	3808341.91	5.24335	(10032206)	465483.41
3808341.91	5.16218	(10032206)		
465503.41	3808341.91	5.08304	(10032206)	465523.41
3808341.91	5.00554	(10032206)		
465543.41	3808341.91	4.92820	(10032206)	465563.41
3808341.91	4.85421	(10032206)		
465583.41	3808341.91	4.78111	(10032206)	465603.41
3808341.91	4.70321	(10032206)		
465623.41	3808341.91	4.63142	(10032206)	465643.41
3808341.91	4.56227	(10032206)		
465663.41	3808341.91	4.48992	(10032206)	465683.41
3808341.91	4.42331	(10032206)		
465703.41	3808341.91	4.35913	(10032206)	465103.41
3808361.91	7.34607	(10032206)		
465123.41	3808361.91	7.21875	(10032206)	465143.41
3808361.91	7.08442	(10032206)		
465163.41	3808361.91	6.94935	(10032206)	465183.41
3808361.91	6.81846	(10032206)		

465203.41	3808361.91	6.68249	(10032206)	465223.41
3808361.91	6.54849	(10032206)		
465243.41	3808361.91	6.42778	(10032206)	465263.41
3808361.91	6.30208	(10032206)		
465283.41	3808361.91	6.17645	(10032206)	465303.41
3808361.91	6.05611	(10032206)		
465323.41	3808361.91	5.93825	(10032206)	465343.41
3808361.91	5.82559	(10032206)		
465363.41	3808361.91	5.72784	(10032206)	465383.41
3808361.91	5.63134	(10032206)		
465403.41	3808361.91	5.53551	(10032206)	465423.41
3808361.91	5.43436	(10032206)		
465443.41	3808361.91	5.34375	(10032206)	465463.41
3808361.91	5.27470	(10032206)		
465483.41	3808361.91	5.19164	(10032206)	465503.41
3808361.91	5.11071	(10032206)		
465523.41	3808361.91	5.03019	(10032206)	465543.41
3808361.91	4.94409	(10032206)		
465563.41	3808361.91	4.86639	(10032206)	465583.41
3808361.91	4.79351	(10032206)		
465603.41	3808361.91	4.72103	(10032206)	465623.41
3808361.91	4.64556	(10032206)		
465643.41	3808361.91	4.57110	(10032206)	465663.41
3808361.91	4.50406	(10032206)		
465683.41	3808361.91	4.43406	(10032206)	465703.41
3808361.91	4.36493	(10032206)		
465183.41	3808381.91	6.84015	(10032206)	465203.41
3808381.91	6.70304	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 742

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

465223.41	3808381.91	6.57035	(10032206)	465243.41	
3808381.91	6.44096	(10032206)			
465263.41	3808381.91	6.31097	(10032206)	465283.41	
3808381.91	6.18387	(10032206)			
465303.41	3808381.91	6.06755	(10032206)	465323.41	
3808381.91	5.94940	(10032206)			
465343.41	3808381.91	5.83482	(10032206)	465363.41	
3808381.91	5.73560	(10032206)			
465383.41	3808381.91	5.63915	(10032206)	465403.41	
3808381.91	5.54435	(10032206)			
465423.41	3808381.91	5.44683	(10032206)	465443.41	
3808381.91	5.35635	(10032206)			
465463.41	3808381.91	5.27913	(10032206)	465483.41	
3808381.91	5.19500	(10032206)			
465503.41	3808381.91	5.11307	(10032206)	465523.41	
3808381.91	5.03225	(10032206)			
465543.41	3808381.91	4.94922	(10032206)	465563.41	
3808381.91	4.86808	(10032206)			
465583.41	3808381.91	4.79005	(10032206)	465603.41	
3808381.91	4.71843	(10032206)			
465623.41	3808381.91	4.64522	(10032206)	465643.41	
3808381.91	4.57236	(10032206)			
465663.41	3808381.91	4.50091	(10032206)	465683.41	
3808381.91	4.43154	(10032206)			
465703.41	3808381.91	4.36404	(10032206)	465303.41	
3808401.91	6.05012	(10032206)			
465323.41	3808401.91	5.93528	(10032206)	465343.41	
3808401.91	5.82214	(10032206)			
465363.41	3808401.91	5.72221	(10032206)	465383.41	
3808401.91	5.62509	(10032206)			
465403.41	3808401.91	5.53069	(10032206)	465423.41	
3808401.91	5.43889	(10032206)			
465443.41	3808401.91	5.34961	(10032206)	465463.41	
3808401.91	5.26292	(10032206)			
465483.41	3808401.91	5.17837	(10032206)	465503.41	
3808401.91	5.09605	(10032206)			
465523.41	3808401.91	5.01588	(10032206)	465543.41	
3808401.91	4.93780	(10032206)			
465563.41	3808401.91	4.85565	(10032206)	465583.41	
3808401.91	4.77456	(10032206)			
465603.41	3808401.91	4.70263	(10032206)	465623.41	
3808401.91	4.63110	(10032206)			
465643.41	3808401.91	4.55971	(10032206)	465663.41	

3808401.91	4.48506	(10032206)		
465683.41	3808401.91	4.41644	(10032206)	465703.41
3808401.91	4.35040	(10032206)		
465323.41	3808421.91	5.89245	(10032206)	465343.41
3808421.91	5.78788	(10032206)		
465363.41	3808421.91	5.68795	(10032206)	465383.41
3808421.91	5.59088	(10032206)		
465403.41	3808421.91	5.49653	(10032206)	465423.41
3808421.91	5.40482	(10032206)		
465443.41	3808421.91	5.31564	(10032206)	465463.41
3808421.91	5.22889	(10032206)		
465483.41	3808421.91	5.14448	(10032206)	465503.41
3808421.91	5.06232	(10032206)		
465523.41	3808421.91	4.98233	(10032206)	465543.41
3808421.91	4.90443	(10032206)		
465563.41	3808421.91	4.82754	(10032206)	465583.41
3808421.91	4.75233	(10032206)		
465603.41	3808421.91	4.68031	(10032206)	465623.41
3808421.91	4.60409	(10032206)		
465643.41	3808421.91	4.52848	(10032206)	465663.41
3808421.91	4.46055	(10032206)		
465683.41	3808421.91	4.38961	(10032206)	465703.41
3808421.91	4.31960	(10032206)		
465323.41	3808441.91	5.83405	(10032206)	465343.41
3808441.91	5.73333	(10032206)		
465363.41	3808441.91	5.64201	(10032206)	465383.41
3808441.91	5.54800	(10032206)		
465403.41	3808441.91	5.45405	(10032206)	465423.41
3808441.91	5.36273	(10032206)		
465443.41	3808441.91	5.27395	(10032206)	465463.41
3808441.91	5.18761	(10032206)		
465483.41	3808441.91	5.10360	(10032206)	465503.41
3808441.91	5.02185	(10032206)		
465523.41	3808441.91	4.94227	(10032206)	465543.41
3808441.91	4.86478	(10032206)		
465563.41	3808441.91	4.78931	(10032206)	465583.41
3808441.91	4.71577	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 743

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110


```

, L0006111      , L0006112      , L0006113      ,
                  L0006114      , L0006115      , L0006116      , L0006117      , L0006118
, L0006119      , L0006120      , L0006121      ,
                  L0006122      , L0006123      , L0006124      , L0006125      , L0006126
, L0006127      , L0006128      , . . .          ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465603.41	3808441.91	4.64410	(10032206)	465623.41
3808441.91	4.56735	(10032206)		
465643.41	3808441.91	4.49017	(10032206)	465663.41
3808441.91	4.41892	(10032206)		
465683.41	3808441.91	4.34980	(10032206)	465703.41
3808441.91	4.28345	(10032206)		
465343.41	3808461.91	5.65723	(10032206)	465363.41
3808461.91	5.57172	(10032206)		
465383.41	3808461.91	5.48205	(10032206)	465403.41
3808461.91	5.39157	(10032206)		
465423.41	3808461.91	5.30132	(10032206)	465443.41
3808461.91	5.21357	(10032206)		
465463.41	3808461.91	5.12843	(10032206)	465483.41
3808461.91	5.04542	(10032206)		
465503.41	3808461.91	4.96625	(10032206)	465523.41
3808461.91	4.88930	(10032206)		
465543.41	3808461.91	4.81264	(10032206)	465563.41
3808461.91	4.73797	(10032206)		
465583.41	3808461.91	4.66522	(10032206)	465603.41
3808461.91	4.59433	(10032206)		
465623.41	3808461.91	4.51841	(10032206)	465643.41
3808461.91	4.44115	(10032206)		
465663.41	3808461.91	4.36590	(10032206)	465683.41
3808461.91	4.29940	(10032206)		
465703.41	3808461.91	4.23732	(10032206)	465343.41
3808481.91	5.55880	(10032206)		
465363.41	3808481.91	5.46533	(10032206)	465383.41
3808481.91	5.38175	(10032206)		
465403.41	3808481.91	5.30140	(10032206)	465423.41
3808481.91	5.21312	(10032206)		
465443.41	3808481.91	5.12727	(10032206)	465463.41
3808481.91	5.04378	(10032206)		
465483.41	3808481.91	4.96255	(10032206)	465503.41
3808481.91	4.89052	(10032206)		

465523.41	3808481.91	4.82147	(10032206)	465543.41
3808481.91	4.74610	(10032206)		
465563.41	3808481.91	4.67269	(10032206)	465583.41
3808481.91	4.60117	(10032206)		
465603.41	3808481.91	4.53146	(10032206)	465623.41
3808481.91	4.45678	(10032206)		
465643.41	3808481.91	4.38078	(10032206)	465663.41
3808481.91	4.30674	(10032206)		
465683.41	3808481.91	4.24134	(10032206)	465703.41
3808481.91	4.17915	(10032206)		
465463.41	3808501.91	4.95266	(10032206)	465483.41
3808501.91	4.86697	(10032206)		
465503.41	3808501.91	4.79618	(10032206)	465523.41
3808501.91	4.73061	(10032206)		
465543.41	3808501.91	4.65723	(10032206)	465563.41
3808501.91	4.58946	(10032206)		
465583.41	3808501.91	4.52327	(10032206)	465603.41
3808501.91	4.44988	(10032206)		
465623.41	3808501.91	4.37872	(10032206)	465643.41
3808501.91	4.30868	(10032206)		
465663.41	3808501.91	4.23623	(10032206)	465683.41
3808501.91	4.17226	(10032206)		
465703.41	3808501.91	4.11115	(10032206)	465523.41
3808521.91	4.62403	(10032206)		
465543.41	3808521.91	4.55312	(10032206)	465563.41
3808521.91	4.49126	(10032206)		
465583.41	3808521.91	4.43064	(10032206)	465603.41
3808521.91	4.35649	(10032206)		
465623.41	3808521.91	4.28845	(10032206)	465643.41
3808521.91	4.22304	(10032206)		
465663.41	3808521.91	4.15442	(10032206)	465683.41
3808521.91	4.09150	(10032206)		
465703.41	3808521.91	4.03099	(10032206)	464239.31
3809562.31	10.40672	(09031705)		
464277.31	3809562.31	10.21998	(09040202)	463745.31
3809591.37	10.25696	(09011307)		
463783.31	3809591.37	10.33415	(09031206)	463821.31
3809591.37	10.75572	(09011120)		
463859.31	3809591.37	10.96847	(09011120)	463897.31
3809591.37	10.82813	(09011120)		
463935.31	3809591.37	10.27325	(09011120)	464239.31
3809591.37	10.14534	(09031705)		
464277.31	3809591.37	9.89518	(09040202)	463745.31
3809620.43	9.81851	(09011307)		
463783.31	3809620.43	9.91097	(09031206)	463821.31
3809620.43	10.34708	(09011120)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 , L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 , L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 , L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463859.31	3809620.43	10.52510	(09011120)	463897.31
3809620.43	10.39823	(09011120)		
463935.31	3809620.43	9.92697	(09011120)	463973.31
3809620.43	9.96503	(10010907)		
464011.31	3809620.43	10.20944	(10010907)	464049.31
3809620.43	10.10352	(10010907)		
464087.31	3809620.43	9.69280	(10010907)	464125.31
3809620.43	10.11217	(10022820)		
464163.31	3809620.43	10.28072	(10022820)	464201.31
3809620.43	10.13981	(10022820)		
464239.31	3809620.43	9.85357	(09031705)	464277.31
3809620.43	9.55197	(09040202)		
463745.31	3809649.49	9.40037	(09011307)	463783.31
3809649.49	9.54235	(09031206)		
463821.31	3809649.49	9.93624	(09011120)	463859.31
3809649.49	10.11231	(09011120)		
463897.31	3809649.49	9.99222	(09011120)	463935.31
3809649.49	9.56653	(09011120)		
463973.31	3809649.49	9.45136	(10010907)	464011.31
3809649.49	9.76539	(10010907)		
464049.31	3809649.49	9.76401	(10010907)	464087.31
3809649.49	9.42701	(10010907)		
464125.31	3809649.49	9.67741	(10022820)	464163.31
3809649.49	9.89810	(10022820)		
464201.31	3809649.49	9.86582	(10022820)	464239.31

3809649.49	9.58136 (10022820)		
464277.31	3809649.49	9.32109 (09031705)	464315.31
3809649.49	9.16201 (09040202)		
464353.31	3809649.49	8.93431 (09040202)	464391.31
3809649.49	8.51400 (09040202)		
464429.31	3809649.49	8.37031 (09010420)	464467.31
3809649.49	8.35446 (10011407)		
464505.31	3809649.49	8.27494 (10011407)	463745.31
3809678.55	8.98498 (09011307)		
463783.31	3809678.55	9.13591 (09031206)	463821.31
3809678.55	9.55525 (09011120)		
463859.31	3809678.55	9.70808 (09011120)	463897.31
3809678.55	9.60893 (09011120)		
463935.31	3809678.55	9.23436 (09011120)	463973.31
3809678.55	9.02791 (10010907)		
464011.31	3809678.55	9.34549 (10010907)	464049.31
3809678.55	9.43358 (10010907)		
464087.31	3809678.55	9.20159 (10010907)	464125.31
3809678.55	9.25403 (10022820)		
464163.31	3809678.55	9.53693 (10022820)	464201.31
3809678.55	9.59284 (10022820)		
464239.31	3809678.55	9.35979 (10022820)	464277.31
3809678.55	9.09826 (09031705)		
464315.31	3809678.55	8.89321 (09040202)	464353.31
3809678.55	8.75369 (09040202)		
464391.31	3809678.55	8.41341 (09040202)	464429.31
3809678.55	8.14961 (09010420)		
464467.31	3809678.55	8.06169 (10011407)	464505.31
3809678.55	8.04023 (10011407)		
463745.31	3809707.61	8.62686 (09011307)	463783.31
3809707.61	8.76363 (09031206)		
463821.31	3809707.61	9.15066 (09011120)	463859.31
3809707.61	9.34953 (09011120)		
463897.31	3809707.61	9.25104 (09011120)	463935.31
3809707.61	8.91489 (09011120)		
463973.31	3809707.61	8.62810 (10010907)	464011.31
3809707.61	8.97836 (10010907)		
464049.31	3809707.61	9.11357 (10010907)	464087.31
3809707.61	8.95094 (10010907)		
464125.31	3809707.61	8.84460 (10022820)	464163.31
3809707.61	9.19519 (10022820)		
464201.31	3809707.61	9.27896 (10022820)	464239.31
3809707.61	9.13815 (10022820)		
464277.31	3809707.61	8.86764 (09031705)	464315.31
3809707.61	8.62549 (09040202)		
464353.31	3809707.61	8.52903 (09040202)	464391.31
3809707.61	8.27673 (09040202)		
464429.31	3809707.61	7.90351 (09010420)	464467.31
3809707.61	7.79549 (09010420)		
464505.31	3809707.61	7.80307 (10011407)	463745.31

3809736.67 8.32793 (09011307)
 463783.31 3809736.67 8.42374 (09031206) 463821.31
 3809736.67 8.74558 (09011120)
 463859.31 3809736.67 8.96082 (09011120) 463897.31
 3809736.67 8.90782 (09011120)
 ▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 745

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
463935.31	3809736.67	8.58066	(09011120)	463973.31
3809736.67	8.24299 (10010907)			
464011.31	3809736.67	8.65963	(10010907)	464049.31
3809736.67	8.80506 (10010907)			
464087.31	3809736.67	8.72485	(10010907)	464125.31
3809736.67	8.46536 (10022820)			
464163.31	3809736.67	8.86006	(10022820)	464201.31
3809736.67	8.98651 (10022820)			
464239.31	3809736.67	8.92259	(10022820)	464277.31
3809736.67	8.64238 (09031705)			
464315.31	3809736.67	8.42610	(09031705)	464353.31
3809736.67	8.31047 (09040202)			
464391.31	3809736.67	8.12515	(09040202)	464429.31
3809736.67	7.76428 (09040202)			
464467.31	3809736.67	7.61399	(09010420)	464505.31
3809736.67	7.55031 (10011407)			

463745.31	3809765.73	8.05555	(09011307)	463783.31
3809765.73	8.13723 (09031206)			
463821.31	3809765.73	8.41392	(09011120)	463859.31
3809765.73	8.60771 (09011120)			
463897.31	3809765.73	8.58391	(09011120)	463935.31
3809765.73	8.26789 (09011120)			
463973.31	3809765.73	7.81162	(09102505)	464011.31
3809765.73	8.31398 (10010907)			
464049.31	3809765.73	8.53669	(10010907)	464087.31
3809765.73	8.49073 (10010907)			
464125.31	3809765.73	8.23062	(10010907)	464163.31
3809765.73	8.53013 (10022820)			
464201.31	3809765.73	8.70653	(10022820)	464239.31
3809765.73	8.70340 (10022820)			
464277.31	3809765.73	8.47718	(10022820)	464315.31
3809765.73	8.25336 (09031705)			
464353.31	3809765.73	8.08858	(09040202)	464391.31
3809765.73	7.95166 (09040202)			
464429.31	3809765.73	7.67854	(09040202)	464467.31
3809765.73	7.42536 (09010420)			
464505.31	3809765.73	7.28865	(09010420)	463745.31
3809794.79	7.80136 (09011307)			
463783.31	3809794.79	7.85495	(09031206)	463821.31
3809794.79	8.10671 (09011120)			
463859.31	3809794.79	8.27247	(09011120)	463897.31
3809794.79	8.25109 (09011120)			
463935.31	3809794.79	7.96607	(09011120)	463973.31
3809794.79	7.53773 (09102505)			
464011.31	3809794.79	7.91882	(10010907)	464049.31
3809794.79	8.25889 (10010907)			
464087.31	3809794.79	8.26416	(10010907)	464125.31
3809794.79	8.04304 (10010907)			
464163.31	3809794.79	8.17862	(10022820)	464201.31
3809794.79	8.42505 (10022820)			
464239.31	3809794.79	8.45825	(10022820)	464277.31
3809794.79	8.29904 (10022820)			
464315.31	3809794.79	8.07580	(09031705)	464353.31
3809794.79	7.83417 (09040202)			
464391.31	3809794.79	7.77668	(09040202)	464429.31
3809794.79	7.57730 (09040202)			
464467.31	3809794.79	7.21916	(09040202)	464505.31
3809794.79	7.13492 (09010420)			
463745.31	3809823.85	7.56226	(09011307)	463783.31
3809823.85	7.59367 (09031206)			
463821.31	3809823.85	7.78635	(09011120)	463859.31
3809823.85	7.95660 (09011120)			
463897.31	3809823.85	7.92645	(09011120)	463935.31
3809823.85	7.67042 (09011120)			
463973.31	3809823.85	7.28164	(09102505)	464011.31
3809823.85	7.53477 (10010907)			

464049.31	3809823.85	7.89918	(10010907)	464087.31
3809823.85	8.01643 (10010907)			
464125.31	3809823.85	7.86644	(10010907)	464163.31
3809823.85	7.84823 (10022820)			
464201.31	3809823.85	8.12114	(10022820)	464239.31
3809823.85	8.21766 (10022820)			
464277.31	3809823.85	8.11838	(10022820)	464315.31
3809823.85	7.86901 (09031705)			
464353.31	3809823.85	7.67578	(09031705)	464391.31
3809823.85	7.58786 (09040202)			
464429.31	3809823.85	7.43508	(09040202)	464467.31
3809823.85	7.14698 (09040202)			
464505.31	3809823.85	6.95313	(09010420)	463745.31
3809852.91	7.35180 (09011307)			

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 746

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463783.31	3809852.91	7.38156	(09031206)	463821.31
3809852.91	7.51932 (09011120)			
463859.31	3809852.91	7.67259	(09011120)	463897.31
3809852.91	7.62503 (09011120)			
463935.31	3809852.91	7.39424	(09011120)	463973.31
3809852.91	7.03636 (09102505)			
464011.31	3809852.91	7.17996	(10010907)	464049.31

3809852.91	7.53523	(10010907)		
464087.31	3809852.91	7.69655	(10010907)	464125.31
3809852.91	7.62568	(10010907)		
464163.31	3809852.91	7.47428	(10022820)	464201.31
3809852.91	7.78318	(10022820)		
464239.31	3809852.91	7.93853	(10022820)	464277.31
3809852.91	7.90625	(10022820)		
464315.31	3809852.91	7.69181	(10022820)	464353.31
3809852.91	7.51885	(09031705)		
464391.31	3809852.91	7.37816	(09040202)	464429.31
3809852.91	7.28614	(09040202)		
464467.31	3809852.91	7.05082	(09040202)	464505.31
3809852.91	6.76489	(09010420)		
463745.31	3809881.97	7.16283	(09011307)	463783.31
3809881.97	7.17748	(09031206)		
463821.31	3809881.97	7.30041	(09011120)	463859.31
3809881.97	7.42360	(09011120)		
463897.31	3809881.97	7.36084	(09011120)	463935.31
3809881.97	7.13460	(09011120)		
463973.31	3809881.97	6.81059	(09102505)	464011.31
3809881.97	6.86619	(10010907)		
464049.31	3809881.97	7.20694	(10010907)	464087.31
3809881.97	7.37117	(10010907)		
464125.31	3809881.97	7.34502	(10010907)	464163.31
3809881.97	7.09538	(10010907)		
464201.31	3809881.97	7.43809	(10022820)	464239.31
3809881.97	7.62917	(10022820)		
464277.31	3809881.97	7.66687	(10022820)	464315.31
3809881.97	7.53783	(10022820)		
464353.31	3809881.97	7.35771	(09031705)	464391.31
3809881.97	7.16928	(09040202)		
464429.31	3809881.97	7.12684	(09040202)	464467.31
3809881.97	6.94321	(09040202)		
464505.31	3809881.97	6.66013	(09040202)	463745.31
3809911.03	6.96746	(09011307)		
463783.31	3809911.03	6.97040	(09031206)	463821.31
3809911.03	7.09753	(09011120)		
463859.31	3809911.03	7.20283	(09011120)	463897.31
3809911.03	7.14173	(09011120)		
463935.31	3809911.03	6.91817	(09011120)	463973.31
3809911.03	6.59661	(09102505)		
464011.31	3809911.03	6.56792	(10010907)	464049.31
3809911.03	6.91390	(10010907)		
464087.31	3809911.03	7.09161	(10010907)	464125.31
3809911.03	7.09108	(10010907)		
464163.31	3809911.03	6.90559	(10010907)	464201.31
3809911.03	7.12397	(10022820)		
464239.31	3809911.03	7.35168	(10022820)	464277.31
3809911.03	7.44337	(10022820)		
464315.31	3809911.03	7.36236	(10022820)	464353.31

3809911.03	7.18585	(09031705)		
464391.31	3809911.03	7.02796	(09031705)	464429.31
3809911.03	6.95205	(09040202)		
464467.31	3809911.03	6.83522	(09040202)	464505.31
3809911.03	6.58836	(09040202)		
463745.31	3809940.09	6.77067	(09011307)	463783.31
3809940.09	6.77305	(09031206)		
463821.31	3809940.09	6.89789	(09011120)	463859.31
3809940.09	6.99648	(09011120)		
463897.31	3809940.09	6.94734	(09011120)	463935.31
3809940.09	6.74117	(09011120)		
463973.31	3809940.09	6.42103	(09011120)	464011.31
3809940.09	6.28117	(10010907)		
464049.31	3809940.09	6.61981	(10010907)	464087.31
3809940.09	6.81124	(10010907)		
464125.31	3809940.09	6.84563	(10010907)	464163.31
3809940.09	6.73121	(10010907)		
464201.31	3809940.09	6.83716	(10022820)	464239.31
3809940.09	7.10826	(10022820)		
464277.31	3809940.09	7.22611	(10022820)	464315.31
3809940.09	7.19649	(10022820)		
464353.31	3809940.09	7.01256	(10022820)	464391.31
3809940.09	6.89723	(09031705)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 747

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464429.31	3809940.09	6.77898	(09040202)	464467.31
3809940.09	6.70138 (09040202)			
464505.31	3809940.09	6.50471	(09040202)	463745.31
3809969.15	6.63651 (09011307)			
463783.31	3809969.15	6.60658	(09031206)	463821.31
3809969.15	6.70288 (09011120)			
463859.31	3809969.15	6.80422	(09011120)	463897.31
3809969.15	6.76108 (09011120)			
463935.31	3809969.15	6.57329	(09011120)	463973.31
3809969.15	6.27072 (09011120)			
464011.31	3809969.15	6.03319	(10010907)	464049.31
3809969.15	6.33946 (10010907)			
464087.31	3809969.15	6.54562	(10010907)	464125.31
3809969.15	6.62280 (10010907)			
464163.31	3809969.15	6.54857	(10010907)	464201.31
3809969.15	6.54483 (10022820)			
464239.31	3809969.15	6.86891	(10022820)	464277.31
3809969.15	7.01675 (10022820)			
464315.31	3809969.15	7.02970	(10022820)	464353.31
3809969.15	6.90682 (10022820)			
464391.31	3809969.15	6.77464	(09031705)	464429.31
3809969.15	6.59533 (09040202)			
464467.31	3809969.15	6.55419	(09040202)	464505.31
3809969.15	6.41800 (09040202)			
463745.31	3809998.21	6.57084	(09011307)	463783.31
3809998.21	6.49070 (09031206)			
463821.31	3809998.21	6.54476	(09011120)	463859.31
3809998.21	6.63336 (09011120)			
463897.31	3809998.21	6.59433	(09011120)	463935.31
3809998.21	6.41164 (09011120)			
463973.31	3809998.21	6.12384	(09011120)	464011.31
3809998.21	5.81657 (10010907)			
464049.31	3809998.21	6.11660	(10010907)	464087.31
3809998.21	6.32093 (10010907)			
464125.31	3809998.21	6.42580	(10010907)	464163.31
3809998.21	6.38429 (10010907)			
464201.31	3809998.21	6.25815	(10022820)	464239.31
3809998.21	6.60805 (10022820)			
464277.31	3809998.21	6.81356	(10022820)	464315.31
3809998.21	6.85863 (10022820)			
464353.31	3809998.21	6.77919	(10022820)	464391.31
3809998.21	6.63051 (09031705)			
464429.31	3809998.21	6.47308	(09031705)	464467.31
3809998.21	6.41291 (09040202)			
464505.31	3809998.21	6.30834	(09040202)	463745.31
3810027.27	6.51224 (09011307)			
463783.31	3810027.27	6.40990	(09031206)	463821.31
3810027.27	6.42098 (09011120)			

463859.31	3810027.27	6.49029	(09011120)	463897.31
3810027.27	6.45055	(09011120)		
463935.31	3810027.27	6.26430	(09011120)	463973.31
3810027.27	5.99298	(09011120)		
464011.31	3810027.27	5.67882	(09102505)	464049.31
3810027.27	5.91743	(10010907)		
464087.31	3810027.27	6.11342	(10010907)	464125.31
3810027.27	6.22029	(10010907)		
464163.31	3810027.27	6.21995	(10010907)	464201.31
3810027.27	6.08125	(10010907)		
464239.31	3810027.27	6.34265	(10022820)	464277.31
3810027.27	6.58642	(10022820)		
464315.31	3810027.27	6.68570	(10022820)	464353.31
3810027.27	6.63953	(10022820)		
464391.31	3810027.27	6.47464	(09031705)	464429.31
3810027.27	6.36997	(09031705)		
464467.31	3810027.27	6.25490	(09040202)	464505.31
3810027.27	6.18456	(09040202)		
463745.31	3810056.33	6.46485	(09011307)	463783.31
3810056.33	6.33953	(09031206)		
463821.31	3810056.33	6.30490	(09011120)	463859.31
3810056.33	6.36360	(09011120)		
463897.31	3810056.33	6.31267	(09011120)	463935.31
3810056.33	6.13644	(09011120)		
463973.31	3810056.33	5.87365	(09011120)	464011.31
3810056.33	5.56574	(09102505)		
464049.31	3810056.33	5.71694	(10010907)	464087.31
3810056.33	5.92080	(10010907)		
464125.31	3810056.33	6.02337	(10010907)	464163.31
3810056.33	6.04393	(10010907)		
464201.31	3810056.33	5.93721	(10010907)	464239.31
3810056.33	6.09293	(10022820)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 748

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: TRUCK9 ***
 INCLUDING SOURCE(S): L0006101 , L0006102
 , L0006103 , L0006104 , L0006105 ,
 L0006106 , L0006107 , L0006108 , L0006109 , L0006110
 , L0006111 , L0006112 , L0006113 ,
 L0006114 , L0006115 , L0006116 , L0006117 , L0006118
 , L0006119 , L0006120 , L0006121 ,
 L0006122 , L0006123 , L0006124 , L0006125 , L0006126
 , L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

		** CONC OF PM_10		IN MICROGRAMS/M**3	
**					
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	
Y-COORD (M)	CONC	(YYMMDDHH)			

464277.31	3810056.33	6.35025	(10022820)	464315.31	
3810056.33	6.49111	(10022820)			
464353.31	3810056.33	6.50395	(10022820)	464391.31	
3810056.33	6.37141	(10022820)			
464429.31	3810056.33	6.25845	(09031705)	464467.31	
3810056.33	6.08343	(09040202)			
464505.31	3810056.33	6.05697	(09040202)	463745.31	
3810085.39	6.41773	(09011307)			
463783.31	3810085.39	6.27486	(09031206)	463821.31	
3810085.39	6.20842	(09011120)			
463859.31	3810085.39	6.24493	(09011120)	463897.31	
3810085.39	6.18724	(09011120)			
463935.31	3810085.39	6.02218	(09011120)	463973.31	
3810085.39	5.76279	(09011120)			
464011.31	3810085.39	5.45357	(09102505)	464049.31	
3810085.39	5.51731	(10010907)			
464087.31	3810085.39	5.73076	(10010907)	464125.31	
3810085.39	5.84551	(10010907)			
464163.31	3810085.39	5.86943	(10010907)	464201.31	
3810085.39	5.78591	(10010907)			
464239.31	3810085.39	5.83565	(10022820)	464277.31	
3810085.39	6.12078	(10022820)			
464315.31	3810085.39	6.28988	(10022820)	464353.31	
3810085.39	6.33566	(10022820)			
464391.31	3810085.39	6.25213	(10022820)	464429.31	
3810085.39	6.12176	(09031705)			
464467.31	3810085.39	5.97316	(09031705)	464505.31	
3810085.39	5.90882	(09040202)			
463745.31	3810114.45	6.33374	(09011307)	463783.31	
3810114.45	6.23302	(09031206)			
463821.31	3810114.45	6.13500	(09011120)	463859.31	
3810114.45	6.16746	(09011120)			
463897.31	3810114.45	6.08572	(09011120)	463935.31	
3810114.45	5.91786	(09011120)			
463973.31	3810114.45	5.65507	(09011120)	464011.31	
3810114.45	5.35110	(09102505)			
464049.31	3810114.45	5.34072	(10010907)	464087.31	
3810114.45	5.55049	(10010907)			
464125.31	3810114.45	5.66506	(10010907)	464163.31	

3810114.45	5.69249	(10010907)		
464201.31	3810114.45	5.62745	(10010907)	464239.31
3810114.45	5.58567	(10022820)		
464277.31	3810114.45	5.89452	(10022820)	464315.31
3810114.45	6.07281	(10022820)		
464353.31	3810114.45	6.13555	(10022820)	464391.31
3810114.45	6.08028	(10022820)		
464429.31	3810114.45	5.95928	(09031705)	464467.31
3810114.45	5.84628	(09031705)		
464505.31	3810114.45	5.75387	(09040202)	463745.31
3810143.51	6.20967	(09011307)		
463783.31	3810143.51	6.15154	(09031206)	463821.31
3810143.51	6.10173	(09011120)		
463859.31	3810143.51	6.11280	(09011120)	463897.31
3810143.51	5.98840	(09011120)		
463935.31	3810143.51	5.80568	(09011120)	463973.31
3810143.51	5.53716	(09011120)		
464011.31	3810143.51	5.25344	(09102505)	464049.31
3810143.51	5.17621	(10010907)		
464087.31	3810143.51	5.37056	(10010907)	464125.31
3810143.51	5.49392	(10010907)		
464163.31	3810143.51	5.53438	(10010907)	464201.31
3810143.51	5.48277	(10010907)		
464239.31	3810143.51	5.34909	(10010907)	464277.31
3810143.51	5.66650	(10022820)		
464315.31	3810143.51	5.86632	(10022820)	464353.31
3810143.51	5.93565	(10022820)		
464391.31	3810143.51	5.92178	(10022820)	464429.31
3810143.51	5.79744	(10022820)		
464467.31	3810143.51	5.72944	(09031705)	464505.31
3810143.51	5.59656	(09040202)		
464383.78	3807479.29	31.18729	(09011918)	464355.03
3807405.24	27.54656	(09011918)		
464402.07	3807352.10	27.28342	(09011918)	464367.23
3807296.35	27.67761	(10112518)		
464358.52	3807237.99	27.78575	(10112518)	464385.52
3807161.33	26.01170	(10112518)		
463132.27	3810926.37	3.62414	(10011006)	463237.82
3811199.31	2.92562	(09040203)		
464944.35	3809244.89	8.30354	(10031906)	465700.32
3809255.46	4.92680	(10021420)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 749

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: TRUCK9 ***

INCLUDING SOURCE(S): L0006101 , L0006102
, L0006103 , L0006104 , L0006105 ,
L0006106 , L0006107 , L0006108 , L0006109 , L0006110
, L0006111 , L0006112 , L0006113 ,
L0006114 , L0006115 , L0006116 , L0006117 , L0006118
, L0006119 , L0006120 , L0006121 ,
L0006122 , L0006123 , L0006124 , L0006125 , L0006126
, L0006127 , L0006128 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465716.18	3808536.49	3.92549	(10032206)	465544.37
3808533.85	4.52222 (09031319)			
465420.13	3808486.27	5.20576	(10032206)	465348.77
3808491.56	5.48077 (10032206)			
465317.05	3808443.98	5.86000	(10032206)	465327.62
3808406.97	5.90256 (10032206)			
465108.23	3808369.97	7.33516	(10032206)	464999.86
3808301.24	7.78619 (09010519)			
464722.31	3807973.48	12.06448	(10020118)	464717.03
3807836.03	11.96040 (10020118)			
464344.33	3807936.47	22.30978	(09030119)	464349.61
3807780.52	13.05621 (09011918)			
464386.62	3807785.81	11.12636	(09011918)	464521.43
3807859.82	12.41054 (09031219)			
464537.28	3807719.72	12.76392	(09030119)	464426.27
3807613.99	23.66559 (09011918)			
464368.43	3807532.62	30.66028	(09011918)	464324.60
3807121.91	22.15841 (10112518)			
464123.31	3807123.54	26.00011	(09123118)	463930.13
3806909.26	22.53597 (09111519)			
463831.11	3806906.01	24.31897	(09111519)	463821.36
3806720.95	19.69841 (09111519)			
463727.21	3806727.44	12.00933	(09120318)	463598.97
3806334.59	9.51836 (10102005)			
463001.06	3806361.54	9.96291	(09111517)	

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
462160.55	3809377.75	31.03403	(10021620)	462051.48
3809270.62	27.41709	(09022407)		
462014.47	3809029.10	28.37035	(10042219)	462010.58
3808855.75	28.23723	(10042219)		
461936.56	3808886.92	27.37441	(10042219)	461936.56
3808997.94	29.28339	(10042219)		
461909.30	3808768.10	25.05027	(10042219)	461835.28
3808894.71	25.28275	(10042219)		
461845.02	3808995.99	27.61999	(10042219)	461833.33
3809114.80	25.75568	(10042219)		
461843.07	3809210.24	24.39904	(09022407)	461809.96
3809297.89	25.41748	(10021620)		
461856.71	3809385.54	24.69884	(10021620)	461841.13
3809482.92	23.76134	(09022407)		
462004.74	3809379.69	27.72838	(10021620)	461763.22
3808793.43	22.39225	(10042219)		
461753.48	3808699.93	22.05244	(09021520)	461835.28
3808686.30	23.15892	(09021520)		
461823.60	3808579.17	31.41572	(09021520)	461761.27
3808585.02	29.82381	(09021520)		
462301.19	3807807.15	79.39362	(10021207)	462304.78
3807868.16	57.97158	(10021207)		
462216.84	3807882.52	48.95160	(09020119)	462116.34
3807886.11	50.44395	(09020119)		
462114.55	3807789.20	45.51327	(10021207)	462012.25

3807887.90	50.61030	(09020119)		
462008.66	3807975.84	56.03611	(09020119)	461917.14
3807972.25	52.91658	(09020119)		
461922.52	3808187.60	88.94616	(10021620)	461908.17
3808288.10	83.49509	(10021620)		
461848.94	3808377.83	58.25545	(10021620)	461831.00
3808494.48	40.73486	(09021520)		
462421.43	3808393.98	89.79296	(10021620)	462459.11
3808501.66	57.48403	(09021520)		
462437.58	3808580.62	44.74996	(09021520)	462654.73
3809189.00	41.30843	(09022407)		
462559.49	3809194.32	38.81816	(09022407)	465763.86
3807935.19	16.01210	(09010519)		
465819.84	3807935.19	15.65049	(09010519)	465875.82
3807935.19	15.29950	(09010519)		
465931.80	3807935.19	14.95654	(09010519)	465987.78
3807935.19	14.62539	(09010519)		
466043.76	3807935.19	14.30055	(09010519)	466099.74
3807935.19	13.98999	(09010519)		
466155.72	3807935.19	13.68249	(09010519)	466211.70
3807935.19	13.39138	(09010519)		
466267.68	3807935.19	13.10399	(09010519)	466323.66
3807935.19	12.83036	(09010519)		
466379.64	3807935.19	12.56330	(09010519)	466435.62
3807935.19	12.30088	(09010519)		
466491.60	3807935.19	12.04130	(09010519)	466547.58
3807935.19	11.77359	(09010519)		
466603.56	3807935.19	11.52812	(09010519)	466659.54
3807935.19	11.28273	(09010519)		
466715.52	3807935.19	11.05414	(09010519)	466771.50
3807935.19	10.82951	(09010519)		
466827.48	3807935.19	10.59878	(09010519)	466883.46
3807935.19	10.37296	(09010519)		
465763.86	3808001.41	17.17383	(09010519)	465819.84
3808001.41	16.71735	(09010519)		
465875.82	3808001.41	16.27585	(09010519)	465931.80
3808001.41	15.85518	(09010519)		
465987.78	3808001.41	15.45148	(09010519)	466043.76
3808001.41	15.06181	(09010519)		
466099.74	3808001.41	14.68779	(09010519)	466155.72
3808001.41	14.33265	(09010519)		
466211.70	3808001.41	13.98363	(09010519)	466267.68
3808001.41	13.64463	(09010519)		
466323.66	3808001.41	13.32971	(09010519)	466379.64
3808001.41	13.01831	(09010519)		
466435.62	3808001.41	12.71114	(09010519)	466491.60
3808001.41	12.41735	(09010519)		
466547.58	3808001.41	12.12248	(09010519)	466603.56
3808001.41	11.85097	(09010519)		
466659.54	3808001.41	11.58870	(09010519)	466715.52


```

3808001.41      11.32499 (09010519)
      466771.50  3808001.41      11.07424 (09010519)      466827.48
3808001.41      10.82854 (09010519)
      466883.46  3808001.41      10.57834 (09010519)      465763.86
3808067.63      18.11156 (09010519)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 751

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465819.84	3808067.63	17.56562	(09010519)	465875.82
3808067.63	17.04600	(09010519)		
465931.80	3808067.63	16.55272	(09010519)	465987.78
3808067.63	16.08407	(09010519)		
466043.76	3808067.63	15.63322	(09010519)	466099.74
3808067.63	15.20967	(09010519)		
466155.72	3808067.63	14.79733	(09010519)	466211.70
3808067.63	14.40879	(09010519)		
466267.68	3808067.63	14.03110	(09010519)	466323.66
3808067.63	13.66607	(09010519)		
466379.64	3808067.63	13.31500	(09010519)	466435.62
3808067.63	12.98428	(09010519)		
466491.60	3808067.63	12.65290	(09010519)	466547.58
3808067.63	12.34611	(09010519)		
466603.56	3808067.63	12.04974	(09010519)	466659.54
3808067.63	11.76324	(09010519)		

466715.52	3808067.63	11.49244	(09010519)	466771.50
3808067.63	11.22454	(09010519)		
466827.48	3808067.63	10.95635	(09010519)	466883.46
3808067.63	10.68953	(09010519)		
465763.86	3808133.85	18.75982	(09010519)	465819.84
3808133.85	18.13953	(09010519)		
465875.82	3808133.85	17.55220	(09010519)	465931.80
3808133.85	17.00608	(09010519)		
465987.78	3808133.85	16.48783	(09010519)	466043.76
3808133.85	15.99376	(09010519)		
466099.74	3808133.85	15.51432	(09010519)	466155.72
3808133.85	15.06972	(09010519)		
466211.70	3808133.85	14.63807	(09010519)	466267.68
3808133.85	14.21752	(09010519)		
466323.66	3808133.85	13.82811	(09010519)	466379.64
3808133.85	13.45760	(09010519)		
466435.62	3808133.85	13.10017	(09010519)	466491.60
3808133.85	12.75742	(09010519)		
466547.58	3808133.85	12.43428	(09010519)	466603.56
3808133.85	12.12737	(09010519)		
466659.54	3808133.85	11.83412	(09010519)	466715.52
3808133.85	11.54523	(09010519)		
466771.50	3808133.85	11.24972	(09010519)	466827.48
3808133.85	10.98543	(10032206)		
466883.46	3808133.85	10.73850	(10032206)	465763.86
3808200.07	19.07496	(09010519)		
465819.84	3808200.07	18.40352	(09010519)	465875.82
3808200.07	17.77119	(09010519)		
465931.80	3808200.07	17.19487	(10032206)	465987.78
3808200.07	16.68696	(10032206)		
466043.76	3808200.07	16.19961	(10032206)	466099.74
3808200.07	15.74341	(10032206)		
466155.72	3808200.07	15.31718	(10032206)	466211.70
3808200.07	14.91106	(10032206)		
466267.68	3808200.07	14.49534	(10032206)	466323.66
3808200.07	14.12033	(10032206)		
466379.64	3808200.07	13.74471	(10032206)	466435.62
3808200.07	13.38401	(10032206)		
466491.60	3808200.07	13.04718	(10032206)	466547.58
3808200.07	12.72418	(10032206)		
466603.56	3808200.07	12.41761	(10032206)	466659.54
3808200.07	12.11468	(10032206)		
466715.52	3808200.07	11.82276	(10032206)	466771.50
3808200.07	11.53712	(10032206)		
466827.48	3808200.07	11.25426	(10032206)	466883.46
3808200.07	10.98983	(10032206)		
465763.86	3808266.29	19.67042	(10032206)	465819.84
3808266.29	18.99772	(10032206)		
465875.82	3808266.29	18.36344	(10032206)	465931.80
3808266.29	17.77049	(10032206)		

465987.78	3808266.29	17.20569	(10032206)	466043.76
3808266.29	16.68319	(10032206)		
466099.74	3808266.29	16.18840	(10032206)	466155.72
3808266.29	15.72125	(10032206)		
466211.70	3808266.29	15.25580	(10032206)	466267.68
3808266.29	14.82515	(10032206)		
466323.66	3808266.29	14.40565	(10032206)	466379.64
3808266.29	14.01475	(10032206)		
466435.62	3808266.29	13.63350	(10032206)	466491.60
3808266.29	13.27898	(10032206)		
466547.58	3808266.29	12.93965	(10032206)	466603.56
3808266.29	12.60647	(10032206)		
466659.54	3808266.29	12.29295	(10032206)	466715.52
3808266.29	11.97858	(10032206)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 752

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** *** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466771.50	3808266.29	11.68265	(10032206)	466827.48
3808266.29	11.39179	(10032206)		
466883.46	3808266.29	11.11597	(10032206)	465763.86
3808332.51	19.96654	(10032206)		
465819.84	3808332.51	19.26486	(10032206)	465875.82
3808332.51	18.59972	(10032206)		
465931.80	3808332.51	17.97197	(10032206)	465987.78

3808332.51	17.39119	(10032206)	
466043.76	3808332.51	16.84278	(10032206) 466099.74
3808332.51	16.32466	(10032206)	
466155.72	3808332.51	15.81985	(10032206) 466211.70
3808332.51	15.34446	(10032206)	
466267.68	3808332.51	14.88978	(10032206) 466323.66
3808332.51	14.47323	(10032206)	
466379.64	3808332.51	14.06064	(10032206) 466435.62
3808332.51	13.67550	(10032206)	
466491.60	3808332.51	13.31298	(10032206) 466547.58
3808332.51	12.96502	(10032206)	
466603.56	3808332.51	12.64348	(10032206) 466659.54
3808332.51	12.31968	(10032206)	
466715.52	3808332.51	12.00300	(10032206) 466771.50
3808332.51	11.68061	(10032206)	
466827.48	3808332.51	11.39130	(10032206) 466883.46
3808332.51	11.11359	(10032206)	
465763.86	3808398.73	19.79557	(10032206) 465819.84
3808398.73	19.09328	(10032206)	
465875.82	3808398.73	18.41821	(10032206) 465931.80
3808398.73	17.80042	(10032206)	
465987.78	3808398.73	17.21674	(10032206) 466043.76
3808398.73	16.66144	(10032206)	
466099.74	3808398.73	16.14817	(10032206) 466155.72
3808398.73	15.64136	(10032206)	
466211.70	3808398.73	15.16028	(10032206) 466267.68
3808398.73	14.72589	(10032206)	
466323.66	3808398.73	14.30575	(10032206) 466379.64
3808398.73	13.90604	(10032206)	
466435.62	3808398.73	13.52900	(10032206) 466491.60
3808398.73	13.17384	(10032206)	
466547.58	3808398.73	12.82491	(10032206) 466603.56
3808398.73	12.49300	(10032206)	
466659.54	3808398.73	12.16756	(10032206) 466715.52
3808398.73	11.85221	(10032206)	
466771.50	3808398.73	11.55347	(10032206) 466827.48
3808398.73	11.26389	(10032206)	
466883.46	3808398.73	10.98902	(10032206) 465763.86
3808464.95	19.17029	(10032206)	
465819.84	3808464.95	18.50167	(10032206) 465875.82
3808464.95	17.86711	(10032206)	
465931.80	3808464.95	17.26373	(10032206) 465987.78
3808464.95	16.69613	(10032206)	
466043.76	3808464.95	16.17838	(10032206) 466099.74
3808464.95	15.66914	(10032206)	
466155.72	3808464.95	15.18620	(10032206) 466211.70
3808464.95	14.74256	(10032206)	
466267.68	3808464.95	14.32452	(10032206) 466323.66
3808464.95	13.92518	(10032206)	
466379.64	3808464.95	13.54770	(10032206) 466435.62

3808464.95	13.18990	(10032206)			
466491.60	3808464.95	12.84949	(10032206)		466547.58
3808464.95	12.51263	(10032206)			
466603.56	3808464.95	12.18353	(10032206)		466659.54
3808464.95	11.87005	(10032206)			
466715.52	3808464.95	11.57250	(10032206)		466771.50
3808464.95	11.28692	(10032206)			
466827.48	3808464.95	11.01394	(10032206)		466883.46
3808464.95	10.75334	(10032206)			
465763.86	3808531.17	19.26158	(09031319)		465819.84
3808531.17	18.45792	(09031319)			
465875.82	3808531.17	17.71053	(09031319)		465931.80
3808531.17	16.99939	(09031319)			
465987.78	3808531.17	16.33240	(09031319)		466043.76
3808531.17	15.70565	(09031319)			
466099.74	3808531.17	15.11227	(09031319)		466155.72
3808531.17	14.55842	(09031319)			
466211.70	3808531.17	14.11785	(10032206)		466267.68
3808531.17	13.73572	(10032206)			
466323.66	3808531.17	13.37820	(10032206)		466379.64
3808531.17	13.02290	(10032206)			
466435.62	3808531.17	12.69429	(10032206)		466491.60
3808531.17	12.36622	(10032206)			

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 753

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

	466547.58	3808531.17	12.04692	(10032206)	466603.56
3808531.17	11.74391	(10032206)			
	466659.54	3808531.17	11.45231	(10032206)	466715.52
3808531.17	11.17558	(10032206)			
	466771.50	3808531.17	10.90715	(10032206)	466827.48
3808531.17	10.65825	(10032206)			
	466883.46	3808531.17	10.41641	(10032206)	465763.86
3808597.39	20.69760	(09031319)			
	465819.84	3808597.39	19.87665	(09031319)	465875.82
3808597.39	19.07381	(09031319)			
	465931.80	3808597.39	18.30347	(09031319)	465987.78
3808597.39	17.60371	(09031319)			
	466043.76	3808597.39	16.94669	(09031319)	466099.74
3808597.39	16.32309	(09031319)			
	466155.72	3808597.39	15.73262	(09031319)	466211.70
3808597.39	15.16923	(09031319)			
	466267.68	3808597.39	14.64019	(09031319)	466323.66
3808597.39	14.14495	(09031319)			
	466379.64	3808597.39	13.67049	(09031319)	466435.62
3808597.39	13.20640	(09031319)			
	466491.60	3808597.39	12.77167	(09031319)	466547.58
3808597.39	12.35226	(09031319)			
	466603.56	3808597.39	11.94934	(09031319)	466659.54
3808597.39	11.56314	(09031319)			
	466715.52	3808597.39	11.19763	(09031319)	466771.50
3808597.39	10.84920	(09031319)			
	466827.48	3808597.39	10.51710	(09031319)	466883.46
3808597.39	10.20988	(09031319)			
	465763.86	3808663.61	21.43337	(09031319)	465819.84
3808663.61	20.63571	(09031319)			
	465875.82	3808663.61	19.85799	(09031319)	465931.80
3808663.61	19.11531	(09031319)			
	465987.78	3808663.61	18.40972	(09031319)	466043.76
3808663.61	17.75353	(09031319)			
	466099.74	3808663.61	17.13741	(09031319)	466155.72
3808663.61	16.53199	(09031319)			
	466211.70	3808663.61	15.96510	(09031319)	466267.68
3808663.61	15.41160	(09031319)			
	466323.66	3808663.61	14.91827	(09031319)	466379.64
3808663.61	14.41554	(09031319)			
	466435.62	3808663.61	13.96950	(09031319)	466491.60
3808663.61	13.51010	(09031319)			
	466547.58	3808663.61	13.07186	(09031319)	466603.56
3808663.61	12.65233	(09031319)			
	466659.54	3808663.61	12.25249	(09031319)	466715.52
3808663.61	11.87465	(09031319)			
	466771.50	3808663.61	11.51398	(09031319)	466827.48
3808663.61	11.18689	(09031319)			

466883.46	3808663.61	10.85481	(09031319)	465763.86
3808729.83	21.53241	(09010419)		
465819.84	3808729.83	20.70778	(09031319)	465875.82
3808729.83	20.00749	(09031319)		
465931.80	3808729.83	19.32196	(09031319)	465987.78
3808729.83	18.67695	(09031319)		
466043.76	3808729.83	18.05650	(09031319)	466099.74
3808729.83	17.46961	(09031319)		
466155.72	3808729.83	16.89579	(09031319)	466211.70
3808729.83	16.34006	(09031319)		
466267.68	3808729.83	15.80720	(09031319)	466323.66
3808729.83	15.33244	(09031319)		
466379.64	3808729.83	14.85740	(09031319)	466435.62
3808729.83	14.39317	(09031319)		
466491.60	3808729.83	13.96376	(09031319)	466547.58
3808729.83	13.53132	(09031319)		
466603.56	3808729.83	13.11812	(09031319)	466659.54
3808729.83	12.75495	(09031319)		
466715.52	3808729.83	12.37496	(09031319)	466771.50
3808729.83	12.01387	(09031319)		
466827.48	3808729.83	11.67660	(09031319)	466883.46
3808729.83	11.34517	(09031319)		
465763.86	3808796.05	22.82077	(09010419)	465819.84
3808796.05	21.89507	(09010419)		
465875.82	3808796.05	20.90701	(09010419)	465931.80
3808796.05	19.99407	(09010419)		
465987.78	3808796.05	19.13339	(09010419)	466043.76
3808796.05	18.31898	(09010419)		
466099.74	3808796.05	17.54542	(09010419)	466155.72
3808796.05	16.80267	(09031319)		
466211.70	3808796.05	16.30836	(09031319)	466267.68
3808796.05	15.82590	(09031319)		

^ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 754

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466323.66	3808796.05	15.37325	(09031319)	466379.64
3808796.05	14.93160	(09031319)		
466435.62	3808796.05	14.52201	(09031319)	466491.60
3808796.05	14.10280	(09031319)		
466547.58	3808796.05	13.70328	(09031319)	466603.56
3808796.05	13.33730	(09031319)		
466659.54	3808796.05	12.96503	(09031319)	466715.52
3808796.05	12.61532	(09031319)		
466771.50	3808796.05	12.27373	(09031319)	466827.48
3808796.05	11.94125	(09031319)		
466883.46	3808796.05	11.63718	(09031319)	465763.86
3808862.27	23.20068	(09010419)		
465819.84	3808862.27	22.39458	(09010419)	465875.82
3808862.27	21.58886	(09010419)		
465931.80	3808862.27	20.75722	(09010419)	465987.78
3808862.27	19.96930	(09010419)		
466043.76	3808862.27	19.20907	(09010419)	466099.74
3808862.27	18.47773	(09010419)		
466155.72	3808862.27	17.73387	(09010419)	466211.70
3808862.27	17.03646	(09010419)		
466267.68	3808862.27	16.39531	(09010419)	466323.66
3808862.27	15.75544	(09010419)		
466379.64	3808862.27	15.15533	(09010419)	466435.62
3808862.27	14.57675	(09010419)		
466491.60	3808862.27	14.02470	(09010419)	466547.58
3808862.27	13.58972	(09031319)		
466603.56	3808862.27	13.24374	(09031319)	466659.54
3808862.27	12.92854	(09031319)		
466715.52	3808862.27	12.60289	(09031319)	466771.50
3808862.27	12.29245	(09031319)		
466827.48	3808862.27	11.99820	(09031319)	466883.46
3808862.27	11.71010	(09031319)		
465763.86	3808928.49	22.63621	(09010419)	465819.84
3808928.49	22.02086	(09010419)		
465875.82	3808928.49	21.42410	(09010419)	465931.80
3808928.49	20.79054	(09010419)		
465987.78	3808928.49	20.15118	(09010419)	466043.76
3808928.49	19.52308	(09010419)		
466099.74	3808928.49	18.84193	(09010419)	466155.72

3808928.49	18.19622	(09010419)		
466211.70	3808928.49	17.57118	(09010419)	466267.68
3808928.49	16.95738	(09010419)		
466323.66	3808928.49	16.35998	(09010419)	466379.64
3808928.49	15.78322	(09010419)		
466435.62	3808928.49	15.24992	(09010419)	466491.60
3808928.49	14.72844	(09010419)		
466547.58	3808928.49	14.21641	(09010419)	466603.56
3808928.49	13.74568	(09010419)		
466659.54	3808928.49	13.26598	(09010419)	466715.52
3808928.49	12.81518	(09010419)		
466771.50	3808928.49	12.37181	(09010419)	466827.48
3808928.49	11.96140	(09010419)		
466883.46	3808928.49	11.57354	(09031319)	465763.86
3808994.71	22.69209	(09120320)		
465819.84	3808994.71	21.89227	(09120320)	465875.82
3808994.71	21.16230	(09120320)		
465931.80	3808994.71	20.48333	(09120320)	465987.78
3808994.71	19.80928	(09120320)		
466043.76	3808994.71	19.18326	(09010419)	466099.74
3808994.71	18.64673	(09010419)		
466155.72	3808994.71	18.09851	(09010419)	466211.70
3808994.71	17.57613	(09010419)		
466267.68	3808994.71	17.05562	(09010419)	466323.66
3808994.71	16.54407	(09010419)		
466379.64	3808994.71	16.04162	(09010419)	466435.62
3808994.71	15.55029	(09010419)		
466491.60	3808994.71	15.08802	(09010419)	466547.58
3808994.71	14.64766	(09010419)		
466603.56	3808994.71	14.19544	(09010419)	466659.54
3808994.71	13.74753	(09010419)		
466715.52	3808994.71	13.34825	(09010419)	466771.50
3808994.71	12.92298	(09010419)		
466827.48	3808994.71	12.51188	(09010419)	466883.46
3808994.71	12.13293	(09010419)		
465763.86	3809060.93	22.03805	(09120320)	465819.84
3809060.93	21.44992	(09120320)		
465875.82	3809060.93	20.89507	(09120320)	465931.80
3809060.93	20.33480	(09120320)		
465987.78	3809060.93	19.76352	(09120320)	466043.76
3809060.93	19.18128	(09120320)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 755

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
466099.74	3809060.93	18.52020	(09120320)	466155.72
3809060.93	17.90257	(09120320)		
466211.70	3809060.93	17.27631	(09120320)	466267.68
3809060.93	16.68505	(09010419)		
466323.66	3809060.93	16.27920	(09010419)	466379.64
3809060.93	15.87186	(09010419)		
466435.62	3809060.93	15.49211	(09010419)	466491.60
3809060.93	15.10595	(09010419)		
466547.58	3809060.93	14.70399	(09010419)	466603.56
3809060.93	14.31907	(09010419)		
466659.54	3809060.93	13.95884	(09010419)	466715.52
3809060.93	13.56973	(09010419)		
466771.50	3809060.93	13.19213	(09010419)	466827.48
3809060.93	12.83069	(09010419)		
466883.46	3809060.93	12.48191	(09010419)	465763.86
3809127.15	21.69483	(10021420)		
465819.84	3809127.15	20.55151	(10021420)	465875.82
3809127.15	20.08157	(09120320)		
465931.80	3809127.15	19.66628	(09120320)	465987.78
3809127.15	19.23131	(09120320)		
466043.76	3809127.15	18.71331	(09120320)	466099.74
3809127.15	18.18490	(09120320)		
466155.72	3809127.15	17.68332	(09120320)	466211.70
3809127.15	17.25734	(09120320)		
466267.68	3809127.15	16.78397	(09120320)	466323.66
3809127.15	16.29170	(09120320)		
466379.64	3809127.15	15.78406	(09120320)	466435.62
3809127.15	15.29700	(09120320)		
466491.60	3809127.15	14.81656	(09120320)	466547.58
3809127.15	14.44776	(09010419)		

466603.56	3809127.15	14.14687	(09010419)	466659.54
3809127.15	13.82362	(09010419)		
466715.52	3809127.15	13.51229	(09010419)	466771.50
3809127.15	13.19848	(09010419)		
466827.48	3809127.15	12.88074	(09010419)	466883.46
3809127.15	12.58302	(09010419)		
465763.86	3809193.37	22.37151	(10021420)	465819.84
3809193.37	21.44043	(10021420)		
465875.82	3809193.37	20.46725	(10021420)	465931.80
3809193.37	19.48488	(10021420)		
465987.78	3809193.37	18.45792	(10021420)	466043.76
3809193.37	17.72559	(09120320)		
466099.74	3809193.37	17.42933	(09120320)	466155.72
3809193.37	17.08205	(09120320)		
466211.70	3809193.37	16.76765	(09120320)	466267.68
3809193.37	16.43655	(09120320)		
466323.66	3809193.37	16.07377	(09120320)	466379.64
3809193.37	15.69493	(09120320)		
466435.62	3809193.37	15.28752	(09120320)	466491.60
3809193.37	14.88816	(09120320)		
466547.58	3809193.37	14.48855	(09120320)	466603.56
3809193.37	14.10230	(09120320)		
466659.54	3809193.37	13.69425	(09120320)	466715.52
3809193.37	13.30850	(09120320)		
466771.50	3809193.37	12.94535	(09010419)	466827.48
3809193.37	12.70053	(09010419)		
466883.46	3809193.37	12.44659	(09010419)	465763.86
3809259.59	22.31266	(10021420)		
465819.84	3809259.59	21.59629	(10021420)	465875.82
3809259.59	20.80151	(10021420)		
465931.80	3809259.59	19.98518	(10021420)	465987.78
3809259.59	19.08198	(10021420)		
466043.76	3809259.59	18.17896	(10021420)	466099.74
3809259.59	17.31541	(10021420)		
466155.72	3809259.59	16.55959	(10021420)	466211.70
3809259.59	15.98317	(09120320)		
466267.68	3809259.59	15.77612	(09120320)	466323.66
3809259.59	15.49962	(09120320)		
466379.64	3809259.59	15.22711	(09120320)	466435.62
3809259.59	14.94398	(09120320)		
466491.60	3809259.59	14.63126	(09120320)	466547.58
3809259.59	14.33455	(09120320)		
466603.56	3809259.59	14.00925	(09120320)	466659.54
3809259.59	13.68051	(09120320)		
466715.52	3809259.59	13.37078	(09120320)	466771.50
3809259.59	13.02993	(09120320)		
466827.48	3809259.59	12.70044	(09120320)	466883.46
3809259.59	12.36765	(09120320)		
464503.41	3807141.91	75.68591	(09120417)	464523.41
3807141.91	75.21992	(09120417)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 756

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464543.41	3807141.91	74.49990	(09120417)	464563.41
3807141.91	73.41505	(09120417)		
464583.41	3807141.91	71.61892	(09120417)	464603.41
3807141.91	72.03770	(09011918)		
464623.41	3807141.91	72.78238	(09011918)	464643.41
3807141.91	72.92900	(09011918)		
464663.41	3807141.91	72.96232	(09011918)	464683.41
3807141.91	72.71551	(09011918)		
464703.41	3807141.91	71.70893	(09011918)	464723.41
3807141.91	71.03253	(09011918)		
464743.41	3807141.91	69.99320	(09011918)	464763.41
3807141.91	68.46379	(09011918)		
464783.41	3807141.91	66.71476	(09011918)	464803.41
3807141.91	64.61115	(09011918)		
464823.41	3807141.91	61.74575	(09011918)	464843.41
3807141.91	59.13961	(09011918)		
464863.41	3807141.91	56.51832	(09011918)	464883.41
3807141.91	53.63613	(09011918)		
464903.41	3807141.91	50.45418	(09011918)	464923.41
3807141.91	47.24036	(09011918)		
464503.41	3807161.91	76.55104	(09120417)	464523.41

3807161.91	75.90770	(09120417)	
464543.41	3807161.91	74.98761	(09120417) 464563.41
3807161.91	73.68720	(09120417)	
464583.41	3807161.91	72.65130	(09011918) 464603.41
3807161.91	73.26887	(09011918)	
464623.41	3807161.91	73.58737	(09011918) 464643.41
3807161.91	73.93515	(09011918)	
464663.41	3807161.91	73.60581	(09011918) 464683.41
3807161.91	72.77511	(09011918)	
464703.41	3807161.91	72.08659	(09011918) 464723.41
3807161.91	71.42262	(09011918)	
464743.41	3807161.91	70.04189	(09011918) 464763.41
3807161.91	67.65584	(09011918)	
464783.41	3807161.91	65.53874	(09011918) 464803.41
3807161.91	63.37011	(09011918)	
464823.41	3807161.91	60.90041	(09011918) 464843.41
3807161.91	58.27280	(09011918)	
464863.41	3807161.91	55.39864	(09011918) 464883.41
3807161.91	52.00550	(09011918)	
464903.41	3807161.91	48.91721	(09011918) 464923.41
3807161.91	45.89802	(09011918)	
464503.41	3807181.91	77.20214	(09120417) 464523.41
3807181.91	76.46899	(09120417)	
464543.41	3807181.91	75.27539	(09120417) 464563.41
3807181.91	73.63866	(09120417)	
464583.41	3807181.91	74.11479	(09011918) 464603.41
3807181.91	74.62514	(09011918)	
464623.41	3807181.91	74.73185	(09011918) 464643.41
3807181.91	74.99562	(09011918)	
464663.41	3807181.91	74.42376	(09011918) 464683.41
3807181.91	73.56329	(09011918)	
464703.41	3807181.91	72.80919	(09011918) 464723.41
3807181.91	71.34606	(09011918)	
464743.41	3807181.91	69.38803	(09011918) 464763.41
3807181.91	67.14576	(09011918)	
464783.41	3807181.91	64.92478	(09011918) 464803.41
3807181.91	62.53757	(09011918)	
464823.41	3807181.91	59.55228	(09011918) 464843.41
3807181.91	56.71204	(09011918)	
464863.41	3807181.91	53.80835	(09011918) 464883.41
3807181.91	50.58827	(09011918)	
464903.41	3807181.91	47.36598	(09011918) 464923.41
3807181.91	44.25052	(09011918)	
464503.41	3807201.91	77.77568	(09120417) 464523.41
3807201.91	76.96047	(09120417)	
464543.41	3807201.91	75.48696	(09120417) 464563.41
3807201.91	74.50359	(09011918)	
464583.41	3807201.91	75.45673	(09011918) 464603.41
3807201.91	75.89285	(09011918)	
464623.41	3807201.91	75.89906	(09011918) 464643.41

```

3807201.91      75.83687 (09011918)
      464663.41  3807201.91      75.08430 (09011918)      464683.41
3807201.91      74.14797 (09011918)
      464703.41  3807201.91      72.96909 (09011918)      464723.41
3807201.91      71.01155 (09011918)
      464743.41  3807201.91      68.59514 (09011918)      464763.41
3807201.91      66.65899 (09011918)
      464783.41  3807201.91      64.27150 (09011918)      464803.41
3807201.91      61.50137 (09011918)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 757

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

464823.41	3807201.91	58.14179	(09011918)	464843.41
3807201.91	54.94889	(09011918)		
464863.41	3807201.91	51.96002	(09011918)	464883.41
3807201.91	49.02526	(09011918)		
464903.41	3807201.91	45.79977	(09011918)	464923.41
3807201.91	42.56366	(09011918)		
464503.41	3807221.91	78.44688	(09120417)	464523.41
3807221.91	77.40421	(09120417)		
464543.41	3807221.91	75.70405	(09120417)	464563.41
3807221.91	76.04676	(09011918)		
464583.41	3807221.91	76.51204	(09011918)	464603.41
3807221.91	76.85804	(09011918)		

464623.41	3807221.91	76.92851	(09011918)	464643.41
3807221.91	76.13335	(09011918)		
464663.41	3807221.91	75.30488	(09011918)	464683.41
3807221.91	74.52245	(09011918)		
464703.41	3807221.91	72.41890	(09011918)	464723.41
3807221.91	70.45508	(09011918)		
464743.41	3807221.91	68.41220	(09011918)	464763.41
3807221.91	66.22138	(09011918)		
464783.41	3807221.91	63.20006	(09011918)	464803.41
3807221.91	59.87395	(09011918)		
464823.41	3807221.91	56.92964	(09011918)	464843.41
3807221.91	53.48627	(09011918)		
464863.41	3807221.91	50.04489	(09011918)	464883.41
3807221.91	47.15046	(09011918)		
464903.41	3807221.91	44.14840	(09011918)	464923.41
3807221.91	41.14230	(09011918)		
464503.41	3807241.91	79.00767	(09120417)	464523.41
3807241.91	77.57553	(09120417)		
464543.41	3807241.91	76.75770	(09011918)	464563.41
3807241.91	77.59990	(09011918)		
464583.41	3807241.91	77.82845	(09011918)	464603.41
3807241.91	78.02698	(09011918)		
464623.41	3807241.91	77.94286	(09011918)	464643.41
3807241.91	76.81311	(09011918)		
464663.41	3807241.91	75.77646	(09011918)	464683.41
3807241.91	74.15626	(09011918)		
464703.41	3807241.91	72.18590	(09011918)	464723.41
3807241.91	70.18109	(09011918)		
464743.41	3807241.91	67.97514	(09011918)	464763.41
3807241.91	65.03887	(09011918)		
464783.41	3807241.91	61.92917	(09011918)	464803.41
3807241.91	58.59514	(09011918)		
464823.41	3807241.91	55.23009	(09011918)	464843.41
3807241.91	51.88664	(09011918)		
464863.41	3807241.91	48.54488	(09011918)	464883.41
3807241.91	45.61037	(09011918)		
464903.41	3807241.91	42.52918	(09011918)	464923.41
3807241.91	39.50643	(09011918)		
464503.41	3807261.91	79.48074	(09120417)	464523.41
3807261.91	77.65067	(09120417)		
464543.41	3807261.91	78.27353	(09011918)	464563.41
3807261.91	79.11775	(09011918)		
464583.41	3807261.91	79.17195	(09011918)	464603.41
3807261.91	79.08150	(09011918)		
464623.41	3807261.91	78.67690	(09011918)	464643.41
3807261.91	77.45261	(09011918)		
464663.41	3807261.91	75.93826	(09011918)	464683.41
3807261.91	73.60618	(09011918)		
464703.41	3807261.91	71.96204	(09011918)	464723.41
3807261.91	69.78045	(09011918)		

464743.41	3807261.91	67.12401	(09011918)	464763.41
3807261.91	63.72514	(09011918)		
464783.41	3807261.91	60.44227	(09011918)	464803.41
3807261.91	57.24334	(09011918)		
464823.41	3807261.91	53.56179	(09011918)	464843.41
3807261.91	50.10958	(09011918)		
464863.41	3807261.91	47.04304	(09011918)	464883.41
3807261.91	44.07504	(09011918)		
464903.41	3807261.91	40.87657	(09011918)	464923.41
3807261.91	37.55883	(09011918)		
464503.41	3807281.91	79.87202	(09120417)	464523.41
3807281.91	78.94383	(09011918)		
464543.41	3807281.91	79.89885	(09011918)	464563.41
3807281.91	80.58173	(09011918)		
464583.41	3807281.91	80.44164	(09011918)	464603.41
3807281.91	79.81299	(09011918)		
464623.41	3807281.91	78.78814	(09011918)	464643.41
3807281.91	77.82398	(09011918)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 758

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464663.41	3807281.91	76.27741	(09011918)	464683.41
3807281.91	73.75115	(09011918)		
464703.41	3807281.91	71.81997	(09011918)	464723.41

3807281.91	68.90782	(09011918)	
464743.41	3807281.91	65.57930	(09011918) 464763.41
3807281.91	62.62678	(09011918)	
464783.41	3807281.91	59.01869	(09011918) 464803.41
3807281.91	55.31315	(09011918)	
464823.41	3807281.91	52.05600	(09011918) 464843.41
3807281.91	48.49655	(09011918)	
464863.41	3807281.91	45.04784	(09011918) 464883.41
3807281.91	42.19062	(09011918)	
464903.41	3807281.91	38.75914	(09011918) 464923.41
3807281.91	35.90249	(09011918)	
464503.41	3807301.91	79.97356	(09120417) 464523.41
3807301.91	80.61449	(09011918)	
464543.41	3807301.91	81.33025	(09011918) 464563.41
3807301.91	81.63362	(09011918)	
464583.41	3807301.91	81.51427	(09011918) 464603.41
3807301.91	80.69132	(09011918)	
464623.41	3807301.91	79.71651	(09011918) 464643.41
3807301.91	78.61009	(09011918)	
464663.41	3807301.91	76.45597	(09011918) 464683.41
3807301.91	73.72387	(09011918)	
464703.41	3807301.91	71.49846	(09011918) 464723.41
3807301.91	68.25235	(09011918)	
464743.41	3807301.91	64.41152	(09011918) 464763.41
3807301.91	60.93281	(09011918)	
464783.41	3807301.91	57.40974	(09011918) 464803.41
3807301.91	53.82233	(09011918)	
464823.41	3807301.91	50.69275	(09011918) 464843.41
3807301.91	47.10299	(09011918)	
464863.41	3807301.91	43.11279	(09011918) 464883.41
3807301.91	40.05605	(09011918)	
464903.41	3807301.91	37.20144	(09011918) 464923.41
3807301.91	34.13594	(09011918)	
464503.41	3807321.91	81.16419	(09011918) 464523.41
3807321.91	82.25293	(09011918)	
464543.41	3807321.91	82.70081	(09011918) 464563.41
3807321.91	82.58729	(09011918)	
464583.41	3807321.91	82.50804	(09011918) 464603.41
3807321.91	81.51614	(09011918)	
464623.41	3807321.91	80.29819	(09011918) 464643.41
3807321.91	78.89253	(09011918)	
464663.41	3807321.91	76.46187	(09011918) 464683.41
3807321.91	73.48226	(09011918)	
464703.41	3807321.91	70.76895	(09011918) 464723.41
3807321.91	67.35555	(09011918)	
464743.41	3807321.91	63.45817	(09011918) 464763.41
3807321.91	59.32205	(09011918)	
464783.41	3807321.91	55.72199	(09011918) 464803.41
3807321.91	52.51796	(09011918)	
464823.41	3807321.91	49.12405	(09011918) 464843.41

3807321.91	45.49852	(09011918)		
464863.41	3807321.91	41.62870	(09011918)	464883.41
3807321.91	38.45263	(09011918)		
464903.41	3807321.91	35.29294	(09011918)	464923.41
3807321.91	32.94083	(09011918)		
464503.41	3807341.91	82.97201	(09011918)	464523.41
3807341.91	83.89961	(09011918)		
464543.41	3807341.91	84.14892	(09011918)	464563.41
3807341.91	83.80676	(09011918)		
464583.41	3807341.91	83.46986	(09011918)	464603.41
3807341.91	82.20333	(09011918)		
464623.41	3807341.91	80.71942	(09011918)	464643.41
3807341.91	78.99896	(09011918)		
464663.41	3807341.91	76.28345	(09011918)	464683.41
3807341.91	72.95836	(09011918)		
464703.41	3807341.91	69.30745	(09011918)	464723.41
3807341.91	65.91217	(09011918)		
464743.41	3807341.91	62.40443	(09011918)	464763.41
3807341.91	58.17345	(09011918)		
464783.41	3807341.91	54.45541	(09011918)	464803.41
3807341.91	51.00494	(09011918)		
464823.41	3807341.91	47.16434	(09011918)	464843.41
3807341.91	43.06236	(09011918)		
464863.41	3807341.91	39.71706	(09011918)	464883.41
3807341.91	36.79414	(09011918)		
464903.41	3807341.91	34.06951	(09011918)	464923.41
3807341.91	32.29355	(09030119)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 759

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464503.41	3807361.91	84.71089	(09011918)	464523.41
3807361.91	85.22440	(09011918)		
464543.41	3807361.91	85.28032	(09011918)	464563.41
3807361.91	84.91573	(09011918)		
464583.41	3807361.91	84.29681	(09011918)	464603.41
3807361.91	82.73645	(09011918)		
464623.41	3807361.91	80.90352	(09011918)	464643.41
3807361.91	78.42029	(09011918)		
464663.41	3807361.91	75.54356	(09011918)	464683.41
3807361.91	72.35592	(09011918)		
464703.41	3807361.91	68.34214	(09011918)	464723.41
3807361.91	64.36983	(09011918)		
464743.41	3807361.91	60.55166	(09011918)	464763.41
3807361.91	56.71574	(09011918)		
464783.41	3807361.91	52.77803	(09011918)	464803.41
3807361.91	48.96850	(09011918)		
464823.41	3807361.91	44.64416	(09011918)	464843.41
3807361.91	41.32270	(09011918)		
464863.41	3807361.91	37.79631	(09011918)	464883.41
3807361.91	35.25505	(09011918)		
464903.41	3807361.91	32.69853	(09011918)	464923.41
3807361.91	31.71162	(09030119)		
464503.41	3807381.91	86.29540	(09011918)	464523.41
3807381.91	86.41053	(09011918)		
464543.41	3807381.91	86.31903	(09011918)	464563.41
3807381.91	85.87782	(09011918)		
464583.41	3807381.91	84.82895	(09011918)	464603.41
3807381.91	82.98296	(09011918)		
464623.41	3807381.91	80.90159	(09011918)	464643.41
3807381.91	77.68052	(09011918)		
464663.41	3807381.91	74.64322	(09011918)	464683.41
3807381.91	71.32094	(09011918)		
464703.41	3807381.91	67.28266	(09011918)	464723.41
3807381.91	62.92044	(09011918)		
464743.41	3807381.91	58.51212	(09011918)	464763.41
3807381.91	54.86818	(09011918)		
464783.41	3807381.91	50.94667	(09011918)	464803.41
3807381.91	46.56656	(09011918)		
464823.41	3807381.91	42.80787	(09011918)	464843.41
3807381.91	39.15034	(09011918)		
464863.41	3807381.91	36.49809	(09011918)	464883.41
3807381.91	33.91982	(09011918)		
464903.41	3807381.91	32.55335	(09030119)	464923.41
3807381.91	30.08774	(09030119)		

464503.41	3807401.91	87.50988	(09011918)	464523.41
3807401.91	87.69225	(09011918)		
464543.41	3807401.91	87.45809	(09011918)	464563.41
3807401.91	86.63776	(09011918)		
464583.41	3807401.91	84.79450	(09011918)	464603.41
3807401.91	82.76076	(09011918)		
464623.41	3807401.91	80.76420	(09011918)	464643.41
3807401.91	77.25396	(09011918)		
464663.41	3807401.91	73.52218	(09011918)	464683.41
3807401.91	69.53170	(09011918)		
464703.41	3807401.91	65.91551	(09011918)	464723.41
3807401.91	61.62591	(09011918)		
464743.41	3807401.91	57.02040	(09011918)	464763.41
3807401.91	52.74452	(09011918)		
464783.41	3807401.91	49.02504	(09011918)	464803.41
3807401.91	45.10715	(09011918)		
464823.41	3807401.91	41.41553	(09011918)	464843.41
3807401.91	37.82915	(09011918)		
464863.41	3807401.91	35.14494	(09011918)	464883.41
3807401.91	32.93653	(09030119)		
464903.41	3807401.91	32.08009	(09030119)	464923.41
3807401.91	31.13053	(09030119)		
464503.41	3807421.91	88.98246	(09011918)	464523.41
3807421.91	88.97650	(09011918)		
464543.41	3807421.91	88.23027	(09011918)	464563.41
3807421.91	86.82994	(09011918)		
464583.41	3807421.91	84.89241	(09011918)	464603.41
3807421.91	82.85310	(09011918)		
464623.41	3807421.91	79.85266	(09011918)	464643.41
3807421.91	76.47443	(09011918)		
464663.41	3807421.91	72.56134	(09011918)	464683.41
3807421.91	68.14865	(09011918)		
464703.41	3807421.91	63.99157	(09011918)	464723.41
3807421.91	59.81573	(09011918)		
464743.41	3807421.91	55.50413	(09011918)	464763.41
3807421.91	51.11641	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 760

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,

```

          L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
          L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464783.41	3807421.91	46.75348	(09011918)	464803.41
3807421.91	43.19780	(09011918)		
464823.41	3807421.91	39.83516	(09011918)	464843.41
3807421.91	36.27932	(09011918)		
464863.41	3807421.91	33.94570	(09030119)	464883.41
3807421.91	33.05119	(09030119)		
464903.41	3807421.91	31.47763	(09030119)	464923.41
3807421.91	31.12581	(09030119)		
464503.41	3807441.91	90.42987	(09011918)	464523.41
3807441.91	90.00873	(09011918)		
464543.41	3807441.91	88.75280	(09011918)	464563.41
3807441.91	87.31647	(09011918)		
464583.41	3807441.91	85.23240	(09011918)	464603.41
3807441.91	82.26302	(09011918)		
464623.41	3807441.91	78.91974	(09011918)	464643.41
3807441.91	75.47634	(09011918)		
464663.41	3807441.91	71.33073	(09011918)	464683.41
3807441.91	66.82571	(09011918)		
464703.41	3807441.91	62.08985	(09011918)	464723.41
3807441.91	57.73042	(09011918)		
464743.41	3807441.91	53.69003	(09011918)	464763.41
3807441.91	49.44409	(09011918)		
464783.41	3807441.91	44.98818	(09011918)	464803.41
3807441.91	40.70357	(09011918)		
464823.41	3807441.91	37.81056	(09011918)	464843.41
3807441.91	34.99954	(09030119)		
464863.41	3807441.91	32.22694	(09030119)	464883.41
3807441.91	32.77158	(09030119)		
464903.41	3807441.91	32.10446	(09030119)	464923.41
3807441.91	30.37733	(09030119)		
464503.41	3807461.91	91.70287	(09011918)	464523.41
3807461.91	90.49249	(09011918)		
464543.41	3807461.91	89.02051	(09011918)	464563.41
3807461.91	87.56459	(09011918)		
464583.41	3807461.91	84.52047	(09011918)	464603.41

3807461.91	81.41036	(09011918)		
464623.41	3807461.91	78.12184	(09011918)	464643.41
3807461.91	73.74420	(09011918)		
464663.41	3807461.91	69.60144	(09011918)	464683.41
3807461.91	65.36183	(09011918)		
464703.41	3807461.91	60.52693	(09011918)	464723.41
3807461.91	55.74653	(09011918)		
464743.41	3807461.91	51.38995	(09011918)	464763.41
3807461.91	47.47971	(09011918)		
464783.41	3807461.91	43.38378	(09011918)	464803.41
3807461.91	39.25014	(09011918)		
464823.41	3807461.91	38.42725	(09030119)	464843.41
3807461.91	36.70080	(09030119)		
464863.41	3807461.91	33.55377	(09030119)	464883.41
3807461.91	34.07950	(09030119)		
464903.41	3807461.91	33.25026	(09030119)	464923.41
3807461.91	31.23895	(09030119)		
464503.41	3807481.91	92.89768	(09011918)	464523.41
3807481.91	91.24886	(09011918)		
464543.41	3807481.91	89.64043	(09011918)	464563.41
3807481.91	87.06297	(09011918)		
464583.41	3807481.91	83.99317	(09011918)	464603.41
3807481.91	80.54974	(09011918)		
464623.41	3807481.91	76.53957	(09011918)	464643.41
3807481.91	72.26135	(09011918)		
464663.41	3807481.91	67.79219	(09011918)	464683.41
3807481.91	63.21463	(09011918)		
464703.41	3807481.91	58.66049	(09011918)	464723.41
3807481.91	53.95588	(09011918)		
464743.41	3807481.91	49.18250	(09011918)	464763.41
3807481.91	45.49254	(09011918)		
464783.41	3807481.91	41.69461	(09011918)	464803.41
3807481.91	39.37422	(09030119)		
464823.41	3807481.91	40.41656	(09030119)	464843.41
3807481.91	38.44809	(09030119)		
464863.41	3807481.91	34.82103	(09030119)	464883.41
3807481.91	34.06216	(09030119)		
464903.41	3807481.91	32.50836	(09030119)	464923.41
3807481.91	32.04478	(09030119)		
464503.41	3807501.91	93.76019	(09011918)	464523.41
3807501.91	91.76247	(09011918)		
464543.41	3807501.91	89.52456	(09011918)	464563.41
3807501.91	86.53798	(09011918)		
464583.41	3807501.91	83.36234	(09011918)	464603.41
3807501.91	79.29469	(09011918)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464623.41	3807501.91	74.81225	(09011918)	464643.41
3807501.91	70.59339	(09011918)		
464663.41	3807501.91	65.82696	(09011918)	464683.41
3807501.91	60.93471	(09011918)		
464703.41	3807501.91	56.51847	(09011918)	464723.41
3807501.91	51.98966	(09011918)		
464743.41	3807501.91	47.40689	(09011918)	464763.41
3807501.91	43.56588	(09011918)		
464783.41	3807501.91	42.09312	(09030119)	464803.41
3807501.91	41.41971	(09030119)		
464823.41	3807501.91	41.91731	(09030119)	464843.41
3807501.91	40.05792	(09030119)		
464863.41	3807501.91	36.04319	(09030119)	464883.41
3807501.91	33.23659	(09030119)		
464903.41	3807501.91	32.85585	(09030119)	464923.41
3807501.91	32.80737	(09030119)		
464503.41	3807521.91	93.98821	(09011918)	464523.41
3807521.91	91.85023	(09011918)		
464543.41	3807521.91	89.12414	(09011918)	464563.41
3807521.91	86.16869	(09011918)		
464583.41	3807521.91	81.89015	(09011918)	464603.41
3807521.91	77.76816	(09011918)		
464623.41	3807521.91	73.44303	(09011918)	464643.41
3807521.91	68.35654	(09011918)		
464663.41	3807521.91	63.64578	(09011918)	464683.41
3807521.91	59.00492	(09011918)		

464703.41	3807521.91	54.13419	(09011918)	464723.41
3807521.91	49.80433	(09011918)		
464743.41	3807521.91	45.44354	(09011918)	464763.41
3807521.91	43.00853	(09030119)		
464783.41	3807521.91	43.31509	(09030119)	464803.41
3807521.91	43.14019	(09030119)		
464823.41	3807521.91	40.55263	(09030119)	464843.41
3807521.91	39.01849	(09030119)		
464863.41	3807521.91	37.39478	(09030119)	464883.41
3807521.91	34.18916	(09030119)		
464903.41	3807521.91	33.70517	(09030119)	464923.41
3807521.91	33.59155	(09030119)		
464503.41	3807541.91	94.36563	(09011918)	464523.41
3807541.91	91.78433	(09011918)		
464543.41	3807541.91	88.70878	(09011918)	464563.41
3807541.91	84.90817	(09011918)		
464583.41	3807541.91	80.69148	(09011918)	464603.41
3807541.91	76.12077	(09011918)		
464623.41	3807541.91	71.31317	(09011918)	464643.41
3807541.91	66.41233	(09011918)		
464663.41	3807541.91	61.43086	(09011918)	464683.41
3807541.91	56.58722	(09011918)		
464703.41	3807541.91	51.99683	(09011918)	464723.41
3807541.91	47.34879	(09011918)		
464743.41	3807541.91	44.27074	(09030119)	464763.41
3807541.91	44.66410	(09030119)		
464783.41	3807541.91	44.69518	(09030119)	464803.41
3807541.91	45.25717	(09030119)		
464823.41	3807541.91	40.84456	(09030119)	464843.41
3807541.91	37.79541	(09030119)		
464863.41	3807541.91	36.97726	(09030119)	464883.41
3807541.91	34.86372	(09030119)		
464903.41	3807541.91	34.28483	(09030119)	464923.41
3807541.91	33.67371	(09030119)		
464503.41	3807561.91	94.38234	(09011918)	464523.41
3807561.91	91.65699	(09011918)		
464543.41	3807561.91	87.85432	(09011918)	464563.41
3807561.91	83.44448	(09011918)		
464583.41	3807561.91	79.24769	(09011918)	464603.41
3807561.91	74.27290	(09011918)		
464623.41	3807561.91	68.98980	(09011918)	464643.41
3807561.91	64.21028	(09011918)		
464663.41	3807561.91	59.13915	(09011918)	464683.41
3807561.91	53.85292	(09011918)		
464703.41	3807561.91	49.47725	(09011918)	464723.41
3807561.91	45.45458	(09030119)		
464743.41	3807561.91	44.76182	(09030119)	464763.41
3807561.91	45.88782	(09030119)		
464783.41	3807561.91	46.49274	(09030119)	464803.41
3807561.91	46.36145	(09030119)		

464823.41 3807561.91 42.31952 (09030119) 464843.41
 3807561.91 38.29715 (09030119)
 464863.41 3807561.91 35.39285 (09030119) 464883.41
 3807561.91 35.37525 (09030119)

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 762

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464903.41	3807561.91	34.62799	(09030119)	464923.41
3807561.91	34.06879	(09030119)		
464503.41	3807581.91	94.57249	(09011918)	464523.41
3807581.91	90.59708	(09011918)		
464543.41	3807581.91	86.67557	(09011918)	464563.41
3807581.91	82.40970	(09011918)		
464583.41	3807581.91	77.10424	(09011918)	464603.41
3807581.91	72.12346	(09011918)		
464623.41	3807581.91	67.11191	(09011918)	464643.41
3807581.91	61.64124	(09011918)		
464663.41	3807581.91	56.76001	(09011918)	464683.41
3807581.91	51.74125	(09011918)		
464703.41	3807581.91	47.06113	(09011918)	464723.41
3807581.91	46.86360	(09030119)		
464743.41	3807581.91	47.13371	(09030119)	464763.41
3807581.91	48.21750	(09030119)		
464783.41	3807581.91	47.35503	(09030119)	464803.41

3807581.91	43.19545	(09030119)		
464823.41	3807581.91	43.04724	(09030119)	464843.41
3807581.91	39.55087	(09030119)		
464863.41	3807581.91	36.26074	(09030119)	464883.41
3807581.91	36.18119	(09030119)		
464903.41	3807581.91	35.28468	(09030119)	464923.41
3807581.91	34.52058	(09030119)		
464503.41	3807601.91	93.65820	(09011918)	464523.41
3807601.91	88.96795	(09011918)		
464543.41	3807601.91	84.75971	(09011918)	464563.41
3807601.91	80.44178	(09011918)		
464583.41	3807601.91	75.29928	(09011918)	464603.41
3807601.91	69.90203	(09011918)		
464623.41	3807601.91	64.54928	(09011918)	464643.41
3807601.91	59.37980	(09011918)		
464663.41	3807601.91	54.00263	(09011918)	464683.41
3807601.91	49.31438	(09011918)		
464703.41	3807601.91	48.39101	(09030119)	464723.41
3807601.91	48.43633	(09030119)		
464743.41	3807601.91	49.12269	(09030119)	464763.41
3807601.91	46.99692	(09030119)		
464783.41	3807601.91	45.32956	(09030119)	464803.41
3807601.91	42.07151	(09030119)		
464823.41	3807601.91	40.61118	(09030119)	464843.41
3807601.91	37.96800	(09030119)		
464863.41	3807601.91	37.01819	(09030119)	464883.41
3807601.91	36.15317	(09030119)		
464903.41	3807601.91	35.58145	(09030119)	464923.41
3807601.91	34.99987	(09030119)		
464503.41	3807621.91	92.15640	(09011918)	464523.41
3807621.91	87.31831	(09011918)		
464543.41	3807621.91	82.64672	(09011918)	464563.41
3807621.91	78.19171	(09011918)		
464583.41	3807621.91	73.13737	(09011918)	464603.41
3807621.91	67.55590	(09011918)		
464623.41	3807621.91	61.51897	(09011918)	464643.41
3807621.91	56.57966	(09011918)		
464663.41	3807621.91	51.60357	(09011918)	464683.41
3807621.91	48.54882	(09030119)		
464703.41	3807621.91	49.79946	(09030119)	464723.41
3807621.91	50.47442	(09030119)		
464743.41	3807621.91	50.33208	(09030119)	464763.41
3807621.91	45.87030	(09030119)		
464783.41	3807621.91	43.13133	(09030119)	464803.41
3807621.91	42.43243	(09030119)		
464823.41	3807621.91	38.67876	(09030119)	464843.41
3807621.91	37.95878	(09030119)		
464863.41	3807621.91	37.47071	(09030119)	464883.41
3807621.91	36.44183	(09030119)		
464903.41	3807621.91	35.86540	(09030119)	464923.41

```

3807621.91      35.71454 (09031219)
      464503.41  3807641.91      90.44916 (09011918)      464523.41
3807641.91      86.07987 (09011918)
      464543.41  3807641.91      81.54303 (09011918)      464563.41
3807641.91      76.49487 (09011918)
      464583.41  3807641.91      70.46509 (09011918)      464603.41
3807641.91      65.04179 (09011918)
      464623.41  3807641.91      59.31015 (09011918)      464643.41
3807641.91      53.83802 (09011918)
      464663.41  3807641.91      50.91480 (09030119)      464683.41
3807641.91      51.22720 (09030119)
      464703.41  3807641.91      52.42877 (09030119)      464723.41
3807641.91      51.48881 (09030119)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 763

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464743.41	3807641.91	46.88496	(09030119)	464763.41
3807641.91	46.70546	(09030119)		
464783.41	3807641.91	43.22898	(09030119)	464803.41
3807641.91	39.65580	(09030119)		
464823.41	3807641.91	39.38349	(09030119)	464843.41
3807641.91	38.27544	(09030119)		
464863.41	3807641.91	37.34092	(09030119)	464883.41
3807641.91	36.80931	(09030119)		

464903.41	3807641.91	36.74421	(09031219)	464923.41
3807641.91	36.66172	(10020118)		
464503.41	3807661.91	87.88661	(09011918)	464523.41
3807661.91	83.73350	(09011918)		
464543.41	3807661.91	79.06854	(09011918)	464563.41
3807661.91	73.88924	(09011918)		
464583.41	3807661.91	68.16304	(09011918)	464603.41
3807661.91	61.99890	(09011918)		
464623.41	3807661.91	56.59800	(09011918)	464643.41
3807661.91	52.65690	(09030119)		
464663.41	3807661.91	51.49142	(09030119)	464683.41
3807661.91	49.69650	(09030119)		
464703.41	3807661.91	50.65748	(09030119)	464723.41
3807661.91	49.29692	(09030119)		
464743.41	3807661.91	45.67560	(09030119)	464763.41
3807661.91	44.03902	(09030119)		
464783.41	3807661.91	41.07416	(09030119)	464803.41
3807661.91	39.98370	(09030119)		
464823.41	3807661.91	38.97913	(09030119)	464843.41
3807661.91	38.29739	(09030119)		
464863.41	3807661.91	37.88457	(09031219)	464883.41
3807661.91	37.80429	(09031219)		
464903.41	3807661.91	37.86788	(10020118)	464923.41
3807661.91	37.91893	(10020118)		
464503.41	3807681.91	83.72038	(09011918)	464523.41
3807681.91	79.63395	(09011918)		
464543.41	3807681.91	75.07981	(09011918)	464563.41
3807681.91	70.17442	(09011918)		
464583.41	3807681.91	65.04444	(09011918)	464603.41
3807681.91	59.38364	(09011918)		
464623.41	3807681.91	53.01820	(09011918)	464643.41
3807681.91	53.58749	(09030119)		
464663.41	3807681.91	51.14073	(09030119)	464683.41
3807681.91	46.06632	(09030119)		
464703.41	3807681.91	46.04421	(09030119)	464723.41
3807681.91	46.27826	(09030119)		
464743.41	3807681.91	46.10319	(09030119)	464763.41
3807681.91	41.90085	(09030119)		
464783.41	3807681.91	41.06036	(09030119)	464803.41
3807681.91	40.46745	(09030119)		
464823.41	3807681.91	39.27702	(09030119)	464843.41
3807681.91	39.03613	(09031219)		
464863.41	3807681.91	38.95396	(09031219)	464883.41
3807681.91	39.03093	(10020118)		
464903.41	3807681.91	39.10410	(10020118)	464923.41
3807681.91	39.12009	(10020118)		
464523.41	3807701.91	76.51384	(09011918)	464543.41
3807701.91	71.86241	(09011918)		
464563.41	3807701.91	66.93310	(09011918)	464583.41
3807701.91	61.85183	(09011918)		

464603.41	3807701.91	56.60554	(09011918)	464623.41
3807701.91	55.40516	(09030119)		
464643.41	3807701.91	51.98536	(09030119)	464663.41
3807701.91	49.90235	(09030119)		
464683.41	3807701.91	47.68600	(09030119)	464703.41
3807701.91	45.68295	(09030119)		
464723.41	3807701.91	43.12693	(09030119)	464743.41
3807701.91	43.03028	(09030119)		
464763.41	3807701.91	42.67690	(09030119)	464783.41
3807701.91	41.39532	(09030119)		
464803.41	3807701.91	40.30374	(09030119)	464823.41
3807701.91	40.25966	(09031219)		
464843.41	3807701.91	40.22394	(10020118)	464863.41
3807701.91	40.29298	(10020118)		
464883.41	3807701.91	40.34786	(10020118)	464903.41
3807701.91	40.32314	(10020118)		
464923.41	3807701.91	40.18295	(10020118)	464543.41
3807721.91	67.37471	(09011918)		
464563.41	3807721.91	63.37372	(09011918)	464583.41
3807721.91	58.36988	(09011918)		
464603.41	3807721.91	57.68106	(09030119)	464623.41
3807721.91	58.48296	(09030119)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 764

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -	464643.41	3807721.91	52.53381	(09030119)	464663.41
3807721.91	48.38738	(09030119)			
	464683.41	3807721.91	47.24564	(09030119)	464703.41
3807721.91	44.29281	(09030119)			
	464723.41	3807721.91	43.70019	(09030119)	464743.41
3807721.91	43.38827	(09030119)			
	464763.41	3807721.91	42.21407	(09030119)	464783.41
3807721.91	41.51146	(09031219)			
	464803.41	3807721.91	41.50616	(09031219)	464823.41
3807721.91	41.58566	(10020118)			
	464843.41	3807721.91	41.66943	(10020118)	464863.41
3807721.91	41.63717	(10020118)			
	464883.41	3807721.91	41.58187	(10020118)	464903.41
3807721.91	41.41313	(10020118)			
	464923.41	3807721.91	41.18010	(10020118)	464943.41
3807721.91	40.93158	(10020118)			
	464963.41	3807721.91	40.57853	(10020118)	464983.41
3807721.91	40.17223	(10020118)			
	465003.41	3807721.91	39.71216	(10020118)	465023.41
3807721.91	39.25276	(10020118)			
	465043.41	3807721.91	38.70484	(10020118)	465063.41
3807721.91	38.16011	(10020118)			
	465083.41	3807721.91	37.53864	(10020118)	465103.41
3807721.91	36.93750	(10020118)			
	465123.41	3807721.91	36.33667	(10020118)	465143.41
3807721.91	35.68727	(10020118)			
	465163.41	3807721.91	34.97501	(10020118)	465183.41
3807721.91	34.31683	(10020118)			
	465203.41	3807721.91	33.62364	(10020118)	465223.41
3807721.91	32.87431	(10020118)			
	465243.41	3807721.91	32.11646	(10020118)	465263.41
3807721.91	31.39217	(10020118)			
	465283.41	3807721.91	30.63947	(10020118)	465303.41
3807721.91	29.94669	(10020118)			
	465323.41	3807721.91	29.23070	(10020118)	465343.41
3807721.91	28.48257	(10020118)			
	465363.41	3807721.91	27.79856	(10020118)	465383.41
3807721.91	27.04369	(10020118)			
	464543.41	3807741.91	60.12600	(09011918)	464563.41
3807741.91	60.61418	(09011918)			
	464583.41	3807741.91	58.10535	(09030119)	464603.41
3807741.91	59.68650	(09030119)			
	464623.41	3807741.91	60.15508	(09030119)	464643.41
3807741.91	53.48246	(09030119)			
	464663.41	3807741.91	48.75942	(09030119)	464683.41
3807741.91	45.16460	(09030119)			
	464703.41	3807741.91	44.98190	(09030119)	464723.41
3807741.91	44.63364	(09030119)			
	464743.41	3807741.91	43.91091	(09030119)	464763.41

3807741.91	42.86232	(09031219)		
464783.41	3807741.91	42.87222	(10020118)	464803.41
3807741.91	42.99113	(10020118)		
464823.41	3807741.91	43.00236	(10020118)	464843.41
3807741.91	42.99238	(10020118)		
464863.41	3807741.91	42.91552	(10020118)	464883.41
3807741.91	42.68261	(10020118)		
464903.41	3807741.91	42.46028	(10020118)	464923.41
3807741.91	42.13434	(10020118)		
464943.41	3807741.91	41.70323	(10020118)	464963.41
3807741.91	41.25272	(10020118)		
464983.41	3807741.91	40.80714	(10020118)	465003.41
3807741.91	40.21515	(10020118)		
465023.41	3807741.91	39.61233	(10020118)	465043.41
3807741.91	39.02765	(10020118)		
465063.41	3807741.91	38.32929	(10020118)	465083.41
3807741.91	37.68214	(10020118)		
465103.41	3807741.91	37.02631	(10020118)	465123.41
3807741.91	36.33636	(10020118)		
465143.41	3807741.91	35.55917	(10020118)	465163.41
3807741.91	34.76450	(10020118)		
465183.41	3807741.91	34.03363	(10020118)	465203.41
3807741.91	33.30292	(10020118)		
465223.41	3807741.91	32.52723	(10020118)	465243.41
3807741.91	31.73981	(10020118)		
465263.41	3807741.91	30.95529	(10020118)	465283.41
3807741.91	30.22241	(10020118)		
465303.41	3807741.91	29.48121	(10020118)	465323.41
3807741.91	28.65693	(10020118)		
465343.41	3807741.91	27.83954	(10020118)	465363.41
3807741.91	27.12221	(10020118)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 765

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465383.41	3807741.91	26.42046	(10020118)	464543.41
3807761.91	46.11035	(09030119)		
464563.41	3807761.91	51.82561	(09011918)	464583.41
3807761.91	51.09065	(09030119)		
464603.41	3807761.91	55.42770	(09030119)	464623.41
3807761.91	55.19182	(09030119)		
464643.41	3807761.91	50.05668	(09030119)	464663.41
3807761.91	46.93762	(09030119)		
464683.41	3807761.91	46.33168	(09030119)	464703.41
3807761.91	46.04458	(09030119)		
464723.41	3807761.91	44.99314	(09030119)	464743.41
3807761.91	44.28198	(09031219)		
464763.41	3807761.91	44.38119	(10020118)	464783.41
3807761.91	44.47330	(10020118)		
464803.41	3807761.91	44.45051	(10020118)	464823.41
3807761.91	44.40866	(10020118)		
464843.41	3807761.91	44.29640	(10020118)	464863.41
3807761.91	44.10709	(10020118)		
464883.41	3807761.91	43.75476	(10020118)	464903.41
3807761.91	43.41755	(10020118)		
464923.41	3807761.91	42.97758	(10020118)	464943.41
3807761.91	42.43065	(10020118)		
464963.41	3807761.91	41.87015	(10020118)	464983.41
3807761.91	41.31860	(10020118)		
465003.41	3807761.91	40.62179	(10020118)	465023.41
3807761.91	39.88871	(10020118)		
465043.41	3807761.91	39.13393	(10020118)	465063.41
3807761.91	38.43890	(10020118)		
465083.41	3807761.91	37.72549	(10020118)	465103.41
3807761.91	36.98330	(10020118)		
465123.41	3807761.91	36.13209	(10020118)	465143.41
3807761.91	35.30758	(10020118)		
465163.41	3807761.91	34.52218	(10020118)	465183.41
3807761.91	33.65010	(10020118)		
465203.41	3807761.91	32.85559	(10020118)	465223.41
3807761.91	32.04391	(10020118)		
465243.41	3807761.91	31.26139	(10020118)	465263.41
3807761.91	30.48813	(10020118)		
465283.41	3807761.91	29.71273	(10020118)	465303.41
3807761.91	28.83704	(10020118)		

465323.41	3807761.91	28.00753	(10020118)	465343.41
3807761.91	27.25602	(10020118)		
465363.41	3807761.91	26.44639	(10020118)	465383.41
3807761.91	25.68832	(10020118)		
464543.41	3807781.91	47.55023	(09030119)	464563.41
3807781.91	47.71828	(09030119)		
464583.41	3807781.91	47.74339	(09030119)	464603.41
3807781.91	47.92678	(09030119)		
464623.41	3807781.91	48.10191	(09030119)	464643.41
3807781.91	47.99405	(09030119)		
464663.41	3807781.91	47.41410	(09030119)	464683.41
3807781.91	46.42209	(09030119)		
464703.41	3807781.91	45.90924	(09030119)	464723.41
3807781.91	45.78061	(09031219)		
464743.41	3807781.91	45.97603	(10020118)	464763.41
3807781.91	46.04612	(10020118)		
464783.41	3807781.91	46.03263	(10020118)	464803.41
3807781.91	45.88809	(10020118)		
464823.41	3807781.91	45.73251	(10020118)	464843.41
3807781.91	45.48377	(10020118)		
464863.41	3807781.91	45.09991	(10020118)	464883.41
3807781.91	44.69857	(10020118)		
464903.41	3807781.91	44.17803	(10020118)	464923.41
3807781.91	43.59686	(10020118)		
464943.41	3807781.91	42.96311	(10020118)	464963.41
3807781.91	42.32571	(10020118)		
464983.41	3807781.91	41.59635	(10020118)	465003.41
3807781.91	40.87532	(10020118)		
465023.41	3807781.91	40.05021	(10020118)	465043.41
3807781.91	39.19669	(10020118)		
465063.41	3807781.91	38.42653	(10020118)	465083.41
3807781.91	37.60922	(10020118)		
465103.41	3807781.91	36.72724	(10020118)	465123.41
3807781.91	35.83925	(10020118)		
465143.41	3807781.91	34.98204	(10020118)	465163.41
3807781.91	34.08580	(10020118)		
465183.41	3807781.91	33.19268	(10020118)	465203.41
3807781.91	32.36275	(10020118)		
465223.41	3807781.91	31.54064	(10020118)	465243.41
3807781.91	30.66174	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 766

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3807781.91	29.84836	(10020118)	465283.41
3807781.91	29.02192	(10020118)		
465303.41	3807781.91	28.18172	(10020118)	465323.41
3807781.91	27.35382	(10020118)		
465343.41	3807781.91	26.53966	(10020118)	465363.41
3807781.91	25.74111	(10020118)		
465383.41	3807781.91	25.00660	(10020118)	464543.41
3807801.91	48.78025	(09030119)		
464563.41	3807801.91	48.91722	(09030119)	464583.41
3807801.91	48.80146	(09030119)		
464603.41	3807801.91	48.56975	(09030119)	464623.41
3807801.91	48.41622	(09030119)		
464643.41	3807801.91	48.38486	(09030119)	464663.41
3807801.91	47.71486	(09030119)		
464683.41	3807801.91	47.34784	(09031219)	464703.41
3807801.91	47.48748	(10020118)		
464723.41	3807801.91	47.65150	(10020118)	464743.41
3807801.91	47.67817	(10020118)		
464763.41	3807801.91	47.57362	(10020118)	464783.41
3807801.91	47.44033	(10020118)		
464803.41	3807801.91	47.23293	(10020118)	464823.41
3807801.91	46.93666	(10020118)		
464843.41	3807801.91	46.48588	(10020118)	464863.41
3807801.91	46.00828	(10020118)		
464883.41	3807801.91	45.44016	(10020118)	464903.41
3807801.91	44.78373	(10020118)		
464923.41	3807801.91	44.06654	(10020118)	464943.41
3807801.91	43.38040	(10020118)		
464963.41	3807801.91	42.57322	(10020118)	464983.41
3807801.91	41.72133	(10020118)		
465003.41	3807801.91	40.92015	(10020118)	465023.41

3807801.91	40.05901	(10020118)		
465043.41	3807801.91	39.12790	(10020118)	465063.41
3807801.91	38.26069	(10020118)		
465083.41	3807801.91	37.30942	(10020118)	465103.41
3807801.91	36.34727	(10020118)		
465123.41	3807801.91	35.45837	(10020118)	465143.41
3807801.91	34.50132	(10020118)		
465163.41	3807801.91	33.54514	(10020118)	465183.41
3807801.91	32.67938	(10020118)		
465203.41	3807801.91	31.80994	(10020118)	465223.41
3807801.91	30.93707	(10020118)		
465243.41	3807801.91	29.95014	(10020118)	465263.41
3807801.91	29.07772	(10020118)		
465283.41	3807801.91	28.26508	(10020118)	465303.41
3807801.91	27.45536	(10020118)		
465323.41	3807801.91	26.60606	(10020118)	465343.41
3807801.91	25.76898	(10020118)		
465363.41	3807801.91	25.02089	(10020118)	465383.41
3807801.91	24.27961	(10020118)		
464543.41	3807821.91	50.02335	(09030119)	464563.41
3807821.91	49.94731	(09030119)		
464583.41	3807821.91	49.83914	(09030119)	464603.41
3807821.91	49.62657	(09030119)		
464623.41	3807821.91	49.21806	(09030119)	464643.41
3807821.91	49.00714	(09031219)		
464663.41	3807821.91	49.06967	(10020118)	464683.41
3807821.91	49.28557	(10020118)		
464703.41	3807821.91	49.41658	(10020118)	464723.41
3807821.91	49.40258	(10020118)		
464743.41	3807821.91	49.25015	(10020118)	464763.41
3807821.91	49.07076	(10020118)		
464783.41	3807821.91	48.80621	(10020118)	464803.41
3807821.91	48.45059	(10020118)		
464823.41	3807821.91	47.91726	(10020118)	464843.41
3807821.91	47.38817	(10020118)		
464863.41	3807821.91	46.74320	(10020118)	464883.41
3807821.91	45.99464	(10020118)		
464903.41	3807821.91	45.22193	(10020118)	464923.41
3807821.91	44.45692	(10020118)		
464943.41	3807821.91	43.55491	(10020118)	464963.41
3807821.91	42.69725	(10020118)		
464983.41	3807821.91	41.77231	(10020118)	465003.41
3807821.91	40.77583	(10020118)		
465023.41	3807821.91	39.84341	(10020118)	465043.41
3807821.91	38.90500	(10020118)		
465063.41	3807821.91	37.86921	(10020118)	465083.41
3807821.91	36.87029	(10020118)		
465103.41	3807821.91	35.91898	(10020118)	465123.41
3807821.91	34.88756	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15

Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 767

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807821.91	33.90124	(10020118)	465163.41
3807821.91	32.97937	(10020118)		
465183.41	3807821.91	32.07404	(10020118)	465203.41
3807821.91	31.10752	(10020118)		
465223.41	3807821.91	30.11770	(10020118)	465243.41
3807821.91	29.21815	(10020118)		
465263.41	3807821.91	28.37079	(10020118)	465283.41
3807821.91	27.53285	(10020118)		
465303.41	3807821.91	26.63830	(10020118)	465323.41
3807821.91	25.79529	(10020118)		
465343.41	3807821.91	25.01603	(10020118)	465363.41
3807821.91	24.32487	(10102019)		
465383.41	3807821.91	23.77399	(10102019)	464543.41
3807841.91	50.89013	(09030119)		
464563.41	3807841.91	50.71152	(09030119)	464583.41
3807841.91	50.66243	(09030119)		
464603.41	3807841.91	50.38635	(09030119)	464623.41
3807841.91	50.59038	(10020118)		
464643.41	3807841.91	50.93751	(10020118)	464663.41
3807841.91	51.12327	(10020118)		
464683.41	3807841.91	51.26355	(10020118)	464723.41
3807841.91	51.08488	(10020118)		

464743.41	3807841.91	50.77879	(10020118)	464763.41
3807841.91	50.45290	(10020118)		
464783.41	3807841.91	50.01634	(10020118)	464803.41
3807841.91	49.42787	(10020118)		
464823.41	3807841.91	48.81571	(10020118)	464843.41
3807841.91	48.07377	(10020118)		
464863.41	3807841.91	47.26628	(10020118)	464883.41
3807841.91	46.40370	(10020118)		
464903.41	3807841.91	45.53831	(10020118)	464923.41
3807841.91	44.58012	(10020118)		
464943.41	3807841.91	43.63456	(10020118)	464963.41
3807841.91	42.61117	(10020118)		
464983.41	3807841.91	41.60958	(10020118)	465003.41
3807841.91	40.55135	(10020118)		
465023.41	3807841.91	39.52183	(10020118)	465043.41
3807841.91	38.44716	(10020118)		
465063.41	3807841.91	37.37572	(10020118)	465083.41
3807841.91	36.34422	(10020118)		
465103.41	3807841.91	35.28351	(10020118)	465123.41
3807841.91	34.23580	(10020118)		
465143.41	3807841.91	33.23394	(10020118)	465163.41
3807841.91	32.21889	(10020118)		
465183.41	3807841.91	31.28462	(10020118)	465203.41
3807841.91	30.28460	(10020118)		
465223.41	3807841.91	29.32567	(10020118)	465243.41
3807841.91	28.38422	(10020118)		
465263.41	3807841.91	27.51491	(10020118)	465283.41
3807841.91	26.67221	(10020118)		
465303.41	3807841.91	25.79686	(10020118)	465323.41
3807841.91	25.05704	(10102019)		
465343.41	3807841.91	24.53264	(10102019)	465363.41
3807841.91	23.95991	(10102019)		
465383.41	3807841.91	23.42960	(10102019)	464503.41
3807861.91	52.66249	(09030119)		
464523.41	3807861.91	52.16231	(09030119)	464543.41
3807861.91	51.69375	(09030119)		
464563.41	3807861.91	51.22820	(09030119)	464583.41
3807861.91	51.26702	(10020118)		
464603.41	3807861.91	51.95762	(10020118)	464723.41
3807861.91	52.57672	(10020118)		
464743.41	3807861.91	52.17963	(10020118)	464763.41
3807861.91	51.68664	(10020118)		
464783.41	3807861.91	51.06161	(10020118)	464803.41
3807861.91	50.28347	(10020118)		
464823.41	3807861.91	49.47464	(10020118)	464843.41
3807861.91	48.56996	(10020118)		
464863.41	3807861.91	47.60201	(10020118)	464883.41
3807861.91	46.67043	(10020118)		
464903.41	3807861.91	45.61537	(10020118)	464923.41
3807861.91	44.51927	(10020118)		

464943.41	3807861.91	43.48359	(10020118)	464963.41
3807861.91	42.39219	(10020118)		
464983.41	3807861.91	41.23828	(10020118)	465003.41
3807861.91	40.15983	(10020118)		
465023.41	3807861.91	39.00541	(10020118)	465043.41
3807861.91	37.85048	(10020118)		
465063.41	3807861.91	36.78047	(10020118)	465083.41
3807861.91	35.65254	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 768

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465103.41	3807861.91	34.53415	(10020118)	465123.41
3807861.91	33.50478	(10020118)		
465143.41	3807861.91	32.39684	(10020118)	465163.41
3807861.91	31.30930	(10020118)		
465183.41	3807861.91	30.34298	(10020118)	465203.41
3807861.91	29.40519	(10020118)		
465223.41	3807861.91	28.48443	(10020118)	465243.41
3807861.91	27.51388	(10020118)		
465263.41	3807861.91	26.60412	(10020118)	465283.41
3807861.91	25.83209	(10102019)		
465303.41	3807861.91	25.26664	(10102019)	465323.41
3807861.91	24.71732	(10102019)		
465343.41	3807861.91	24.17437	(10102019)	465363.41

3807861.91	23.57046	(10102019)		
465383.41	3807861.91	22.99243	(10102019)	464503.41
3807881.91	54.11844	(09030119)		
464523.41	3807881.91	53.44239	(09030119)	464543.41
3807881.91	52.80971	(09030119)		
464723.41	3807881.91	53.99214	(10020118)	464743.41
3807881.91	53.41331	(10020118)		
464763.41	3807881.91	52.73968	(10020118)	464783.41
3807881.91	51.93517	(10020118)		
464803.41	3807881.91	50.92121	(10020118)	464823.41
3807881.91	49.89930	(10020118)		
464843.41	3807881.91	48.85565	(10020118)	464863.41
3807881.91	47.82319	(10020118)		
464883.41	3807881.91	46.65190	(10020118)	464903.41
3807881.91	45.53448	(10020118)		
464923.41	3807881.91	44.35656	(10020118)	464943.41
3807881.91	43.11295	(10020118)		
464963.41	3807881.91	41.94600	(10020118)	464983.41
3807881.91	40.78371	(10020118)		
465003.41	3807881.91	39.53379	(10020118)	465023.41
3807881.91	38.33416	(10020118)		
465043.41	3807881.91	37.19371	(10020118)	465063.41
3807881.91	35.98516	(10020118)		
465083.41	3807881.91	34.83447	(10020118)	465103.41
3807881.91	33.74804	(10020118)		
465123.41	3807881.91	32.57411	(10020118)	465143.41
3807881.91	31.46536	(10020118)		
465163.41	3807881.91	30.45450	(10020118)	465183.41
3807881.91	29.39534	(10020118)		
465203.41	3807881.91	28.40504	(10020118)	465223.41
3807881.91	27.48701	(10020118)		
465243.41	3807881.91	26.66164	(10102019)	465263.41
3807881.91	26.06614	(10102019)		
465283.41	3807881.91	25.47559	(10102019)	465303.41
3807881.91	24.81979	(10102019)		
465323.41	3807881.91	24.24414	(10102019)	465343.41
3807881.91	23.66324	(10102019)		
465363.41	3807881.91	23.12054	(10102019)	465383.41
3807881.91	22.54129	(10102019)		
464723.41	3807901.91	55.10478	(10020118)	464743.41
3807901.91	54.44148	(10020118)		
464763.41	3807901.91	53.54023	(10020118)	464783.41
3807901.91	52.50740	(10020118)		
464803.41	3807901.91	51.40005	(10020118)	464823.41
3807901.91	50.20135	(10020118)		
464843.41	3807901.91	49.00610	(10020118)	464863.41
3807901.91	47.83447	(10020118)		
464883.41	3807901.91	46.52020	(10020118)	464903.41
3807901.91	45.20943	(10020118)		
464923.41	3807901.91	43.94651	(10020118)	464943.41

3807901.91	42.63869	(10020118)		
464963.41	3807901.91	41.40161	(10020118)	464983.41
3807901.91	40.16800	(10020118)		
465003.41	3807901.91	38.80608	(10020118)	465023.41
3807901.91	37.56373	(10020118)		
465043.41	3807901.91	36.32046	(10020118)	465063.41
3807901.91	35.10372	(10020118)		
465083.41	3807901.91	33.94471	(10020118)	465103.41
3807901.91	32.74950	(10020118)		
465123.41	3807901.91	31.62032	(10020118)	465143.41
3807901.91	30.52025	(10020118)		
465163.41	3807901.91	29.45047	(10020118)	465183.41
3807901.91	28.41245	(10020118)		
465203.41	3807901.91	27.53808	(10102019)	465223.41
3807901.91	26.89753	(10102019)		
465243.41	3807901.91	26.20789	(10102019)	465263.41
3807901.91	25.58796	(10102019)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 769

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465283.41	3807901.91	24.98751	(10102019)	465303.41
3807901.91	24.34129	(10102019)		
465323.41	3807901.91	23.73029	(10102019)	465343.41
3807901.91	23.10023	(10102019)		

465363.41	3807901.91	22.55592	(10102019)	465383.41
3807901.91	21.98985	(10102019)		
464723.41	3807921.91	55.94949	(10020118)	464743.41
3807921.91	55.20069	(10020118)		
464763.41	3807921.91	54.04056	(10020118)	464783.41
3807921.91	52.83044	(10020118)		
464803.41	3807921.91	51.61851	(10020118)	464823.41
3807921.91	50.27137	(10020118)		
464843.41	3807921.91	48.91983	(10020118)	464863.41
3807921.91	47.59571	(10020118)		
464883.41	3807921.91	46.15684	(10020118)	464903.41
3807921.91	44.72064	(10020118)		
464923.41	3807921.91	43.30436	(10020118)	464943.41
3807921.91	41.99222	(10020118)		
464963.41	3807921.91	40.67864	(10020118)	464983.41
3807921.91	39.32934	(10020118)		
465003.41	3807921.91	37.95598	(10020118)	465023.41
3807921.91	36.62069	(10020118)		
465043.41	3807921.91	35.32929	(10020118)	465063.41
3807921.91	34.13943	(10020118)		
465083.41	3807921.91	32.88808	(10020118)	465103.41
3807921.91	31.66995	(10020118)		
465123.41	3807921.91	30.58218	(10020118)	465143.41
3807921.91	29.46956	(10020118)		
465163.41	3807921.91	28.47421	(10102019)	465183.41
3807921.91	27.78027	(10102019)		
465203.41	3807921.91	27.10812	(10102019)	465223.41
3807921.91	26.44691	(10102019)		
465243.41	3807921.91	25.72379	(10102019)	465263.41
3807921.91	25.03601	(10102019)		
465283.41	3807921.91	24.41638	(10102019)	465303.41
3807921.91	23.82433	(10102019)		
465323.41	3807921.91	23.16358	(10102019)	465343.41
3807921.91	22.45360	(10102019)		
465363.41	3807921.91	21.90017	(10102019)	465383.41
3807921.91	21.33332	(10102019)		
464723.41	3807941.91	56.34436	(10020118)	464743.41
3807941.91	55.43927	(10020118)		
464763.41	3807941.91	54.29397	(10020118)	464783.41
3807941.91	52.95016	(10020118)		
464803.41	3807941.91	51.48143	(10020118)	464823.41
3807941.91	50.02900	(10020118)		
464843.41	3807941.91	48.51922	(10020118)	464863.41
3807941.91	47.02477	(10020118)		
464883.41	3807941.91	45.42812	(10020118)	464903.41
3807941.91	43.97755	(10020118)		
464923.41	3807941.91	42.56418	(10020118)	464943.41
3807941.91	41.17461	(10020118)		
464963.41	3807941.91	39.72766	(10020118)	464983.41
3807941.91	38.29089	(10020118)		

465003.41	3807941.91	36.87965	(10020118)	465023.41
3807941.91	35.54863	(10020118)		
465043.41	3807941.91	34.29903	(10020118)	465063.41
3807941.91	32.98145	(10020118)		
465083.41	3807941.91	31.74193	(10020118)	465103.41
3807941.91	30.61009	(10020118)		
465123.41	3807941.91	29.54859	(10102019)	465143.41
3807941.91	28.75241	(10102019)		
465163.41	3807941.91	28.01925	(10102019)	465183.41
3807941.91	27.22591	(10102019)		
465203.41	3807941.91	26.52549	(10102019)	465223.41
3807941.91	25.82412	(10102019)		
465243.41	3807941.91	25.16878	(10102019)	465263.41
3807941.91	24.48328	(10102019)		
465283.41	3807941.91	23.75332	(10102019)	465303.41
3807941.91	23.15289	(10102019)		
465323.41	3807941.91	22.53992	(10102019)	465343.41
3807941.91	21.90709	(10102019)		
465363.41	3807941.91	21.35309	(10102019)	465383.41
3807941.91	20.71807	(10102019)		
465403.41	3807941.91	20.09292	(10102019)	465423.41
3807941.91	19.57306	(10102019)		
465443.41	3807941.91	19.07107	(10102019)	465463.41
3807941.91	18.61346	(10102019)		
465483.41	3807941.91	18.13628	(10102019)	465503.41
3807941.91	17.96213	(09010519)		
▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15				
Industrial Park\I15 Industrial *** 05/09/22				
*** AERMET - VERSION 14134 *** ***				
*** 16:42:19				

PAGE 770

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
465523.41	3807941.91	17.82064	(09010519)	465543.41
3807941.91	17.67034 (09010519)			
465563.41	3807941.91	17.52700	(09010519)	465583.41
3807941.91	17.38651 (09010519)			
465603.41	3807941.91	17.24812	(09010519)	465623.41
3807941.91	17.10533 (09010519)			
465643.41	3807941.91	16.96057	(09010519)	465663.41
3807941.91	16.82370 (09010519)			
465683.41	3807941.91	16.68604	(09010519)	465703.41
3807941.91	16.54388 (09010519)			
464723.41	3807961.91	56.28632	(10020118)	464743.41
3807961.91	55.41565 (10020118)			
464763.41	3807961.91	54.21565	(10020118)	464783.41
3807961.91	52.73508 (10020118)			
464803.41	3807961.91	51.12500	(10020118)	464823.41
3807961.91	49.49661 (10020118)			
464843.41	3807961.91	47.91602	(10020118)	464863.41
3807961.91	46.28909 (10020118)			
464883.41	3807961.91	44.64260	(10020118)	464903.41
3807961.91	43.11365 (10020118)			
464923.41	3807961.91	41.62747	(10020118)	464943.41
3807961.91	40.10244 (10020118)			
464963.41	3807961.91	38.65428	(10020118)	464983.41
3807961.91	37.20766 (10020118)			
465003.41	3807961.91	35.77317	(10020118)	465023.41
3807961.91	34.43042 (10020118)			
465043.41	3807961.91	33.17186	(10020118)	465063.41
3807961.91	31.81683 (10020118)			
465083.41	3807961.91	30.71029	(10102019)	465103.41
3807961.91	29.84519 (10102019)			
465123.41	3807961.91	29.00211	(10102019)	465143.41
3807961.91	28.21566 (10102019)			
465163.41	3807961.91	27.41195	(10102019)	465183.41
3807961.91	26.63067 (10102019)			
465203.41	3807961.91	25.89670	(10102019)	465223.41
3807961.91	25.14750 (10102019)			
465243.41	3807961.91	24.49288	(10102019)	465263.41
3807961.91	23.82246 (10102019)			
465283.41	3807961.91	23.08345	(10102019)	465303.41
3807961.91	22.47950 (10102019)			
465323.41	3807961.91	21.84553	(10102019)	465343.41
3807961.91	21.20955 (10102019)			
465363.41	3807961.91	20.65730	(10102019)	465383.41
3807961.91	20.06781 (10102019)			
465403.41	3807961.91	19.49079	(10102019)	465423.41

3807961.91	19.12627	(09010519)	
465443.41	3807961.91	18.96588	(09010519) 465463.41
3807961.91	18.81923	(09010519)	
465483.41	3807961.91	18.65562	(09010519) 465503.41
3807961.91	18.49666	(09010519)	
465523.41	3807961.91	18.34023	(09010519) 465543.41
3807961.91	18.17895	(09010519)	
465563.41	3807961.91	18.02250	(09010519) 465583.41
3807961.91	17.86932	(09010519)	
465603.41	3807961.91	17.71082	(09010519) 465623.41
3807961.91	17.55412	(09010519)	
465643.41	3807961.91	17.40124	(09010519) 465663.41
3807961.91	17.24840	(09010519)	
465683.41	3807961.91	17.09453	(09010519) 465703.41
3807961.91	16.94339	(09010519)	
464743.41	3807981.91	54.95738	(10020118) 464763.41
3807981.91	53.74307	(10020118)	
464783.41	3807981.91	52.20868	(10020118) 464803.41
3807981.91	50.53353	(10020118)	
464823.41	3807981.91	48.73852	(10020118) 464843.41
3807981.91	47.01221	(10020118)	
464863.41	3807981.91	45.36233	(10020118) 464883.41
3807981.91	43.63869	(10020118)	
464903.41	3807981.91	42.04109	(10020118) 464923.41
3807981.91	40.46076	(10020118)	
464943.41	3807981.91	38.88109	(10020118) 464963.41
3807981.91	37.40954	(10020118)	
464983.41	3807981.91	35.96106	(10020118) 465003.41
3807981.91	34.56190	(10020118)	
465023.41	3807981.91	33.20905	(10020118) 465043.41
3807981.91	32.13970	(10102019)	
465063.41	3807981.91	31.09921	(10102019) 465083.41
3807981.91	30.12004	(10102019)	
465103.41	3807981.91	29.21306	(10102019) 465123.41
3807981.91	28.42505	(10102019)	

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 771

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028

, L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465143.41	3807981.91	27.57591	(10102019)	465163.41
3807981.91	26.73376	(10102019)		
465183.41	3807981.91	25.99844	(10102019)	465203.41
3807981.91	25.20711	(10102019)		
465223.41	3807981.91	24.38266	(10102019)	465243.41
3807981.91	23.72133	(10102019)		
465263.41	3807981.91	23.08054	(10102019)	465283.41
3807981.91	22.44876	(10102019)		
465303.41	3807981.91	21.82116	(10102019)	465323.41
3807981.91	21.15512	(10102019)		
465343.41	3807981.91	20.48638	(10102019)	465363.41
3807981.91	20.26474	(09010519)		
465383.41	3807981.91	20.08580	(09010519)	465403.41
3807981.91	19.90759	(09010519)		
465423.41	3807981.91	19.71609	(09010519)	465443.41
3807981.91	19.53693	(09010519)		
465463.41	3807981.91	19.38014	(09010519)	465483.41
3807981.91	19.19316	(09010519)		
465503.41	3807981.91	19.01628	(09010519)	465523.41
3807981.91	18.84408	(09010519)		
465543.41	3807981.91	18.67256	(09010519)	465563.41
3807981.91	18.50229	(09010519)		
465583.41	3807981.91	18.33198	(09010519)	465603.41
3807981.91	18.15549	(09010519)		
465623.41	3807981.91	17.98917	(09010519)	465643.41
3807981.91	17.82356	(09010519)		
465663.41	3807981.91	17.65104	(09010519)	465683.41
3807981.91	17.48786	(09010519)		
465703.41	3807981.91	17.32877	(09010519)	464763.41
3808001.91	52.81747	(10020118)		
464783.41	3808001.91	51.28367	(10020118)	464803.41
3808001.91	49.57582	(10020118)		
464823.41	3808001.91	47.62620	(10020118)	464843.41
3808001.91	45.85455	(10020118)		
464863.41	3808001.91	44.12987	(10020118)	464883.41
3808001.91	42.34860	(10020118)		

464903.41	3808001.91	40.67367	(10020118)	464923.41
3808001.91	39.10581	(10020118)		
464943.41	3808001.91	37.58130	(10020118)	464963.41
3808001.91	36.05097	(10020118)		
464983.41	3808001.91	34.57287	(10020118)	465003.41
3808001.91	33.44415	(10102019)		
465023.41	3808001.91	32.41639	(10102019)	465043.41
3808001.91	31.37228	(10102019)		
465063.41	3808001.91	30.44346	(10102019)	465083.41
3808001.91	29.50252	(10102019)		
465103.41	3808001.91	28.58195	(10102019)	465123.41
3808001.91	27.78415	(10102019)		
465143.41	3808001.91	26.92793	(10102019)	465163.41
3808001.91	26.06827	(10102019)		
465183.41	3808001.91	25.22881	(10102019)	465203.41
3808001.91	24.45758	(10102019)		
465223.41	3808001.91	23.71240	(10102019)	465243.41
3808001.91	23.05394	(10102019)		
465263.41	3808001.91	22.41729	(10102019)	465283.41
3808001.91	21.76893	(10102019)		
465303.41	3808001.91	21.52112	(09010519)	465323.41
3808001.91	21.31488	(09010519)		
465343.41	3808001.91	21.11227	(09010519)	465363.41
3808001.91	20.89514	(09010519)		
465383.41	3808001.91	20.69201	(09010519)	465403.41
3808001.91	20.49536	(09010519)		
465423.41	3808001.91	20.29702	(09010519)	465443.41
3808001.91	20.10197	(09010519)		
465463.41	3808001.91	19.91277	(09010519)	465483.41
3808001.91	19.71864	(09010519)		
465503.41	3808001.91	19.52792	(09010519)	465523.41
3808001.91	19.33934	(09010519)		
465543.41	3808001.91	19.14058	(09010519)	465563.41
3808001.91	18.95156	(09010519)		
465583.41	3808001.91	18.76883	(09010519)	465603.41
3808001.91	18.58719	(09010519)		
465623.41	3808001.91	18.40447	(09010519)	465643.41
3808001.91	18.21734	(09010519)		
465663.41	3808001.91	18.04051	(09010519)	465683.41
3808001.91	17.86716	(09010519)		
465703.41	3808001.91	17.69494	(09010519)	464763.41
3808021.91	51.31592	(10020118)		
464783.41	3808021.91	49.78993	(10020118)	464803.41
3808021.91	48.13856	(10020118)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***

*** 16:42:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464823.41	3808021.91	46.28986	(10020118)	464843.41
3808021.91	44.48140	(10020118)		
464863.41	3808021.91	42.71251	(10020118)	464883.41
3808021.91	40.93787	(10020118)		
464903.41	3808021.91	39.25742	(10020118)	464923.41
3808021.91	37.61494	(10020118)		
464943.41	3808021.91	36.09515	(10020118)	464963.41
3808021.91	34.88745	(10102019)		
464983.41	3808021.91	33.78550	(10102019)	465003.41
3808021.91	32.71089	(10102019)		
465023.41	3808021.91	31.63621	(10102019)	465043.41
3808021.91	30.63830	(10102019)		
465063.41	3808021.91	29.67024	(10102019)	465083.41
3808021.91	28.77399	(10102019)		
465103.41	3808021.91	27.87194	(10102019)	465123.41
3808021.91	26.99650	(10102019)		
465143.41	3808021.91	26.18796	(10102019)	465163.41
3808021.91	25.35824	(10102019)		
465183.41	3808021.91	24.49737	(10102019)	465203.41
3808021.91	23.67793	(10102019)		
465223.41	3808021.91	23.15326	(09010519)	465243.41
3808021.91	22.91105	(09010519)		
465263.41	3808021.91	22.67768	(09010519)	465283.41
3808021.91	22.44761	(09010519)		
465303.41	3808021.91	22.21266	(09010519)	465323.41
3808021.91	21.97956	(09010519)		
465343.41	3808021.91	21.74589	(09010519)	465363.41

3808021.91	21.51449	(09010519)		
465383.41	3808021.91	21.29188	(09010519)	465403.41
3808021.91	21.07432	(09010519)		
465423.41	3808021.91	20.84905	(09010519)	465443.41
3808021.91	20.63250	(09010519)		
465463.41	3808021.91	20.43446	(09010519)	465483.41
3808021.91	20.21665	(09010519)		
465503.41	3808021.91	20.00660	(09010519)	465523.41
3808021.91	19.80049	(09010519)		
465543.41	3808021.91	19.59220	(09010519)	465563.41
3808021.91	19.38792	(09010519)		
465583.41	3808021.91	19.18545	(09010519)	465603.41
3808021.91	18.99079	(09010519)		
465623.41	3808021.91	18.79388	(09010519)	465643.41
3808021.91	18.59794	(09010519)		
465663.41	3808021.91	18.41052	(09010519)	465683.41
3808021.91	18.22215	(09010519)		
465703.41	3808021.91	18.03532	(09010519)	464783.41
3808041.91	47.92866	(10020118)		
464803.41	3808041.91	46.42322	(10020118)	464823.41
3808041.91	44.67164	(10020118)		
464843.41	3808041.91	42.86660	(10020118)	464863.41
3808041.91	41.12749	(10020118)		
464883.41	3808041.91	39.40422	(10020118)	464903.41
3808041.91	37.68563	(10020118)		
464923.41	3808041.91	36.29948	(10102019)	464943.41
3808041.91	35.18864	(10102019)		
464963.41	3808041.91	34.11131	(10102019)	464983.41
3808041.91	33.05451	(10102019)		
465003.41	3808041.91	31.84589	(10102019)	465023.41
3808041.91	30.80482	(10102019)		
465043.41	3808041.91	29.85125	(10102019)	465063.41
3808041.91	28.85887	(10102019)		
465083.41	3808041.91	27.93049	(10102019)	465103.41
3808041.91	27.07891	(10102019)		
465123.41	3808041.91	26.18593	(10102019)	465143.41
3808041.91	25.34450	(10102019)		
465163.41	3808041.91	24.73125	(09010519)	465183.41
3808041.91	24.45362	(09010519)		
465203.41	3808041.91	24.19483	(09010519)	465223.41
3808041.91	23.92622	(09010519)		
465243.41	3808041.91	23.65099	(09010519)	465263.41
3808041.91	23.38800	(09010519)		
465283.41	3808041.91	23.12977	(09010519)	465303.41
3808041.91	22.87846	(09010519)		
465323.41	3808041.91	22.61709	(09010519)	465343.41
3808041.91	22.35418	(09010519)		
465363.41	3808041.91	22.10856	(09010519)	465383.41
3808041.91	21.86634	(09010519)		
465403.41	3808041.91	21.62546	(09010519)	465423.41

3808041.91 21.37448 (09010519)
 465443.41 3808041.91 21.14031 (09010519) 465463.41
 3808041.91 20.92854 (09010519)

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 773

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465483.41	3808041.91	20.68734	(09010519)	465503.41
3808041.91	20.46045	(09010519)		
465523.41	3808041.91	20.23778	(09010519)	465543.41
3808041.91	20.02023	(09010519)		
465563.41	3808041.91	19.79712	(09010519)	465583.41
3808041.91	19.57445	(09010519)		
465603.41	3808041.91	19.36606	(09010519)	465623.41
3808041.91	19.16045	(09010519)		
465643.41	3808041.91	18.95716	(09010519)	465663.41
3808041.91	18.75554	(09010519)		
465683.41	3808041.91	18.55269	(09010519)	465703.41
3808041.91	18.35175	(09010519)		
464803.41	3808061.91	44.46663	(10020118)	464823.41
3808061.91	42.70475	(10020118)		
464843.41	3808061.91	41.09170	(10020118)	464863.41
3808061.91	39.39568	(10020118)		
464883.41	3808061.91	37.98655	(10102019)	464903.41
3808061.91	36.71480	(10102019)		

464923.41	3808061.91	35.52849	(10102019)	464943.41
3808061.91	34.39147	(10102019)		
464963.41	3808061.91	33.29427	(10102019)	464983.41
3808061.91	32.22341	(10102019)		
465003.41	3808061.91	31.01119	(10102019)	465023.41
3808061.91	29.89559	(10102019)		
465043.41	3808061.91	28.87300	(10102019)	465063.41
3808061.91	27.97161	(10102019)		
465083.41	3808061.91	27.03229	(10102019)	465103.41
3808061.91	26.50330	(09010519)		
465123.41	3808061.91	26.19334	(09010519)	465143.41
3808061.91	25.87824	(09010519)		
465163.41	3808061.91	25.56858	(09010519)	465183.41
3808061.91	25.27370	(09010519)		
465203.41	3808061.91	24.96793	(09010519)	465223.41
3808061.91	24.65930	(09010519)		
465243.41	3808061.91	24.36915	(09010519)	465263.41
3808061.91	24.07171	(09010519)		
465283.41	3808061.91	23.77254	(09010519)	465303.41
3808061.91	23.49678	(09010519)		
465323.41	3808061.91	23.22127	(09010519)	465343.41
3808061.91	22.94769	(09010519)		
465363.41	3808061.91	22.66148	(09010519)	465383.41
3808061.91	22.39323	(09010519)		
465403.41	3808061.91	22.13488	(09010519)	465423.41
3808061.91	21.87897	(09010519)		
465443.41	3808061.91	21.62946	(09010519)	465463.41
3808061.91	21.38301	(09010519)		
465483.41	3808061.91	21.13754	(09010519)	465503.41
3808061.91	20.89000	(09010519)		
465523.41	3808061.91	20.63892	(09010519)	465543.41
3808061.91	20.40638	(09010519)		
465563.41	3808061.91	20.17556	(09010519)	465583.41
3808061.91	19.94774	(09010519)		
465603.41	3808061.91	19.72550	(09010519)	465623.41
3808061.91	19.50658	(09010519)		
465643.41	3808061.91	19.28932	(09010519)	465663.41
3808061.91	19.06779	(09010519)		
465683.41	3808061.91	18.85351	(09010519)	465703.41
3808061.91	18.64911	(09010519)		
464823.41	3808081.91	40.82987	(10020118)	464843.41
3808081.91	39.25345	(10102019)		
464863.41	3808081.91	38.02406	(10102019)	464883.41
3808081.91	36.88460	(10102019)		
464903.41	3808081.91	35.78535	(10102019)	464923.41
3808081.91	34.62900	(10102019)		
464943.41	3808081.91	33.47788	(10102019)	464963.41
3808081.91	32.34241	(10102019)		
464983.41	3808081.91	31.16561	(10102019)	465003.41
3808081.91	30.08017	(10102019)		

465023.41	3808081.91	28.98004	(10102019)	465043.41
3808081.91	28.52803	(09010519)		
465063.41	3808081.91	28.17236	(09010519)	465083.41
3808081.91	27.79868	(09010519)		
465103.41	3808081.91	27.42605	(09010519)	465123.41
3808081.91	27.06834	(09010519)		
465143.41	3808081.91	26.72109	(09010519)	465163.41
3808081.91	26.38786	(09010519)		
465183.41	3808081.91	26.04248	(09010519)	465203.41
3808081.91	25.70292	(09010519)		
465223.41	3808081.91	25.37346	(09010519)	465243.41
3808081.91	25.04259	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 774

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM_10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465263.41	3808081.91	24.71700	(09010519)	465283.41
3808081.91	24.39976	(09010519)		
465303.41	3808081.91	24.09858	(09010519)	465323.41
3808081.91	23.79396	(09010519)		
465343.41	3808081.91	23.48795	(09010519)	465363.41
3808081.91	23.18998	(09010519)		
465383.41	3808081.91	22.90658	(09010519)	465403.41
3808081.91	22.62627	(09010519)		
465423.41	3808081.91	22.34342	(09010519)	465443.41

3808081.91	22.06928	(09010519)		
465463.41	3808081.91	21.81793	(09010519)	465483.41
3808081.91	21.54950	(09010519)		
465503.41	3808081.91	21.28204	(09010519)	465523.41
3808081.91	21.02036	(09010519)		
465543.41	3808081.91	20.76395	(09010519)	465563.41
3808081.91	20.51948	(09010519)		
465583.41	3808081.91	20.28053	(09010519)	465603.41
3808081.91	20.04547	(09010519)		
465623.41	3808081.91	19.81426	(09010519)	465643.41
3808081.91	19.58606	(09010519)		
465663.41	3808081.91	19.35453	(09010519)	465683.41
3808081.91	19.13516	(09010519)		
465703.41	3808081.91	18.92068	(09010519)	464843.41
3808101.91	38.13256	(10102019)		
464863.41	3808101.91	36.83765	(10102019)	464883.41
3808101.91	35.72941	(10102019)		
464903.41	3808101.91	34.64733	(10102019)	464923.41
3808101.91	33.58892	(10102019)		
464943.41	3808101.91	32.43709	(10102019)	464963.41
3808101.91	31.27576	(09010519)		
464983.41	3808101.91	30.83006	(09010519)	465003.41
3808101.91	30.40674	(09010519)		
465023.41	3808101.91	29.97383	(09010519)	465043.41
3808101.91	29.54396	(09010519)		
465063.41	3808101.91	29.13737	(09010519)	465083.41
3808101.91	28.71754	(09010519)		
465103.41	3808101.91	28.30328	(09010519)	465123.41
3808101.91	27.90363	(09010519)		
465143.41	3808101.91	27.53129	(09010519)	465163.41
3808101.91	27.16077	(09010519)		
465183.41	3808101.91	26.76755	(09010519)	465203.41
3808101.91	26.40086	(09010519)		
465223.41	3808101.91	26.04095	(09010519)	465243.41
3808101.91	25.67080	(09010519)		
465263.41	3808101.91	25.32461	(09010519)	465283.41
3808101.91	24.99183	(09010519)		
465303.41	3808101.91	24.66217	(09010519)	465323.41
3808101.91	24.32333	(09010519)		
465343.41	3808101.91	23.99330	(09010519)	465363.41
3808101.91	23.68138	(09010519)		
465383.41	3808101.91	23.37633	(09010519)	465403.41
3808101.91	23.07693	(09010519)		
465423.41	3808101.91	22.76311	(09010519)	465443.41
3808101.91	22.47035	(09010519)		
465463.41	3808101.91	22.21490	(09010519)	465483.41
3808101.91	21.91765	(09010519)		
465503.41	3808101.91	21.63868	(09010519)	465523.41
3808101.91	21.36629	(09010519)		
465543.41	3808101.91	21.09010	(09010519)	465563.41

3808101.91	20.83169	(09010519)		
465583.41	3808101.91	20.57997	(09010519)	465603.41
3808101.91	20.33269	(09010519)		
465623.41	3808101.91	20.08979	(09010519)	465643.41
3808101.91	19.85162	(09010519)		
465663.41	3808101.91	19.61787	(09010519)	465683.41
3808101.91	19.38695	(09010519)		
465703.41	3808101.91	19.15955	(09010519)	464863.41
3808121.91	35.73752	(10102019)		
464883.41	3808121.91	34.62182	(10102019)	464903.41
3808121.91	33.89760	(09010519)		
464923.41	3808121.91	33.40796	(09010519)	464943.41
3808121.91	32.91918	(09010519)		
464963.41	3808121.91	32.43230	(09010519)	464983.41
3808121.91	31.94678	(09010519)		
465003.41	3808121.91	31.44500	(09010519)	465023.41
3808121.91	30.97041	(09010519)		
465043.41	3808121.91	30.50873	(09010519)	465063.41
3808121.91	30.03196	(09010519)		
465083.41	3808121.91	29.56841	(09010519)	465103.41
3808121.91	29.12195	(09010519)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 775

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 , L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 , L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 , L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

- - - - -
 - - - - -

465123.41	3808121.91	28.70401	(09010519)	465143.41
3808121.91	28.29290	(09010519)		
465163.41	3808121.91	27.88754	(09010519)	465183.41
3808121.91	27.45945	(09010519)		
465203.41	3808121.91	27.04469	(09010519)	465223.41
3808121.91	26.63969	(09010519)		
465243.41	3808121.91	26.26345	(09010519)	465263.41
3808121.91	25.89747	(09010519)		
465283.41	3808121.91	25.53769	(09010519)	465303.41
3808121.91	25.16089	(09010519)		
465323.41	3808121.91	24.80710	(09010519)	465343.41
3808121.91	24.46651	(09010519)		
465363.41	3808121.91	24.11398	(09010519)	465383.41
3808121.91	23.78333	(09010519)		
465403.41	3808121.91	23.46653	(09010519)	465423.41
3808121.91	23.15301	(09010519)		
465443.41	3808121.91	22.84800	(09010519)	465463.41
3808121.91	22.55462	(09010519)		
465483.41	3808121.91	22.25861	(09010519)	465503.41
3808121.91	21.95954	(09010519)		
465523.41	3808121.91	21.66442	(09010519)	465543.41
3808121.91	21.38712	(09010519)		
465563.41	3808121.91	21.11934	(09010519)	465583.41
3808121.91	20.85504	(09010519)		
465603.41	3808121.91	20.59576	(09010519)	465623.41
3808121.91	20.34139	(09010519)		
465643.41	3808121.91	20.09315	(09010519)	465663.41
3808121.91	19.83713	(09010519)		
465683.41	3808121.91	19.59653	(09010519)	465703.41
3808121.91	19.36156	(09010519)		
464883.41	3808141.91	35.69667	(09010519)	464903.41
3808141.91	35.17657	(09010519)		
464923.41	3808141.91	34.63832	(09010519)	464943.41
3808141.91	34.08784	(09010519)		
464963.41	3808141.91	33.54685	(09010519)	464983.41
3808141.91	33.00908	(09010519)		
465003.41	3808141.91	32.44748	(09010519)	465023.41
3808141.91	31.92375	(09010519)		
465043.41	3808141.91	31.41813	(09010519)	465063.41
3808141.91	30.88995	(09010519)		
465083.41	3808141.91	30.38002	(09010519)	465103.41
3808141.91	29.90058	(09010519)		
465123.41	3808141.91	29.44438	(09010519)	465143.41
3808141.91	28.98897	(09010519)		
465163.41	3808141.91	28.53285	(09010519)	465183.41
3808141.91	28.08972	(09010519)		
465203.41	3808141.91	27.64575	(09010519)	465223.41
3808141.91	27.20739	(09010519)		
465243.41	3808141.91	26.80863	(09010519)	465263.41
3808141.91	26.40848	(09010519)		

465283.41	3808141.91	26.00869	(09010519)	465303.41
3808141.91	25.62227	(09010519)		
465323.41	3808141.91	25.24460	(09010519)	465343.41
3808141.91	24.87276	(09010519)		
465363.41	3808141.91	24.50903	(09010519)	465383.41
3808141.91	24.16349	(09010519)		
465403.41	3808141.91	23.82777	(09010519)	465423.41
3808141.91	23.48771	(09010519)		
465443.41	3808141.91	23.16596	(09010519)	465463.41
3808141.91	22.85273	(09010519)		
465483.41	3808141.91	22.54620	(09010519)	465503.41
3808141.91	22.23985	(09010519)		
465523.41	3808141.91	21.93928	(09010519)	465543.41
3808141.91	21.64420	(09010519)		
465563.41	3808141.91	21.35871	(09010519)	465583.41
3808141.91	21.08338	(09010519)		
465603.41	3808141.91	20.81359	(09010519)	465623.41
3808141.91	20.54922	(09010519)		
465643.41	3808141.91	20.28865	(09010519)	465663.41
3808141.91	20.03238	(09010519)		
465683.41	3808141.91	19.77962	(09010519)	465703.41
3808141.91	19.53157	(09010519)		
464883.41	3808161.91	36.92112	(09010519)	464903.41
3808161.91	36.37186	(09010519)		
464923.41	3808161.91	35.79180	(09010519)	464943.41
3808161.91	35.17982	(09010519)		
464963.41	3808161.91	34.58080	(09010519)	464983.41
3808161.91	33.98916	(09010519)		
465003.41	3808161.91	33.38189	(09010519)	465023.41
3808161.91	32.80469	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 776

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: ALL INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465043.41	3808161.91	32.24617	(09010519)	465063.41
3808161.91	31.67023	(09010519)		
465083.41	3808161.91	31.12770	(09010519)	465103.41
3808161.91	30.61212	(09010519)		
465123.41	3808161.91	30.11392	(09010519)	465143.41
3808161.91	29.60880	(09010519)		
465163.41	3808161.91	29.11828	(09010519)	465183.41
3808161.91	28.65392	(09010519)		
465203.41	3808161.91	28.18320	(09010519)	465223.41
3808161.91	27.72041	(09010519)		
465243.41	3808161.91	27.29117	(09010519)	465263.41
3808161.91	26.85314	(09010519)		
465283.41	3808161.91	26.42818	(09010519)	465303.41
3808161.91	26.02910	(09010519)		
465323.41	3808161.91	25.62380	(09010519)	465343.41
3808161.91	25.22472	(09010519)		
465363.41	3808161.91	24.85318	(09010519)	465383.41
3808161.91	24.49111	(09010519)		
465403.41	3808161.91	24.13729	(09010519)	465423.41
3808161.91	23.77438	(09010519)		
465443.41	3808161.91	23.43625	(09010519)	465463.41
3808161.91	23.10982	(09010519)		
465483.41	3808161.91	22.78951	(09010519)	465503.41
3808161.91	22.47570	(09010519)		
465523.41	3808161.91	22.16743	(09010519)	465543.41
3808161.91	21.85511	(09010519)		
465563.41	3808161.91	21.56000	(09010519)	465583.41
3808161.91	21.27477	(09010519)		
465603.41	3808161.91	20.99557	(09010519)	465623.41
3808161.91	20.71890	(09010519)		
465643.41	3808161.91	20.45065	(09010519)	465663.41
3808161.91	20.18881	(09010519)		
465683.41	3808161.91	19.92773	(09010519)	465703.41
3808161.91	19.66735	(09010519)		
464903.41	3808181.91	37.45288	(09010519)	464923.41
3808181.91	36.81602	(09010519)		
464943.41	3808181.91	36.14493	(09010519)	464963.41
3808181.91	35.49032	(09010519)		
464983.41	3808181.91	34.85056	(09010519)	465003.41
3808181.91	34.22232	(09010519)		
465023.41	3808181.91	33.58677	(09010519)	465043.41

3808181.91	32.95720	(09010519)		
465063.41	3808181.91	32.35170	(09010519)	465083.41
3808181.91	31.78978	(09010519)		
465103.41	3808181.91	31.24468	(09010519)	465123.41
3808181.91	30.68095	(09010519)		
465143.41	3808181.91	30.15337	(09010519)	465163.41
3808181.91	29.64775	(09010519)		
465183.41	3808181.91	29.12486	(09010519)	465203.41
3808181.91	28.63500	(09010519)		
465223.41	3808181.91	28.16704	(09010519)	465243.41
3808181.91	27.68520	(09010519)		
465263.41	3808181.91	27.23536	(09010519)	465283.41
3808181.91	26.80253	(09010519)		
465303.41	3808181.91	26.35873	(09010519)	465323.41
3808181.91	25.94012	(09010519)		
465343.41	3808181.91	25.53866	(09010519)	465363.41
3808181.91	25.13017	(09010519)		
465383.41	3808181.91	24.74596	(09010519)	465403.41
3808181.91	24.38014	(09010519)		
465423.41	3808181.91	24.02068	(09010519)	465443.41
3808181.91	23.67428	(09010519)		
465463.41	3808181.91	23.33471	(09010519)	465483.41
3808181.91	22.98379	(09010519)		
465503.41	3808181.91	22.65715	(09010519)	465523.41
3808181.91	22.34107	(09010519)		
465543.41	3808181.91	22.03018	(09010519)	465563.41
3808181.91	21.72875	(09010519)		
465583.41	3808181.91	21.43400	(09010519)	465603.41
3808181.91	21.14578	(09010519)		
465623.41	3808181.91	20.85643	(09010519)	465643.41
3808181.91	20.56914	(09010519)		
465663.41	3808181.91	20.30041	(09010519)	465683.41
3808181.91	20.03605	(09010519)		
465703.41	3808181.91	19.77873	(09010519)	464923.41
3808201.91	37.68725	(09010519)		
464943.41	3808201.91	36.99030	(09010519)	464963.41
3808201.91	36.29316	(09010519)		
464983.41	3808201.91	35.60542	(09010519)	465003.41
3808201.91	34.93671	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 777

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012

```

, L0006013      , L0006014      , L0006015      ,
                  L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
                  L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
                  L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465023.41	3808201.91	34.25266	(09010519)	465043.41
3808201.91	33.59067	(09010519)		
465063.41	3808201.91	32.96850	(09010519)	465083.41
3808201.91	32.36320	(09010519)		
465103.41	3808201.91	31.76200	(09010519)	465123.41
3808201.91	31.18279	(09010519)		
465143.41	3808201.91	30.62275	(09010519)	465163.41
3808201.91	30.07166	(09010519)		
465183.41	3808201.91	29.53662	(09010519)	465203.41
3808201.91	29.02059	(09010519)		
465223.41	3808201.91	28.51383	(09010519)	465243.41
3808201.91	28.02749	(09010519)		
465263.41	3808201.91	27.55310	(09010519)	465283.41
3808201.91	27.08898	(09010519)		
465303.41	3808201.91	26.63737	(09010519)	465323.41
3808201.91	26.19885	(09010519)		
465343.41	3808201.91	25.77556	(09010519)	465363.41
3808201.91	25.35954	(09010519)		
465383.41	3808201.91	24.96422	(09010519)	465403.41
3808201.91	24.57256	(09010519)		
465423.41	3808201.91	24.20429	(09010519)	465443.41
3808201.91	23.84496	(09010519)		
465463.41	3808201.91	23.49236	(09010519)	465483.41
3808201.91	23.14401	(09010519)		
465503.41	3808201.91	22.80807	(09010519)	465523.41
3808201.91	22.48277	(09010519)		
465543.41	3808201.91	22.16511	(09010519)	465563.41
3808201.91	21.84945	(09010519)		
465583.41	3808201.91	21.53983	(09010519)	465603.41
3808201.91	21.24447	(09010519)		
465623.41	3808201.91	20.94753	(09010519)	465643.41
3808201.91	20.66080	(09010519)		

465663.41	3808201.91	20.38553	(09010519)	465683.41
3808201.91	20.11776	(09010519)		
465703.41	3808201.91	19.84425	(09010519)	464943.41
3808221.91	37.71481	(09010519)		
464963.41	3808221.91	36.98237	(09010519)	464983.41
3808221.91	36.24888	(09010519)		
465003.41	3808221.91	35.53753	(09010519)	465023.41
3808221.91	34.82418	(09010519)		
465043.41	3808221.91	34.14002	(09010519)	465063.41
3808221.91	33.48695	(09010519)		
465083.41	3808221.91	32.82393	(09010519)	465103.41
3808221.91	32.18249	(09010519)		
465123.41	3808221.91	31.59518	(09010519)	465143.41
3808221.91	30.99817	(09010519)		
465163.41	3808221.91	30.41170	(09010519)	465183.41
3808221.91	29.87041	(09010519)		
465203.41	3808221.91	29.32132	(09010519)	465223.41
3808221.91	28.79087	(09010519)		
465243.41	3808221.91	28.29589	(09010519)	465263.41
3808221.91	27.79547	(09010519)		
465283.41	3808221.91	27.30555	(09010519)	465303.41
3808221.91	26.85167	(09010519)		
465323.41	3808221.91	26.39585	(09010519)	465343.41
3808221.91	25.95066	(09010519)		
465363.41	3808221.91	25.53711	(09010519)	465383.41
3808221.91	25.11683	(09010519)		
465403.41	3808221.91	24.71426	(09010519)	465423.41
3808221.91	24.33571	(09010519)		
465443.41	3808221.91	23.96674	(09010519)	465463.41
3808221.91	23.60703	(09010519)		
465483.41	3808221.91	23.25629	(09010519)	465503.41
3808221.91	22.90915	(09010519)		
465523.41	3808221.91	22.57420	(09010519)	465543.41
3808221.91	22.24889	(09010519)		
465563.41	3808221.91	21.92434	(09010519)	465583.41
3808221.91	21.59998	(09010519)		
465603.41	3808221.91	21.29856	(09010519)	465623.41
3808221.91	21.00558	(09010519)		
465643.41	3808221.91	20.71817	(09010519)	465663.41
3808221.91	20.45591	(10032206)		
465683.41	3808221.91	20.19423	(10032206)	465703.41
3808221.91	19.93829	(10032206)		
464963.41	3808241.91	37.54964	(09010519)	464983.41
3808241.91	36.77497	(09010519)		
465003.41	3808241.91	36.02541	(09010519)	465023.41
3808241.91	35.29985	(09010519)		
465043.41	3808241.91	34.59112	(09010519)	465063.41
3808241.91	33.86674	(09010519)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 778

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0006011 , L0006012
, L0006013 , L0006014 , L0006015 ,
L0006016 , L0006017 , L0006018 , L0006019 , L0006020
, L0006021 , L0006022 , L0006023 ,
L0006024 , L0006025 , L0006026 , L0006027 , L0006028
, L0006029 , L0006030 , L0006031 ,
L0006032 , L0006033 , L0006034 , L0006035 , L0006036
, L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465083.41	3808241.91	33.16373	(09010519)	465103.41
3808241.91	32.49021	(09010519)		
465123.41	3808241.91	31.87878	(09010519)	465143.41
3808241.91	31.27630	(09010519)		
465163.41	3808241.91	30.69305	(09010519)	465183.41
3808241.91	30.09605	(09010519)		
465203.41	3808241.91	29.54205	(09010519)	465223.41
3808241.91	29.00954	(09010519)		
465243.41	3808241.91	28.46781	(09010519)	465263.41
3808241.91	27.95873	(09010519)		
465283.41	3808241.91	27.47376	(09010519)	465303.41
3808241.91	26.98181	(09010519)		
465323.41	3808241.91	26.51764	(09010519)	465343.41
3808241.91	26.08132	(09010519)		
465363.41	3808241.91	25.63125	(09010519)	465383.41
3808241.91	25.21408	(09010519)		
465403.41	3808241.91	24.81329	(09010519)	465423.41
3808241.91	24.43262	(10032206)		
465443.41	3808241.91	24.08614	(10032206)	465463.41
3808241.91	23.74773	(10032206)		
465483.41	3808241.91	23.41714	(10032206)	465503.41
3808241.91	23.08402	(10032206)		
465523.41	3808241.91	22.75326	(10032206)	465543.41

3808241.91	22.44609	(10032206)		
465563.41	3808241.91	22.14329	(10032206)	465583.41
3808241.91	21.85187	(10032206)		
465603.41	3808241.91	21.56482	(10032206)	465623.41
3808241.91	21.27742	(10032206)		
465643.41	3808241.91	20.99039	(10032206)	465663.41
3808241.91	20.72271	(10032206)		
465683.41	3808241.91	20.45863	(10032206)	465703.41
3808241.91	20.20156	(10032206)		
464983.41	3808261.91	37.06212	(09010519)	465003.41
3808261.91	36.32314	(09010519)		
465023.41	3808261.91	35.58035	(09010519)	465043.41
3808261.91	34.84808	(09010519)		
465063.41	3808261.91	34.11428	(09010519)	465083.41
3808261.91	33.41084	(09010519)		
465103.41	3808261.91	32.72809	(09010519)	465123.41
3808261.91	32.06905	(09010519)		
465143.41	3808261.91	31.44383	(09010519)	465163.41
3808261.91	30.84723	(09010519)		
465183.41	3808261.91	30.25585	(09010519)	465203.41
3808261.91	29.67944	(09010519)		
465223.41	3808261.91	29.15330	(10032206)	465243.41
3808261.91	28.65681	(10032206)		
465263.41	3808261.91	28.18685	(10032206)	465283.41
3808261.91	27.73063	(10032206)		
465303.41	3808261.91	27.25595	(10032206)	465323.41
3808261.91	26.81272	(10032206)		
465343.41	3808261.91	26.38262	(10032206)	465363.41
3808261.91	25.96717	(10032206)		
465383.41	3808261.91	25.56483	(10032206)	465403.41
3808261.91	25.16945	(10032206)		
465423.41	3808261.91	24.79918	(10032206)	465443.41
3808261.91	24.43797	(10032206)		
465463.41	3808261.91	24.08604	(10032206)	465483.41
3808261.91	23.74208	(10032206)		
465503.41	3808261.91	23.39896	(10032206)	465523.41
3808261.91	23.06686	(10032206)		
465543.41	3808261.91	22.74743	(10032206)	465563.41
3808261.91	22.43252	(10032206)		
465583.41	3808261.91	22.11900	(10032206)	465603.41
3808261.91	21.82193	(10032206)		
465623.41	3808261.91	21.52562	(10032206)	465643.41
3808261.91	21.23607	(10032206)		
465663.41	3808261.91	20.94886	(10032206)	465683.41
3808261.91	20.67744	(10032206)		
465703.41	3808261.91	20.41122	(10032206)	465003.41
3808281.91	36.44110	(09010519)		
465023.41	3808281.91	35.71365	(10032206)	465043.41
3808281.91	35.03861	(10032206)		
465063.41	3808281.91	34.36308	(10032206)	465083.41

```

3808281.91      33.72390 (10032206)
      465103.41  3808281.91      33.10320 (10032206)      465123.41
3808281.91      32.45721 (10032206)
      465143.41  3808281.91      31.86279 (10032206)      465163.41
3808281.91      31.29718 (10032206)
      465183.41  3808281.91      30.74069 (10032206)      465203.41
3808281.91      30.18086 (10032206)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 779

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465223.41	3808281.91	29.63510	(10032206)	465243.41
3808281.91	29.13563	(10032206)		
465263.41	3808281.91	28.64474	(10032206)	465283.41
3808281.91	28.16174	(10032206)		
465303.41	3808281.91	27.66567	(10032206)	465323.41
3808281.91	27.19757	(10032206)		
465343.41	3808281.91	26.74491	(10032206)	465363.41
3808281.91	26.32479	(10032206)		
465383.41	3808281.91	25.89816	(10032206)	465403.41
3808281.91	25.48739	(10032206)		
465423.41	3808281.91	25.10167	(10032206)	465443.41
3808281.91	24.72608	(10032206)		
465463.41	3808281.91	24.36438	(10032206)	465483.41
3808281.91	24.00866	(10032206)		

465503.41	3808281.91	23.66173	(10032206)	465523.41
3808281.91	23.32345	(10032206)		
465543.41	3808281.91	22.99299	(10032206)	465563.41
3808281.91	22.65666	(10032206)		
465583.41	3808281.91	22.32997	(10032206)	465603.41
3808281.91	22.02434	(10032206)		
465623.41	3808281.91	21.72545	(10032206)	465643.41
3808281.91	21.42814	(10032206)		
465663.41	3808281.91	21.12953	(10032206)	465683.41
3808281.91	20.85375	(10032206)		
465703.41	3808281.91	20.57993	(10032206)	465003.41
3808301.91	37.01409	(10032206)		
465023.41	3808301.91	36.32129	(10032206)	465043.41
3808301.91	35.63746	(10032206)		
465063.41	3808301.91	34.88993	(10032206)	465083.41
3808301.91	34.23766	(10032206)		
465103.41	3808301.91	33.62219	(10032206)	465123.41
3808301.91	32.98462	(10032206)		
465143.41	3808301.91	32.37367	(10032206)	465163.41
3808301.91	31.77603	(10032206)		
465183.41	3808301.91	31.16098	(10032206)	465203.41
3808301.91	30.58912	(10032206)		
465223.41	3808301.91	30.04742	(10032206)	465243.41
3808301.91	29.52717	(10032206)		
465263.41	3808301.91	28.99946	(10032206)	465283.41
3808301.91	28.47462	(10032206)		
465303.41	3808301.91	27.96994	(10032206)	465323.41
3808301.91	27.49784	(10032206)		
465343.41	3808301.91	27.04769	(10032206)	465363.41
3808301.91	26.58607	(10032206)		
465383.41	3808301.91	26.15556	(10032206)	465403.41
3808301.91	25.74692	(10032206)		
465423.41	3808301.91	25.32511	(10032206)	465443.41
3808301.91	24.93264	(10032206)		
465463.41	3808301.91	24.59044	(10032206)	465483.41
3808301.91	24.22417	(10032206)		
465503.41	3808301.91	23.86724	(10032206)	465523.41
3808301.91	23.51865	(10032206)		
465543.41	3808301.91	23.16084	(10032206)	465563.41
3808301.91	22.82235	(10032206)		
465583.41	3808301.91	22.50037	(10032206)	465603.41
3808301.91	22.18702	(10032206)		
465623.41	3808301.91	21.87065	(10032206)	465643.41
3808301.91	21.56037	(10032206)		
465663.41	3808301.91	21.26691	(10032206)	465683.41
3808301.91	20.98113	(10032206)		
465703.41	3808301.91	20.69285	(10032206)	465043.41
3808321.91	36.05180	(10032206)		
465063.41	3808321.91	35.33536	(10032206)	465083.41
3808321.91	34.65975	(10032206)		

465103.41	3808321.91	34.01021	(10032206)	465123.41
3808321.91	33.35644	(10032206)		
465143.41	3808321.91	32.72402	(10032206)	465163.41
3808321.91	32.10685	(10032206)		
465183.41	3808321.91	31.49113	(10032206)	465203.41
3808321.91	30.91062	(10032206)		
465223.41	3808321.91	30.35245	(10032206)	465243.41
3808321.91	29.79236	(10032206)		
465263.41	3808321.91	29.23704	(10032206)	465283.41
3808321.91	28.70527	(10032206)		
465303.41	3808321.91	28.20329	(10032206)	465323.41
3808321.91	27.71775	(10032206)		
465343.41	3808321.91	27.24226	(10032206)	465363.41
3808321.91	26.78229	(10032206)		
465383.41	3808321.91	26.34570	(10032206)	465403.41
3808321.91	25.91059	(10032206)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 780

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465423.41	3808321.91	25.49013	(10032206)	465443.41
3808321.91	25.09392	(10032206)		
465463.41	3808321.91	24.73110	(10032206)	465483.41
3808321.91	24.35745	(10032206)		
465503.41	3808321.91	23.99354	(10032206)	465523.41

3808321.91	23.63623	(10032206)		
465543.41	3808321.91	23.27915	(10032206)	465563.41
3808321.91	22.94148	(10032206)		
465583.41	3808321.91	22.61485	(10032206)	465603.41
3808321.91	22.28331	(10032206)		
465623.41	3808321.91	21.96423	(10032206)	465643.41
3808321.91	21.65995	(10032206)		
465663.41	3808321.91	21.35556	(10032206)	465683.41
3808321.91	21.06032	(10032206)		
465703.41	3808321.91	20.77325	(10032206)	465083.41
3808341.91	34.94510	(10032206)		
465103.41	3808341.91	34.25181	(10032206)	465123.41
3808341.91	33.59316	(10032206)		
465143.41	3808341.91	32.94721	(10032206)	465163.41
3808341.91	32.31976	(10032206)		
465183.41	3808341.91	31.71284	(10032206)	465203.41
3808341.91	31.11923	(10032206)		
465223.41	3808341.91	30.53814	(10032206)	465243.41
3808341.91	29.95357	(10032206)		
465263.41	3808341.91	29.39002	(10032206)	465283.41
3808341.91	28.84480	(10032206)		
465303.41	3808341.91	28.34527	(10032206)	465323.41
3808341.91	27.83658	(10032206)		
465343.41	3808341.91	27.35212	(10032206)	465363.41
3808341.91	26.90188	(10032206)		
465383.41	3808341.91	26.44432	(10032206)	465403.41
3808341.91	25.99948	(10032206)		
465423.41	3808341.91	25.58359	(10032206)	465443.41
3808341.91	25.18102	(10032206)		
465463.41	3808341.91	24.79874	(10032206)	465483.41
3808341.91	24.41995	(10032206)		
465503.41	3808341.91	24.05123	(10032206)	465523.41
3808341.91	23.69244	(10032206)		
465543.41	3808341.91	23.33993	(10032206)	465563.41
3808341.91	22.99780	(10032206)		
465583.41	3808341.91	22.66231	(10032206)	465603.41
3808341.91	22.32414	(10032206)		
465623.41	3808341.91	22.01059	(10032206)	465643.41
3808341.91	21.69829	(10032206)		
465663.41	3808341.91	21.38550	(10032206)	465683.41
3808341.91	21.09136	(10032206)		
465703.41	3808341.91	20.80101	(10032206)	465103.41
3808361.91	34.35744	(10032206)		
465123.41	3808361.91	33.72622	(10032206)	465143.41
3808361.91	33.08068	(10032206)		
465163.41	3808361.91	32.44103	(10032206)	465183.41
3808361.91	31.82281	(10032206)		
465203.41	3808361.91	31.19782	(10032206)	465223.41
3808361.91	30.58643	(10032206)		
465243.41	3808361.91	30.02384	(10032206)	465263.41

3808361.91	29.46255	(10032206)		
465283.41	3808361.91	28.90825	(10032206)	465303.41
3808361.91	28.37175	(10032206)		
465323.41	3808361.91	27.86044	(10032206)	465343.41
3808361.91	27.35841	(10032206)		
465363.41	3808361.91	26.90413	(10032206)	465383.41
3808361.91	26.45859	(10032206)		
465403.41	3808361.91	26.02690	(10032206)	465423.41
3808361.91	25.58327	(10032206)		
465443.41	3808361.91	25.17230	(10032206)	465463.41
3808361.91	24.81532	(10032206)		
465483.41	3808361.91	24.43278	(10032206)	465503.41
3808361.91	24.06057	(10032206)		
465523.41	3808361.91	23.69734	(10032206)	465543.41
3808361.91	23.32421	(10032206)		
465563.41	3808361.91	22.97564	(10032206)	465583.41
3808361.91	22.64201	(10032206)		
465603.41	3808361.91	22.31403	(10032206)	465623.41
3808361.91	21.99559	(10032206)		
465643.41	3808361.91	21.67387	(10032206)	465663.41
3808361.91	21.37075	(10032206)		
465683.41	3808361.91	21.07046	(10032206)	465703.41
3808361.91	20.77423	(10032206)		
465183.41	3808381.91	31.73919	(10032206)	465203.41
3808381.91	31.12399	(10032206)		

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 781

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465223.41	3808381.91	30.52237	(10032206)	465243.41
3808381.91	29.94287	(10032206)		
465263.41	3808381.91	29.37111	(10032206)	465283.41
3808381.91	28.82073	(10032206)		
465303.41	3808381.91	28.29880	(10032206)	465323.41
3808381.91	27.78017	(10032206)		
465343.41	3808381.91	27.28316	(10032206)	465363.41
3808381.91	26.82816	(10032206)		
465383.41	3808381.91	26.38645	(10032206)	465403.41
3808381.91	25.95449	(10032206)		
465423.41	3808381.91	25.52187	(10032206)	465443.41
3808381.91	25.12012	(10032206)		
465463.41	3808381.91	24.74271	(10032206)	465483.41
3808381.91	24.35988	(10032206)		
465503.41	3808381.91	23.98749	(10032206)	465523.41
3808381.91	23.62244	(10032206)		
465543.41	3808381.91	23.25754	(10032206)	465563.41
3808381.91	22.91343	(10032206)		
465583.41	3808381.91	22.57002	(10032206)	465603.41
3808381.91	22.24573	(10032206)		
465623.41	3808381.91	21.92620	(10032206)	465643.41
3808381.91	21.61072	(10032206)		
465663.41	3808381.91	21.30075	(10032206)	465683.41
3808381.91	20.99961	(10032206)		
465703.41	3808381.91	20.72047	(10032206)	465303.41
3808401.91	28.11166	(10032206)		
465323.41	3808401.91	27.60859	(10032206)	465343.41
3808401.91	27.12609	(10032206)		
465363.41	3808401.91	26.67348	(10032206)	465383.41
3808401.91	26.23419	(10032206)		
465403.41	3808401.91	25.80766	(10032206)	465423.41
3808401.91	25.39337	(10032206)		
465443.41	3808401.91	24.99083	(10032206)	465463.41
3808401.91	24.60010	(10032206)		
465483.41	3808401.91	24.21966	(10032206)	465503.41
3808401.91	23.84965	(10032206)		
465523.41	3808401.91	23.48966	(10032206)	465543.41
3808401.91	23.13932	(10032206)		
465563.41	3808401.91	22.78392	(10032206)	465583.41
3808401.91	22.43976	(10032206)		
465603.41	3808401.91	22.11745	(10032206)	465623.41
3808401.91	21.80512	(10032206)		
465643.41	3808401.91	21.49062	(10032206)	465663.41
3808401.91	21.17984	(10032206)		
465683.41	3808401.91	20.89581	(10032206)	465703.41
3808401.91	20.60507	(10032206)		

465323.41	3808421.91	27.34179	(10032206)	465343.41
3808421.91	26.87606	(10032206)		
465363.41	3808421.91	26.42910	(10032206)	465383.41
3808421.91	25.99531	(10032206)		
465403.41	3808421.91	25.57414	(10032206)	465423.41
3808421.91	25.16507	(10032206)		
465443.41	3808421.91	24.76761	(10032206)	465463.41
3808421.91	24.38131	(10032206)		
465483.41	3808421.91	24.00572	(10032206)	465503.41
3808421.91	23.64043	(10032206)		
465523.41	3808421.91	23.28504	(10032206)	465543.41
3808421.91	22.93918	(10032206)		
465563.41	3808421.91	22.60140	(10032206)	465583.41
3808421.91	22.26861	(10032206)		
465603.41	3808421.91	21.94936	(10032206)	465623.41
3808421.91	21.62961	(10032206)		
465643.41	3808421.91	21.31403	(10032206)	465663.41
3808421.91	21.01584	(10032206)		
465683.41	3808421.91	20.73094	(10032206)	465703.41
3808421.91	20.43455	(10032206)		
465323.41	3808441.91	26.99927	(10032206)	465343.41
3808441.91	26.55016	(10032206)		
465363.41	3808441.91	26.13238	(10032206)	465383.41
3808441.91	25.70678	(10032206)		
465403.41	3808441.91	25.29222	(10032206)	465423.41
3808441.91	24.88957	(10032206)		
465443.41	3808441.91	24.49835	(10032206)	465463.41
3808441.91	24.11809	(10032206)		
465483.41	3808441.91	23.74837	(10032206)	465503.41
3808441.91	23.38877	(10032206)		
465523.41	3808441.91	23.03892	(10032206)	465543.41
3808441.91	22.69844	(10032206)		
465563.41	3808441.91	22.36697	(10032206)	465583.41
3808441.91	22.04419	(10032206)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 782

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,

L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

465603.41	3808441.91	21.72977	(10032206)	465623.41
3808441.91	21.41280	(10032206)		
465643.41	3808441.91	21.11098	(10032206)	465663.41
3808441.91	20.81138	(10032206)		
465683.41	3808441.91	20.51796	(10032206)	465703.41
3808441.91	20.23666	(10032206)		
465343.41	3808461.91	26.16329	(10032206)	465363.41
3808461.91	25.74571	(10032206)		
465383.41	3808461.91	25.34041	(10032206)	465403.41
3808461.91	24.94407	(10032206)		
465423.41	3808461.91	24.55059	(10032206)	465443.41
3808461.91	24.16821	(10032206)		
465463.41	3808461.91	23.79697	(10032206)	465483.41
3808461.91	23.43548	(10032206)		
465503.41	3808461.91	23.08706	(10032206)	465523.41
3808461.91	22.74310	(10032206)		
465543.41	3808461.91	22.40977	(10032206)	465563.41
3808461.91	22.08524	(10032206)		
465583.41	3808461.91	21.76917	(10032206)	465603.41
3808461.91	21.46126	(10032206)		
465623.41	3808461.91	21.15080	(10032206)	465643.41
3808461.91	20.85436	(10032206)		
465663.41	3808461.91	20.54829	(10032206)	465683.41
3808461.91	20.26691	(10032206)		
465703.41	3808461.91	19.99942	(10032206)	465343.41
3808481.91	25.67549	(10032206)		
465363.41	3808481.91	25.26804	(10032206)	465383.41
3808481.91	24.88612	(10032206)		
465403.41	3808481.91	24.50398	(10032206)	465423.41
3808481.91	24.12282	(10032206)		
465443.41	3808481.91	23.75228	(10032206)	465463.41
3808481.91	23.39196	(10032206)		
465483.41	3808481.91	23.04145	(10032206)	465503.41
3808481.91	22.71352	(10032206)		
465523.41	3808481.91	22.39475	(10032206)	465543.41
3808481.91	22.07036	(10032206)		
465563.41	3808481.91	21.75447	(10032206)	465583.41

3808481.91	21.44676	(10032206)		
465603.41	3808481.91	21.14693	(10032206)	465623.41
3808481.91	20.84443	(10032206)		
465643.41	3808481.91	20.55542	(10032206)	465663.41
3808481.91	20.25637	(10032206)		
465683.41	3808481.91	19.98148	(10032206)	465703.41
3808481.91	19.71797	(10032206)		
465463.41	3808501.91	23.70889	(09031319)	465483.41
3808501.91	23.27508	(09031319)		
465503.41	3808501.91	22.88449	(09031319)	465523.41
3808501.91	22.49663	(09031319)		
465543.41	3808501.91	22.11166	(09031319)	465563.41
3808501.91	21.74663	(09031319)		
465583.41	3808501.91	21.39016	(09031319)	465603.41
3808501.91	21.02229	(09031319)		
465623.41	3808501.91	20.66542	(09031319)	465643.41
3808501.91	20.33192	(09031319)		
465663.41	3808501.91	19.98147	(09031319)	465683.41
3808501.91	19.65940	(09031319)		
465703.41	3808501.91	19.40305	(10032206)	465523.41
3808521.91	23.17421	(09031319)		
465543.41	3808521.91	22.77980	(09031319)	465563.41
3808521.91	22.39869	(09031319)		
465583.41	3808521.91	22.04158	(09031319)	465603.41
3808521.91	21.65683	(09031319)		
465623.41	3808521.91	21.30828	(09031319)	465643.41
3808521.91	20.95447	(09031319)		
465663.41	3808521.91	20.60014	(09031319)	465683.41
3808521.91	20.27127	(09031319)		
465703.41	3808521.91	19.94438	(09031319)	464239.31
3809562.31	90.03751	(10022820)		
464277.31	3809562.31	89.96061	(09031705)	463745.31
3809591.37	68.19795	(09011307)		
463783.31	3809591.37	69.61072	(09041719)	463821.31
3809591.37	69.46176	(09041719)		
463859.31	3809591.37	72.68211	(09041719)	463897.31
3809591.37	82.61104	(09041719)		
463935.31	3809591.37	84.27914	(09041719)	464239.31
3809591.37	73.30707	(10022820)		
464277.31	3809591.37	72.49874	(09031705)	463745.31
3809620.43	59.01793	(09011307)		
463783.31	3809620.43	58.85188	(09011307)	463821.31
3809620.43	59.42546	(09011120)		

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 *** ***
 *** 16:42:19

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)	Y-COORD (M) CONC	Y-COORD (M) CONC	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)
463859.31	3809620.43	59.77559	(09011120)		463897.31
3809620.43	61.69431	(09041719)			
463935.31	3809620.43	66.70722	(09041719)		463973.31
3809620.43	66.65791	(09041719)			
464011.31	3809620.43	64.16606	(09041719)		464049.31
3809620.43	61.23754	(10010907)			
464087.31	3809620.43	61.33616	(10022820)		464125.31
3809620.43	62.58367	(10022820)			
464163.31	3809620.43	63.40990	(10022820)		464201.31
3809620.43	63.60934	(10022820)			
464239.31	3809620.43	63.80363	(10022820)		464277.31
3809620.43	63.19664	(10022820)			
463745.31	3809649.49	53.00012	(09011307)		463783.31
3809649.49	53.39821	(09011307)			
463821.31	3809649.49	53.86917	(09011120)		463859.31
3809649.49	54.26244	(09011120)			
463897.31	3809649.49	54.71431	(09011120)		463935.31
3809649.49	55.06246	(09011120)			
463973.31	3809649.49	54.49396	(09011120)		464011.31
3809649.49	54.53691	(10010907)			
464049.31	3809649.49	55.23564	(10010907)		464087.31
3809649.49	55.21366	(10010907)			
464125.31	3809649.49	56.40811	(10022820)		464163.31
3809649.49	57.25983	(10022820)			
464201.31	3809649.49	57.77128	(10022820)		464239.31
3809649.49	57.93673	(10022820)			
464277.31	3809649.49	57.38242	(10022820)		464315.31
3809649.49	56.67467	(09031705)			

464353.31	3809649.49	56.54179	(09040202)	464391.31
3809649.49	56.32156	(09040202)		
464429.31	3809649.49	55.49720	(09040202)	464467.31
3809649.49	54.47626	(09040202)		
464505.31	3809649.49	54.78024	(10011407)	463745.31
3809678.55	48.35549	(09011307)		
463783.31	3809678.55	48.96750	(09011307)	463821.31
3809678.55	50.05198	(09011120)		
463859.31	3809678.55	50.26606	(09011120)	463897.31
3809678.55	50.59134	(09011120)		
463935.31	3809678.55	50.97347	(09011120)	463973.31
3809678.55	50.49320	(09011120)		
464011.31	3809678.55	50.31385	(10010907)	464049.31
3809678.55	51.07912	(10010907)		
464087.31	3809678.55	51.30549	(10010907)	464125.31
3809678.55	52.05365	(10022820)		
464163.31	3809678.55	52.89834	(10022820)	464201.31
3809678.55	53.62775	(10022820)		
464239.31	3809678.55	53.58726	(10022820)	464277.31
3809678.55	53.23339	(10022820)		
464315.31	3809678.55	52.61214	(09031705)	464353.31
3809678.55	52.35583	(09040202)		
464391.31	3809678.55	52.21492	(09040202)	464429.31
3809678.55	51.54990	(09040202)		
464467.31	3809678.55	50.80532	(09040202)	464505.31
3809678.55	50.25582	(10011407)		
463745.31	3809707.61	45.06131	(09011307)	463783.31
3809707.61	45.47219	(09011307)		
463821.31	3809707.61	46.70237	(09011120)	463859.31
3809707.61	47.36272	(09011120)		
463897.31	3809707.61	47.49691	(09011120)	463935.31
3809707.61	47.67298	(09011120)		
463973.31	3809707.61	47.36042	(09011120)	464011.31
3809707.61	47.09414	(10010907)		
464049.31	3809707.61	47.90404	(10010907)	464087.31
3809707.61	48.13748	(10010907)		
464125.31	3809707.61	48.60938	(10022820)	464163.31
3809707.61	49.60917	(10022820)		
464201.31	3809707.61	50.12772	(10022820)	464239.31
3809707.61	50.33597	(10022820)		
464277.31	3809707.61	50.07037	(10022820)	464315.31
3809707.61	49.58850	(10022820)		
464353.31	3809707.61	49.02115	(09031705)	464391.31
3809707.61	48.97389	(09040202)		
464429.31	3809707.61	48.52790	(09040202)	464467.31
3809707.61	47.79120	(09040202)		
464505.31	3809707.61	47.01439	(09010420)	463745.31
3809736.67	42.67782	(09011307)		
463783.31	3809736.67	42.71351	(09011307)	463821.31
3809736.67	43.65082	(09011120)		

463859.31 3809736.67 44.56790 (09011120) 463897.31
 3809736.67 45.01297 (09011120)
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 784

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463935.31	3809736.67	44.95023	(09011120)	463973.31
3809736.67	44.77348	(09011120)		
464011.31	3809736.67	44.67719	(10010907)	464049.31
3809736.67	45.30703	(10010907)		
464087.31	3809736.67	45.68203	(10010907)	464125.31
3809736.67	45.88690	(10022820)		
464163.31	3809736.67	46.90918	(10022820)	464201.31
3809736.67	47.45205	(10022820)		
464239.31	3809736.67	47.75923	(10022820)	464277.31
3809736.67	47.60440	(10022820)		
464315.31	3809736.67	47.07983	(10022820)	464353.31
3809736.67	46.65740	(09031705)		
464391.31	3809736.67	46.42939	(09040202)	464429.31
3809736.67	46.07073	(09040202)		
464467.31	3809736.67	45.55840	(09040202)	464505.31
3809736.67	44.68429	(09040202)		
463745.31	3809765.73	40.74074	(09011307)	463783.31
3809765.73	40.69662	(09011120)		
463821.31	3809765.73	41.41765	(09011120)	463859.31

3809765.73	42.15915	(09011120)		
463897.31	3809765.73	42.77329	(09011120)	463935.31
3809765.73	42.74689	(09011120)		
463973.31	3809765.73	42.33595	(09011120)	464011.31
3809765.73	42.44508	(10010907)		
464049.31	3809765.73	43.27822	(10010907)	464087.31
3809765.73	43.59299	(10010907)		
464125.31	3809765.73	43.59977	(10022820)	464163.31
3809765.73	44.61325	(10022820)		
464201.31	3809765.73	45.22067	(10022820)	464239.31
3809765.73	45.58817	(10022820)		
464277.31	3809765.73	45.53483	(10022820)	464315.31
3809765.73	45.06638	(10022820)		
464353.31	3809765.73	44.65532	(09031705)	464391.31
3809765.73	44.18822	(09040202)		
464429.31	3809765.73	44.11259	(09040202)	464467.31
3809765.73	43.70115	(09040202)		
464505.31	3809765.73	42.82514	(09040202)	463745.31
3809794.79	39.09237	(09011307)		
463783.31	3809794.79	38.88915	(09011120)	463821.31
3809794.79	39.52896	(09011120)		
463859.31	3809794.79	40.05163	(09011120)	463897.31
3809794.79	40.56789	(09011120)		
463935.31	3809794.79	40.54259	(09011120)	463973.31
3809794.79	40.26750	(09011120)		
464011.31	3809794.79	40.35334	(10010907)	464049.31
3809794.79	41.43506	(10010907)		
464087.31	3809794.79	41.79605	(10010907)	464125.31
3809794.79	41.77216	(10010907)		
464163.31	3809794.79	42.53973	(10022820)	464201.31
3809794.79	43.26715	(10022820)		
464239.31	3809794.79	43.61114	(10022820)	464277.31
3809794.79	43.65101	(10022820)		
464315.31	3809794.79	43.35364	(10022820)	464353.31
3809794.79	42.80034	(09031705)		
464391.31	3809794.79	42.39610	(09031705)	464429.31
3809794.79	42.38083	(09040202)		
464467.31	3809794.79	41.97625	(09040202)	464505.31
3809794.79	41.34023	(09040202)		
463745.31	3809823.85	37.65437	(09011307)	463783.31
3809823.85	37.34280	(09011120)		
463821.31	3809823.85	37.68082	(09011120)	463859.31
3809823.85	38.20220	(09011120)		
463897.31	3809823.85	38.55353	(09011120)	463935.31
3809823.85	38.52383	(09011120)		
463973.31	3809823.85	38.33559	(09011120)	464011.31
3809823.85	38.35342	(10010907)		
464049.31	3809823.85	39.53379	(10010907)	464087.31
3809823.85	40.14238	(10010907)		
464125.31	3809823.85	40.24770	(10010907)	464163.31

```

3809823.85      40.74923 (10022820)
      464201.31  3809823.85      41.43827 (10022820)      464239.31
3809823.85      41.90440 (10022820)
      464277.31  3809823.85      42.01871 (10022820)      464315.31
3809823.85      41.79781 (10022820)
      464353.31  3809823.85      41.29913 (10022820)      464391.31
3809823.85      40.93775 (09031705)
      464429.31  3809823.85      40.72645 (09040202)      464467.31
3809823.85      40.47503 (09040202)
      464505.31  3809823.85      39.91872 (09040202)      463745.31
3809852.91      36.48092 (09011307)
^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial ***      05/09/22
*** AERMET - VERSION 14134 *** ***
***      16:42:19

```

PAGE 785

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
      INCLUDING SOURCE(S):      L0006011      , L0006012
, L0006013      , L0006014      , L0006015      ,
      L0006016      , L0006017      , L0006018      , L0006019      , L0006020
, L0006021      , L0006022      , L0006023      ,
      L0006024      , L0006025      , L0006026      , L0006027      , L0006028
, L0006029      , L0006030      , L0006031      ,
      L0006032      , L0006033      , L0006034      , L0006035      , L0006036
, L0006037      , L0006038      , . . .      ,

```

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
463783.31	3809852.91	36.19599	(09011120)	463821.31
3809852.91	36.25184	(09011120)		
463859.31	3809852.91	36.63789	(09011120)	463897.31
3809852.91	36.79232	(09011120)		
463935.31	3809852.91	36.75437	(09011120)	463973.31
3809852.91	36.59792	(09011120)		
464011.31	3809852.91	36.45202	(10010907)	464049.31
3809852.91	37.70651	(10010907)		
464087.31	3809852.91	38.44176	(10010907)	464125.31
3809852.91	38.64673	(10010907)		

464163.31	3809852.91	38.92925	(10022820)	464201.31
3809852.91	39.69846	(10022820)		
464239.31	3809852.91	40.26045	(10022820)	464277.31
3809852.91	40.50093	(10022820)		
464315.31	3809852.91	40.37029	(10022820)	464353.31
3809852.91	39.95475	(10022820)		
464391.31	3809852.91	39.57219	(09031705)	464429.31
3809852.91	39.30458	(09040202)		
464467.31	3809852.91	39.12880	(09040202)	464505.31
3809852.91	38.67089	(09040202)		
463745.31	3809881.97	35.49527	(09011307)	463783.31
3809881.97	35.14790	(09011120)		
463821.31	3809881.97	35.16724	(09011120)	463859.31
3809881.97	35.34077	(09011120)		
463897.31	3809881.97	35.32508	(09011120)	463935.31
3809881.97	35.17685	(09011120)		
463973.31	3809881.97	35.08755	(09011120)	464011.31
3809881.97	34.86141	(10010907)		
464049.31	3809881.97	35.93827	(10010907)	464087.31
3809881.97	36.74467	(10010907)		
464125.31	3809881.97	37.12809	(10010907)	464163.31
3809881.97	37.19236	(10022820)		
464201.31	3809881.97	38.08300	(10022820)	464239.31
3809881.97	38.67038	(10022820)		
464277.31	3809881.97	39.01866	(10022820)	464315.31
3809881.97	39.09292	(10022820)		
464353.31	3809881.97	38.79056	(10022820)	464391.31
3809881.97	38.39971	(09031705)		
464429.31	3809881.97	37.96346	(09040202)	464467.31
3809881.97	37.86570	(09040202)		
464505.31	3809881.97	37.57392	(09040202)	463745.31
3809911.03	34.49749	(09011307)		
463783.31	3809911.03	34.11372	(09011120)	463821.31
3809911.03	34.21230	(09011120)		
463859.31	3809911.03	34.24816	(09011120)	463897.31
3809911.03	34.16529	(09011120)		
463935.31	3809911.03	33.91385	(09011120)	463973.31
3809911.03	33.72591	(09011120)		
464011.31	3809911.03	33.41058	(10010907)	464049.31
3809911.03	34.42870	(10010907)		
464087.31	3809911.03	35.18775	(10010907)	464125.31
3809911.03	35.61719	(10010907)		
464163.31	3809911.03	35.63245	(10022820)	464201.31
3809911.03	36.61677	(10022820)		
464239.31	3809911.03	37.24868	(10022820)	464277.31
3809911.03	37.71717	(10022820)		
464315.31	3809911.03	37.85479	(10022820)	464353.31
3809911.03	37.66855	(10022820)		
464391.31	3809911.03	37.24200	(09031705)	464429.31
3809911.03	36.87893	(09031705)		

464467.31	3809911.03	36.74639	(09040202)	464505.31
3809911.03	36.46848	(09040202)		
463745.31	3809940.09	33.51314	(09011307)	463783.31
3809940.09	33.16450	(09011120)		
463821.31	3809940.09	33.29865	(09011120)	463859.31
3809940.09	33.26678	(09011120)		
463897.31	3809940.09	33.18049	(09011120)	463935.31
3809940.09	32.91960	(09011120)		
463973.31	3809940.09	32.61728	(09011120)	464011.31
3809940.09	32.08741	(09011120)		
464049.31	3809940.09	32.96298	(10010907)	464087.31
3809940.09	33.67612	(10010907)		
464125.31	3809940.09	34.15854	(10010907)	464163.31
3809940.09	34.41107	(10010907)		
464201.31	3809940.09	35.33229	(10022820)	464239.31
3809940.09	36.03849	(10022820)		
464277.31	3809940.09	36.51250	(10022820)	464315.31
3809940.09	36.73147	(10022820)		
464353.31	3809940.09	36.61998	(10022820)	464391.31
3809940.09	36.22259	(10022820)		

▲ *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 786

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
464429.31	3809940.09	35.92769	(09031705)	464467.31

3809940.09	35.63758	(09040202)		
464505.31	3809940.09	35.45375	(09040202)	463745.31
3809969.15	32.94256	(09011307)		
463783.31	3809969.15	32.42280	(09011120)	463821.31
3809969.15	32.42678	(09011120)		
463859.31	3809969.15	32.38567	(09011120)	463897.31
3809969.15	32.26775	(09011120)		
463935.31	3809969.15	32.01121	(09011120)	463973.31
3809969.15	31.68298	(09011120)		
464011.31	3809969.15	31.05123	(09011120)	464049.31
3809969.15	31.61428	(10010907)		
464087.31	3809969.15	32.30730	(10010907)	464125.31
3809969.15	32.89052	(10010907)		
464163.31	3809969.15	33.20608	(10010907)	464201.31
3809969.15	34.01798	(10022820)		
464239.31	3809969.15	34.93792	(10022820)	464277.31
3809969.15	35.41758	(10022820)		
464315.31	3809969.15	35.68434	(10022820)	464353.31
3809969.15	35.70532	(10022820)		
464391.31	3809969.15	35.38291	(10022820)	464429.31
3809969.15	35.01542	(09031705)		
464467.31	3809969.15	34.56657	(09040202)	464505.31
3809969.15	34.53812	(09040202)		
463745.31	3809998.21	32.80278	(09011307)	463783.31
3809998.21	32.00227	(09011120)		
463821.31	3809998.21	31.78363	(09011120)	463859.31
3809998.21	31.64014	(09011120)		
463897.31	3809998.21	31.48387	(09011120)	463935.31
3809998.21	31.16466	(09011120)		
463973.31	3809998.21	30.80355	(09011120)	464011.31
3809998.21	30.20635	(09011120)		
464049.31	3809998.21	30.61962	(10010907)	464087.31
3809998.21	31.21445	(10010907)		
464125.31	3809998.21	31.82827	(10010907)	464163.31
3809998.21	32.17671	(10010907)		
464201.31	3809998.21	32.76695	(10022820)	464239.31
3809998.21	33.73910	(10022820)		
464277.31	3809998.21	34.40736	(10022820)	464315.31
3809998.21	34.70490	(10022820)		
464353.31	3809998.21	34.78537	(10022820)	464391.31
3809998.21	34.53309	(10022820)		
464429.31	3809998.21	34.10098	(09031705)	464467.31
3809998.21	33.75127	(09031705)		
464505.31	3809998.21	33.59448	(09040202)	463745.31
3810027.27	32.68384	(09011307)		
463783.31	3810027.27	31.79714	(09011120)	463821.31
3810027.27	31.34997	(09011120)		
463859.31	3810027.27	31.06278	(09011120)	463897.31
3810027.27	30.84351	(09011120)		
463935.31	3810027.27	30.41937	(09011120)	463973.31

3810027.27	30.04525	(09011120)		
464011.31	3810027.27	29.45722	(09011120)	464049.31
3810027.27	29.77394	(10010907)		
464087.31	3810027.27	30.24593	(10010907)	464125.31
3810027.27	30.75749	(10010907)		
464163.31	3810027.27	31.20148	(10010907)	464201.31
3810027.27	31.61305	(10022820)		
464239.31	3810027.27	32.55360	(10022820)	464277.31
3810027.27	33.31607	(10022820)		
464315.31	3810027.27	33.76835	(10022820)	464353.31
3810027.27	33.88967	(10022820)		
464391.31	3810027.27	33.70257	(10022820)	464429.31
3810027.27	33.28790	(09031705)		
464467.31	3810027.27	32.98340	(09031705)	464505.31
3810027.27	32.67273	(09040202)		
463745.31	3810056.33	32.57393	(09011307)	463783.31
3810056.33	31.64406	(09011120)		
463821.31	3810056.33	30.96237	(09011120)	463859.31
3810056.33	30.58544	(09011120)		
463897.31	3810056.33	30.24706	(09011120)	463935.31
3810056.33	29.80023	(09011120)		
463973.31	3810056.33	29.37643	(09011120)	464011.31
3810056.33	28.76322	(09011120)		
464049.31	3810056.33	28.92784	(10010907)	464087.31
3810056.33	29.38062	(10010907)		
464125.31	3810056.33	29.76915	(10010907)	464163.31
3810056.33	30.20342	(10010907)		
464201.31	3810056.33	30.43615	(10022820)	464239.31
3810056.33	31.46676	(10022820)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 787

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,
 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 , L0006021 , L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M) Y-COORD (M)		Y-COORD (M) CONC	CONC	(YYMMDDHH)	X-COORD (M)

464277.31	3810056.33	32.22369	(10022820)	464315.31	
3810056.33	32.77193	(10022820)			
464353.31	3810056.33	33.06544	(10022820)	464391.31	
3810056.33	32.97727	(10022820)			
464429.31	3810056.33	32.58695	(10022820)	464467.31	
3810056.33	32.19911	(09031705)			
464505.31	3810056.33	31.80923	(09040202)	463745.31	
3810085.39	32.49501	(09011120)			
463783.31	3810085.39	31.50559	(09011120)	463821.31	
3810085.39	30.68761	(09011120)			
463859.31	3810085.39	30.15690	(09011120)	463897.31	
3810085.39	29.72855	(09011120)			
463935.31	3810085.39	29.27119	(09011120)	463973.31	
3810085.39	28.77528	(09011120)			
464011.31	3810085.39	28.09719	(09011120)	464049.31	
3810085.39	28.08970	(10010907)			
464087.31	3810085.39	28.54294	(10010907)	464125.31	
3810085.39	28.91462	(10010907)			
464163.31	3810085.39	29.25263	(10010907)	464201.31	
3810085.39	29.43514	(10010907)			
464239.31	3810085.39	30.35301	(10022820)	464277.31	
3810085.39	31.18209	(10022820)			
464315.31	3810085.39	31.79021	(10022820)	464353.31	
3810085.39	32.12732	(10022820)			
464391.31	3810085.39	32.16293	(10022820)	464429.31	
3810085.39	31.83201	(10022820)			
464467.31	3810085.39	31.43434	(09031705)	464505.31	
3810085.39	30.99185	(09031705)			
463745.31	3810114.45	32.15706	(09011120)	463783.31	
3810114.45	31.45580	(09011120)			
463821.31	3810114.45	30.53898	(09011120)	463859.31	
3810114.45	29.96658	(09011120)			
463897.31	3810114.45	29.35144	(09011120)	463935.31	
3810114.45	28.80894	(09011120)			
463973.31	3810114.45	28.20740	(09011120)	464011.31	
3810114.45	27.50779	(09011120)			
464049.31	3810114.45	27.38542	(10010907)	464087.31	
3810114.45	27.76961	(10010907)			
464125.31	3810114.45	28.06453	(10010907)	464163.31	
3810114.45	28.31954	(10010907)			
464201.31	3810114.45	28.48324	(10010907)	464239.31	
3810114.45	29.29137	(10022820)			

464277.31	3810114.45	30.18394	(10022820)	464315.31
3810114.45	30.74094	(10022820)		
464353.31	3810114.45	31.06791	(10022820)	464391.31
3810114.45	31.13398	(10022820)		
464429.31	3810114.45	30.99886	(10022820)	464467.31
3810114.45	30.55966	(09031705)		
464505.31	3810114.45	30.28320	(09031705)	463745.31
3810143.51	31.75117	(09011120)		
463783.31	3810143.51	31.12829	(09011120)	463821.31
3810143.51	30.59568	(09011120)		
463859.31	3810143.51	29.90008	(09011120)	463897.31
3810143.51	29.00093	(09011120)		
463935.31	3810143.51	28.30908	(09011120)	463973.31
3810143.51	27.59267	(09011120)		
464011.31	3810143.51	26.96262	(09011120)	464049.31
3810143.51	26.74988	(10010907)		
464087.31	3810143.51	27.00351	(10010907)	464125.31
3810143.51	27.28174	(10010907)		
464163.31	3810143.51	27.51948	(10010907)	464201.31
3810143.51	27.64829	(10010907)		
464239.31	3810143.51	28.17541	(10022820)	464277.31
3810143.51	29.19366	(10022820)		
464315.31	3810143.51	29.78143	(10022820)	464353.31
3810143.51	30.03179	(10022820)		
464391.31	3810143.51	30.20053	(10022820)	464429.31
3810143.51	30.09872	(10022820)		
464467.31	3810143.51	29.78849	(10022820)	464505.31
3810143.51	29.60368	(09031705)		
464383.78	3807479.29	93.10053	(09120417)	464355.03
3807405.24	88.72082	(09120417)		
464402.07	3807352.10	86.24603	(09120417)	464367.23
3807296.35	83.21319	(09031218)		
464358.52	3807237.99	80.68965	(09031218)	464385.52
3807161.33	76.76333	(09031218)		
463132.27	3810926.37	39.31359	(10011006)	463237.82
3811199.31	59.92321	(10011006)		
464944.35	3809244.89	37.50741	(10012420)	465700.32
3809255.46	23.15093	(10021420)		

*** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22

*** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 788

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0006011 , L0006012
 , L0006013 , L0006014 , L0006015 ,

, L0006021 L0006016 , L0006017 , L0006018 , L0006019 , L0006020
 L0006022 , L0006023 ,
 L0006024 , L0006025 , L0006026 , L0006027 , L0006028
 , L0006029 , L0006030 , L0006031 ,
 L0006032 , L0006033 , L0006034 , L0006035 , L0006036
 , L0006037 , L0006038 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
465716.18	3808536.49	20.12966	(09031319)	465544.37
3808533.85	23.11542	(09031319)		
465420.13	3808486.27	24.08860	(10032206)	465348.77
3808491.56	25.84399	(09031319)		
465317.05	3808443.98	27.10465	(10032206)	465327.62
3808406.97	27.45257	(10032206)		
465108.23	3808369.97	34.20169	(10032206)	464999.86
3808301.24	37.12782	(10032206)		
464722.31	3807973.48	56.04142	(10020118)	464717.03
3807836.03	50.65421	(10020118)		
464344.33	3807936.47	110.80104	(09011918)	464349.61
3807780.52	64.80224	(09011918)		
464386.62	3807785.81	61.59520	(09011918)	464521.43
3807859.82	52.06665	(09030119)		
464537.28	3807719.72	68.80778	(09011918)	464426.27
3807613.99	97.15144	(09011918)		
464368.43	3807532.62	95.10643	(09120417)	464324.60
3807121.91	71.44057	(09031218)		
464123.31	3807123.54	78.45144	(09123118)	463930.13
3806909.26	61.76354	(09111519)		
463831.11	3806906.01	58.55980	(09111519)	463821.36
3806720.95	47.94910	(09111519)		
463727.21	3806727.44	43.22974	(10010717)	463598.97
3806334.59	38.49924	(09111519)		
463001.06	3806361.54	73.12089	(09032718)	

^ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 789

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (16656

HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3

**

GROUP ID		NETWORK	AVERAGE CONC		RECEPTOR (XR, YR, ZELEV,		
ZHILL, ZFLAG)	OF TYPE	GRID-ID					

IDLE	1ST HIGHEST VALUE IS		1.09129	AT (	463783.31,	3809591.37,	1070.26,
1070.26,	0.00) DC						
	2ND HIGHEST VALUE IS		1.09106	AT (	463859.31,	3809591.37,	1074.24,
1077.00,	0.00) DC						
	3RD HIGHEST VALUE IS		1.09102	AT (	463745.31,	3809591.37,	1069.00,
1069.00,	0.00) DC						
	4TH HIGHEST VALUE IS		1.09064	AT (	463897.31,	3809591.37,	1077.13,
1077.13,	0.00) DC						
	5TH HIGHEST VALUE IS		1.08880	AT (	463821.31,	3809591.37,	1071.59,
1079.00,	0.00) DC						
	6TH HIGHEST VALUE IS		1.07968	AT (	463935.31,	3809591.37,	1079.03,
1079.03,	0.00) DC						
	7TH HIGHEST VALUE IS		1.03825	AT (	463821.31,	3809620.43,	1070.56,
1070.56,	0.00) DC						
	8TH HIGHEST VALUE IS		1.03680	AT (	463783.31,	3809620.43,	1068.57,
1068.57,	0.00) DC						
	9TH HIGHEST VALUE IS		1.03677	AT (	463859.31,	3809620.43,	1072.59,
1072.59,	0.00) DC						
	10TH HIGHEST VALUE IS		1.03547	AT (	463745.31,	3809620.43,	1067.08,
1067.08,	0.00) DC						
TRUCK1I1	1ST HIGHEST VALUE IS		22.28985	AT (	464277.31,	3809562.31,	1074.49,
1074.49,	0.00) DC						
	2ND HIGHEST VALUE IS		22.26524	AT (	464239.31,	3809562.31,	1075.08,
1075.08,	0.00) DC						
	3RD HIGHEST VALUE IS		13.95362	AT (	464239.31,	3809591.37,	1074.74,
1074.74,	0.00) DC						
	4TH HIGHEST VALUE IS		13.92320	AT (	464277.31,	3809591.37,	1074.06,
1074.06,	0.00) DC						
	5TH HIGHEST VALUE IS		13.71329	AT (	463935.31,	3809591.37,	1079.03,
1079.03,	0.00) DC						
	6TH HIGHEST VALUE IS		13.31510	AT (	463897.31,	3809591.37,	1077.13,
1077.13,	0.00) DC						
	7TH HIGHEST VALUE IS		13.23548	AT (	463745.31,	3809591.37,	1069.00,
1069.00,	0.00) DC						

1070.26,	8TH HIGHEST VALUE IS	13.16814 AT (	463783.31,	3809591.37,	1070.26,
	0.00) DC				
1079.00,	9TH HIGHEST VALUE IS	12.95055 AT (	463821.31,	3809591.37,	1071.59,
	0.00) DC				
1077.00,	10TH HIGHEST VALUE IS	12.93404 AT (	463859.31,	3809591.37,	1074.24,
	0.00) DC				
TRUCK10	1ST HIGHEST VALUE IS	1.12024 AT (	464344.33,	3807936.47,	1104.00,
1104.00,	0.00) DC				
1077.13,	2ND HIGHEST VALUE IS	0.99826 AT (	463897.31,	3809591.37,	1077.13,
	0.00) DC				
1079.03,	3RD HIGHEST VALUE IS	0.99592 AT (	463935.31,	3809591.37,	1079.03,
	0.00) DC				
1077.00,	4TH HIGHEST VALUE IS	0.99229 AT (	463859.31,	3809591.37,	1074.24,
	0.00) DC				
1079.00,	5TH HIGHEST VALUE IS	0.98485 AT (	463821.31,	3809591.37,	1071.59,
	0.00) DC				
1070.26,	6TH HIGHEST VALUE IS	0.98225 AT (	463783.31,	3809591.37,	1070.26,
	0.00) DC				
1069.00,	7TH HIGHEST VALUE IS	0.97780 AT (	463745.31,	3809591.37,	1069.00,
	0.00) DC				
1105.00,	8TH HIGHEST VALUE IS	0.96136 AT (	464349.61,	3807780.52,	1095.52,
	0.00) DC				
1077.51,	9TH HIGHEST VALUE IS	0.94994 AT (	463935.31,	3809620.43,	1077.51,
	0.00) DC				
1075.19,	10TH HIGHEST VALUE IS	0.94981 AT (	463897.31,	3809620.43,	1075.19,
	0.00) DC				
TRUCK31	1ST HIGHEST VALUE IS	1.41364 AT (	463745.31,	3809591.37,	1069.00,
1069.00,	0.00) DC				
1067.08,	2ND HIGHEST VALUE IS	1.34962 AT (	463745.31,	3809620.43,	1067.08,
	0.00) DC				
1070.26,	3RD HIGHEST VALUE IS	1.31785 AT (	463783.31,	3809591.37,	1070.26,
	0.00) DC				
1064.99,	4TH HIGHEST VALUE IS	1.28363 AT (	463745.31,	3809649.49,	1064.99,
	0.00) DC				
1068.57,	5TH HIGHEST VALUE IS	1.26434 AT (	463783.31,	3809620.43,	1068.57,
	0.00) DC				
1079.00,	6TH HIGHEST VALUE IS	1.23200 AT (	463821.31,	3809591.37,	1071.59,
	0.00) DC				
1067.00,	7TH HIGHEST VALUE IS	1.21445 AT (	463745.31,	3809678.55,	1062.39,
	0.00) DC				
1067.35,	8TH HIGHEST VALUE IS	1.21287 AT (	463783.31,	3809649.49,	1067.35,
	0.00) DC				
1070.56,	9TH HIGHEST VALUE IS	1.18952 AT (	463821.31,	3809620.43,	1070.56,
	0.00) DC				
1077.00,	10TH HIGHEST VALUE IS	1.15916 AT (	463859.31,	3809591.37,	1074.24,
	0.00) DC				

▲ *** AERMOD - VERSION 19191 ***
 Industrial Park\I15 Industrial ***

*** C:\Users\apoll\Desktop\HARP2\HARP\I15
 05/09/22

*** AERMET - VERSION 14134 ***
*** 16:42:19

PAGE 790

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (16656
HRS) RESULTS ***

** CONC OF PM₁₀ IN MICROGRAMS/M**3

**

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG) OF TYPE	GRID-ID		
- - - - -	- - - - -	- - - - -	- - - - -
TRUCK395	1ST HIGHEST VALUE IS	11.97482 AT (	463237.82, 3811199.31, 1062.00,
1062.00,	0.00) DC		
	2ND HIGHEST VALUE IS	5.16138 AT (	463132.27, 3810926.37, 1066.86,
1066.86,	0.00) DC		
	3RD HIGHEST VALUE IS	1.45875 AT (	463745.31, 3810143.51, 1071.16,
1071.16,	0.00) DC		
	4TH HIGHEST VALUE IS	1.44521 AT (	463745.31, 3810114.45, 1070.44,
1070.44,	0.00) DC		
	5TH HIGHEST VALUE IS	1.43027 AT (	463745.31, 3810085.39, 1068.32,
1068.32,	0.00) DC		
	6TH HIGHEST VALUE IS	1.39282 AT (	463745.31, 3810056.33, 1065.06,
1073.00,	0.00) DC		
	7TH HIGHEST VALUE IS	1.34202 AT (	463783.31, 3810143.51, 1066.81,
1071.00,	0.00) DC		
	8TH HIGHEST VALUE IS	1.33791 AT (	463745.31, 3810027.27, 1061.82,
1073.00,	0.00) DC		
	9TH HIGHEST VALUE IS	1.31612 AT (	463783.31, 3810114.45, 1064.94,
1072.00,	0.00) DC		
	10TH HIGHEST VALUE IS	1.28192 AT (	463745.31, 3809998.21, 1058.85,
1073.00,	0.00) DC		
TRUCK3I1	1ST HIGHEST VALUE IS	1.21618 AT (	463001.06, 3806361.54, 1143.00,
1143.00,	0.00) DC		
	2ND HIGHEST VALUE IS	0.78969 AT (	463831.11, 3806906.01, 1120.40,
1122.00,	0.00) DC		
	3RD HIGHEST VALUE IS	0.75800 AT (	463727.21, 3806727.44, 1126.66,
1126.66,	0.00) DC		
	4TH HIGHEST VALUE IS	0.70778 AT (	462459.11, 3808501.66, 1108.51,
1108.51,	0.00) DC		
	5TH HIGHEST VALUE IS	0.69265 AT (	462421.43, 3808393.98, 1110.00,

1110.00,	0.00) DC	0.67108 AT (	462437.58,	3808580.62,	1107.63,
1107.63,	0.00) DC				
	7TH HIGHEST VALUE IS	0.64989 AT (	463930.13,	3806909.26,	1122.56,
1122.56,	0.00) DC				
	8TH HIGHEST VALUE IS	0.61843 AT (	463821.36,	3806720.95,	1127.52,
1127.52,	0.00) DC				
	9TH HIGHEST VALUE IS	0.58977 AT (	462654.73,	3809189.00,	1096.56,
1096.56,	0.00) DC				
	10TH HIGHEST VALUE IS	0.58852 AT (	464123.31,	3807123.54,	1114.44,
1114.44,	0.00) DC				
TRUCK43	1ST HIGHEST VALUE IS	0.83358 AT (	462654.73,	3809189.00,	1096.56,
1096.56,	0.00) DC				
	2ND HIGHEST VALUE IS	0.69718 AT (	463745.31,	3809591.37,	1069.00,
1069.00,	0.00) DC				
	3RD HIGHEST VALUE IS	0.69388 AT (	462559.49,	3809194.32,	1097.00,
1097.00,	0.00) DC				
	4TH HIGHEST VALUE IS	0.67729 AT (	463783.31,	3809591.37,	1070.26,
1070.26,	0.00) DC				
	5TH HIGHEST VALUE IS	0.66915 AT (	463745.31,	3809620.43,	1067.08,
1067.08,	0.00) DC				
	6TH HIGHEST VALUE IS	0.65748 AT (	463821.31,	3809591.37,	1071.59,
1079.00,	0.00) DC				
	7TH HIGHEST VALUE IS	0.65117 AT (	463783.31,	3809620.43,	1068.57,
1068.57,	0.00) DC				
	8TH HIGHEST VALUE IS	0.64237 AT (	463745.31,	3809649.49,	1064.99,
1064.99,	0.00) DC				
	9TH HIGHEST VALUE IS	0.64221 AT (	463859.31,	3809591.37,	1074.24,
1077.00,	0.00) DC				
	10TH HIGHEST VALUE IS	0.63461 AT (	463821.31,	3809620.43,	1070.56,
1070.56,	0.00) DC				
TRUCK9	1ST HIGHEST VALUE IS	1.03061 AT (	463745.31,	3809591.37,	1069.00,
1069.00,	0.00) DC				
	2ND HIGHEST VALUE IS	1.01808 AT (	463783.31,	3809591.37,	1070.26,
1070.26,	0.00) DC				
	3RD HIGHEST VALUE IS	1.00194 AT (	463821.31,	3809591.37,	1071.59,
1079.00,	0.00) DC				
	4TH HIGHEST VALUE IS	0.98926 AT (	463859.31,	3809591.37,	1074.24,
1077.00,	0.00) DC				
	5TH HIGHEST VALUE IS	0.97920 AT (	463745.31,	3809620.43,	1067.08,
1067.08,	0.00) DC				
	6TH HIGHEST VALUE IS	0.97388 AT (	463897.31,	3809591.37,	1077.13,
1077.13,	0.00) DC				
	7TH HIGHEST VALUE IS	0.96884 AT (	463783.31,	3809620.43,	1068.57,
1068.57,	0.00) DC				
	8TH HIGHEST VALUE IS	0.95746 AT (	463821.31,	3809620.43,	1070.56,
1070.56,	0.00) DC				
	9TH HIGHEST VALUE IS	0.94965 AT (	463935.31,	3809591.37,	1079.03,

1079.03, 0.00) DC
 10TH HIGHEST VALUE IS 0.94261 AT (463859.31, 3809620.43, 1072.59,
 1072.59, 0.00) DC
 *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 *** ***
 *** 16:42:19

PAGE 791

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (16656

HRS) RESULTS ***

** CONC OF PM₁₀ IN MICROGRAMS/M³

**

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG)	OF TYPE GRID-ID		
ALL	1ST HIGHEST VALUE IS	26.26824 AT (464239.31, 3809562.31, 1075.08,	
1075.08,	0.00) DC		
	2ND HIGHEST VALUE IS	26.12660 AT (464277.31, 3809562.31, 1074.49,	
1074.49,	0.00) DC		
	3RD HIGHEST VALUE IS	19.51564 AT (463745.31, 3809591.37, 1069.00,	
1069.00,	0.00) DC		
	4TH HIGHEST VALUE IS	19.25562 AT (463783.31, 3809591.37, 1070.26,	
1070.26,	0.00) DC		
	5TH HIGHEST VALUE IS	19.13731 AT (463935.31, 3809591.37, 1079.03,	
1079.03,	0.00) DC		
	6TH HIGHEST VALUE IS	18.91506 AT (463897.31, 3809591.37, 1077.13,	
1077.13,	0.00) DC		
	7TH HIGHEST VALUE IS	18.85544 AT (463821.31, 3809591.37, 1071.59,	
1079.00,	0.00) DC		
	8TH HIGHEST VALUE IS	18.68786 AT (463859.31, 3809591.37, 1074.24,	
1077.00,	0.00) DC		
	9TH HIGHEST VALUE IS	17.86286 AT (464239.31, 3809591.37, 1074.74,	
1074.74,	0.00) DC		
	10TH HIGHEST VALUE IS	17.67011 AT (464277.31, 3809591.37, 1074.06,	
1074.06,	0.00) DC		

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART

DP = DISCPOLR
 *** AERMOD - VERSION 19191 *** C:\Users\apoll\Desktop\HARP2\HARP\I15
 Industrial Park\I15 Industrial *** 05/09/22
 *** AERMET - VERSION 14134 ***
 *** 16:42:19

PAGE 792
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 1-HR
 RESULTS ***

** CONC OF PM₁₀ IN MICROGRAMS/M³
 **

GROUP ID (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK AVERAGE CONC OF TYPE GRID-ID	DATE (YYMMDDHH)	RECEPTOR
IDLE HIGH 1ST HIGH VALUE IS 3807936.47, 1104.00, 1104.00,	43.80399 0.00) DC	ON 09011918: AT (	464344.33,
TRUCK1I1 HIGH 1ST HIGH VALUE IS 3809562.31, 1075.08, 1075.08,	69.08712 0.00) DC	ON 09010419: AT (	464239.31,
TRUCK10 HIGH 1ST HIGH VALUE IS 3807936.47, 1104.00, 1104.00,	40.20234 0.00) DC	ON 09011918: AT (	464344.33,
TRUCK31 HIGH 1ST HIGH VALUE IS 3806727.44, 1126.66, 1126.66,	16.07040 0.00) DC	ON 09123118: AT (	463727.21,
TRUCK395 HIGH 1ST HIGH VALUE IS 3811199.31, 1062.00, 1062.00,	46.01884 0.00) DC	ON 10021119: AT (	463237.82,
TRUCK3I1 HIGH 1ST HIGH VALUE IS 3806361.54, 1143.00, 1143.00,	48.57399 0.00) DC	ON 09032718: AT (	463001.06,
TRUCK43 HIGH 1ST HIGH VALUE IS 3807807.15, 1122.18, 1122.18,	28.22991 0.00) DC	ON 10021207: AT (	462301.19,
TRUCK9 HIGH 1ST HIGH VALUE IS 3807479.29, 1110.00, 1110.00,	31.18729 0.00) DC	ON 09011918: AT (	464383.78,
ALL HIGH 1ST HIGH VALUE IS 3807936.47, 1104.00, 1104.00,	110.80104 0.00) DC	ON 09011918: AT (	464344.33,

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 19191 *** *** C:\Users\apoll\Desktop\HARP2\HARP\I15
Industrial Park\I15 Industrial *** 05/09/22
*** AERMET - VERSION 14134 *** ***
*** 16:42:19

PAGE 793

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 4 Warning Message(s)
A Total of 14077 Informational Message(s)

A Total of 16656 Hours Were Processed

A Total of 1464 Calm Hours Identified

A Total of 12613 Missing Hours Identified (75.73 Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
Data May Not Be Acceptable for Regulatory Applications.
See Section 5.3.2 of "Meteorological Monitoring Guidance
for Regulatory Modeling Applications" (EPA-454/R-99-005).

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
MX W441 1449 METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
09030309
MX W441 1450 METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
09030310
MX W441 1452 METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
09030312
MX W441 1453 METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
09030313

*** AERMOD Finishes Successfully ***

HARP2 - HRACalc (dated 21081) 5/10/2022 2:13:20 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: RMP

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05

Soil mixing depth (m): 0.01

Dermal climate: Mixed

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\Users\dlarocca\Desktop\Air Quality

Work\HARP2\POPLAR180P\hra\30yrCancerCancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\dlarocca\Desktop\Air Quality

Work\HARP2\POPLAR180P\hra\30yrCancerCancerRiskSumByRec.csv

HRA ran successfully

*HARP - HRACalc v21081 5/10/2022 2:13:20 PM - Cancer Risk - Input File: C:\Users\dlarocca\Desktop\Air Quality Work\HARP2\POPLAR18OP\hra\30yrCancerHRAInput.hra

REC	GRP	NETID	X	Y	RISK_SUM	SCENARIO	INH_RISK	SOIL_RISK	DERMAL_RISK	MILK_RISK	WATER_RISK	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_RISK	EGG_RISK
1	ALL		462160.6	3809378	4.73E-08	30YrCancer	4.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	ALL		462051.5	3809271	4.14E-08	30YrCancer	4.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	ALL		462014.5	3809029	3.10E-08	30YrCancer	3.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	ALL		462010.6	3808856	2.60E-08	30YrCancer	2.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	ALL		461936.6	3808887	2.42E-08	30YrCancer	2.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	ALL		461936.6	3808998	2.65E-08	30YrCancer	2.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	ALL		461909.3	3808768	2.07E-08	30YrCancer	2.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	ALL		461835.3	3808895	2.15E-08	30YrCancer	2.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	ALL		461845	3808996	2.36E-08	30YrCancer	2.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	ALL		461833.3	3809115	2.61E-08	30YrCancer	2.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	ALL		461843.1	3809210	3.09E-08	30YrCancer	3.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	ALL		461810	3809298	3.26E-08	30YrCancer	3.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	ALL		461856.7	3809386	3.47E-08	30YrCancer	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	ALL		461841.1	3809483	3.46E-08	30YrCancer	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	ALL		462004.7	3809380	4.01E-08	30YrCancer	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ALL		461763.2	3808793	1.76E-08	30YrCancer	1.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	ALL		461753.5	3808700	1.71E-08	30YrCancer	1.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	ALL		461835.3	3808686	1.80E-08	30YrCancer	1.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	ALL		461823.6	3808579	1.66E-08	30YrCancer	1.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	ALL		461761.3	3808585	1.55E-08	30YrCancer	1.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	ALL		462301.2	3807807	2.55E-08	30YrCancer	2.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	ALL		462304.8	3807868	2.56E-08	30YrCancer	2.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	ALL		462216.8	3807883	2.21E-08	30YrCancer	2.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	ALL		462116.3	3807886	1.89E-08	30YrCancer	1.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25	ALL		462114.6	3807789	1.82E-08	30YrCancer	1.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
26	ALL		462012.3	3807888	1.62E-08	30YrCancer	1.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
27	ALL		462008.7	3807976	1.70E-08	30YrCancer	1.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
28	ALL		461917.1	3807972	1.50E-08	30YrCancer	1.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
29	ALL		461922.5	3808188	1.74E-08	30YrCancer	1.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
30	ALL		461908.2	3808288	1.76E-08	30YrCancer	1.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
31	ALL		461848.9	3808378	1.67E-08	30YrCancer	1.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32	ALL		461831	3808494	1.66E-08	30YrCancer	1.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
33	ALL		462421.4	3808394	3.73E-08	30YrCancer	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
34	ALL		462459.1	3808502	4.14E-08	30YrCancer	4.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
35	ALL		462437.6	3808581	4.11E-08	30YrCancer	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
36	ALL		462654.7	3809189	8.88E-08	30YrCancer	8.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
37	ALL		462559.5	3809194	7.66E-08	30YrCancer	7.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
38	ALL		465763.9	3807935	3.06E-08	30YrCancer	3.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39	ALL		465819.8	3807935	2.94E-08	30YrCancer	2.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
40	ALL		465875.8	3807935	2.84E-08	30YrCancer	2.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
41	ALL		465931.8	3807935	2.74E-08	30YrCancer	2.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42	ALL		465987.8	3807935	2.64E-08	30YrCancer	2.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

[illegible]

87	ALL	466155.7	3808068	2.57E-08	30YrCancel	2.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
88	ALL	466211.7	3808068	2.49E-08	30YrCancel	2.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
89	ALL	466267.7	3808068	2.42E-08	30YrCancel	2.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
90	ALL	466323.7	3808068	2.35E-08	30YrCancel	2.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
91	ALL	466379.6	3808068	2.28E-08	30YrCancel	2.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
92	ALL	466435.6	3808068	2.21E-08	30YrCancel	2.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
93	ALL	466491.6	3808068	2.15E-08	30YrCancel	2.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
94	ALL	466547.6	3808068	2.09E-08	30YrCancel	2.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95	ALL	466603.6	3808068	2.03E-08	30YrCancel	2.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
96	ALL	466659.5	3808068	1.98E-08	30YrCancel	1.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
97	ALL	466715.5	3808068	1.93E-08	30YrCancel	1.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
98	ALL	466771.5	3808068	1.87E-08	30YrCancel	1.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
99	ALL	466827.5	3808068	1.82E-08	30YrCancel	1.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
100	ALL	466883.5	3808068	1.76E-08	30YrCancel	1.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
101	ALL	465763.9	3808134	3.46E-08	30YrCancel	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
102	ALL	465819.8	3808134	3.32E-08	30YrCancel	3.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
103	ALL	465875.8	3808134	3.19E-08	30YrCancel	3.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
104	ALL	465931.8	3808134	3.08E-08	30YrCancel	3.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
105	ALL	465987.8	3808134	2.96E-08	30YrCancel	2.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106	ALL	466043.8	3808134	2.86E-08	30YrCancel	2.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E					

131	ALL	466267.7	3808200	2.60E-08	30YrCancel	2.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
132	ALL	466323.7	3808200	2.52E-08	30YrCancel	2.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
133	ALL	466379.6	3808200	2.44E-08	30YrCancel	2.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
134	ALL	466435.6	3808200	2.36E-08	30YrCancel	2.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
135	ALL	466491.6	3808200	2.29E-08	30YrCancel	2.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
136	ALL	466547.6	3808200	2.23E-08	30YrCancel	2.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
137	ALL	466603.6	3808200	2.16E-08	30YrCancel	2.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
138	ALL	466659.5	3808200	2.10E-08	30YrCancel	2.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
139	ALL	466715.5	3808200	2.04E-08	30YrCancel	2.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
140	ALL	466771.5	3808200	1.97E-08	30YrCancel	1.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
141	ALL	466827.5	3808200	1.91E-08	30YrCancel	1.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
142	ALL	466883.5	3808200	1.86E-08	30YrCancel	1.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
143	ALL	465763.9	3808266	3.78E-08	30YrCancel	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
144	ALL	465819.8	3808266	3.62E-08	30YrCancel	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
145	ALL	465875.8	3808266	3.47E-08	30YrCancel	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
146	ALL	465931.8	3808266	3.34E-08	30YrCancel	3.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
147	ALL	465987.8	3808266	3.21E-08	30YrCancel	3.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
148	ALL	466043.8	3808266	3.09E-08	30YrCancel	3.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
149	ALL	466099.7	3808266	2.99E-08	30YrCancel	2.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
150	ALL	466155.7	3808266	2.89E-08	30YrCancel	2.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

175	ALL	466379.6	3808333	2.60E-08	30YrCancel	2.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
176	ALL	466435.6	3808333	2.52E-08	30YrCancel	2.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
177	ALL	466491.6	3808333	2.44E-08	30YrCancel	2.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
178	ALL	466547.6	3808333	2.36E-08	30YrCancel	2.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
179	ALL	466603.6	3808333	2.29E-08	30YrCancel	2.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
180	ALL	466659.5	3808333	2.22E-08	30YrCancel	2.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
181	ALL	466715.5	3808333	2.15E-08	30YrCancel	2.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
182	ALL	466771.5	3808333	2.08E-08	30YrCancel	2.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
183	ALL	466827.5	3808333	2.01E-08	30YrCancel	2.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
184	ALL	466883.5	3808333	1.95E-08	30YrCancel	1.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
185	ALL	465763.9	3808399	4.11E-08	30YrCancel	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
186	ALL	465819.8	3808399	3.92E-08	30YrCancel	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
187	ALL	465875.8	3808399	3.75E-08	30YrCancel	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
188	ALL	465931.8	3808399	3.60E-08	30YrCancel	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
189	ALL	465987.8	3808399	3.47E-08	30YrCancel	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
190	ALL	466043.8	3808399	3.34E-08	30YrCancel	3.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
191	ALL	466099.7	3808399	3.22E-08	30YrCancel	3.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
192	ALL	466155.7	3808399	3.10E-08	30YrCancel	3.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
193	ALL	466211.7	3808399	2.98E-08	30YrCancel	2.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
194	ALL	466267.7	3808399	2.87E-08	30YrCancel	2.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

219	ALL	466491.6	3808465	2.58E-08	30YrCancel	2.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
220	ALL	466547.6	3808465	2.49E-08	30YrCancel	2.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221	ALL	466603.6	3808465	2.40E-08	30YrCancel	2.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222	ALL	466659.5	3808465	2.32E-08	30YrCancel	2.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
223	ALL	466715.5	3808465	2.25E-08	30YrCancel	2.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
224	ALL	466771.5	3808465	2.17E-08	30YrCancel	2.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
225	ALL	466827.5	3808465	2.10E-08	30YrCancel	2.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
226	ALL	466883.5	3808465	2.04E-08	30YrCancel	2.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
227	ALL	465763.9	3808531	4.40E-08	30YrCancel	4.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
228	ALL	465819.8	3808531	4.21E-08	30YrCancel	4.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
229	ALL	465875.8	3808531	4.03E-08	30YrCancel	4.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
230	ALL	465931.8	3808531	3.87E-08	30YrCancel	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
231	ALL	465987.8	3808531	3.70E-08	30YrCancel	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
232	ALL	466043.8	3808531	3.55E-08	30YrCancel	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
233	ALL	466099.7	3808531	3.41E-08	30YrCancel	3.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
234	ALL	466155.7	3808531	3.28E-08	30YrCancel	3.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
235	ALL	466211.7	3808531	3.16E-08	30YrCancel	3.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
236	ALL	466267.7	3808531	3.04E-08	30YrCancel	3.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
237	ALL	466323.7	3808531	2.93E-08	30YrCancel	2.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
238	ALL	466379.6	3808531	2.83E-08	30YrCancel	2.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

263	ALL	466603.6	3808597	2.50E-08	30YrCancel	2.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
264	ALL	466659.5	3808597	2.41E-08	30YrCancel	2.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
265	ALL	466715.5	3808597	2.33E-08	30YrCancel	2.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
266	ALL	466771.5	3808597	2.25E-08	30YrCancel	2.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
267	ALL	466827.5	3808597	2.18E-08	30YrCancel	2.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
268	ALL	466883.5	3808597	2.11E-08	30YrCancel	2.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
269	ALL	465763.9	3808664	4.64E-08	30YrCancel	4.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
270	ALL	465819.8	3808664	4.43E-08	30YrCancel	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
271	ALL	465875.8	3808664	4.23E-08	30YrCancel	4.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
272	ALL	465931.8	3808664	4.05E-08	30YrCancel	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
273	ALL	465987.8	3808664	3.87E-08	30YrCancel	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
274	ALL	466043.8	3808664	3.72E-08	30YrCancel	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
275	ALL	466099.7	3808664	3.57E-08	30YrCancel	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
276	ALL	466155.7	3808664	3.43E-08	30YrCancel	3.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
277	ALL	466211.7	3808664	3.30E-08	30YrCancel	3.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
278	ALL	466267.7	3808664	3.17E-08	30YrCancel	3.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
279	ALL	466323.7	3808664	3.06E-08	30YrCancel	3.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
280	ALL	466379.6	3808664	2.94E-08	30YrCancel	2.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
281	ALL	466435.6	3808664	2.84E-08	30YrCancel	2.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
282	ALL	466491.6	3808664	2.73E-08	30YrCancel	2.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

307	ALL	466715.5	3808730	2.40E-08	30YrCancel	2.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
308	ALL	466771.5	3808730	2.32E-08	30YrCancel	2.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
309	ALL	466827.5	3808730	2.25E-08	30YrCancel	2.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
310	ALL	466883.5	3808730	2.18E-08	30YrCancel	2.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
311	ALL	465763.9	3808796	4.80E-08	30YrCancel	4.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
312	ALL	465819.8	3808796	4.57E-08	30YrCancel	4.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
313	ALL	465875.8	3808796	4.37E-08	30YrCancel	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
314	ALL	465931.8	3808796	4.18E-08	30YrCancel	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
315	ALL	465987.8	3808796	4.01E-08	30YrCancel	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
316	ALL	466043.8	3808796	3.84E-08	30YrCancel	3.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
317	ALL	466099.7	3808796	3.70E-08	30YrCancel	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
318	ALL	466155.7	3808796	3.55E-08	30YrCancel	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
319	ALL	466211.7	3808796	3.40E-08	30YrCancel	3.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
320	ALL	466267.7	3808796	3.27E-08	30YrCancel	3.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
321	ALL	466323.7	3808796	3.14E-08	30YrCancel	3.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
322	ALL	466379.6	3808796	3.02E-08	30YrCancel	3.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
323	ALL	466435.6	3808796	2.91E-08	30YrCancel	2.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
324	ALL	466491.6	3808796	2.80E-08	30YrCancel	2.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
325	ALL	466547.6	3808796	2.70E-08	30YrCancel	2.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
326	ALL	466603.6	3808796	2.61E-08	30YrCancel	2.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

351	ALL	466827.5	3808862	2.30E-08	30YrCancel	2.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
352	ALL	466883.5	3808862	2.22E-08	30YrCancel	2.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
353	ALL	465763.9	3808928	4.91E-08	30YrCancel	4.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
354	ALL	465819.8	3808928	4.69E-08	30YrCancel	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
355	ALL	465875.8	3808928	4.48E-08	30YrCancel	4.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
356	ALL	465931.8	3808928	4.29E-08	30YrCancel	4.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
357	ALL	465987.8	3808928	4.10E-08	30YrCancel	4.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
358	ALL	466043.8	3808928	3.93E-08	30YrCancel	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
359	ALL	466099.7	3808928	3.76E-08	30YrCancel	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
360	ALL	466155.7	3808928	3.61E-08	30YrCancel	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
361	ALL	466211.7	3808928	3.46E-08	30YrCancel	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
362	ALL	466267.7	3808928	3.32E-08	30YrCancel	3.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
363	ALL	466323.7	3808928	3.19E-08	30YrCancel	3.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
364	ALL	466379.6	3808928	3.07E-08	30YrCancel	3.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
365	ALL	466435.6	3808928	2.96E-08	30YrCancel	2.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
366	ALL	466491.6	3808928	2.85E-08	30YrCancel	2.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
367	ALL	466547.6	3808928	2.75E-08	30YrCancel	2.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
368	ALL	466603.6	3808928	2.65E-08	30YrCancel	2.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
369	ALL	466659.5	3808928	2.56E-08	30YrCancel	2.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
370	ALL	466715.5	3808928	2.48E-08	30YrCancel	2.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

395	ALL	465763.9	3809061	4.95E-08	30YrCancel	4.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
396	ALL	465819.8	3809061	4.72E-08	30YrCancel	4.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
397	ALL	465875.8	3809061	4.51E-08	30YrCancel	4.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
398	ALL	465931.8	3809061	4.31E-08	30YrCancel	4.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
399	ALL	465987.8	3809061	4.13E-08	30YrCancel	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
400	ALL	466043.8	3809061	3.96E-08	30YrCancel	3.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
401	ALL	466099.7	3809061	3.79E-08	30YrCancel	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
402	ALL	466155.7	3809061	3.64E-08	30YrCancel	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
403	ALL	466211.7	3809061	3.49E-08	30YrCancel	3.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
404	ALL	466267.7	3809061	3.35E-08	30YrCancel	3.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
405	ALL	466323.7	3809061	3.22E-08	30YrCancel	3.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
406	ALL	466379.6	3809061	3.10E-08	30YrCancel	3.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
407	ALL	466435.6	3809061	2.99E-08	30YrCancel	2.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
408	ALL	466491.6	3809061	2.88E-08	30YrCancel	2.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
409	ALL	466547.6	3809061	2.78E-08	30YrCancel	2.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
410	ALL	466603.6	3809061	2.69E-08	30YrCancel	2.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
411	ALL	466659.5	3809061	2.60E-08	30YrCancel	2.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
412	ALL	466715.5	3809061	2.51E-08	30YrCancel	2.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
413	ALL	466771.5	3809061	2.43E-08	30YrCancel	2.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
414	ALL	466827.5	3809061	2.35E-08	30YrCancel	2.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

439	ALL	465875.8	3809193	4.55E-08	30YrCancel	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
440	ALL	465931.8	3809193	4.35E-08	30YrCancel	4.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
441	ALL	465987.8	3809193	4.15E-08	30YrCancel	4.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
442	ALL	466043.8	3809193	3.95E-08	30YrCancel	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
443	ALL	466099.7	3809193	3.79E-08	30YrCancel	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
444	ALL	466155.7	3809193	3.63E-08	30YrCancel	3.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
445	ALL	466211.7	3809193	3.50E-08	30YrCancel	3.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
446	ALL	466267.7	3809193	3.37E-08	30YrCancel	3.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
447	ALL	466323.7	3809193	3.24E-08	30YrCancel	3.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
448	ALL	466379.6	3809193	3.13E-08	30YrCancel	3.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
449	ALL	466435.6	3809193	3.01E-08	30YrCancel	3.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
450	ALL	466491.6	3809193	2.90E-08	30YrCancel	2.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
451	ALL	466547.6	3809193	2.80E-08	30YrCancel	2.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
452	ALL	466603.6	3809193	2.71E-08	30YrCancel	2.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
453	ALL	466659.5	3809193	2.62E-08	30YrCancel	2.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
454	ALL	466715.5	3809193	2.53E-08	30YrCancel	2.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
455	ALL	466771.5	3809193	2.45E-08	30YrCancel	2.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
456	ALL	466827.5	3809193	2.37E-08	30YrCancel	2.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
457	ALL	466883.5	3809193	2.30E-08	30YrCancel	2.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
458	ALL	465763.9	3809260	4.98E-08	30YrCancel	4.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

483	ALL	464583.4	3807142	3.12E-08	30YrCancel	3.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
484	ALL	464603.4	3807142	3.07E-08	30YrCancel	3.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
485	ALL	464623.4	3807142	3.03E-08	30YrCancel	3.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
486	ALL	464643.4	3807142	2.99E-08	30YrCancel	2.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
487	ALL	464663.4	3807142	2.94E-08	30YrCancel	2.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
488	ALL	464683.4	3807142	2.89E-08	30YrCancel	2.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
489	ALL	464703.4	3807142	2.85E-08	30YrCancel	2.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
490	ALL	464723.4	3807142	2.85E-08	30YrCancel	2.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
491	ALL	464743.4	3807142	2.78E-08	30YrCancel	2.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
492	ALL	464763.4	3807142	2.73E-08	30YrCancel	2.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
493	ALL	464783.4	3807142	2.67E-08	30YrCancel	2.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
494	ALL	464803.4	3807142	2.61E-08	30YrCancel	2.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
495	ALL	464823.4	3807142	2.58E-08	30YrCancel	2.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
496	ALL	464843.4	3807142	2.55E-08	30YrCancel	2.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
497	ALL	464863.4	3807142	2.49E-08	30YrCancel	2.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
498	ALL	464883.4	3807142	2.44E-08	30YrCancel	2.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
499	ALL	464903.4	3807142	2.41E-08	30YrCancel	2.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
500	ALL	464923.4	3807142	2.40E-08	30YrCancel	2.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
501	ALL	464503.4	3807162	3.30E-08	30YrCancel	3.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
502	ALL	464523.4	3807162	3.28E-08	30YrCancel	3.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

527	ALL	464583.4	3807182	3.20E-08	30YrCancel	3.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
528	ALL	464603.4	3807182	3.17E-08	30YrCancel	3.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
529	ALL	464623.4	3807182	3.14E-08	30YrCancel	3.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
530	ALL	464643.4	3807182	3.07E-08	30YrCancel	3.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
531	ALL	464663.4	3807182	3.03E-08	30YrCancel	3.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
532	ALL	464683.4	3807182	3.04E-08	30YrCancel	3.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
533	ALL	464703.4	3807182	2.97E-08	30YrCancel	2.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
534	ALL	464723.4	3807182	2.92E-08	30YrCancel	2.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
535	ALL	464743.4	3807182	2.87E-08	30YrCancel	2.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
536	ALL	464763.4	3807182	2.82E-08	30YrCancel	2.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
537	ALL	464783.4	3807182	2.78E-08	30YrCancel	2.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
538	ALL	464803.4	3807182	2.72E-08	30YrCancel	2.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
539	ALL	464823.4	3807182	2.68E-08	30YrCancel	2.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
540	ALL	464843.4	3807182	2.62E-08	30YrCancel	2.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
541	ALL	464863.4	3807182	2.56E-08	30YrCancel	2.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
542	ALL	464883.4	3807182	2.53E-08	30YrCancel	2.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
543	ALL	464903.4	3807182	2.51E-08	30YrCancel	2.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
544	ALL	464923.4	3807182	2.48E-08	30YrCancel	2.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
545	ALL	464503.4	3807202	3.45E-08	30YrCancel	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
546	ALL	464523.4	3807202	3.39E-08	30YrCancel	3.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

[illegible]

615	ALL	464583.4	3807262	3.42E-08	30YrCancel	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
616	ALL	464603.4	3807262	3.36E-08	30YrCancel	3.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
617	ALL	464623.4	3807262	3.30E-08	30YrCancel	3.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
618	ALL	464643.4	3807262	3.25E-08	30YrCancel	3.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
619	ALL	464663.4	3807262	3.27E-08	30YrCancel	3.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
620	ALL	464683.4	3807262	3.26E-08	30YrCancel	3.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
621	ALL	464703.4	3807262	3.17E-08	30YrCancel	3.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
622	ALL	464723.4	3807262	3.10E-08	30YrCancel	3.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
623	ALL	464743.4	3807262	3.04E-08	30YrCancel	3.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
624	ALL	464763.4	3807262	3.00E-08	30YrCancel	3.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
625	ALL	464783.4	3807262	2.96E-08	30YrCancel	2.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
626	ALL	464803.4	3807262	2.91E-08	30YrCancel	2.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
627	ALL	464823.4	3807262	2.89E-08	30YrCancel	2.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
628	ALL	464843.4	3807262	2.86E-08	30YrCancel	2.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
629	ALL	464863.4	3807262	2.81E-08	30YrCancel	2.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
630	ALL	464883.4	3807262	2.75E-08	30YrCancel	2.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
631	ALL	464903.4	3807262	2.74E-08	30YrCancel	2.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
632	ALL	464923.4	3807262	2.76E-08	30YrCancel	2.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
633	ALL	464503.4	3807282	3.66E-08	30YrCancel	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
634	ALL	464523.4	3807282	3.63E-08	30YrCancel	3.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

[illegible]

[illegible]

747	ALL	464583.4	3807382	3.68E-08	30YrCancel	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
748	ALL	464603.4	3807382	3.61E-08	30YrCancel	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
749	ALL	464623.4	3807382	3.62E-08	30YrCancel	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
750	ALL	464643.4	3807382	3.58E-08	30YrCancel	3.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
751	ALL	464663.4	3807382	3.54E-08	30YrCancel	3.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
752	ALL	464683.4	3807382	3.46E-08	30YrCancel	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
753	ALL	464703.4	3807382	3.42E-08	30YrCancel	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
754	ALL	464723.4	3807382	3.41E-08	30YrCancel	3.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
755	ALL	464743.4	3807382	3.39E-08	30YrCancel	3.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
756	ALL	464763.4	3807382	3.33E-08	30YrCancel	3.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
757	ALL	464783.4	3807382	3.30E-08	30YrCancel	3.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
758	ALL	464803.4	3807382	3.31E-08	30YrCancel	3.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
759	ALL	464823.4	3807382	3.32E-08	30YrCancel	3.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
760	ALL	464843.4	3807382	3.35E-08	30YrCancel	3.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
761	ALL	464863.4	3807382	3.29E-08	30YrCancel	3.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
762	ALL	464883.4	3807382	3.27E-08	30YrCancel	3.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
763	ALL	464903.4	3807382	3.33E-08	30YrCancel	3.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
764	ALL	464923.4	3807382	3.74E-08	30YrCancel	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
765	ALL	464503.4	3807402	4.11E-08	30YrCancel	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
766	ALL	464523.4	3807402	4.01E-08	30YrCancel	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

791	ALL	464583.4	3807422	3.82E-08	30YrCancel	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
792	ALL	464603.4	3807422	3.81E-08	30YrCancel	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
793	ALL	464623.4	3807422	3.73E-08	30YrCancel	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
794	ALL	464643.4	3807422	3.66E-08	30YrCancel	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
795	ALL	464663.4	3807422	3.64E-08	30YrCancel	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
796	ALL	464683.4	3807422	3.61E-08	30YrCancel	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
797	ALL	464703.4	3807422	3.56E-08	30YrCancel	3.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
798	ALL	464723.4	3807422	3.51E-08	30YrCancel	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
799	ALL	464743.4	3807422	3.48E-08	30YrCancel	3.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
800	ALL	464763.4	3807422	3.48E-08	30YrCancel	3.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
801	ALL	464783.4	3807422	3.48E-08	30YrCancel	3.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
802	ALL	464803.4	3807422	3.45E-08	30YrCancel	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803	ALL	464823.4	3807422	3.42E-08	30YrCancel	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
804	ALL	464843.4	3807422	3.51E-08	30YrCancel	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
805	ALL	464863.4	3807422	3.55E-08	30YrCancel	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
806	ALL	464883.4	3807422	3.77E-08	30YrCancel	3.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
807	ALL	464903.4	3807422	3.98E-08	30YrCancel	3.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
808	ALL	464923.4	3807422	4.01E-08	30YrCancel	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
809	ALL	464503.4	3807442	4.23E-08	30YrCancel	4.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
810	ALL	464523.4	3807442	4.13E-08	30YrCancel	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

835	ALL	464583.4	3807462	4.04E-08	30YrCancel	4.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
836	ALL	464603.4	3807462	3.95E-08	30YrCancel	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
837	ALL	464623.4	3807462	3.89E-08	30YrCancel	3.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
838	ALL	464643.4	3807462	3.83E-08	30YrCancel	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
839	ALL	464663.4	3807462	3.76E-08	30YrCancel	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
840	ALL	464683.4	3807462	3.69E-08	30YrCancel	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
841	ALL	464703.4	3807462	3.68E-08	30YrCancel	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
842	ALL	464723.4	3807462	3.67E-08	30YrCancel	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
843	ALL	464743.4	3807462	3.66E-08	30YrCancel	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
844	ALL	464763.4	3807462	3.59E-08	30YrCancel	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
845	ALL	464783.4	3807462	3.59E-08	30YrCancel	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
846	ALL	464803.4	3807462	3.67E-08	30YrCancel	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
847	ALL	464823.4	3807462	3.59E-08	30YrCancel	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
848	ALL	464843.4	3807462	3.68E-08	30YrCancel	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
849	ALL	464863.4	3807462	4.17E-08	30YrCancel	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
850	ALL	464883.4	3807462	4.09E-08	30YrCancel	4.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
851	ALL	464903.4	3807462	4.15E-08	30YrCancel	4.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
852	ALL	464923.4	3807462	4.54E-08	30YrCancel	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
853	ALL	464503.4	3807482	4.34E-08	30YrCancel	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
854	ALL	464523.4	3807482	4.28E-08	30YrCancel	4.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

879	ALL	464583.4	3807502	4.20E-08	30YrCancel	4.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
880	ALL	464603.4	3807502	4.13E-08	30YrCancel	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
881	ALL	464623.4	3807502	4.08E-08	30YrCancel	4.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
882	ALL	464643.4	3807502	3.98E-08	30YrCancel	3.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
883	ALL	464663.4	3807502	3.93E-08	30YrCancel	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
884	ALL	464683.4	3807502	3.90E-08	30YrCancel	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
885	ALL	464703.4	3807502	3.82E-08	30YrCancel	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
886	ALL	464723.4	3807502	3.78E-08	30YrCancel	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
887	ALL	464743.4	3807502	3.78E-08	30YrCancel	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
888	ALL	464763.4	3807502	3.72E-08	30YrCancel	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
889	ALL	464783.4	3807502	3.70E-08	30YrCancel	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
890	ALL	464803.4	3807502	3.77E-08	30YrCancel	3.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
891	ALL	464823.4	3807502	3.74E-08	30YrCancel	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
892	ALL	464843.4	3807502	3.81E-08	30YrCancel	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
893	ALL	464863.4	3807502	4.33E-08	30YrCancel	4.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
894	ALL	464883.4	3807502	4.79E-08	30YrCancel	4.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
895	ALL	464903.4	3807502	4.75E-08	30YrCancel	4.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
896	ALL	464923.4	3807502	4.67E-08	30YrCancel	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
897	ALL	464503.4	3807522	4.54E-08	30YrCancel	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
898	ALL	464523.4	3807522	4.55E-08	30YrCancel	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

923	ALL	464583.4	3807542	4.38E-08	30YrCancel	4.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
924	ALL	464603.4	3807542	4.32E-08	30YrCancel	4.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
925	ALL	464623.4	3807542	4.24E-08	30YrCancel	4.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
926	ALL	464643.4	3807542	4.17E-08	30YrCancel	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
927	ALL	464663.4	3807542	4.12E-08	30YrCancel	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
928	ALL	464683.4	3807542	4.07E-08	30YrCancel	4.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
929	ALL	464703.4	3807542	4.02E-08	30YrCancel	4.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
930	ALL	464723.4	3807542	4.01E-08	30YrCancel	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
931	ALL	464743.4	3807542	3.97E-08	30YrCancel	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
932	ALL	464763.4	3807542	3.94E-08	30YrCancel	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
933	ALL	464783.4	3807542	3.95E-08	30YrCancel	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
934	ALL	464803.4	3807542	3.91E-08	30YrCancel	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
935	ALL	464823.4	3807542	4.26E-08	30YrCancel	4.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
936	ALL	464843.4	3807542	4.57E-08	30YrCancel	4.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
937	ALL	464863.4	3807542	4.60E-08	30YrCancel	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
938	ALL	464883.4	3807542	4.97E-08	30YrCancel	4.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
939	ALL	464903.4	3807542	4.90E-08	30YrCancel	4.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
940	ALL	464923.4	3807542	4.83E-08	30YrCancel	4.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
941	ALL	464503.4	3807562	4.88E-08	30YrCancel	4.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
942	ALL	464523.4	3807562	4.75E-08	30YrCancel	4.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E						

967	ALL	464583.4	3807582	4.61E-08	30YrCancel	4.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
968	ALL	464603.4	3807582	4.52E-08	30YrCancel	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
969	ALL	464623.4	3807582	4.43E-08	30YrCancel	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
970	ALL	464643.4	3807582	4.41E-08	30YrCancel	4.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
971	ALL	464663.4	3807582	4.34E-08	30YrCancel	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
972	ALL	464683.4	3807582	4.29E-08	30YrCancel	4.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
973	ALL	464703.4	3807582	4.28E-08	30YrCancel	4.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
974	ALL	464723.4	3807582	4.24E-08	30YrCancel	4.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
975	ALL	464743.4	3807582	4.24E-08	30YrCancel	4.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
976	ALL	464763.4	3807582	4.15E-08	30YrCancel	4.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
977	ALL	464783.4	3807582	4.21E-08	30YrCancel	4.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
978	ALL	464803.4	3807582	4.55E-08	30YrCancel	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
979	ALL	464823.4	3807582	4.53E-08	30YrCancel	4.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
980	ALL	464843.4	3807582	4.78E-08	30YrCancel	4.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
981	ALL	464863.4	3807582	5.23E-08	30YrCancel	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
982	ALL	464883.4	3807582	5.13E-08	30YrCancel	5.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
983	ALL	464903.4	3807582	5.06E-08	30YrCancel	5.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
984	ALL	464923.4	3807582	4.99E-08	30YrCancel	4.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
985	ALL	464503.4	3807602	5.08E-08	30YrCancel	5.08E-08	0.00E+00	0.00E+									

1011		464583.4	3807622	4.81E-08	30YrCancel	4.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1012	ALL	464603.4	3807622	4.75E-08	30YrCancel	4.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1013	ALL	464623.4	3807622	4.74E-08	30YrCancel	4.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1014	ALL	464643.4	3807622	4.64E-08	30YrCancel	4.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1015	ALL	464663.4	3807622	4.60E-08	30YrCancel	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1016	ALL	464683.4	3807622	4.67E-08	30YrCancel	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1017	ALL	464703.4	3807622	4.56E-08	30YrCancel	4.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1018	ALL	464723.4	3807622	4.50E-08	30YrCancel	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1019	ALL	464743.4	3807622	4.49E-08	30YrCancel	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1020	ALL	464763.4	3807622	4.84E-08	30YrCancel	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1021	ALL	464783.4	3807622	5.09E-08	30YrCancel	5.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1022	ALL	464803.4	3807622	5.07E-08	30YrCancel	5.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1023	ALL	464823.4	3807622	5.59E-08	30YrCancel	5.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1024	ALL	464843.4	3807622	5.50E-08	30YrCancel	5.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1025	ALL	464863.4	3807622	5.40E-08	30YrCancel	5.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1026	ALL	464883.4	3807622	5.33E-08	30YrCancel	5.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1027	ALL	464903.4	3807622	5.23E-08	30YrCancel	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1028	ALL	464923.4	3807622	5.14E-08	30YrCancel	5.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1029	ALL	464503.4	3807642	5.43E-08	30YrCancel	5.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1030	ALL	464523.4	3807642	5.29E-08	30YrCancel	5.29E-08	0.00E+00	0.00E+00								

1055		ALL	464583.4	3807662	5.09E-08	30YrCancel	5.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1056	ALL		464603.4	3807662	5.05E-08	30YrCancel	5.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1057	ALL		464623.4	3807662	4.98E-08	30YrCancel	4.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1058	ALL		464643.4	3807662	4.93E-08	30YrCancel	4.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1059	ALL		464663.4	3807662	5.03E-08	30YrCancel	5.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1060	ALL		464683.4	3807662	5.06E-08	30YrCancel	5.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1061	ALL		464703.4	3807662	4.95E-08	30YrCancel	4.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1062	ALL		464723.4	3807662	5.14E-08	30YrCancel	5.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1063	ALL		464743.4	3807662	5.47E-08	30YrCancel	5.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1064	ALL		464763.4	3807662	5.51E-08	30YrCancel	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1065	ALL		464783.4	3807662	5.94E-08	30YrCancel	5.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1066	ALL		464803.4	3807662	5.91E-08	30YrCancel	5.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1067	ALL		464823.4	3807662	5.81E-08	30YrCancel	5.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1068	ALL		464843.4	3807662	5.71E-08	30YrCancel	5.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1069	ALL		464863.4	3807662	5.61E-08	30YrCancel	5.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1070	ALL		464883.4	3807662	5.51E-08	30YrCancel	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1071	ALL		464903.4	3807662	5.41E-08	30YrCancel	5.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1072	ALL		464923.4	3807662	5.31E-08	30YrCancel	5.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1073	ALL		464503.4	3807682	5.90E-08	30YrCancel	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1074	ALL		46452														

1099	ALL	464603.4	3807702	5.36E-08	30YrCancel	5.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1100	ALL	464623.4	3807702	5.38E-08	30YrCancel	5.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1101	ALL	464643.4	3807702	5.56E-08	30YrCancel	5.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1102	ALL	464663.4	3807702	5.85E-08	30YrCancel	5.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1103	ALL	464683.4	3807702	6.07E-08	30YrCancel	6.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1104	ALL	464703.4	3807702	6.17E-08	30YrCancel	6.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1105	ALL	464723.4	3807702	6.63E-08	30YrCancel	6.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1106	ALL	464743.4	3807702	6.49E-08	30YrCancel	6.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1107	ALL	464763.4	3807702	6.35E-08	30YrCancel	6.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1108	ALL	464783.4	3807702	6.25E-08	30YrCancel	6.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1109	ALL	464803.4	3807702	6.14E-08	30YrCancel	6.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1110	ALL	464823.4	3807702	6.02E-08	30YrCancel	6.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1111	ALL	464843.4	3807702	5.91E-08	30YrCancel	5.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1112	ALL	464863.4	3807702	5.80E-08	30YrCancel	5.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1113	ALL	464883.4	3807702	5.69E-08	30YrCancel	5.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1114	ALL	464903.4	3807702	5.58E-08	30YrCancel	5.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1115	ALL	464923.4	3807702	5.48E-08	30YrCancel	5.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1116	ALL	464543.4	3807722	6.21E-08	30YrCancel	6.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1117	ALL	464563.4	3807722	5.87E-08	30YrCancel	5.87E-08											

1143	ALL	465083.4	3807722	4.78E-08	30YrCancel	4.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1144	ALL	465103.4	3807722	4.69E-08	30YrCancel	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1145	ALL	465123.4	3807722	4.61E-08	30YrCancel	4.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1146	ALL	465143.4	3807722	4.52E-08	30YrCancel	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1147	ALL	465163.4	3807722	4.44E-08	30YrCancel	4.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1148	ALL	465183.4	3807722	4.36E-08	30YrCancel	4.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1149	ALL	465203.4	3807722	4.29E-08	30YrCancel	4.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1150	ALL	465223.4	3807722	4.21E-08	30YrCancel	4.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1151	ALL	465243.4	3807722	4.14E-08	30YrCancel	4.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1152	ALL	465263.4	3807722	4.07E-08	30YrCancel	4.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1153	ALL	465283.4	3807722	4.00E-08	30YrCancel	4.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1154	ALL	465303.4	3807722	3.93E-08	30YrCancel	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1155	ALL	465323.4	3807722	3.86E-08	30YrCancel	3.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1156	ALL	465343.4	3807722	3.80E-08	30YrCancel	3.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1157	ALL	465363.4	3807722	3.74E-08	30YrCancel	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1158	ALL	465383.4	3807722	3.68E-08	30YrCancel	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1159	ALL	464543.4	3807742	7.45E-08	30YrCancel	7.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1160	ALL	464563.4	3807742	6.18E-08	30YrCancel	6.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1161	ALL	464583.4	3807742	5.94E-08	30YrCancel	5.94E-08											

1187	ALL	465103.4	3807742	4.75E-08	30YrCancel	4.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1188	ALL	465123.4	3807742	4.66E-08	30YrCancel	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1189	ALL	465143.4	3807742	4.58E-08	30YrCancel	4.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1190	ALL	465163.4	3807742	4.50E-08	30YrCancel	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1191	ALL	465183.4	3807742	4.42E-08	30YrCancel	4.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1192	ALL	465203.4	3807742	4.34E-08	30YrCancel	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1193	ALL	465223.4	3807742	4.26E-08	30YrCancel	4.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1194	ALL	465243.4	3807742	4.19E-08	30YrCancel	4.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1195	ALL	465263.4	3807742	4.11E-08	30YrCancel	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1196	ALL	465283.4	3807742	4.04E-08	30YrCancel	4.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1197	ALL	465303.4	3807742	3.97E-08	30YrCancel	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1198	ALL	465323.4	3807742	3.91E-08	30YrCancel	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1199	ALL	465343.4	3807742	3.84E-08	30YrCancel	3.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200	ALL	465363.4	3807742	3.78E-08	30YrCancel	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1201	ALL	465383.4	3807742	3.71E-08	30YrCancel	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1202	ALL	464543.4	3807762	8.75E-08	30YrCancel	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1203	ALL	464563.4	3807762	7.71E-08	30YrCancel	7.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1204	ALL	464583.4	3807762	7.19E-08	30YrCancel	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1205	ALL	464603.4	3807762	6.57E-08	30YrCancel	6.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1206	ALL	464623.4	3807762	6.53E-08	30YrCancel	6.53E-08	0.00E+00	0.00E+00								

1231		465123.4	3807762	4.72E-08	30YrCancel	4.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1232	ALL	465143.4	3807762	4.64E-08	30YrCancel	4.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1233	ALL	465163.4	3807762	4.55E-08	30YrCancel	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1234	ALL	465183.4	3807762	4.47E-08	30YrCancel	4.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1235	ALL	465203.4	3807762	4.39E-08	30YrCancel	4.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1236	ALL	465223.4	3807762	4.31E-08	30YrCancel	4.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1237	ALL	465243.4	3807762	4.23E-08	30YrCancel	4.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1238	ALL	465263.4	3807762	4.16E-08	30YrCancel	4.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1239	ALL	465283.4	3807762	4.09E-08	30YrCancel	4.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1240	ALL	465303.4	3807762	4.02E-08	30YrCancel	4.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1241	ALL	465323.4	3807762	3.95E-08	30YrCancel	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1242	ALL	465343.4	3807762	3.88E-08	30YrCancel	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1243	ALL	465363.4	3807762	3.82E-08	30YrCancel	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1244	ALL	465383.4	3807762	3.75E-08	30YrCancel	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1245	ALL	464543.4	3807782	8.98E-08	30YrCancel	8.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1246	ALL	464563.4	3807782	8.74E-08	30YrCancel	8.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1247	ALL	464583.4	3807782	8.50E-08	30YrCancel	8.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1248	ALL	464603.4	3807782	8.26E-08	30YrCancel	8.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1249	ALL	464623.4	3807782	8.04E-08	30YrCancel	8.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1250	ALL	464643.4	3807782	7.84E-08	30YrCancel	7.84E-08	0.00E+00	0.00E+00								

1275	ALL	465143.4	3807782	4.69E-08	30YrCancel	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1276	ALL	465163.4	3807782	4.61E-08	30YrCancel	4.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1277	ALL	465183.4	3807782	4.52E-08	30YrCancel	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1278	ALL	465203.4	3807782	4.44E-08	30YrCancel	4.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1279	ALL	465223.4	3807782	4.36E-08	30YrCancel	4.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1280	ALL	465243.4	3807782	4.28E-08	30YrCancel	4.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1281	ALL	465263.4	3807782	4.21E-08	30YrCancel	4.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1282	ALL	465283.4	3807782	4.13E-08	30YrCancel	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1283	ALL	465303.4	3807782	4.06E-08	30YrCancel	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1284	ALL	465323.4	3807782	3.99E-08	30YrCancel	3.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1285	ALL	465343.4	3807782	3.92E-08	30YrCancel	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1286	ALL	465363.4	3807782	3.86E-08	30YrCancel	3.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1287	ALL	465383.4	3807782	3.79E-08	30YrCancel	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1288	ALL	464543.4	3807802	9.19E-08	30YrCancel	9.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1289	ALL	464563.4	3807802	8.95E-08	30YrCancel	8.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1290	ALL	464583.4	3807802	8.72E-08	30YrCancel	8.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1291	ALL	464603.4	3807802	8.50E-08	30YrCancel	8.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1292	ALL	464623.4	3807802	8.26E-08	30YrCancel	8.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1293	ALL	464643.4	3807802	8.03E-08	30YrCancel	8.03E-08											

1319	ALL	465163.4	3807802	4.66E-08	30YrCancel	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1320	ALL	465183.4	3807802	4.58E-08	30YrCancel	4.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1321	ALL	465203.4	3807802	4.49E-08	30YrCancel	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1322	ALL	465223.4	3807802	4.41E-08	30YrCancel	4.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1323	ALL	465243.4	3807802	4.33E-08	30YrCancel	4.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1324	ALL	465263.4	3807802	4.25E-08	30YrCancel	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1325	ALL	465283.4	3807802	4.18E-08	30YrCancel	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1326	ALL	465303.4	3807802	4.11E-08	30YrCancel	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1327	ALL	465323.4	3807802	4.03E-08	30YrCancel	4.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1328	ALL	465343.4	3807802	3.96E-08	30YrCancel	3.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1329	ALL	465363.4	3807802	3.90E-08	30YrCancel	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1330	ALL	465383.4	3807802	3.83E-08	30YrCancel	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1331	ALL	464543.4	3807822	9.39E-08	30YrCancel	9.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1332	ALL	464563.4	3807822	9.15E-08	30YrCancel	9.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1333	ALL	464583.4	3807822	8.92E-08	30YrCancel	8.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1334	ALL	464603.4	3807822	8.68E-08	30YrCancel	8.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1335	ALL	464623.4	3807822	8.46E-08	30YrCancel	8.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1336	ALL	464643.4	3807822	8.22E-08	30YrCancel	8.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1337	ALL	464663.4	3807822	8.02E-08	30YrCancel	8.02E-08											

1365	ALL	465183.4	3807822	4.63E-08	30YrCancel	4.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1364	ALL	465203.4	3807822	4.55E-08	30YrCancel	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1365	ALL	465223.4	3807822	4.46E-08	30YrCancel	4.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1366	ALL	465243.4	3807822	4.38E-08	30YrCancel	4.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1367	ALL	465263.4	3807822	4.30E-08	30YrCancel	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1368	ALL	465283.4	3807822	4.23E-08	30YrCancel	4.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1369	ALL	465303.4	3807822	4.15E-08	30YrCancel	4.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1370	ALL	465323.4	3807822	4.08E-08	30YrCancel	4.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1371	ALL	465343.4	3807822	4.01E-08	30YrCancel	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1372	ALL	465363.4	3807822	3.94E-08	30YrCancel	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1373	ALL	465383.4	3807822	3.87E-08	30YrCancel	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1374	ALL	464543.4	3807842	9.57E-08	30YrCancel	9.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1375	ALL	464563.4	3807842	9.33E-08	30YrCancel	9.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1376	ALL	464583.4	3807842	9.10E-08	30YrCancel	9.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1377	ALL	464603.4	3807842	8.88E-08	30YrCancel	8.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1378	ALL	464623.4	3807842	8.64E-08	30YrCancel	8.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1379	ALL	464643.4	3807842	8.42E-08	30YrCancel	8.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1380	ALL	464663.4	3807842	8.21E-08	30YrCancel	8.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1381	ALL	464683.4	3807842	8.00E-08	30YrCancel	8.00E-08											

1407	ALL	465223.4	3807842	4.52E-08	30YrCancel	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1408	ALL	465243.4	3807842	4.43E-08	30YrCancel	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1409	ALL	465263.4	3807842	4.35E-08	30YrCancel	4.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1410	ALL	465283.4	3807842	4.27E-08	30YrCancel	4.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1411	ALL	465303.4	3807842	4.20E-08	30YrCancel	4.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1412	ALL	465323.4	3807842	4.12E-08	30YrCancel	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1413	ALL	465343.4	3807842	4.05E-08	30YrCancel	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1414	ALL	465363.4	3807842	3.98E-08	30YrCancel	3.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1415	ALL	465383.4	3807842	3.91E-08	30YrCancel	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1416	ALL	464503.4	3807862	1.03E-07	30YrCancel	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1417	ALL	464523.4	3807862	1.00E-07	30YrCancel	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1418	ALL	464543.4	3807862	9.75E-08	30YrCancel	9.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1419	ALL	464563.4	3807862	9.50E-08	30YrCancel	9.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1420	ALL	464583.4	3807862	9.28E-08	30YrCancel	9.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1421	ALL	464603.4	3807862	9.06E-08	30YrCancel	9.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1422	ALL	464723.4	3807862	7.77E-08	30YrCancel	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1423	ALL	464743.4	3807862	7.59E-08	30YrCancel	7.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1424	ALL	464763.4	3807862	7.41E-08	30YrCancel	7.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1425	ALL	464783.4	3807862	7.24E-08	30YrCancel	7.24E-08											

1451 ALL		465303.4	3807862	4.25E-08	30YrCancel	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1452 ALL		465323.4	3807862	4.17E-08	30YrCancel	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1453 ALL		465343.4	3807862	4.10E-08	30YrCancel	4.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1454 ALL		465363.4	3807862	4.03E-08	30YrCancel	4.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1455 ALL		465383.4	3807862	3.96E-08	30YrCancel	3.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1456 ALL		464503.4	3807882	1.06E-07	30YrCancel	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1457 ALL		464523.4	3807882	1.02E-07	30YrCancel	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1458 ALL		464543.4	3807882	9.96E-08	30YrCancel	9.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1459 ALL		464723.4	3807882	7.92E-08	30YrCancel	7.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1460 ALL		464743.4	3807882	7.73E-08	30YrCancel	7.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1461 ALL		464763.4	3807882	7.54E-08	30YrCancel	7.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1462 ALL		464783.4	3807882	7.37E-08	30YrCancel	7.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1463 ALL		464803.4	3807882	7.20E-08	30YrCancel	7.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1464 ALL		464823.4	3807882	7.04E-08	30YrCancel	7.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1465 ALL		464843.4	3807882	6.88E-08	30YrCancel	6.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1466 ALL		464863.4	3807882	6.72E-08	30YrCancel	6.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1467 ALL		464883.4	3807882	6.57E-08	30YrCancel	6.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1468 ALL		464903.4	3807882	6.43E-08	30YrCancel	6.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1469 ALL		464923.4	3807882	6.29E-08	30YrCancel	6.29E-08	0.00E+00	0.00E+									

1495	ALL	464763.4	3807902	7.68E-08	30YrCancel	7.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1496	ALL	464783.4	3807902	7.50E-08	30YrCancel	7.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1497	ALL	464803.4	3807902	7.33E-08	30YrCancel	7.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1498	ALL	464823.4	3807902	7.16E-08	30YrCancel	7.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1499	ALL	464843.4	3807902	6.99E-08	30YrCancel	6.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500	ALL	464863.4	3807902	6.83E-08	30YrCancel	6.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1501	ALL	464883.4	3807902	6.68E-08	30YrCancel	6.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1502	ALL	464903.4	3807902	6.53E-08	30YrCancel	6.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1503	ALL	464923.4	3807902	6.38E-08	30YrCancel	6.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1504	ALL	464943.4	3807902	6.24E-08	30YrCancel	6.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1505	ALL	464963.4	3807902	6.11E-08	30YrCancel	6.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1506	ALL	464983.4	3807902	5.97E-08	30YrCancel	5.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1507	ALL	465003.4	3807902	5.85E-08	30YrCancel	5.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1508	ALL	465023.4	3807902	5.72E-08	30YrCancel	5.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1509	ALL	465043.4	3807902	5.60E-08	30YrCancel	5.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1510	ALL	465063.4	3807902	5.49E-08	30YrCancel	5.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1511	ALL	465083.4	3807902	5.37E-08	30YrCancel	5.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1512	ALL	465103.4	3807902	5.27E-08	30YrCancel	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1513	ALL	465123.4	3807902	5.16E-08	30YrCancel	5.16E-08											

1539	ALL	464963.4	3807922	6.20E-08	30YrCancel	6.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1540	ALL	464983.4	3807922	6.06E-08	30YrCancel	6.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1541	ALL	465003.4	3807922	5.93E-08	30YrCancel	5.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1542	ALL	465023.4	3807922	5.80E-08	30YrCancel	5.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1543	ALL	465043.4	3807922	5.68E-08	30YrCancel	5.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1544	ALL	465063.4	3807922	5.56E-08	30YrCancel	5.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1545	ALL	465083.4	3807922	5.45E-08	30YrCancel	5.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1546	ALL	465103.4	3807922	5.34E-08	30YrCancel	5.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1547	ALL	465123.4	3807922	5.23E-08	30YrCancel	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1548	ALL	465143.4	3807922	5.13E-08	30YrCancel	5.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1549	ALL	465163.4	3807922	5.02E-08	30YrCancel	5.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1550	ALL	465183.4	3807922	4.93E-08	30YrCancel	4.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1551	ALL	465203.4	3807922	4.83E-08	30YrCancel	4.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1552	ALL	465223.4	3807922	4.74E-08	30YrCancel	4.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1553	ALL	465243.4	3807922	4.65E-08	30YrCancel	4.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1554	ALL	465263.4	3807922	4.56E-08	30YrCancel	4.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1555	ALL	465283.4	3807922	4.48E-08	30YrCancel	4.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1556	ALL	465303.4	3807922	4.40E-08	30YrCancel	4.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1557	ALL	465323.4	3807922	4.32E-08	30YrCancel	4.32E-08											

1583	ALL	465163.4	3807942	5.09E-08	30YrCancel	5.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1584	ALL	465183.4	3807942	4.99E-08	30YrCancel	4.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1585	ALL	465203.4	3807942	4.89E-08	30YrCancel	4.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1586	ALL	465223.4	3807942	4.80E-08	30YrCancel	4.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1587	ALL	465243.4	3807942	4.71E-08	30YrCancel	4.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1588	ALL	465263.4	3807942	4.62E-08	30YrCancel	4.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1589	ALL	465283.4	3807942	4.54E-08	30YrCancel	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1590	ALL	465303.4	3807942	4.46E-08	30YrCancel	4.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1591	ALL	465323.4	3807942	4.38E-08	30YrCancel	4.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1592	ALL	465343.4	3807942	4.30E-08	30YrCancel	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1593	ALL	465363.4	3807942	4.22E-08	30YrCancel	4.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1594	ALL	465383.4	3807942	4.15E-08	30YrCancel	4.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1595	ALL	465403.4	3807942	4.08E-08	30YrCancel	4.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1596	ALL	465423.4	3807942	4.01E-08	30YrCancel	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1597	ALL	465443.4	3807942	3.94E-08	30YrCancel	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1598	ALL	465463.4	3807942	3.88E-08	30YrCancel	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1599	ALL	465483.4	3807942	3.81E-08	30YrCancel	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600	ALL	465503.4	3807942	3.75E-08	30YrCancel	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1601	ALL	465523.4	3807942	3.69E-08	30YrCancel	3.69E-08											

1627	ALL	465043.4	3807962	5.85E-08	30YrCancel	5.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1628	ALL	465063.4	3807962	5.72E-08	30YrCancel	5.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1629	ALL	465083.4	3807962	5.60E-08	30YrCancel	5.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1630	ALL	465103.4	3807962	5.49E-08	30YrCancel	5.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1631	ALL	465123.4	3807962	5.37E-08	30YrCancel	5.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1632	ALL	465143.4	3807962	5.26E-08	30YrCancel	5.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1633	ALL	465163.4	3807962	5.16E-08	30YrCancel	5.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1634	ALL	465183.4	3807962	5.06E-08	30YrCancel	5.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1635	ALL	465203.4	3807962	4.96E-08	30YrCancel	4.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1636	ALL	465223.4	3807962	4.86E-08	30YrCancel	4.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1637	ALL	465243.4	3807962	4.77E-08	30YrCancel	4.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1638	ALL	465263.4	3807962	4.68E-08	30YrCancel	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1639	ALL	465283.4	3807962	4.60E-08	30YrCancel	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1640	ALL	465303.4	3807962	4.52E-08	30YrCancel	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1641	ALL	465323.4	3807962	4.43E-08	30YrCancel	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1642	ALL	465343.4	3807962	4.35E-08	30YrCancel	4.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1643	ALL	465363.4	3807962	4.28E-08	30YrCancel	4.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1644	ALL	465383.4	3807962	4.20E-08	30YrCancel	4.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1645	ALL	465403.4	3807962	4.13E-08	30YrCancel	4.13E-08											

1671		464943.4	3807982	6.64E-08	30YrCancel	6.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1672	ALL	464963.4	3807982	6.49E-08	30YrCancel	6.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1673	ALL	464983.4	3807982	6.34E-08	30YrCancel	6.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1674	ALL	465003.4	3807982	6.20E-08	30YrCancel	6.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1675	ALL	465023.4	3807982	6.07E-08	30YrCancel	6.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1676	ALL	465043.4	3807982	5.93E-08	30YrCancel	5.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1677	ALL	465063.4	3807982	5.81E-08	30YrCancel	5.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1678	ALL	465083.4	3807982	5.68E-08	30YrCancel	5.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1679	ALL	465103.4	3807982	5.56E-08	30YrCancel	5.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1680	ALL	465123.4	3807982	5.45E-08	30YrCancel	5.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1681	ALL	465143.4	3807982	5.34E-08	30YrCancel	5.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1682	ALL	465163.4	3807982	5.23E-08	30YrCancel	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1683	ALL	465183.4	3807982	5.13E-08	30YrCancel	5.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1684	ALL	465203.4	3807982	5.03E-08	30YrCancel	5.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1685	ALL	465223.4	3807982	4.93E-08	30YrCancel	4.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1686	ALL	465243.4	3807982	4.84E-08	30YrCancel	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1687	ALL	465263.4	3807982	4.75E-08	30YrCancel	4.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1688	ALL	465283.4	3807982	4.66E-08	30YrCancel	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1689	ALL	465303.4	3807982	4.57E-08	30YrCancel	4.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1690	ALL	465323.4	3807982	4.49E-08	30YrCancel	4.49E-08	0.00E+00	0.00E+00								

1715		464863.4	3808002	7.44E-08	30YrCancel	7.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1716	ALL	464883.4	3808002	7.25E-08	30YrCancel	7.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1717	ALL	464903.4	3808002	7.08E-08	30YrCancel	7.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1718	ALL	464923.4	3808002	6.91E-08	30YrCancel	6.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1719	ALL	464943.4	3808002	6.75E-08	30YrCancel	6.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1720	ALL	464963.4	3808002	6.59E-08	30YrCancel	6.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1721	ALL	464983.4	3808002	6.44E-08	30YrCancel	6.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1722	ALL	465003.4	3808002	6.30E-08	30YrCancel	6.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1723	ALL	465023.4	3808002	6.16E-08	30YrCancel	6.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1724	ALL	465043.4	3808002	6.02E-08	30YrCancel	6.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1725	ALL	465063.4	3808002	5.89E-08	30YrCancel	5.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1726	ALL	465083.4	3808002	5.77E-08	30YrCancel	5.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1727	ALL	465103.4	3808002	5.65E-08	30YrCancel	5.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1728	ALL	465123.4	3808002	5.53E-08	30YrCancel	5.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1729	ALL	465143.4	3808002	5.42E-08	30YrCancel	5.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1730	ALL	465163.4	3808002	5.30E-08	30YrCancel	5.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1731	ALL	465183.4	3808002	5.20E-08	30YrCancel	5.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1732	ALL	465203.4	3808002	5.10E-08	30YrCancel	5.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1733	ALL	465223.4	3808002	5.00E-08	30YrCancel	5.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1734	ALL	465243.4	3808002	4.91E-08	30YrCancel	4.91E-08	0.00E+00	0.00E+00								

1759	ALL	464783.4	3808022	8.38E-08	30YrCancel	8.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1760	ALL	464803.4	3808022	8.17E-08	30YrCancel	8.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1761	ALL	464823.4	3808022	7.96E-08	30YrCancel	7.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1762	ALL	464843.4	3808022	7.76E-08	30YrCancel	7.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1763	ALL	464863.4	3808022	7.57E-08	30YrCancel	7.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1764	ALL	464883.4	3808022	7.38E-08	30YrCancel	7.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1765	ALL	464903.4	3808022	7.20E-08	30YrCancel	7.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1766	ALL	464923.4	3808022	7.03E-08	30YrCancel	7.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1767	ALL	464943.4	3808022	6.86E-08	30YrCancel	6.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1768	ALL	464963.4	3808022	6.70E-08	30YrCancel	6.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1769	ALL	464983.4	3808022	6.55E-08	30YrCancel	6.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1770	ALL	465003.4	3808022	6.40E-08	30YrCancel	6.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1771	ALL	465023.4	3808022	6.26E-08	30YrCancel	6.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1772	ALL	465043.4	3808022	6.12E-08	30YrCancel	6.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1773	ALL	465063.4	3808022	5.99E-08	30YrCancel	5.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1774	ALL	465083.4	3808022	5.86E-08	30YrCancel	5.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1775	ALL	465103.4	3808022	5.73E-08	30YrCancel	5.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1776	ALL	465123.4	3808022	5.61E-08	30YrCancel	5.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1777	ALL	465143.4	3808022	5.50E-08	30YrCancel	5.50E-08											

1803	ALL	465663.4	3808022	3.47E-08	30YrCancel	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1804	ALL	465683.4	3808022	3.42E-08	30YrCancel	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1805	ALL	465703.4	3808022	3.37E-08	30YrCancel	3.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1806	ALL	464783.4	3808042	8.53E-08	30YrCancel	8.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1807	ALL	464803.4	3808042	8.32E-08	30YrCancel	8.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1808	ALL	464823.4	3808042	8.11E-08	30YrCancel	8.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1809	ALL	464843.4	3808042	7.90E-08	30YrCancel	7.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1810	ALL	464863.4	3808042	7.70E-08	30YrCancel	7.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1811	ALL	464883.4	3808042	7.51E-08	30YrCancel	7.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1812	ALL	464903.4	3808042	7.33E-08	30YrCancel	7.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1813	ALL	464923.4	3808042	7.15E-08	30YrCancel	7.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1814	ALL	464943.4	3808042	6.98E-08	30YrCancel	6.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1815	ALL	464963.4	3808042	6.81E-08	30YrCancel	6.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1816	ALL	464983.4	3808042	6.66E-08	30YrCancel	6.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1817	ALL	465003.4	3808042	6.50E-08	30YrCancel	6.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1818	ALL	465023.4	3808042	6.36E-08	30YrCancel	6.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1819	ALL	465043.4	3808042	6.22E-08	30YrCancel	6.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1820	ALL	465063.4	3808042	6.08E-08	30YrCancel	6.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1821	ALL	465083.4	3808042	5.95E-08	30YrCancel	5.95E-08											

1847	ALL	465603.4	3808042	3.68E-08	30YrCancel	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1848	ALL	465623.4	3808042	3.62E-08	30YrCancel	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1849	ALL	465643.4	3808042	3.57E-08	30YrCancel	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1850	ALL	465663.4	3808042	3.51E-08	30YrCancel	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1851	ALL	465683.4	3808042	3.46E-08	30YrCancel	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1852	ALL	465703.4	3808042	3.41E-08	30YrCancel	3.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1853	ALL	464803.4	3808062	8.47E-08	30YrCancel	8.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1854	ALL	464823.4	3808062	8.25E-08	30YrCancel	8.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1855	ALL	464843.4	3808062	8.04E-08	30YrCancel	8.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1856	ALL	464863.4	3808062	7.84E-08	30YrCancel	7.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1857	ALL	464883.4	3808062	7.65E-08	30YrCancel	7.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1858	ALL	464903.4	3808062	7.46E-08	30YrCancel	7.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1859	ALL	464923.4	3808062	7.28E-08	30YrCancel	7.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1860	ALL	464943.4	3808062	7.10E-08	30YrCancel	7.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1861	ALL	464963.4	3808062	6.93E-08	30YrCancel	6.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1862	ALL	464983.4	3808062	6.77E-08	30YrCancel	6.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1863	ALL	465003.4	3808062	6.61E-08	30YrCancel	6.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1864	ALL	465023.4	3808062	6.46E-08	30YrCancel	6.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1865	ALL	465043.4	3808062	6.32E-08	30YrCancel	6.32E-08											

1891	ALL	465563.4	3808062	3.85E-08	30YrCancel	3.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1892	ALL	465583.4	3808062	3.79E-08	30YrCancel	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1893	ALL	465603.4	3808062	3.73E-08	30YrCancel	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1894	ALL	465623.4	3808062	3.67E-08	30YrCancel	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1895	ALL	465643.4	3808062	3.61E-08	30YrCancel	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1896	ALL	465663.4	3808062	3.56E-08	30YrCancel	3.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1897	ALL	465683.4	3808062	3.50E-08	30YrCancel	3.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1898	ALL	465703.4	3808062	3.45E-08	30YrCancel	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1899	ALL	464823.4	3808082	8.41E-08	30YrCancel	8.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1900	ALL	464843.4	3808082	8.19E-08	30YrCancel	8.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1901	ALL	464863.4	3808082	7.99E-08	30YrCancel	7.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1902	ALL	464883.4	3808082	7.79E-08	30YrCancel	7.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1903	ALL	464903.4	3808082	7.59E-08	30YrCancel	7.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1904	ALL	464923.4	3808082	7.41E-08	30YrCancel	7.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1905	ALL	464943.4	3808082	7.23E-08	30YrCancel	7.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1906	ALL	464963.4	3808082	7.06E-08	30YrCancel	7.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1907	ALL	464983.4	3808082	6.89E-08	30YrCancel	6.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1908	ALL	465003.4	3808082	6.73E-08	30YrCancel	6.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1909	ALL	465023.4	3808082	6.58E-08	30YrCancel	6.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1910	ALL	465043.4	3808082	6.43E-08	30YrCancel	6.43E-08	0.00E+00	0.00E+00								

1935	ALL	465543.4	3808082	3.97E-08	30YrCancel	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1936	ALL	465563.4	3808082	3.90E-08	30YrCancel	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1937	ALL	465583.4	3808082	3.84E-08	30YrCancel	3.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1938	ALL	465603.4	3808082	3.78E-08	30YrCancel	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1939	ALL	465623.4	3808082	3.72E-08	30YrCancel	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1940	ALL	465643.4	3808082	3.66E-08	30YrCancel	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1941	ALL	465663.4	3808082	3.60E-08	30YrCancel	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1942	ALL	465683.4	3808082	3.55E-08	30YrCancel	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1943	ALL	465703.4	3808082	3.49E-08	30YrCancel	3.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1944	ALL	464843.4	3808102	8.35E-08	30YrCancel	8.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1945	ALL	464863.4	3808102	8.14E-08	30YrCancel	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1946	ALL	464883.4	3808102	7.94E-08	30YrCancel	7.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1947	ALL	464903.4	3808102	7.74E-08	30YrCancel	7.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1948	ALL	464923.4	3808102	7.55E-08	30YrCancel	7.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1949	ALL	464943.4	3808102	7.37E-08	30YrCancel	7.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1950	ALL	464963.4	3808102	7.19E-08	30YrCancel	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1951	ALL	464983.4	3808102	7.02E-08	30YrCancel	7.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1952	ALL	465003.4	3808102	6.85E-08	30YrCancel	6.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1953	ALL	465023.4	3808102	6.69E-08	30YrCancel	6.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1954	ALL	465043.4	3808102	6.54E-08	30YrCancel	6.54E-08	0.00E+00	0.00E+00								

1979		465543.4	3808102	4.02E-08	30YrCancel	4.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1980	ALL	465563.4	3808102	3.96E-08	30YrCancel	3.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1981	ALL	465583.4	3808102	3.89E-08	30YrCancel	3.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1982	ALL	465603.4	3808102	3.83E-08	30YrCancel	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1983	ALL	465623.4	3808102	3.77E-08	30YrCancel	3.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1984	ALL	465643.4	3808102	3.71E-08	30YrCancel	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1985	ALL	465663.4	3808102	3.65E-08	30YrCancel	3.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1986	ALL	465683.4	3808102	3.60E-08	30YrCancel	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1987	ALL	465703.4	3808102	3.54E-08	30YrCancel	3.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1988	ALL	464863.4	3808122	8.30E-08	30YrCancel	8.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1989	ALL	464883.4	3808122	8.10E-08	30YrCancel	8.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1990	ALL	464903.4	3808122	7.89E-08	30YrCancel	7.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1991	ALL	464923.4	3808122	7.70E-08	30YrCancel	7.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1992	ALL	464943.4	3808122	7.51E-08	30YrCancel	7.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1993	ALL	464963.4	3808122	7.32E-08	30YrCancel	7.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1994	ALL	464983.4	3808122	7.15E-08	30YrCancel	7.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1995	ALL	465003.4	3808122	6.98E-08	30YrCancel	6.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1996	ALL	465023.4	3808122	6.81E-08	30YrCancel	6.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1997	ALL	465043.4	3808122	6.66E-08	30YrCancel	6.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1998	ALL	465063.4	3808122	6.50E-08	30YrCancel	6.50E-08	0.00E+00	0.00E+00								

2023	ALL	465563.4	3808122	4.01E-08	30YrCancel	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2024	ALL	465583.4	3808122	3.95E-08	30YrCancel	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2025	ALL	465603.4	3808122	3.88E-08	30YrCancel	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2026	ALL	465623.4	3808122	3.82E-08	30YrCancel	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2027	ALL	465643.4	3808122	3.76E-08	30YrCancel	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2028	ALL	465663.4	3808122	3.70E-08	30YrCancel	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2029	ALL	465683.4	3808122	3.65E-08	30YrCancel	3.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2030	ALL	465703.4	3808122	3.59E-08	30YrCancel	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2031	ALL	464883.4	3808142	8.26E-08	30YrCancel	8.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2032	ALL	464903.4	3808142	8.05E-08	30YrCancel	8.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2033	ALL	464923.4	3808142	7.85E-08	30YrCancel	7.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2034	ALL	464943.4	3808142	7.66E-08	30YrCancel	7.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2035	ALL	464963.4	3808142	7.47E-08	30YrCancel	7.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2036	ALL	464983.4	3808142	7.29E-08	30YrCancel	7.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2037	ALL	465003.4	3808142	7.11E-08	30YrCancel	7.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2038	ALL	465023.4	3808142	6.94E-08	30YrCancel	6.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2039	ALL	465043.4	3808142	6.78E-08	30YrCancel	6.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2040	ALL	465063.4	3808142	6.62E-08	30YrCancel	6.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2041	ALL	465083.4	3808142	6.47E-08	30YrCancel	6.47E-08											

2067	ALL		465603.4	3808142	3.94E-08	30YrCancel	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2068	ALL		465623.4	3808142	3.87E-08	30YrCancel	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2069	ALL		465643.4	3808142	3.81E-08	30YrCancel	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2070	ALL		465663.4	3808142	3.75E-08	30YrCancel	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2071	ALL		465683.4	3808142	3.70E-08	30YrCancel	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2072	ALL		465703.4	3808142	3.64E-08	30YrCancel	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2073	ALL		464883.4	3808162	8.43E-08	30YrCancel	8.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2074	ALL		464903.4	3808162	8.22E-08	30YrCancel	8.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2075	ALL		464923.4	3808162	8.01E-08	30YrCancel	8.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2076	ALL		464943.4	3808162	7.81E-08	30YrCancel	7.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2077	ALL		464963.4	3808162	7.62E-08	30YrCancel	7.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2078	ALL		464983.4	3808162	7.43E-08	30YrCancel	7.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2079	ALL		465003.4	3808162	7.25E-08	30YrCancel	7.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2080	ALL		465023.4	3808162	7.08E-08	30YrCancel	7.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2081	ALL		465043.4	3808162	6.91E-08	30YrCancel	6.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2082	ALL		465063.4	3808162	6.75E-08	30YrCancel	6.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2083	ALL		465083.4	3808162	6.59E-08	30YrCancel	6.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2084	ALL		465103.4	3808162	6.45E-08	30YrCancel	6.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2085	ALL		465123.4	3808162	6.31E-08	30YrCancel	6.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2086	ALL		46514														

2111	ALL	465643.4	3808162	3.87E-08	30YrCancel	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2112	ALL	465663.4	3808162	3.81E-08	30YrCancel	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2113	ALL	465683.4	3808162	3.75E-08	30YrCancel	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2114	ALL	465703.4	3808162	3.69E-08	30YrCancel	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2115	ALL	464903.4	3808182	8.39E-08	30YrCancel	8.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2116	ALL	464923.4	3808182	8.18E-08	30YrCancel	8.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2117	ALL	464943.4	3808182	7.97E-08	30YrCancel	7.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2118	ALL	464963.4	3808182	7.77E-08	30YrCancel	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2119	ALL	464983.4	3808182	7.58E-08	30YrCancel	7.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2120	ALL	465003.4	3808182	7.39E-08	30YrCancel	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2121	ALL	465023.4	3808182	7.22E-08	30YrCancel	7.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2122	ALL	465043.4	3808182	7.04E-08	30YrCancel	7.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2123	ALL	465063.4	3808182	6.88E-08	30YrCancel	6.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2124	ALL	465083.4	3808182	6.72E-08	30YrCancel	6.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2125	ALL	465103.4	3808182	6.57E-08	30YrCancel	6.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2126	ALL	465123.4	3808182	6.42E-08	30YrCancel	6.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2127	ALL	465143.4	3808182	6.28E-08	30YrCancel	6.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2128	ALL	465163.4	3808182	6.15E-08	30YrCancel	6.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2129	ALL	465183.4	3808182	6.01E-08	30YrCancel	6.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2130	ALL	465203.4	3808182	5.89E-08	30YrCancel	5.89E-08	0.00E+00	0.00E+00								

2155		465703.4	3808182	3.74E-08	30YrCancel	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2156	ALL	464923.4	3808202	8.35E-08	30YrCancel	8.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2157	ALL	464943.4	3808202	8.14E-08	30YrCancel	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2158	ALL	464963.4	3808202	7.93E-08	30YrCancel	7.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2159	ALL	464983.4	3808202	7.73E-08	30YrCancel	7.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2160	ALL	465003.4	3808202	7.54E-08	30YrCancel	7.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2161	ALL	465023.4	3808202	7.36E-08	30YrCancel	7.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2162	ALL	465043.4	3808202	7.18E-08	30YrCancel	7.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2163	ALL	465063.4	3808202	7.01E-08	30YrCancel	7.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2164	ALL	465083.4	3808202	6.85E-08	30YrCancel	6.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2165	ALL	465103.4	3808202	6.70E-08	30YrCancel	6.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2166	ALL	465123.4	3808202	6.54E-08	30YrCancel	6.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2167	ALL	465143.4	3808202	6.40E-08	30YrCancel	6.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2168	ALL	465163.4	3808202	6.26E-08	30YrCancel	6.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2169	ALL	465183.4	3808202	6.12E-08	30YrCancel	6.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2170	ALL	465203.4	3808202	5.99E-08	30YrCancel	5.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2171	ALL	465223.4	3808202	5.86E-08	30YrCancel	5.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2172	ALL	465243.4	3808202	5.74E-08	30YrCancel	5.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2173	ALL	465263.4	3808202	5.62E-08	30YrCancel	5.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2174	ALL	465283.4	3808202	5.51E-08	30YrCancel	5.51E-08	0.00E+00	0.00E+00								

2199	ALL	465003.4	3808222	7.70E-08	30YrCancel	7.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200	ALL	465023.4	3808222	7.51E-08	30YrCancel	7.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2201	ALL	465043.4	3808222	7.33E-08	30YrCancel	7.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2202	ALL	465063.4	3808222	7.16E-08	30YrCancel	7.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2203	ALL	465083.4	3808222	6.99E-08	30YrCancel	6.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2204	ALL	465103.4	3808222	6.82E-08	30YrCancel	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2205	ALL	465123.4	3808222	6.67E-08	30YrCancel	6.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2206	ALL	465143.4	3808222	6.52E-08	30YrCancel	6.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2207	ALL	465163.4	3808222	6.37E-08	30YrCancel	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2208	ALL	465183.4	3808222	6.23E-08	30YrCancel	6.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2209	ALL	465203.4	3808222	6.10E-08	30YrCancel	6.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2210	ALL	465223.4	3808222	5.97E-08	30YrCancel	5.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2211	ALL	465243.4	3808222	5.84E-08	30YrCancel	5.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2212	ALL	465263.4	3808222	5.72E-08	30YrCancel	5.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2213	ALL	465283.4	3808222	5.60E-08	30YrCancel	5.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2214	ALL	465303.4	3808222	5.49E-08	30YrCancel	5.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2215	ALL	465323.4	3808222	5.38E-08	30YrCancel	5.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2216	ALL	465343.4	3808222	5.27E-08	30YrCancel	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2217	ALL	465363.4	3808222	5.18E-08	30YrCancel	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2218	ALL	465383.4	3808222	5.08E-08	30YrCancel	5.08E-08	0.00E+00	0.00E+00								

2243	ALL	465123.4	3808242	6.79E-08	30YrCancel	6.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2244	ALL	465143.4	3808242	6.64E-08	30YrCancel	6.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2245	ALL	465163.4	3808242	6.49E-08	30YrCancel	6.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2246	ALL	465183.4	3808242	6.35E-08	30YrCancel	6.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2247	ALL	465203.4	3808242	6.21E-08	30YrCancel	6.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2248	ALL	465223.4	3808242	6.07E-08	30YrCancel	6.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2249	ALL	465243.4	3808242	5.94E-08	30YrCancel	5.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2250	ALL	465263.4	3808242	5.82E-08	30YrCancel	5.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2251	ALL	465283.4	3808242	5.70E-08	30YrCancel	5.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2252	ALL	465303.4	3808242	5.58E-08	30YrCancel	5.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2253	ALL	465323.4	3808242	5.47E-08	30YrCancel	5.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2254	ALL	465343.4	3808242	5.36E-08	30YrCancel	5.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2255	ALL	465363.4	3808242	5.26E-08	30YrCancel	5.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2256	ALL	465383.4	3808242	5.16E-08	30YrCancel	5.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2257	ALL	465403.4	3808242	5.06E-08	30YrCancel	5.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2258	ALL	465423.4	3808242	4.97E-08	30YrCancel	4.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2259	ALL	465443.4	3808242	4.87E-08	30YrCancel	4.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2260	ALL	465463.4	3808242	4.78E-08	30YrCancel	4.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2261	ALL	465483.4	3808242	4.70E-08	30YrCancel	4.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2262	ALL	465503.4	3808242	4.62E-08	30YrCancel	4.62E-08	0.00E+00	0.00E+00								

2287	ALL	465263.4	3808262	5.92E-08	30YrCancel	5.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2288	ALL	465283.4	3808262	5.80E-08	30YrCancel	5.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2289	ALL	465303.4	3808262	5.68E-08	30YrCancel	5.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2290	ALL	465323.4	3808262	5.56E-08	30YrCancel	5.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2291	ALL	465343.4	3808262	5.45E-08	30YrCancel	5.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2292	ALL	465363.4	3808262	5.35E-08	30YrCancel	5.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2293	ALL	465383.4	3808262	5.25E-08	30YrCancel	5.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2294	ALL	465403.4	3808262	5.14E-08	30YrCancel	5.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2295	ALL	465423.4	3808262	5.05E-08	30YrCancel	5.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2296	ALL	465443.4	3808262	4.95E-08	30YrCancel	4.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2297	ALL	465463.4	3808262	4.86E-08	30YrCancel	4.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2298	ALL	465483.4	3808262	4.77E-08	30YrCancel	4.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2299	ALL	465503.4	3808262	4.68E-08	30YrCancel	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300	ALL	465523.4	3808262	4.60E-08	30YrCancel	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2301	ALL	465543.4	3808262	4.52E-08	30YrCancel	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2302	ALL	465563.4	3808262	4.45E-08	30YrCancel	4.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2303	ALL	465583.4	3808262	4.37E-08	30YrCancel	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2304	ALL	465603.4	3808262	4.29E-08	30YrCancel	4.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2305	ALL	465623.4	3808262	4.22E-08	30YrCancel	4.22E-08											

2331	ALL	465423.4	3808282	5.13E-08	30YrCancel	5.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2332	ALL	465443.4	3808282	5.04E-08	30YrCancel	5.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2333	ALL	465463.4	3808282	4.94E-08	30YrCancel	4.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2334	ALL	465483.4	3808282	4.85E-08	30YrCancel	4.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2335	ALL	465503.4	3808282	4.76E-08	30YrCancel	4.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2336	ALL	465523.4	3808282	4.67E-08	30YrCancel	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2337	ALL	465543.4	3808282	4.59E-08	30YrCancel	4.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2338	ALL	465563.4	3808282	4.51E-08	30YrCancel	4.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2339	ALL	465583.4	3808282	4.43E-08	30YrCancel	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2340	ALL	465603.4	3808282	4.35E-08	30YrCancel	4.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2341	ALL	465623.4	3808282	4.28E-08	30YrCancel	4.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2342	ALL	465643.4	3808282	4.21E-08	30YrCancel	4.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2343	ALL	465663.4	3808282	4.14E-08	30YrCancel	4.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2344	ALL	465683.4	3808282	4.08E-08	30YrCancel	4.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2345	ALL	465703.4	3808282	4.01E-08	30YrCancel	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2346	ALL	465003.4	3808302	8.34E-08	30YrCancel	8.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2347	ALL	465023.4	3808302	8.14E-08	30YrCancel	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2348	ALL	465043.4	3808302	7.94E-08	30YrCancel	7.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2349	ALL	465063.4	3808302	7.73E-08	30YrCancel	7.73E-08											

2375		465583.4	3808302	4.49E-08	30YrCancel	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2376	ALL	465603.4	3808302	4.41E-08	30YrCancel	4.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2377	ALL	465623.4	3808302	4.34E-08	30YrCancel	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2378	ALL	465643.4	3808302	4.27E-08	30YrCancel	4.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2379	ALL	465663.4	3808302	4.19E-08	30YrCancel	4.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2380	ALL	465683.4	3808302	4.13E-08	30YrCancel	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2381	ALL	465703.4	3808302	4.06E-08	30YrCancel	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2382	ALL	465043.4	3808322	8.09E-08	30YrCancel	8.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2383	ALL	465063.4	3808322	7.89E-08	30YrCancel	7.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2384	ALL	465083.4	3808322	7.69E-08	30YrCancel	7.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2385	ALL	465103.4	3808322	7.51E-08	30YrCancel	7.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2386	ALL	465123.4	3808322	7.33E-08	30YrCancel	7.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2387	ALL	465143.4	3808322	7.15E-08	30YrCancel	7.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2388	ALL	465163.4	3808322	6.99E-08	30YrCancel	6.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2389	ALL	465183.4	3808322	6.82E-08	30YrCancel	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2390	ALL	465203.4	3808322	6.67E-08	30YrCancel	6.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2391	ALL	465223.4	3808322	6.52E-08	30YrCancel	6.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2392	ALL	465243.4	3808322	6.37E-08	30YrCancel	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2393	ALL	465263.4	3808322	6.23E-08	30YrCancel	6.23E-08	0.										

2419		465143.4	3808342	7.28E-08	30YrCancel	7.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2420	ALL	465163.4	3808342	7.11E-08	30YrCancel	7.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2421	ALL	465183.4	3808342	6.95E-08	30YrCancel	6.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2422	ALL	465203.4	3808342	6.79E-08	30YrCancel	6.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2423	ALL	465223.4	3808342	6.63E-08	30YrCancel	6.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2424	ALL	465243.4	3808342	6.48E-08	30YrCancel	6.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2425	ALL	465263.4	3808342	6.34E-08	30YrCancel	6.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2426	ALL	465283.4	3808342	6.20E-08	30YrCancel	6.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2427	ALL	465303.4	3808342	6.07E-08	30YrCancel	6.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2428	ALL	465323.4	3808342	5.94E-08	30YrCancel	5.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2429	ALL	465343.4	3808342	5.83E-08	30YrCancel	5.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2430	ALL	465363.4	3808342	5.71E-08	30YrCancel	5.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2431	ALL	465383.4	3808342	5.59E-08	30YrCancel	5.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2432	ALL	465403.4	3808342	5.48E-08	30YrCancel	5.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2433	ALL	465423.4	3808342	5.37E-08	30YrCancel	5.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2434	ALL	465443.4	3808342	5.27E-08	30YrCancel	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2435	ALL	465463.4	3808342	5.16E-08	30YrCancel	5.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2436	ALL	465483.4	3808342	5.07E-08	30YrCancel	5.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2437	ALL	465503.4	3808342	4.97E-08	30YrCancel	4.97E-08	0.										

2463	ALL	465403.4	3808362	5.56E-08	30YrCancel	5.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2464	ALL	465423.4	3808362	5.45E-08	30YrCancel	5.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2465	ALL	465443.4	3808362	5.34E-08	30YrCancel	5.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2466	ALL	465463.4	3808362	5.24E-08	30YrCancel	5.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2467	ALL	465483.4	3808362	5.14E-08	30YrCancel	5.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2468	ALL	465503.4	3808362	5.04E-08	30YrCancel	5.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2469	ALL	465523.4	3808362	4.94E-08	30YrCancel	4.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2470	ALL	465543.4	3808362	4.85E-08	30YrCancel	4.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2471	ALL	465563.4	3808362	4.77E-08	30YrCancel	4.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2472	ALL	465583.4	3808362	4.68E-08	30YrCancel	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2473	ALL	465603.4	3808362	4.59E-08	30YrCancel	4.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2474	ALL	465623.4	3808362	4.52E-08	30YrCancel	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2475	ALL	465643.4	3808362	4.44E-08	30YrCancel	4.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2476	ALL	465663.4	3808362	4.36E-08	30YrCancel	4.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2477	ALL	465683.4	3808362	4.29E-08	30YrCancel	4.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2478	ALL	465703.4	3808362	4.22E-08	30YrCancel	4.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2479	ALL	465183.4	3808382	7.18E-08	30YrCancel	7.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2480	ALL	465203.4	3808382	7.02E-08	30YrCancel	7.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2481	ALL	465223.4	3808382	6.86E-08	30YrCancel	6.86E-08											

2507	ALL	465323.4	3808402	6.23E-08	30YrCancel	6.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2508	ALL	465343.4	3808402	6.10E-08	30YrCancel	6.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2509	ALL	465363.4	3808402	5.97E-08	30YrCancel	5.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2510	ALL	465383.4	3808402	5.85E-08	30YrCancel	5.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2511	ALL	465403.4	3808402	5.73E-08	30YrCancel	5.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2512	ALL	465423.4	3808402	5.61E-08	30YrCancel	5.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2513	ALL	465443.4	3808402	5.50E-08	30YrCancel	5.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2514	ALL	465463.4	3808402	5.39E-08	30YrCancel	5.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2515	ALL	465483.4	3808402	5.28E-08	30YrCancel	5.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2516	ALL	465503.4	3808402	5.18E-08	30YrCancel	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2517	ALL	465523.4	3808402	5.08E-08	30YrCancel	5.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2518	ALL	465543.4	3808402	4.99E-08	30YrCancel	4.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2519	ALL	465563.4	3808402	4.89E-08	30YrCancel	4.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2520	ALL	465583.4	3808402	4.80E-08	30YrCancel	4.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2521	ALL	465603.4	3808402	4.72E-08	30YrCancel	4.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2522	ALL	465623.4	3808402	4.63E-08	30YrCancel	4.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2523	ALL	465643.4	3808402	4.55E-08	30YrCancel	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2524	ALL	465663.4	3808402	4.47E-08	30YrCancel	4.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2525	ALL	465683.4	3808402	4.40E-08	30YrCancel	4.40E-08											

2551		465403.4	3808442	5.88E-08	30YrCancel	5.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2552	ALL	465423.4	3808442	5.76E-08	30YrCancel	5.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2553	ALL	465443.4	3808442	5.64E-08	30YrCancel	5.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2554	ALL	465463.4	3808442	5.53E-08	30YrCancel	5.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2555	ALL	465483.4	3808442	5.42E-08	30YrCancel	5.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2556	ALL	465503.4	3808442	5.31E-08	30YrCancel	5.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2557	ALL	465523.4	3808442	5.21E-08	30YrCancel	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2558	ALL	465543.4	3808442	5.11E-08	30YrCancel	5.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2559	ALL	465563.4	3808442	5.01E-08	30YrCancel	5.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2560	ALL	465583.4	3808442	4.92E-08	30YrCancel	4.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2561	ALL	465603.4	3808442	4.83E-08	30YrCancel	4.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2562	ALL	465623.4	3808442	4.74E-08	30YrCancel	4.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2563	ALL	465643.4	3808442	4.67E-08	30YrCancel	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2564	ALL	465663.4	3808442	4.58E-08	30YrCancel	4.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2565	ALL	465683.4	3808442	4.50E-08	30YrCancel	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2566	ALL	465703.4	3808442	4.43E-08	30YrCancel	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2567	ALL	465343.4	3808462	6.37E-08	30YrCancel	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2568	ALL	465363.4	3808462	6.22E-08	30YrCancel	6.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2569	ALL	465383.4	3808462	6.09E-08	30YrCancel	6.09E-08	0.										

2595	ALL	465523.4	3808482	5.33E-08	30YrCancel	5.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2596	ALL	465543.4	3808482	5.22E-08	30YrCancel	5.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2597	ALL	465563.4	3808482	5.12E-08	30YrCancel	5.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2598	ALL	465583.4	3808482	5.03E-08	30YrCancel	5.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2599	ALL	465603.4	3808482	4.93E-08	30YrCancel	4.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2600	ALL	465623.4	3808482	4.84E-08	30YrCancel	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2601	ALL	465643.4	3808482	4.77E-08	30YrCancel	4.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2602	ALL	465663.4	3808482	4.68E-08	30YrCancel	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2603	ALL	465683.4	3808482	4.60E-08	30YrCancel	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2604	ALL	465703.4	3808482	4.52E-08	30YrCancel	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2605	ALL	465463.4	3808502	5.73E-08	30YrCancel	5.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2606	ALL	465483.4	3808502	5.62E-08	30YrCancel	5.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2607	ALL	465503.4	3808502	5.51E-08	30YrCancel	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2608	ALL	465523.4	3808502	5.39E-08	30YrCancel	5.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2609	ALL	465543.4	3808502	5.28E-08	30YrCancel	5.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2610	ALL	465563.4	3808502	5.18E-08	30YrCancel	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2611	ALL	465583.4	3808502	5.08E-08	30YrCancel	5.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2612	ALL	465603.4	3808502	4.98E-08	30YrCancel	4.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2613	ALL	465623.4	3808502	4.89E-08	30YrCancel	4.89E-08											

2639	ALL	463783.3	3809620	4.08E-07	30YrCancel	4.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2640	ALL	463821.3	3809620	4.07E-07	30YrCancel	4.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2641	ALL	463859.3	3809620	4.06E-07	30YrCancel	4.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2642	ALL	463897.3	3809620	4.09E-07	30YrCancel	4.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2643	ALL	463935.3	3809620	4.14E-07	30YrCancel	4.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2644	ALL	463973.3	3809620	4.14E-07	30YrCancel	4.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2645	ALL	464011.3	3809620	4.11E-07	30YrCancel	4.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2646	ALL	464049.3	3809620	4.06E-07	30YrCancel	4.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2647	ALL	464087.3	3809620	4.00E-07	30YrCancel	4.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2648	ALL	464125.3	3809620	3.95E-07	30YrCancel	3.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2649	ALL	464163.3	3809620	3.91E-07	30YrCancel	3.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2650	ALL	464201.3	3809620	3.84E-07	30YrCancel	3.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2651	ALL	464239.3	3809620	3.82E-07	30YrCancel	3.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2652	ALL	464277.3	3809620	3.77E-07	30YrCancel	3.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2653	ALL	463745.3	3809649	3.45E-07	30YrCancel	3.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2654	ALL	463783.3	3809649	3.47E-07	30YrCancel	3.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2655	ALL	463821.3	3809649	3.47E-07	30YrCancel	3.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2656	ALL	463859.3	3809649	3.46E-07	30YrCancel	3.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2657	ALL	463897.3	3809649	3.48E-07	30YrCancel	3.48E-07											

2683	ALL	464087.3	3809679	2.99E-07	30YrCancel	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2684	ALL	464125.3	3809679	2.96E-07	30YrCancel	2.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2685	ALL	464163.3	3809679	2.91E-07	30YrCancel	2.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2686	ALL	464201.3	3809679	2.88E-07	30YrCancel	2.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2687	ALL	464239.3	3809679	2.83E-07	30YrCancel	2.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2688	ALL	464277.3	3809679	2.79E-07	30YrCancel	2.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2689	ALL	464315.3	3809679	2.75E-07	30YrCancel	2.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2690	ALL	464353.3	3809679	2.72E-07	30YrCancel	2.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2691	ALL	464391.3	3809679	2.69E-07	30YrCancel	2.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2692	ALL	464429.3	3809679	2.65E-07	30YrCancel	2.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2693	ALL	464467.3	3809679	2.64E-07	30YrCancel	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2694	ALL	464505.3	3809679	2.60E-07	30YrCancel	2.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2695	ALL	463745.3	3809708	2.69E-07	30YrCancel	2.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2696	ALL	463783.3	3809708	2.71E-07	30YrCancel	2.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2697	ALL	463821.3	3809708	2.74E-07	30YrCancel	2.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2698	ALL	463859.3	3809708	2.75E-07	30YrCancel	2.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2699	ALL	463897.3	3809708	2.75E-07	30YrCancel	2.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2700	ALL	463935.3	3809708	2.77E-07	30YrCancel	2.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2701	ALL	463973.3	3809708	2.76E-07	30YrCancel	2.76E-07											

2727		464163.3	3809737	2.41E-07	30YrCancel	2.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2728	ALL	464201.3	3809737	2.37E-07	30YrCancel	2.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2729	ALL	464239.3	3809737	2.33E-07	30YrCancel	2.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2730	ALL	464277.3	3809737	2.29E-07	30YrCancel	2.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2731	ALL	464315.3	3809737	2.26E-07	30YrCancel	2.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2732	ALL	464353.3	3809737	2.23E-07	30YrCancel	2.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2733	ALL	464391.3	3809737	2.20E-07	30YrCancel	2.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2734	ALL	464429.3	3809737	2.17E-07	30YrCancel	2.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2735	ALL	464467.3	3809737	2.15E-07	30YrCancel	2.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2736	ALL	464505.3	3809737	2.12E-07	30YrCancel	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2737	ALL	463745.3	3809766	2.28E-07	30YrCancel	2.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2738	ALL	463783.3	3809766	2.28E-07	30YrCancel	2.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2739	ALL	463821.3	3809766	2.28E-07	30YrCancel	2.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2740	ALL	463859.3	3809766	2.29E-07	30YrCancel	2.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2741	ALL	463897.3	3809766	2.30E-07	30YrCancel	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2742	ALL	463935.3	3809766	2.30E-07	30YrCancel	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2743	ALL	463973.3	3809766	2.30E-07	30YrCancel	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2744	ALL	464011.3	3809766	2.32E-07	30YrCancel	2.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2745	ALL	464049.3	3809766	2.32E-07	30YrCancel	2.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2746	ALL	464087.3	3809766	2.29E-07	30YrCancel	2.29E-07	0.00E+00	0.00E+00								

2771		ALL	464239.3	3809795	2.01E-07	30YrCancel	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2772	ALL		464277.3	3809795	1.98E-07	30YrCancel	1.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2773		ALL	464315.3	3809795	1.95E-07	30YrCancel	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2774	ALL		464353.3	3809795	1.92E-07	30YrCancel	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2775		ALL	464391.3	3809795	1.89E-07	30YrCancel	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2776	ALL		464429.3	3809795	1.87E-07	30YrCancel	1.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2777		ALL	464467.3	3809795	1.84E-07	30YrCancel	1.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2778	ALL		464505.3	3809795	1.82E-07	30YrCancel	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2779		ALL	463745.3	3809824	2.00E-07	30YrCancel	2.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2780	ALL		463783.3	3809824	1.98E-07	30YrCancel	1.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2781		ALL	463821.3	3809824	1.97E-07	30YrCancel	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2782	ALL		463859.3	3809824	1.97E-07	30YrCancel	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2783		ALL	463897.3	3809824	1.97E-07	30YrCancel	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2784	ALL		463935.3	3809824	1.97E-07	30YrCancel	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2785		ALL	463973.3	3809824	1.97E-07	30YrCancel	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2786	ALL		464011.3	3809824	1.98E-07	30YrCancel	1.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2787		ALL	464049.3	3809824	2.01E-07	30YrCancel	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2788	ALL		464087.3	3809824	2.00E-07	30YrCancel	2.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2789		ALL	464125.3	3809824	1.99E-07	30YrCancel	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2790	ALL		46416														

[illegible]

2859	ALL	464391.3	3809911	1.51E-07	30YrCancel	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2860	ALL	464429.3	3809911	1.49E-07	30YrCancel	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2861	ALL	464467.3	3809911	1.47E-07	30YrCancel	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2862	ALL	464505.3	3809911	1.45E-07	30YrCancel	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2863	ALL	463745.3	3809940	1.63E-07	30YrCancel	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2864	ALL	463783.3	3809940	1.61E-07	30YrCancel	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2865	ALL	463821.3	3809940	1.59E-07	30YrCancel	1.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2866	ALL	463859.3	3809940	1.57E-07	30YrCancel	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2867	ALL	463897.3	3809940	1.56E-07	30YrCancel	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2868	ALL	463935.3	3809940	1.55E-07	30YrCancel	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2869	ALL	463973.3	3809940	1.54E-07	30YrCancel	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2870	ALL	464011.3	3809940	1.53E-07	30YrCancel	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2871	ALL	464049.3	3809940	1.54E-07	30YrCancel	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2872	ALL	464087.3	3809940	1.54E-07	30YrCancel	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2873	ALL	464125.3	3809940	1.54E-07	30YrCancel	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2874	ALL	464163.3	3809940	1.54E-07	30YrCancel	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2875	ALL	464201.3	3809940	1.53E-07	30YrCancel	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2876	ALL	464239.3	3809940	1.52E-07	30YrCancel	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2877	ALL	464277.3	3809940	1.50E-07	30YrCancel	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2878	ALL	464315.3	3809940	1.48E-07	30YrCancel	1.48E-07	0.00E+00	0.00E+00								

2903		464467.3	3809969	1.34E-07	30YrCancel	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2904	ALL	464505.3	3809969	1.32E-07	30YrCancel	1.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2905	ALL	463745.3	3809998	1.54E-07	30YrCancel	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2906	ALL	463783.3	3809998	1.49E-07	30YrCancel	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2907	ALL	463821.3	3809998	1.47E-07	30YrCancel	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2908	ALL	463859.3	3809998	1.44E-07	30YrCancel	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2909	ALL	463897.3	3809998	1.43E-07	30YrCancel	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2910	ALL	463935.3	3809998	1.41E-07	30YrCancel	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2911	ALL	463973.3	3809998	1.41E-07	30YrCancel	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2912	ALL	464011.3	3809998	1.39E-07	30YrCancel	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2913	ALL	464049.3	3809998	1.39E-07	30YrCancel	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2914	ALL	464087.3	3809998	1.38E-07	30YrCancel	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2915	ALL	464125.3	3809998	1.39E-07	30YrCancel	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2916	ALL	464163.3	3809998	1.39E-07	30YrCancel	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2917	ALL	464201.3	3809998	1.39E-07	30YrCancel	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2918	ALL	464239.3	3809998	1.38E-07	30YrCancel	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2919	ALL	464277.3	3809998	1.37E-07	30YrCancel	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2920	ALL	464315.3	3809998	1.35E-07	30YrCancel	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2921	ALL	464353.3	3809998	1.34E-07	30YrCancel	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2922	ALL	464391.3	3809998	1.32E-07	30YrCancel	1.32E-07	0.00E+00	0.00E+00								

2947		463745.3	3810056	1.48E-07	30YrCancel	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2948	ALL	463783.3	3810056	1.42E-07	30YrCancel	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2949	ALL	463821.3	3810056	1.38E-07	30YrCancel	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2950	ALL	463859.3	3810056	1.35E-07	30YrCancel	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2951	ALL	463897.3	3810056	1.33E-07	30YrCancel	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2952	ALL	463935.3	3810056	1.31E-07	30YrCancel	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2953	ALL	463973.3	3810056	1.30E-07	30YrCancel	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2954	ALL	464011.3	3810056	1.29E-07	30YrCancel	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2955	ALL	464049.3	3810056	1.27E-07	30YrCancel	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2956	ALL	464087.3	3810056	1.27E-07	30YrCancel	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2957	ALL	464125.3	3810056	1.26E-07	30YrCancel	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2958	ALL	464163.3	3810056	1.27E-07	30YrCancel	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2959	ALL	464201.3	3810056	1.27E-07	30YrCancel	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2960	ALL	464239.3	3810056	1.26E-07	30YrCancel	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2961	ALL	464277.3	3810056	1.26E-07	30YrCancel	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2962	ALL	464315.3	3810056	1.25E-07	30YrCancel	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2963	ALL	464353.3	3810056	1.23E-07	30YrCancel	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2964	ALL	464391.3	3810056	1.22E-07	30YrCancel	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2965	ALL	464429.3	3810056	1.20E-07	30YrCancel	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2966	ALL	464467.3	3810056	1.18E-07	30YrCancel	1.18E-07	0.00E+00	0.00E+00								

2991	ALL	463821.3	3810114	1.32E-07	30YrCancel	1.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2992	ALL	463859.3	3810114	1.28E-07	30YrCancel	1.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2993	ALL	463897.3	3810114	1.25E-07	30YrCancel	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2994	ALL	463935.3	3810114	1.23E-07	30YrCancel	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2995	ALL	463973.3	3810114	1.21E-07	30YrCancel	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2996	ALL	464011.3	3810114	1.19E-07	30YrCancel	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2997	ALL	464049.3	3810114	1.18E-07	30YrCancel	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2998	ALL	464087.3	3810114	1.17E-07	30YrCancel	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2999	ALL	464125.3	3810114	1.16E-07	30YrCancel	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3000	ALL	464163.3	3810114	1.15E-07	30YrCancel	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3001	ALL	464201.3	3810114	1.15E-07	30YrCancel	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3002	ALL	464239.3	3810114	1.16E-07	30YrCancel	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3003	ALL	464277.3	3810114	1.15E-07	30YrCancel	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3004	ALL	464315.3	3810114	1.14E-07	30YrCancel	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3005	ALL	464353.3	3810114	1.13E-07	30YrCancel	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3006	ALL	464391.3	3810114	1.12E-07	30YrCancel	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3007	ALL	464429.3	3810114	1.11E-07	30YrCancel	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3008	ALL	464467.3	3810114	1.09E-07	30YrCancel	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3009	ALL	464505.3	3810114	1.08E-07	30YrCancel	1.08E-07											

3035 ALL	464358.5	3807238	3.83E-08	30YrCancel	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3036 ALL	464385.5	3807161	3.51E-08	30YrCancel	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3037 ALL	463132.3	3810926	7.85E-08	30YrCancel	7.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3038 ALL	463237.8	3811199	8.51E-08	30YrCancel	8.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3039 ALL	464944.4	3809245	1.12E-07	30YrCancel	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3040 ALL	465700.3	3809255	5.26E-08	30YrCancel	5.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3041 ALL	465716.2	3808536	4.58E-08	30YrCancel	4.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3042 ALL	465544.4	3808534	5.37E-08	30YrCancel	5.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3043 ALL	465420.1	3808486	5.94E-08	30YrCancel	5.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3044 ALL	465348.8	3808492	6.45E-08	30YrCancel	6.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3045 ALL	465317.1	3808444	6.47E-08	30YrCancel	6.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3046 ALL	465327.6	3808407	6.23E-08	30YrCancel	6.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3047 ALL	465108.2	3808370	7.80E-08	30YrCancel	7.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3048 ALL	464999.9	3808301	8.38E-08	30YrCancel	8.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3049 ALL	464722.3	3807973	8.67E-08	30YrCancel	8.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3050 ALL	464717	3807836	7.64E-08	30YrCancel	7.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3051 ALL	464344.3	3807936	1.05E-07	30YrCancel	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3052 ALL	464349.6	3807781	1.16E-07	30YrCancel	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3053 ALL	464386.6	3807786	1.11E-07	30YrCancel	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3054 ALL	464521.4	3807860	1.00E-07	30YrCancel	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3055 ALL	464537.3	3807720	6.26E-08	30YrCancel	6.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3056 ALL	464426.3	3807614	5.97E-08	30YrCancel	5.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3057 ALL	464368.4	3807533	5.75E-08	30YrCancel	5.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3058 ALL	464324.6	3807122	3.51E-08	30YrCancel	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3059 ALL	464123.3	3807124	4.42E-08	30YrCancel	4.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3060 ALL	463930.1	3806909	3.85E-08	30YrCancel	3.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3061 ALL	463831.1	3806906	4.27E-08	30YrCancel	4.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3062 ALL	463821.4	3806721	3.27E-08	30YrCancel	3.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3063 ALL	463727.2	3806727	3.67E-08	30YrCancel	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3064 ALL	463599	3806335	2.23E-08	30YrCancel	2.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3065 ALL	463001.1	3806362	3.91E-08	30YrCancel	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

7.09E-07

7.09E-01

HARP2 - HRACalc (dated 21081) 5/10/2022 2:19:02 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: NCChronic
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Exposure duration are only adjusted for cancer assessments

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home

NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

TIER 2 SETTINGS

Tier2 not used.

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\Users\dlarocca\Desktop\Air Quality

Work\HARP2\POPLAR180P\hra\ChronicNonCancerNCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\dlarocca\Desktop\Air Quality

Work\HARP2\POPLAR180P\hra\ChronicNonCancerNCChronicRiskSumByRec.csv

HRA ran successfully

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

2699			463897.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.39E-05
2700	ALL		463935.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E-05
2701	ALL		463973.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-05
2702	ALL		464011.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05
2703	ALL		464049.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-05
2704	ALL		464087.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05
2705	ALL		464125.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05
2706	ALL		464163.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05
2707	ALL		464201.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-05
2708	ALL		464239.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-05
2709	ALL		464277.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05
2710	ALL		464315.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05
2711	ALL		464353.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05
2712	ALL		464391.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-05
2713	ALL		464429.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-05
2714	ALL		464467.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.32E-05
2715	ALL		464505.3	3809708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-05
2716	ALL		463745.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05
2717	ALL		463783.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05
2718	ALL		463821.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05
2719	ALL		463859.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E-05
2720	ALL		463897.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05
2721	ALL		463935.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.75E-05
2722	ALL		463973.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05
2723	ALL		464011.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05
2724	ALL		464049.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-05
2725	ALL		464087.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05
2726	ALL		464125.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-05
2727	ALL		464163.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-05
2728	ALL		464201.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-05
2729	ALL		464239.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-05
2730	ALL		464277.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-05
2731	ALL		464315.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05
2732	ALL		464353.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05
2733	ALL		464391.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-05
2734	ALL		464429.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05
2735	ALL		464467.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-05
2736	ALL		464505.3	3809737	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-05
2737	ALL		463745.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05
2738	ALL		463783.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05
2739	ALL		463821.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05
2740	ALL		463859.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-05
2741	ALL		463897.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05
2742	ALL		463935.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05
2743	ALL		463973.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05
2744	ALL		464011.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-05
2745	ALL		464049.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-05
2746	ALL		464087.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05
2747	ALL		464125.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-05
2748	ALL		464163.3	3809766	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-05

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

3049 ALL	464722.3	3807973	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-05
3050 ALL	464717	3807836	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05
3051 ALL	464344.3	3807936	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05
3052 ALL	464349.6	3807781	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
3053 ALL	464386.6	3807786	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05
3054 ALL	464521.4	3807860	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05
3055 ALL	464537.3	3807720	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-05
3056 ALL	464426.3	3807614	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-05
3057 ALL	464368.4	3807533	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-05
3058 ALL	464324.6	3807122	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.42E-06
3059 ALL	464123.3	3807124	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-05
3060 ALL	463930.1	3806909	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-05
3061 ALL	463831.1	3806906	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-05
3062 ALL	463821.4	3806721	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-06
3063 ALL	463727.2	3806727	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-06
3064 ALL	463599	3806335	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-06
3065 ALL	463001.1	3806362	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-05

1.90E-04

Appendix B-3

South Coast Air Quality Management District and the
San Joaquin Valley Air Pollution Control District

S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,

Plaintiffs and Appellants,

v.

COUNTY OF FRESNO,

Defendant and Respondent,

and,

FRIANT RANCH, L.P.,

Real Party in Interest and Respondent.

SUPREME COURT
FILED

APR 13 2015

Frank A. McGuire Clerk
Deputy

After a Published Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726
Honorable Rosendo A. Pena, Jr.

**APPLICATION OF THE SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT FOR LEAVE TO FILE
BRIEF OF *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY
AND [PROPOSED] BRIEF OF *AMICUS CURIAE***

Kurt R. Wiese, General Counsel (SBN 127251)
*Barbara Baird, Chief Deputy Counsel (SBN 81507)
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765
Telephone: 909-396-2302; Facsimile: 909-396-2961
Email: bbaird@aqmd.gov
Counsel for [Proposed] Amicus Curiae,
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

RECEIVED

APR - 8 2015

CLERK SUPREME COURT

TABLE OF CONTENTS

APPLICATION FOR LEAVE TO FILE <i>amicus curiae</i> brief.....	App-1
HOW THIS BRIEF WILL ASSIST THE COURT	App-1
STATEMENT OF INTEREST OF <i>AMICUS CURIAE</i>	App-3
CERTIFICATION REGARDING AUTHORSHIP & FUNDING	App-4
BRIEF OF AMICUS CURIAE.....	1
SUMMARY OF ARGUMENT	1
ARGUMENT	2
I. RELEVANT FACTUAL AND LEGAL FRAMEWORK.	2
A. Air Quality Regulatory Background	2
B. The SCAQMD's Role Under CEQA.....	6
II. THIS COURT SHOULD NOT SET A HARD-AND-FAST RULE CONCERNING THE EXTENT TO WHICH AN EIR MUST CORRELATE A PROJECT'S EMISSION OF POLLUTANTS WITH RESULTING HEALTH IMPACTS.....	8
III. THE QUESTION OF WHETHER AN EIR CONTAINS SUFFICIENT ANALYSIS TO MEET CEQA'S REQUIREMENTS IS A MIXED QUESTION OF FACT AND LAW GOVERNED BY TWO DIFFERENT STANDARDS OF REVIEW.....	16
A. Standard of Review for Feasibility Determination and Sufficiency as an Informative Document.....	16
B. Friant Ranch's Rationale for Rejecting the Independent Judgment Standard of Review is Unsupported by Case Law.....	23
IV. COURTS MUST SCRUPULOUSLY ENFORCE THE REQUIREMENTS THAT LEAD AGENCIES CONSULT WITH AND OBTAIN COMMENTS FROM AIR DISTRICTS.....	26
CONCLUSION	29

TABLE OF AUTHORITIES

State Cases

<i>Association of Irrigated Residents v. County of Madera</i> (2003) 107 Cal App.4th 1383	1, 9
<i>Bakersfield Citizens for Local Control v. City of Bakersfield</i> (2004) 124 Cal.App.4th 1184	9, 22
<i>Berkeley Keep Jets Over the Bay v. Board of Port Commissioners</i> (2007) 91 Cal.App.4th 1344.....	21, 28
<i>Center for Biological Diversity v. County of San Bernardino</i> (2010) 185 Cal.App.4th 866.	20
<i>Citizens of Goleta Valley v. Bd. of Supervisors</i> (1990) 52 Cal.3d 553	8-9
<i>County of Amador v. El Dorado County Water Agency</i> (1999) 76 Cal.App.4th 931	23
<i>Crocker National Bank v. City and County of San Francisco</i> (1989) 49 Cal.3d 881	18
<i>Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection</i> (2008) 43 Cal.4th 936.....	21
<i>Fall River Wild Trout Foundation v. County of Shasta</i> , (1999) 70 Cal.App.4th 482	27, 28
<i>Gray v. County of Madera</i> (2008) 167 Cal.App.4th 1099	25
<i>Laurel Heights Improvement Assn. v. Regents of the Univ of Cal. ("Laurel Heights I")</i> (1988) 47 Cal.3d 376.....	1, 8, 19, 20, 21, 22
<i>Natural Res. Def. Council v SCAQMD</i> , Los Angeles Superior Court No. BS110792.....	12
<i>Neighbors for Smart Rail v. Exposition Metro Line</i> (2013) 57 Cal.4th 439	15, 20

State Cases (cont'd)

<i>Orange County Air Pollution Control District v. Public Util. Com.</i> (1971) 4 Cal.3d 945.....	27
<i>Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors</i> (2001) 87 Cal.App.4th 99.....	19
<i>Schenck v. County of Sonoma</i> (2011) 198 Cal.App.4th 949	26, 27
<i>Sierra Club v. County of Fresno</i> (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271	9, 23
<i>Sierra Club v. State Bd. Of Forestry</i> (1994) 7 Cal.4th 1215	28
<i>Uphold Our Heritage v. Town of Woodside</i> (2007) 147 Cal.App.4th 587	20
<i>Vineyard Area Citizens for Responsible Growth, Inc.</i> <i>v. City of Rancho Cordova</i> (2007) 40 Cal.4th 412	1, 17, 19, 24, 25, 26
<i>Western Oil & Gas Assn. v. Monterey Bay Unified APCD</i> (1989) 49 Cal.3d 408	5

California Statutes

Health & Saf. Code § 39666	5
Health & Saf. Code § 40000	3
Health & Saf. Code § 40001	3
Health & Saf. Code § 40410	3
Health & Saf. Code §§ 40460, et seq.....	4
Health & Saf. Code § 41508	5
Health & Saf. Code §§ 42300, et seq.....	5
Health & Saf. Code § 44320	5
Health & Saf. Code § 44322	5
Health & Saf. Code § 44360	5
Pub. Resources Code § 20180.3.....	27
Pub. Resources Code § 21061.....	19
Pub. Resources Code § 21061.1.....	16

California Statutes (cont'd)

Pub. Resources Code § 21080.....	6
Pub. Resources Code § 21080.5.....	6
Pub. Resources Code § 21083.1.....	26
Pub. Resources Code § 21100.....	27
Pub. Resources Code § 21104.....	6, 7 26
Pub. Resources Code §§ 21150-21154	7
Pub. Resources Code § 21151.8.....	25
Pub. Resources Code § 21153	6, 7, 26

California Regulations

Cal. Code Regs., tit. 14, §§ 15000, et seq. ("CEQA Guidelines")

CEQA Guidelines § 15050.....	6
CEQA Guidelines § 15051.....	1, 6
CEQA Guidelines § 15073.....	6
CEQA Guidelines § 15086.....	6
CEQA Guidelines § 15088.5.....	28
CEQA Guidelines § 15096.....	6
CEQA Guidelines § 15126.2.....	25
CEQA Guidelines § 15131.....	26
CEQA Guidelines § 15144.....	19, 24
CEQA Guidelines § 15151.....	9, 18, 19
CEQA Guidelines § 15204.....	1, 9, 21
CEQA Guidelines § 15251.....	6
CEQA Guidelines § 15366.....	7
CEQA Guidelines § 15381.....	6

Cal. Code Regs., tit. 17, § 60104	3
---	---

Federal Statutes

42 U.S.C. § 7401; CAA § 101	4
42 U.S.C. § 7408; CAA § 108	3
42 U.S.C. § 7409; CAA § 109	4
42 U.S.C. § 7410; CAA § 110	4, 5
42 U.S.C. § 7412; CAA § 112	5
42 U.S.C. § 7502; CAA § 172	5, 13
42 U.S.C. § 7503; CAA § 173	5, 13
42 U.S.C. § 7511a; CAA § 182.....	13
42 U.S.C. § 7521; CAA § 202	4
42 U.S.C. § 7543; CAA § 209	4
42 U.S.C. § 7547; CAA § 213	4

Rules

SCAQMD Rule 1303	7
SCAQMD Rule 1401	5, 8, 9

Other

Association of Environmental Professionals, 2015 CEQA Statute and Guidelines (2015) (Appendix G, “Environmental Checklist Form.”)	24
CARB, <i>Health Impacts Analysis: PM Premature Death Relationship</i>	14
CARB, <i>Health Impacts Analysis: PM Mortality Relationship</i>	16
CARB, Resolution 98-35, Aug. 27, 1998	8
SCAQMD, <i>Air Quality Analysis Handbook</i>	13
SCAQMD, <i>Final 2012 AQMP (Feb. 2013)</i>	3, 11
SCAQMD, <i>Final Subsequent Mitigated Negative Declaration for: Warren E&P, Inc. WTU Central Facility, New Equipment Project (certified July 19, 2011)</i>	14-15
SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, <i>Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System</i> ,	12
SCAQMD Governing Board Agenda, April 3, 2015, Agenda Item 16, Attachment A	7
SCAQMD, Health Risk Assessment Summary form	10
SCAQMD, <i>Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics “Hot Spots” Information and Assessment Act (AB2588)</i>	10
U.S. EPA, Ground Level Ozone	11
U.S. EPA, <i>Guideline on Ozone Monitoring Site Selection</i> (Aug. 1998) EPA-454/R-98-002 § 5.1.2	11
U.S. EPA, <i>Health Effects of Ozone in the General Population</i> , Figure 9,	11
U.S. EPA, National Ambient Air Quality Standards (NAAQS)	4
U.S. EPA, Particulate Matter (PM)	4

**TO THE HONORABLE CHIEF JUSTICE AND JUSTICES OF THE
SUPREME COURT:**

APPLICATION FOR LEAVE TO FILE *AMICUS CURIAE* BRIEF

Pursuant to Rule 8.520(f) of the California Rules of Court, the South Coast Air Quality Management District (SCAQMD) respectfully requests leave to file the attached *amicus curiae* brief. Because SCAQMD's position differs from that of either party, we request leave to submit this amicus brief in support of neither party.

HOW THIS BRIEF WILL ASSIST THE COURT

SCAQMD's proposed amicus brief takes a position on two of the issues in this case. In both instances, its position differs from that of either party. The issues are:

- 1) Does the California Environmental Quality Act (CEQA) require an environmental impact report (EIR) to correlate a project's air pollution emissions with specific levels of health impacts?
- 2) What is the proper standard of review for determining whether an EIR provides sufficient information on the health impacts caused by a project's emission of air pollutants?

This brief will assist the Court by discussing the practical realities of correlating identified air quality impacts with specific health outcomes. In short, CEQA requires agencies to provide detailed information about a project's air quality impacts that is sufficient for the public and decisionmakers to adequately evaluate the project and meaningfully understand its impacts. However, the level of analysis is governed by a rule of reason; CEQA only requires agencies to conduct analysis if it is reasonably feasible to do so.

With regard to health-related air quality impacts, an analysis that correlates a project's air pollution emissions with specific levels of health impacts will be feasible in some cases but not others. Whether it is feasible depends on a variety of factors, including the nature of the project and the nature of the analysis under consideration. The feasibility of analysis may also change over time as air districts and others develop new tools for measuring projects' air quality related health impacts. Because SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, it is uniquely situated to express an opinion on the extent to which the Court should hold that CEQA requires lead agencies to correlate air quality impacts with specific health outcomes.

SCAQMD can also offer a unique perspective on the question of the appropriate standard of review. SCAQMD submits that the proper standard of review for determining whether an EIR is sufficient as an informational document is more nuanced than argued by either party. In our view, this is a mixed question of fact and law. It includes determining whether additional analysis is feasible, which is primarily a factual question that should be reviewed under the substantial evidence standard. However, it also involves determining whether the omission of a particular analysis renders an EIR insufficient to serve CEQA's purpose as a meaningful, informational document. If a lead agency has not determined that a requested analysis is infeasible, it is the court's role to determine whether the EIR nevertheless meets CEQA's purposes, and courts should not defer to the lead agency's conclusions regarding the legal sufficiency of an EIR's analysis. The ultimate question of whether an EIR's analysis is "sufficient" to serve CEQA's informational purposes is predominately a question of law that courts should review de novo.

This brief will explain the rationale for these arguments and may assist the Court in reaching a conclusion that accords proper respect to a lead agency's factual conclusions while maintaining judicial authority over the ultimate question of what level of analysis CEQA requires.

STATEMENT OF INTEREST OF *AMICUS CURIAE*

The SCAQMD is the regional agency primarily responsible for air pollution control in the South Coast Air Basin, which consists of all of Orange County and the non-desert portions of the Los Angeles, Riverside, and San Bernardino Counties. (Health & Saf. Code § 40410; Cal. Code Regs., tit. 17, § 60104.) The SCAQMD participates in the CEQA process in several ways. Sometimes it acts as a lead agency that prepares CEQA documents for projects. Other times it acts as a responsible agency when it has permit authority over some part of a project that is undergoing CEQA review by a different lead agency. Finally, SCAQMD also acts as a commenting agency for CEQA documents that it receives because it is a public agency with jurisdiction by law over natural resources affected by the project.

In all of these capacities, SCAQMD will be affected by the decision in this case. SCAQMD sometimes submits comments requesting that a lead agency perform an additional type of air quality or health impacts analysis. On the other hand, SCAQMD sometimes determines that a particular type of health impact analysis is not feasible or would not produce reliable and informative results. Thus, SCAQMD will be affected by the Court's resolution of the extent to which CEQA requires EIRs to correlate emissions and health impacts, and its resolution of the proper standard of review.

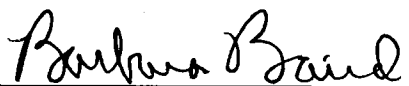
CERTIFICATION REGARDING AUTHORSHIP AND FUNDING

No party or counsel in the pending case authored the proposed amicus curiae brief in whole or in part, or made any monetary contribution intended to fund the preparation or submission of the brief. No person or entity other than the proposed *Amicus Curiae* made any monetary contribution intended to fund the preparation or submission of the brief.

Respectfully submitted,

DATED: April 3, 2015

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
KURT R. WIESE, GENERAL COUNSEL
BARBARA BAIRD, CHIEF DEPUTY COUNSEL

By: 
Barbara Baird

Attorneys for [proposed] Amicus Curiae
SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT

BRIEF OF AMICUS CURIAE

SUMMARY OF ARGUMENT

The South Coast Air Quality Management District (SCAQMD) submits that this Court should not try to establish a hard-and-fast rule concerning whether lead agencies are required to correlate emissions of air pollutants with specific health consequences in their environmental impact reports (EIR). The level of detail required in EIRs is governed by a few, core CEQA (California Environmental Quality Act) principles. As this Court has stated, “[a]n EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.” (*Laurel Heights Improvement Assn. v. Regents of the Univ of Cal.* (1988) 47 Cal.3d 376, 405 [*“Laurel Heights I”*]) Accordingly, “an agency must use its best efforts to find out and disclose all that it reasonably can.” (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428 (quoting CEQA Guidelines § 15144)¹). However, “[a]nalysis of environmental effects need not be exhaustive, but will be judged in light of what is reasonably feasible.” (*Association of Irrigated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1390; CEQA Guidelines §§ 15151, 15204(a).)

With regard to analysis of air quality related health impacts, EIRs must generally quantify a project’s pollutant emissions, but in some cases it is not feasible to correlate these emissions to specific, quantifiable health impacts (e.g., premature mortality; hospital admissions). In such cases, a general description of the adverse health impacts resulting from the pollutants at issue may be sufficient. In other cases, due to the magnitude

¹ The CEQA Guidelines are found at Cal. Code Regs., tit. 14 §§ 15000, *et seq.*

or nature of the pollution emissions, as well as the specificity of the project involved, it may be feasible to quantify health impacts. Or there may be a less exacting, but still meaningful analysis of health impacts that can feasibly be performed. In these instances, agencies should disclose those impacts.

SCAQMD also submits that whether or not an EIR complies with CEQA's informational mandates by providing sufficient, feasible analysis is a mixed question of fact and law. Pertinent here, the question of whether an EIR's discussion of health impacts from air pollution is sufficient to allow the public to understand and consider meaningfully the issues involves two inquiries: (1) Is it feasible to provide the information or analysis that a commenter is requesting or a petitioner is arguing should be required?; and (2) Even if it is feasible, is the agency relying on other policy or legal considerations to justify not preparing the requested analysis? The first question of whether an analysis is feasible is primarily a question of fact that should be judged by the substantial evidence standard. The second inquiry involves evaluating CEQA's information disclosure purposes against the asserted reasons to not perform the requested analysis. For example, an agency might believe that its EIR meets CEQA's informational disclosure standards even without a particular analysis, and therefore choose not to conduct that analysis. SCAQMD submits that this is more of a legal question, which should be reviewed de novo as a question of law.

ARGUMENT

I. RELEVANT FACTUAL AND LEGAL FRAMEWORK.

A. Air Quality Regulatory Background

The South Coast Air Quality Management District (SCAQMD) is one of the local and regional air pollution control districts and air quality

management districts in California. The SCAQMD is the regional air pollution agency for the South Coast Air Basin, which consists of all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. (Health & Saf. Code § 40410, 17 Cal. Code Reg. § 60104.) The SCAQMD also includes the Coachella Valley in Riverside County (Palm Springs area to the Salton Sea). (SCAQMD, *Final 2012 AQMP* (Feb. 2013), <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “chapter 7” hyperlink; pp 7-1, 7-3 (last visited Apr. 1, 2015).) The SCAQMD's jurisdiction includes over 16 million residents and has the worst or nearly the worst air pollution levels in the country for ozone and fine particulate matter. (SCAQMD, *Final 2012 AQMP* (Feb. 2013), <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “Executive Summary” hyperlink p. ES-1 (last visited Apr. 1, 2015).)

Under California law, the local and regional districts are primarily responsible for controlling air pollution from all sources except motor vehicles. (Health & Saf. Code § 40000.) The California Air Resources Board (CARB), part of the California Environmental Protection Agency, is primarily responsible for controlling pollution from motor vehicles. (*Id.*) The air districts must adopt rules to achieve and maintain the state and federal ambient air quality standards within their jurisdictions. (Health & Saf. Code § 40001.)

The federal Clean Air Act (CAA) requires the United States Environmental Protection Agency (EPA) to identify pollutants that are widely distributed and pose a threat to human health, developing a so-called “criteria” document. (42 U.S.C. § 7408; CAA § 108.) These pollutants are frequently called “criteria pollutants.” EPA must then establish “national ambient air quality standards” at levels “requisite to protect public health”,

allowing “an adequate margin of safety.” (42 U.S.C. § 7409; CAA § 109.) EPA has set standards for six identified pollutants: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter (PM), and lead. (U.S. EPA, National Ambient Air Quality Standards (NAAQS), <http://www.epa.gov/air/criteria.html> (last updated Oct. 21, 2014).)²

Under the Clean Air Act, EPA sets emission standards for motor vehicles and “nonroad engines” (mobile farm and construction equipment, marine vessels, locomotives, aircraft, etc.). (42 U.S.C. §§ 7521, 7547; CAA §§ 202, 213.) California is the only state allowed to establish emission standards for motor vehicles and most nonroad sources; however, it may only do so with EPA's approval. (42 U.S.C. §§ 7543(b), 7543(e); CAA §§ 209(b), 209(c).) Sources such as manufacturing facilities, power plants and refineries that are not mobile are often referred to as “stationary sources.” The Clean Air Act charges state and local agencies with the primary responsibility to attain the national ambient air quality standards. (42 U.S.C. § 7401(a)(3); CAA § 101(a)(3).) Each state must adopt and implement a plan including enforceable measures to achieve and maintain the national ambient air quality standards. (42 U.S.C. § 7410; CAA § 110.) The SCAQMD and CARB jointly prepare portion of the plan for the South Coast Air Basin and submit it for approval by EPA. (Health & Saf. Code §§ 40460, et seq.)

The Clean Air Act also requires state and local agencies to adopt a permit program requiring, among other things, that new or modified “major” stationary sources use technology to achieve the “lowest achievable emission rate,” and to control minor stationary sources as

² Particulate matter (PM) is further divided into two categories: fine particulate or PM_{2.5} (particles with a diameter of less than or equal to 2.5 microns) and coarse particulate (PM₁₀) (particles with a diameter of 10 microns or less). (U.S. EPA, Particulate Matter (PM), <http://www.epa.gov/airquality/particulatepollution/> (last visited Apr. 1, 2015).)

needed to help attain the standards. (42 U.S.C. §§ 7502(c)(5), 7503(a)(2), 7410(a)(2)(C); CAA §§ 172(c)(5), 173(a)(2), 110(a)(2)(C).) The air districts implement these permit programs in California. (Health & Saf. Code §§ 42300, et seq.)

The Clean Air Act also sets out a regulatory structure for over 100 so-called “hazardous air pollutants” calling for EPA to establish “maximum achievable control technology” (MACT) for sources of these pollutants. (42 U.S.C. § 7412(d)(2); CAA § 112(d)(2).) California refers to these pollutants as “toxic air contaminants” (TACs) which are subject to two state-required programs. The first program requires “air toxics control measures” for specific categories of sources. (Health & Saf. Code § 39666.) The other program requires larger stationary sources and sources identified by air districts to prepare “health risk assessments” for impacts of toxic air contaminants. (Health & Saf. Code §§ 44320(b), 44322, 44360.) If the health risk exceeds levels identified by the district as “significant,” the facility must implement a “risk reduction plan” to bring its risk levels below “significant” levels. Air districts may adopt additional more stringent requirements than those required by state law, including requirements for toxic air contaminants. (Health & Saf. Code § 41508; *Western Oil & Gas Assn. v. Monterey Bay Unified APCD* (1989) 49 Cal.3d 408, 414.) For example, SCAQMD has adopted a rule requiring new or modified sources to keep their risks below specified levels and use best available control technology (BACT) for toxics. (SCAQMD, *Rule 1401-New Source Review of Toxic Air Contaminants*, <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-xiv>; then follow “Rule 1401” hyperlink (last visited Apr. 1, 2015).)

B. The SCAQMD's Role Under CEQA

The California Environmental Quality Act (CEQA) requires public agencies to perform an environmental review and appropriate analysis for projects that they implement or approve. (Pub. Resources Code § 21080(a).) The agency with primary approval authority for a particular project is generally the “lead agency” that prepares the appropriate CEQA document. (CEQA Guidelines §§ 15050, 15051.) Other agencies having a subsequent approval authority over all or part of a project are called “responsible” agencies that must determine whether the CEQA document is adequate for their use. (CEQA Guidelines §§ 15096(c), 15381.) Lead agencies must also consult with and circulate their environmental impact reports to “trustee agencies” and agencies “with jurisdiction by law” including “authority over resources which may be affected by the project.” (Pub. Resources Code §§ 21104(a), 21153; CEQA Guidelines §§ 15086(a)(3), 15073(c).) The SCAQMD has a role in all these aspects of CEQA.

Fulfilling its responsibilities to implement its air quality plan and adopt rules to attain the national ambient air quality standards, SCAQMD adopts a dozen or more rules each year to require pollution reductions from a wide variety of sources. The SCAQMD staff evaluates each rule for any adverse environmental impact and prepares the appropriate CEQA document. Although most rules reduce air emissions, they may have secondary environmental impacts such as use of water or energy or disposal of waste—e.g., spent catalyst from control equipment.³

³ The SCAQMD's CEQA program for its rules is a “Certified Regulatory Program” under which it prepares a “functionally equivalent” document in lieu of a negative declaration or EIR. (Pub. Resources Code § 21080.5, CEQA Guidelines § 15251(l).)

The SCAQMD also approves a large number of permits every year to construct new, modified, or replacement facilities that emit regulated air pollutants. The majority of these air pollutant sources have already been included in an earlier CEQA evaluation for a larger project, are currently being evaluated by a local government as lead agency, or qualify for an exemption. However, the SCAQMD sometimes acts as lead agency for major projects where the local government does not have a discretionary approval. In such cases, SCAQMD prepares and certifies a negative declaration or environmental impact report (EIR) as appropriate.⁴ SCAQMD evaluates perhaps a dozen such permit projects under CEQA each year. SCAQMD is often also a “responsible agency” for many projects since it must issue a permit for part of the projects (e.g., a boiler used to provide heat in a commercial building). For permit projects evaluated by another lead agency under CEQA, SCAQMD has the right to determine that the CEQA document is inadequate for its purposes as a responsible agency, but it may not do so because its permit program already requires all permitted sources to use the best available air pollution control technology. (SCAQMD, *Rule 1303(a)(1) – Requirements*, <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-xiii>; then follow “Rule 1303” hyperlink (last visited Apr. 1, 2015).)

Finally, SCAQMD receives as many as 60 or more CEQA documents each month (around 500 per year) in its role as commenting agency or an agency with “jurisdiction by law” over air quality—a natural resource affected by the project. (Pub. Resources Code §§ 21104(a), 21153; CEQA Guidelines § 15366(a)(3).) The SCAQMD staff provides comments on as many as 25 or 30 such documents each month.

⁴ The SCAQMD's permit projects are not included in its Certified Regulatory Program, and are evaluated under the traditional local government CEQA analysis. (Pub. Resources Code §§ 21150-21154.)

(SCAQMD Governing Board Agenda, Apr. 3, 2015, Agenda Item 16, Attachment A, <http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-april-3-2015>; then follow “16. Lead Agency Projects and Environmental Documents Received by SCAQMD” hyperlink (last visited Apr. 1, 2015).) Of course, SCAQMD focuses its commenting efforts on the more significant projects.

Typically, SCAQMD comments on the adequacy of air quality analysis, appropriateness of assumptions and methodology, and completeness of the recommended air quality mitigation measures. Staff may comment on the need to prepare a health risk assessment detailing the projected cancer and noncancer risks from toxic air contaminants resulting from the project, particularly the impacts of diesel particulate matter, which CARB has identified as a toxic air contaminant based on its carcinogenic effects. (California Air Resources Board, Resolution 98-35, Aug. 27, 1998, <http://www.arb.ca.gov/regact/diesltac/diesltac.htm>; then follow Resolution 98-35 hyperlink (last visited Apr. 1, 2015).) Because SCAQMD already requires new or modified stationary sources of toxic air contaminants to use the best available control technology for toxics and to keep their risks below specified levels, (SCAQMD Rule 1401, *supra*, note 15), the greatest opportunity to further mitigate toxic impacts through the CEQA process is by reducing emissions—particularly diesel emissions—from vehicles.

II. THIS COURT SHOULD NOT SET A HARD-AND-FAST RULE CONCERNING THE EXTENT TO WHICH AN EIR MUST CORRELATE A PROJECT’S EMISSION OF POLLUTANTS WITH RESULTING HEALTH IMPACTS.

Numerous cases hold that courts do not review the correctness of an EIR’s conclusions but rather its sufficiency as an informative document. (*Laurel Heights 1*, *supra*, 47 Cal.3d at p. 392; *Citizens of Goleta Valley v.*

Bd. of Supervisors (1990) 52 Cal.3d 553, 569; *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1197.)

As stated by the Court of Appeal in this case, where an EIR has addressed a topic, but the petitioner claims that the information provided about that topic is insufficient, courts must “draw[] a line that divides *sufficient* discussions from those that are *insufficient*.” (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271, 290.) The Court of Appeal readily admitted that “[t]he terms themselves – sufficient and insufficient – provide little, if any, guidance as to where the line should be drawn. They are simply labels applied once the court has completed its analysis.” (*Id.*)

The CEQA Guidelines, however, provide guidance regarding what constitutes a sufficient discussion of impacts. Section 15151 states that “the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible.” Case law reflects this: “Analysis of environmental effects need not be exhaustive, but will be judged in light of what was reasonably feasible.” (*Association of Irrigated Residents v. County of Madera, supra*, 107 Cal.App.4th at p. 1390; see also CEQA Guidelines § 15204(a).)

Applying this test, this Court cannot realistically establish a hard-and-fast rule that an analysis correlating air pollution impacts of a project to quantified resulting health impacts is always required, or indeed that it is never required. Simply put, in some cases such an analysis will be “feasible”; in some cases it will not.

For example, air pollution control districts often require a proposed new source of toxic air contaminants to prepare a “health risk assessment” before issuing a permit to construct. District rules often limit the allowable cancer risk the new source may cause to the “maximally exposed individual” (worker and residence exposures). (See, e.g., SCAQMD Rule 1401(c)(8); 1401(d)(1), *supra* note 15.) In order to perform this analysis, it

is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). (SCAQMD, *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB2588)*, pp. 11-16; (last visited Apr. 1, 2015) [http://www.aqmd.gov/home/library/documents-support-material](http://www.aqmd.gov/home/library/documents-support-material;); "Guidelines" hyperlink; AB2588; then follow AB2588 Risk Assessment Guidelines hyperlink.)

Thus, it is feasible to determine the health risk posed by a new gas station locating at an intersection in a mixed use area, where receptor locations are known. On the other hand, it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk—it does not necessarily mean anyone will contract cancer as a result of the project.

In order to find the "cancer burden" or expected additional cases of cancer resulting from the project, it is also necessary to know the numbers and location of individuals living within the "zone of impact" of the project: i.e., those living in areas where the projected cancer risk from the project exceeds one in a million. (SCAQMD, Health Risk Assessment Summary form, <http://www.aqmd.gov/home/forms>; filter by "AB2588" category; then "Health Risk Assessment" hyperlink (last visited Apr. 1, 2015).) The affected population is divided into bands of those exposed to at least 1 in a million risk, those exposed to at least 10 in a million risk, etc. up to those exposed at the highest levels. (*Id.*) This data allows agencies to calculate an approximate number of additional cancer cases expected from

the project. However, it is not possible to predict which particular individuals will be affected.

For the so-called criteria pollutants⁵, such as ozone, it may be more difficult to quantify health impacts. Ozone is formed in the atmosphere from the chemical reaction of the nitrogen oxides (NO_x) and volatile organic compounds (VOC) in the presence of sunlight. (U.S. EPA, Ground Level Ozone, <http://www.epa.gov/airquality/ozonepollution/> (last updated Mar. 25, 2015).) It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. (U.S. EPA, *Guideline on Ozone Monitoring Site Selection* (Aug. 1998) EPA-454/R-98-002 § 5.1.2, <http://www.epa.gov/ttnamti1/archive/cpreldoc.html> (last visited Apr. 1, 2015).) NO_x and VOC are known as “precursors” of ozone.

Scientifically, health effects from ozone are correlated with increases in the ambient level of ozone in the air a person breathes. (U.S. EPA, *Health Effects of Ozone in the General Population*, Figure 9, <http://www.epa.gov/apti/ozonehealth/population.html#levels> (last visited Apr. 1, 2015).) However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region. For example, the SCAQMD's 2012 AQMP showed that reducing NO_x by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion. (South Coast Air Quality Management District, *Final 2012 AQMP* (February 2013), <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “Appendix V: Modeling & Attainment Demonstrations” hyperlink,

⁵ See discussion of types of pollutants, *supra*, Part I.A.

pp. v-4-2, v-7-4, v-7-24.) SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects.

On the other hand, this type of analysis may be feasible for projects on a regional scale with very high emissions of NO_x and VOCs, where impacts are regional. For example, in 2011 the SCAQMD performed a health impact analysis in its CEQA document for proposed Rule 1315, which authorized various newly-permitted sources to use offsets from the districts “internal bank” of emission reductions. This CEQA analysis accounted for essentially *all* the increases in emissions due to new or modified sources in the District between 2010 and 2030.⁶ The SCAQMD was able to correlate this very large emissions increase (e.g., 6,620 pounds per day NO_x (1,208 tons per year), 89,180 pounds per day VOC (16,275 tons per year)) to expected health outcomes from ozone and particulate matter (e.g., 20 premature deaths per year and 89,947 school absences in the year 2030 due to ozone).⁷ (SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, *Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System* (see hyperlink in fn 6) at p. 4.1-35, Table 4.1-29.)

⁶ (SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, Attachment G, *Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System, Vol. 1, p.4.0-6*, <http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-february-4-2011>; the follow “26. Adopt Proposed Rule 1315 – Federal New Source Review Tracking System” (last visited April 1, 2015).)

⁷ The SCAQMD was able to establish the location of future NO_x and VOC emissions by assuming that new projects would be built in the same locations and proportions as existing stationary sources. This CEQA document was upheld by the Los Angeles County Superior Court in *Natural Res. Def. Council v SCAQMD*, Los Angeles Superior Court No. BS110792).

However, a project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient ozone levels may not be detected in the regional air quality models that are currently used to determine ozone levels. Thus, in this case it would not be feasible to directly correlate project emissions of VOC or NO_x with specific health impacts from ozone. This is in part because ozone formation is not linearly related to emissions. Ozone impacts vary depending on the location of the emissions, the location of other precursor emissions, meteorology and seasonal impacts, and because ozone is formed some time later and downwind from the actual emission. (EPA Guideline on Ozone Monitoring Site Selection (Aug. 1998) EPA-454/R-98-002, § 5.1.2; <https://www.epa.gov/ttnamti1/archive/cpreldoc.html>; then search “Guideline on Ozone Monitoring Site Selection” click on pdf) (last viewed Apr. 1, 2015).)

SCAQMD has set its CEQA “significance” threshold for NO_x and VOC at 10 tons per year (expressed as 55 lb/day). (SCAQMD, *Air Quality Analysis Handbook*, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>; then follow “SCAQMD Air Quality Significance Thresholds” hyperlink (last visited Apr. 1, 2015).) This is because the federal Clean Air Act defines a “major” stationary source for “extreme” ozone nonattainment areas such as SCAQMD as one emitting 10 tons/year. (42 U.S.C. §§ 7511a(e), 7511a(f); CAA §§ 182(e), 182(f).) Under the Clean Air Act, such sources are subject to enhanced control requirements (42 U.S.C. §§ 7502(c)(5), 7503; CAA §§ 172(c)(5), 173), so SCAQMD decided this was an appropriate threshold for making a CEQA “significance” finding and requiring feasible mitigation. Essentially, SCAQMD takes the position that a source that emits 10 tons/year of NO_x or VOC would contribute cumulatively to ozone formation. Therefore, lead agencies that use SCAQMD’s thresholds of significance may determine

that many projects have “significant” air quality impacts and must apply all feasible mitigation measures, yet will not be able to precisely correlate the project to quantifiable health impacts, unless the emissions are sufficiently high to use a regional modeling program.

In the case of particulate matter (PM_{2.5})⁸, another “criteria” pollutant, SCAQMD staff is aware of two possible methods of analysis. SCAQMD used regional modeling to predict expected health impacts from its proposed Rule 1315, as mentioned above. Also, the California Air Resources Board (CARB) has developed a methodology that can predict expected mortality (premature deaths) from large amounts of PM_{2.5}. (California Air Resources Board, *Health Impacts Analysis: PM Premature Death Relationship*, http://www.arb.ca.gov/research/health/pm-mort/pm-mort_arch.htm (last reviewed Jan. 19, 2012).) SCAQMD used the CARB methodology to predict impacts from three very large power plants (e.g., 731-1837 lbs/day). (Final Environmental Assessment for Rule 1315, *supra*, pp 4.0-12, 4.1-13, 4.1-37 (e.g., 125 premature deaths in the entire SCAQMD in 2030), 4.1-39 (0.05 to 1.77 annual premature deaths from power plants.) Again, this project involved large amounts of additional PM_{2.5} in the District, up to 2.82 tons/day (5,650 lbs/day of PM_{2.5}, or, or 1029 tons/year. (*Id.* at table 4.1-4, p. 4.1-10.)

However, the primary author of the CARB methodology has reported that this PM_{2.5} health impact methodology is not suited for small projects and may yield unreliable results due to various uncertainties.⁹ (SCAQMD, *Final Subsequent Mitigated Negative Declaration for: Warren*

⁸ SCAQMD has not attained the latest annual or 24-hour national ambient air quality standards for “PM_{2.5}” or particulate matter less than 2.5 microns in diameter.

⁹ Among these uncertainties are the representativeness of the population used in the methodology, and the specific source of PM and the corresponding health impacts. (*Id.* at p. 2-24.)

E&P, Inc. WTU Central Facility, New Equipment Project (certified July 19, 2011), <http://www.aqmd.gov/home/library/documents-support-material/lead-agency-permit-projects/permit-project-documents---year-2011>; then follow “Final Subsequent Mitigated Negative Declaration for Warren E&P Inc. WTU Central Facility, New Equipment Project” hyperlink, pp. 2-22, 2-23 (last visited Apr. 1, 2015).) Therefore, when SCAQMD prepared a CEQA document for the expansion of an existing oil production facility, with very small PM_{2.5} increases (3.8 lb/day) and a very small affected population, staff elected not to use the CARB methodology for using estimated PM_{2.5} emissions to derive a projected premature mortality number and explained why it would be inappropriate to do so. (*Id.* at pp 2-22 to 2-24.) SCAQMD staff concluded that use of this methodology for such a small source could result in unreliable findings and would not provide meaningful information. (*Id.* at pp. 2-23, 2-25.) This CEQA document was not challenged in court.

In the above case, while it may have been technically possible to plug the data into the methodology, the results would not have been reliable or meaningful. SCAQMD believes that an agency should not be required to perform analyses that do not produce reliable or meaningful results. This Court has already held that an agency may decline to use even the “normal” “existing conditions” CEQA baseline where to do so would be misleading or without informational value. (*Neighbors for Smart Rail v. Exposition Metro Line* (2013) 57 Cal.4th 439, 448, 457.) The same should be true for a decision that a particular study or analysis would not provide reliable or meaningful results.¹⁰

¹⁰ Whether a particular study would result in “informational value” is a part of deciding whether it is “feasible.” CEQA defines “feasible” as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and

Therefore, it is not possible to set a hard-and-fast rule on whether a correlation of air quality impacts with specific quantifiable health impacts is required in all cases. Instead, the result turns on whether such an analysis is reasonably feasible in the particular case.¹¹ Moreover, what is reasonably feasible may change over time as scientists and regulatory agencies continually seek to improve their ability to predict health impacts. For example, CARB staff has been directed by its Governing Board to reassess and improve the methodology for estimating premature deaths. (California Air Resources Board, *Health Impacts Analysis: PM Mortality Relationship*, <http://www.arb.ca.gov/research/health/pm-mort/pm-mort.htm> (last reviewed Dec. 29, 2010).) This factor also counsels against setting any hard-and-fast rule in this case.

III. THE QUESTION OF WHETHER AN EIR CONTAINS SUFFICIENT ANALYSIS TO MEET CEQA'S REQUIREMENTS IS A MIXED QUESTION OF FACT AND LAW GOVERNED BY TWO DIFFERENT STANDARDS OF REVIEW.

A. Standard of Review for Feasibility Determination and Sufficiency as an Informative Document

A second issue in this case is whether courts should review an EIR's informational sufficiency under the "substantial evidence" test as argued by Friant Ranch or the "independent judgment" test as argued by Sierra Club.

technological factors." (Pub. Resources Code § 21061.1.) A study cannot be "accomplished in a *successful* manner" if it produces unreliable or misleading results.

¹¹ In this case, the lead agency did not have an opportunity to determine whether the requested analysis was feasible because the comment was non-specific. Therefore, SCAQMD suggests that this Court, after resolving the legal issues in the case, direct the Court of Appeal to remand the case to the lead agency for a determination of whether the requested analysis is feasible. Because Fresno County, the lead agency, did not seek review in this Court, it seems likely that the County has concluded that at least some level of correlation of air pollution with health impacts is feasible.

As this Court has explained, “a reviewing court must adjust its scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts.” (*Vineyard Area Citizens v. City of Rancho Cordova*, *supra*, 40 Cal.4th at 435.) For questions regarding compliance with proper procedure or other legal questions, courts review an agency’s action de novo under the “independent judgment” test. (*Id.*) On the other hand, courts review factual disputes only for substantial evidence, thereby “accord[ing] greater deference to the agency’s substantive factual conclusions.” (*Id.*)

Here, Friant Ranch and Sierra Club agree that the case involves the question of whether an EIR includes sufficient information regarding a project’s impacts. However, they disagree on the proper standard of review for answering this question: Sierra Club contends that courts use the independent judgment standard to determine whether an EIR’s analysis is sufficient to meet CEQA’s informational purposes,¹² while Friant Ranch contends that the substantial evidence standard applies to this question.

///

///

///

///

///

///

///

///

///

¹² Sierra Club acknowledges that courts use the substantial evidence standard when reviewing predicate factual issues, but argues that courts ultimately decide as a matter of law what CEQA requires. (Answering Brief, pp. 14, 23.)

SCAQMD submits that the issue is more nuanced than either party contends. We submit that, whether a CEQA document includes sufficient analysis to satisfy CEQA's informational mandates is a mixed question of fact and law,¹³ containing two levels of inquiry that should be judged by different standards.¹⁴

The state CEQA Guidelines set forth standards for the adequacy of environmental analysis. Guidelines Section 15151 states:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

In this case, the basic question is whether the underlying analysis of air quality impacts made the EIR "sufficient" as an informative document. However, whether the EIR's analysis was sufficient is judged in light of what was reasonably feasible. This represents a mixed question of fact and law that is governed by two different standards of review.

¹³ Friant Ranch actually states that the claim that an EIR lacks sufficient relevant information is, "most properly thought of as raising mixed questions of fact and law." (Opening Brief, p. 27.) However, the remainder of its argument claims that the court should apply the substantial evidence standard of review to all aspects of the issue.

¹⁴ Mixed questions of fact and law issues may implicate predominantly factual subordinate questions that are reviewed under the substantial evidence test even though the ultimate question may be reviewed by the independent judgment test. *Crocker National Bank v. City and County of San Francisco* (1989) 49 Cal.3d 881, 888-889.

SCAQMD submits that an EIR's sufficiency as an informational document is ultimately a legal question that courts should determine using their independent judgment. This Court's language in *Laurel Heights I* supports this position. As this Court explained: "The court does not pass upon the correctness of the EIR's environmental conclusions, but only upon its *sufficiency as an informative document*." (*Laurel Heights I, supra*, 47 Cal.3d at 392-393) (emphasis added.) As described above, the Court in *Vineyard Area Citizens v. City of Rancho Cordova, supra*, 40 Cal.4th at 431, also used its independent judgment to determine what level of analysis CEQA requires for water supply impacts. The Court did not defer to the lead agency's opinion regarding the law's requirements; rather, it determined for itself what level of analysis was necessary to meet "[t]he law's informational demands." (*Id.* at p. 432.) Further, existing case law also holds that where an agency fails to comply with CEQA's information disclosure requirements, the agency has "failed to proceed in the manner required by law." (*Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 118.)

However, whether an EIR satisfies CEQA's requirements depends in part on whether it was reasonably feasible for an agency to conduct additional or more thorough analysis. EIRs must contain "a detailed statement" of a project's impacts (Pub. Res. Code § 21061), and an agency must "use its best efforts to find out and disclose all that it reasonably can." (CEQA Guidelines § 15144.) Nevertheless, "the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible." (CEQA Guidelines § 15151.)

SCAQMD submits that the question of whether additional analysis or a particular study suggested by a commenter is "feasible" is generally a question of fact. Courts have already held that whether a particular alternative is "feasible" is reviewed by the substantial evidence test.

(*Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 598-99; *Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866, 883.) Thus, if a lead agency determines that a particular study or analysis is infeasible, that decision should generally be judged by the substantial evidence standard. However, SCAQMD urges this Court to hold that lead agencies must explain the basis of any determination that a particular analysis is infeasible in the EIR itself. An EIR must discuss information, including issues related to the feasibility of particular analyses “in sufficient detail to enable meaningful participation and criticism by the public. ‘[W]hatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.’” (*Laurel Heights I, supra*, 47 Cal.3d at p. 405 (quoting *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 831) (discussing analysis of alternatives).) The evidence on which the determination is based should also be summarized in the EIR itself, with appropriate citations to reference materials if necessary. Otherwise commenting agencies such as SCAQMD would be forced to guess where the lead agency's evidence might be located, thus thwarting effective public participation.

Moreover, if a lead agency determines that a particular study or analysis would not result in reliable or useful information and for that reason is not feasible, that determination should be judged by the substantial evidence test. (See *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority, supra*, 57 Cal.4th 439, 448, 457:

whether “existing conditions” baseline would be misleading or uninformative judged by substantial evidence standard.¹⁵)

If the lead agency’s determination that a particular analysis or study is not feasible is supported by substantial evidence, then the agency has not violated CEQA’s information disclosure provisions, since it would be infeasible to provide additional information. This Court’s decisions provide precedent for such a result. For example, this Court determined that the issue of whether the EIR should have included a more detailed discussion of future herbicide use was resolved because substantial evidence supported the agency’s finding that “the precise parameters of future herbicide use could not be predicted.” *Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection* (2008) 43 Cal.4th 936, 955.

Of course, SCAQMD expects that courts will continue to hold lead agencies to their obligations to consult with, and not to ignore or misrepresent, the views of sister agencies having special expertise in the area of air quality. (*Berkeley Keep Jets Over the Bay v. Board of Port Commissioners* (2007) 91 Cal.App.4th 1344, 1364 n.11.) In some cases, information provided by such expert agencies may establish that the purported evidence relied on by the lead agency is not in fact “substantial”. (*Id.* at pp. 1369-1371.)

In sum, courts retain ultimate responsibility to determine what CEQA requires. However, the law does not require exhaustive analysis, but only what is reasonably feasible. Agencies deserve deference for their factual determinations regarding what type of analysis is reasonably feasible. On the other hand, if a commenter requests more information, and the lead agency declines to provide it but does *not* determine that the

¹⁵ The substantial evidence standard recognizes that the courts "have neither the resources nor the scientific expertise" to weigh conflicting evidence on technical issues. (*Laurel Heights I, supra*, 47 Cal.3d 376, 393.)

requested study or analysis would be infeasible, misleading or uninformative, the question becomes whether the omission of that analysis renders the EIR inadequate to satisfy CEQA's informational purposes. (*Id.* at pp. 1370-71.) Again, this is predominantly a question of law and should be judged by the de novo or independent judgment standard of review. Of course, this Court has recognized that a "project opponent or reviewing court can always imagine some additional study or analysis that might provide helpful information. It is not for them to design the EIR. That further study...might be helpful does not make it necessary." (*Laurel Heights I, supra*, 47 Cal.3d 376, 415 – see also CEQA Guidelines § 15204(a) [CEQA "does not require a lead agency to conduct every test. . . recommended or demanded by commenters."].) Courts, then, must adjudicate whether an omission of particular information renders an EIR inadequate to serve CEQA's informational purposes.¹⁶

¹⁶ We recognize that there is case law stating that the substantial evidence standard applies to "challenges to the scope of an EIR's analysis of a topic" as well as the methodology used and the accuracy of the data relied on in the document "because these types of challenges involve factual questions." (*Bakersfield Citizens for Local Control v. City of Bakersfield, supra*, 124 Cal.App.4th 1184, 1198, and cases relied on therein.) However, we interpret this language to refer to situations where the question of the scope of the analysis really is factual—that is, where it involves whether further analysis is feasible, as discussed above. This interpretation is supported by the fact that the *Bakersfield* court expressly rejected an argument that a claimed "omission of information from the EIR should be treated as inquiries whether there is substantial evidence supporting the decision approving the project." *Bakersfield, supra*, 124 Cal.App.4th at p. 1208. And the *Bakersfield* court ultimately decided that the lead agency must analyze the connection between the identified air pollution impacts and resulting health impacts, even though the EIR already included some discussion of air-pollution-related respiratory illnesses. *Bakersfield, supra*, 124 Cal.App.4th at p. 1220. Therefore, the court must not have interpreted this question as one of the "scope of the analysis" to be judged by the substantial evidence standard.

B. Friant Ranch's Rationale for Rejecting the Independent Judgment Standard of Review is Unsupported by Case Law.

In its brief, Friant Ranch makes a distinction between cases where a required CEQA topic is not discussed at all (to be reviewed by independent judgment as a failure to proceed in the manner required by law) and cases where a topic is discussed, but the commenter claims the information provided is insufficient (to be judged by the substantial evidence test). (Opening Brief, pp. 13-17.) The Court of Appeal recognized these two types of cases, but concluded that both raised questions of law. (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271, 290.) We believe the distinction drawn by Friant Ranch is unduly narrow, and inconsistent with cases which have concluded that CEQA documents are insufficient. In many instances, CEQA's requirements are stated broadly, and the courts must interpret the law to determine what level of analysis satisfies CEQA's mandate for providing meaningful information, even though the EIR discusses the issue to some extent.

For example, the CEQA Guidelines require discussion of the existing environmental baseline. In *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 954-955, the lead agency had discussed the environmental baseline by describing historic month-end water levels in the affected lakes. However, the court held that this was not an adequate baseline discussion because it failed to discuss the timing and amounts of past actual water releases, to allow comparison with the proposed project. The court evidently applied the independent judgment test to its decision, even though the agency discussed the issue to some extent.

Likewise, in *Vineyard Area Citizens* (2007) 40 Cal.4th 412, this Court addressed the question of whether an EIR's analysis of water supply impacts complied with CEQA. The parties agreed that the EIR was required to analyze the effects of providing water to the development project, "and that in order to do so the EIR had, in some manner, to identify the planned sources of that water." (*Vineyard Area Citizens, supra*, at p. 428.) However, the parties disagreed as to the level of detail required for this analysis and "what level of uncertainty regarding the availability of water supplies can be tolerated in an EIR" (*Id.*) In other words, the EIR had analyzed water supply impacts for the project, but the petitioner claimed that the analysis was insufficient.

This Court noted that neither CEQA's statutory language or the CEQA Guidelines specifically addressed the question of how precisely an EIR must discuss water supply impacts. (*Id.*) However, it explained that CEQA "states that '[w]hile foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.'" (*Id.*, [Guidelines § 15144].) The Court used this general principle, along with prior precedent, to elucidate four "principles for analytical adequacy" that are necessary in order to satisfy "CEQA's informational purposes." (*Vineyard Area Citizens, supra*, at p. 430.) The Court did not defer to the agency's determination that the EIR's analysis of water supply impacts was sufficient. Rather, this Court used its independent judgment to determine for itself the level of analysis required to satisfy CEQA's fundamental purposes. (*Vineyard Area Citizens, supra*, at p. 441: an EIR does not serve its purposes where it neglects to explain likely sources of water and "... leaves long term water supply considerations to later stages of the project.")

Similarly, the CEQA Guidelines require an analysis of noise impacts of the project. (Appendix G, “Environmental Checklist Form.”¹⁷) In *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1123, the court held that the lead agency’s noise impact analysis was inadequate even though it had addressed the issue and concluded that the increase would not be noticeable. If the court had been using the substantial evidence standard, it likely would have upheld this discussion.

Therefore, we do not agree that the issue can be resolved on the basis suggested by Friant Ranch, which would apply the substantial evidence standard to *every* challenge to an analysis that addresses a required CEQA topic. This interpretation would subvert the courts’ proper role in interpreting CEQA and determining what the law requires.

Nor do we agree that the Court of Appeal in this case violated CEQA’s prohibition on courts interpreting its provisions “in a manner which imposes procedural or substantive requirements beyond those explicitly stated in this division or in the state guidelines.” (Pub. Resources Code § 21083.1.) CEQA requires an EIR to describe *all* significant impacts of the project on the environment. (Pub. Resources Code § 21100(b)(2); *Vineyard Area Citizens, supra*, at p. 428.) Human beings are part of the environment, so CEQA requires EIRs to discuss a project’s significant impacts on human health. However, except in certain particular circumstances,¹⁸ neither the CEQA statute nor Guidelines specify the precise level of analysis that agencies must undertake to satisfy the law’s requirements. (see, e.g., CEQA Guidelines § 15126.2(a) [EIRs must describe “health and safety problems caused by {a project’s} physical changes”].) Accordingly, courts must interpret CEQA as a whole to

¹⁷ Association of Environmental Professionals, 2015 CEQA Statute and Guidelines (2015) p.287.

¹⁸ E.g., Pub. Resources Code § 21151.8(C)(3)(B)(iii) (requiring specific type of health risk analysis for siting schools).

determine whether a particular EIR is sufficient as an informational document. A court determining whether an EIR's discussion of human health impacts is legally sufficient does not constitute imposing a new substantive requirement.¹⁹ Under Friant Ranch's theory, the above-referenced cases holding a CEQA analysis inadequate would have violated the law. This is not a reasonable interpretation.

IV. COURTS MUST SCRUPULOUSLY ENFORCE THE REQUIREMENTS THAT LEAD AGENCIES CONSULT WITH AND OBTAIN COMMENTS FROM AIR DISTRICTS

Courts must "scrupulously enforce" CEQA's legislatively mandated requirements. (*Vineyard Area Citizens, supra*, 40 Cal.4th 412, 435.) Case law has firmly established that lead agencies must consult with the relevant air pollution control district before conducting an initial study, and must provide the districts with notice of the intention to adopt a negative declaration (or EIR). (*Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 958.) As *Schenck* held, neither publishing the notice nor providing it to the State Clearinghouse was a sufficient substitute for sending notice directly to the air district. (*Id.*) Rather, courts "must be satisfied that [administrative] agencies have fully complied with the procedural requirements of CEQA, since only in this way can the important public purposes of CEQA be protected from subversion." *Schenck*, 198 Cal.App.4th at p. 959 (citations omitted).²⁰

¹⁹ We submit that Public Resources Code Section 21083.1 was intended to prevent courts from, for example, holding that an agency must analyze economic impacts of a project where there are no resulting environmental impacts (see CEQA Guidelines § 15131), or imposing new procedural requirements, such as imposing additional public notice requirements not set forth in CEQA or the Guidelines.

²⁰ Lead agencies must consult air districts, as public agencies with jurisdiction by law over resources affected by the project, *before* releasing an EIR. (Pub. Resources Code §§ 21104(a); 21153.) Moreover, air

Lead agencies should be aware, therefore, that failure to properly seek and consider input from the relevant air district constitutes legal error which may jeopardize their project approvals. For example, the court in *Fall River Wild Trout Foundation v. County of Shasta*, (1999) 70 Cal.App.4th 482, 492 held that the failure to give notice to a trustee agency (Department of Fish and Game) was prejudicial error requiring reversal. The court explained that the lack of notice prevented the Department from providing any response to the CEQA document. (*Id.* at p. 492.) It therefore prevented relevant information from being presented to the lead agency, which was prejudicial error because it precluded informed decision-making. (*Id.*)²¹

districts should be considered “state agencies” for purposes of the requirement to consult with “trustee agencies” as set forth in Public Resources Code § 20180.3(a). This Court has long ago held that the districts are not mere “local agencies” whose regulations are superseded by those of a state agency regarding matters of statewide concern, but rather have concurrent jurisdiction over such issues. (*Orange County Air Pollution Control District v. Public Util. Com.* (1971) 4 Cal.3d 945, 951, 954.) Since air pollution is a matter of statewide concern, *Id.* at 952, air districts should be entitled to trustee agency status in order to ensure that this vital concern is adequately protected during the CEQA process.

²¹ In *Schenck*, the court concluded that failure to give notice to the air district was not prejudicial, but this was partly because the trial court had already corrected the error before the case arrived at the Court of Appeal. The trial court issued a writ of mandate requiring the lead agency to give notice to the air district. The air district responded by concurring with the lead agency that air impacts were not significant. (*Schenck*, 198 Cal.App.4th 949, 960.) We disagree with the *Schenck* court that the failure to give notice to the air district would not have been prejudicial (even in the absence of the trial court writ) merely because the lead agency purported to follow the air district’s published CEQA guidelines for significance. (*Id.*, 198 Cal.App.4th at p. 960.) In the first place, absent notice to the air district, it is uncertain whether the lead agency properly followed those guidelines. Moreover, it is not realistic to expect that an air district’s published guidelines would necessarily fully address all possible air-quality related issues that can arise with a CEQA project, or that those

Similarly, lead agencies must obtain additional information requested by expert agencies, including those with jurisdiction by law, if that information is necessary to determine a project's impacts. (*Sierra Club v. State Bd. Of Forestry* (1994) 7 Cal.4th 1215, 1236-37.) Approving a project without obtaining that information constitutes a failure to proceed in the manner prescribed by CEQA. (*Id.* at p. 1236.)

Moreover, a lead agency can save significant time and money by consulting with the air district early in the process. For example, the lead agency can learn what the air district recommends as an appropriate analysis on the facts of its case, including what kinds of health impacts analysis may be available, and what models are appropriate for use. This saves the lead agency from the need to do its analysis all over again and possibly needing to recirculate the document after errors are corrected, if new significant impacts are identified. (CEQA Guidelines § 15088.5(a).) At the same time, the air district's expert input can help the lead agency properly determine whether another commenter's request for additional analysis or studies is reasonable or feasible. Finally, the air district can provide input on what mitigation measures would be feasible and effective.

Therefore, we suggest that this Court provide guidance to lead agencies reminding them of the importance of consulting with the relevant air districts regarding these issues. Otherwise, their feasibility decisions may be vulnerable to air district evidence that establishes that there is no substantial evidence to support the lead agency decision not to provide specific analysis. (*See Berkeley Keep Jets Over the Bay, supra*, 91 Cal.App.4th 1344, 1369-1371.)

guidelines would necessarily be continually modified to reflect new developments. Therefore we believe that, had the trial court not already ordered the lead agency to obtain the air district's views, the failure to give notice would have been prejudicial, as in *Fall River, supra*, 70 Cal.App.4th 482, 492.

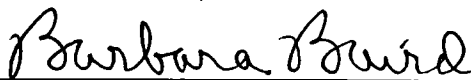
CONCLUSION

The SCAQMD respectfully requests this Court *not* to establish a hard-and-fast rule concerning whether CEQA requires a lead agency to correlate identified air quality impacts of a project with resulting health outcomes. Moreover, the question of whether an EIR is “sufficient as an informational document” is a mixed question of fact and law containing two levels of inquiry. Whether a particular proposed analysis is feasible is predominantly a question of fact to be judged by the substantial evidence standard of review. Where the requested analysis is feasible, but the lead agency relies on legal or policy reasons not to provide it, the question of whether the EIR is nevertheless sufficient as an informational document is predominantly a question of law to be judged by the independent judgment standard of review.

DATED: April 3, 2015

Respectfully submitted,

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
KURT R. WIESE, GENERAL COUNSEL
BARBARA BAIRD, CHIEF DEPUTY COUNSEL

By: 

Barbara Baird

Attorneys for Amicus Curiae

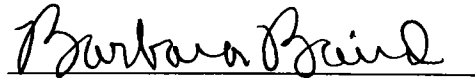
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

CERTIFICATE OF WORD COUNT

Pursuant to Rule 8.520(c)(1) of the California Rules of Court, I hereby certify that this brief contains 8,476 words, including footnotes, but excluding the Application, Table of Contents, Table of Authorities, Certificate of Service, this Certificate of Word Count, and signature blocks. I have relied on the word count of the Microsoft Word Vista program used to prepare this Certificate.

DATED: April 3, 2015

Respectfully submitted,


Barbara Baird

PROOF OF SERVICE

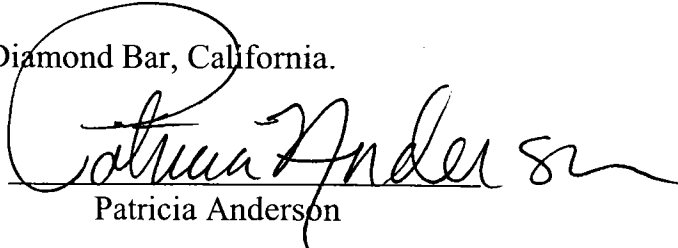
I am employed in the County of Los Angeles, California. I am over the age of 18 years and not a party to the within action. My business address is 21865 Copley Drive, Diamond Bar, California 91765.

On April 3, 2015 I served true copies of the following document(s) described as **APPLICATION OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT FOR LEAVE TO FILE BRIEF OF *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY AND [PROPOSED] BRIEF OF *AMICUS CURIAE*** by placing a true copy of the foregoing document(s) in a sealed envelope addressed as set forth on the attached service list as follows:

BY MAIL: I enclosed the document(s) in a sealed envelope or package addressed to the persons at the addresses listed in the Service List and placed the envelope for collection and mailing following our ordinary business practices. I am readily familiar with this District's practice for collection and processing of correspondence for mailing. Under that practice, the correspondence would be deposited with the United States Postal Service, with postage thereon fully prepaid at Diamond Bar, California, in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on April 3, 2015 at Diamond Bar, California.


Patricia Anderson

SERVICE LIST

James G. Moose, Tiffany K. Wright,
Laura M. Harris
REMY MOOSE MANLEY, LLP
555 Capitol Mall, Suite 800
Sacramento, CA 95814

Attorneys for Real Party in
Interest and Respondent *Friant
Ranch, L.P.*

Bryan N. Wagner
WAGNER & WAGNER
7110 N. Fresno St, Suite 340
Fresno, CA 93720

Attorney for Real Party in Interest
and Respondent *Friant Ranch,
L.P.*

Sara Hedgpeth-Harris
LAW OFFICE OF SARA
HEDGPETH-HARRIS
5445 E. Lane Avenue
Fresno, CA 93727

Attorney for Plaintiffs and
Appellants *Sierra Club, et al*

Daniel C. Cederborg
Bruce B. Johnson, Jr.
Zachary Stephen Redmond
OFFICE OF THE FRESNO COUNTY
COUNSEL
2220 Tulare Street, Suite 500
Fresno, CA 93721

Attorneys for Respondents
County of Fresno

Clerk of the Court
California Court of Appeal
Fifth Appellate District
2424 Ventura Street
Fresno, CA 93721
(via U.S. Mail & Electronic Transmission)

Clerk of the Court
Superior Court of California
County of Fresno
1130 O Street
Fresno, CA 93721

SUPREME COURT COPY

CASE NO. S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,
Plaintiffs and Appellants

v.

COUNTY OF FRESNO,
Defendant and Respondent

FRIANT RANCH, L.P.,
Real Party in Interest and Respondent

SUPREME COURT
FILED

APR 13 2015

Frank A. McGuire Clerk
Deputy

After a Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726

**APPLICATION FOR LEAVE TO FILE AMICUS CURIAE BRIEF OF
SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN
SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO AND
REAL PARTY IN INTEREST AND RESPONDENT, FRIANT RANCH, L.P.**

CATHERINE T. REDMOND (State Bar No. 226957)
261 High Street
Duxbury, Massachusetts 02332
Tel. (339) 236-5720
Catherinetredmond22@gmail.com

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT
Annette Ballatore-Williamson, District Counsel (State Bar. No. 192176)
1990 E. Gettysburg Avenue
Fresno, California 93726
Tel. (559) 230-6033
Annette.Ballatore-Williamson@valleyair.org

Counsel for San Joaquin Valley Unified Air Pollution Control District

CASE NO. S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,
Plaintiffs and Appellants

v.

COUNTY OF FRESNO,
Defendant and Respondent

FRIANT RANCH, L.P.,
Real Party in Interest and Respondent

After a Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726

**APPLICATION FOR LEAVE TO FILE AMICUS CURIAE BRIEF OF
SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN
SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO AND
REAL PARTY IN INTEREST AND RESPONDENT, FRIANT RANCH, L.P.**

CATHERINE T. REDMOND (State Bar No. 226957)
261 High Street
Duxbury, Massachusetts 02332
Tel. (339) 236-5720
Catherinetredmond22@gmail.com

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT
Annette Ballatore-Williamson, District Counsel (State Bar. No. 192176)
1990 E. Gettysburg Avenue
Fresno, California 93726
Tel. (559) 230-6033
Annette.Ballatore-Williamson@valleyair.org

Counsel for San Joaquin Valley Unified Air Pollution Control District

APPLICATION

Pursuant to California Rules of Court 8.520(f)(1), proposed Amicus Curiae San Joaquin Valley Unified Air Pollution Control District hereby requests permission from the Chief Justice to file an amicus brief in support of Defendant and Respondent, County of Fresno, and Defendant and Real Parties in Interest Friant Ranch, L.P. Pursuant to Rule 8.520(f)(5) of the California Rules of Court, the proposed amicus curiae brief is combined with this Application. The brief addresses the following issue certified by this Court for review:

Is an EIR adequate when it identifies the health impacts of air pollution and quantifies a project's expected emissions, or does CEQA further require the EIR to *correlate* a project's air quality emissions to specific health impacts?

As of the date of this filing, the deadline for the final reply brief on the merits was March 5, 2015. Accordingly, under Rule 8.520(f)(2), this application and brief are timely.

1. Background and Interest of San Joaquin Valley Unified Air Pollution Control District

The San Joaquin Valley Unified Air Pollution Control District ("Air District") regulates air quality in the eight counties comprising the San Joaquin Valley ("Central Valley"): Kern, Tulare, Madera, Fresno, Merced, San Joaquin, Stanislaus, and Kings, and is primarily responsible for attaining air quality standards within its jurisdiction. After billions of dollars of investment by Central Valley businesses, pioneering air quality regulations, and consistent efforts by residents, the Central Valley air basin has made historic improvements in air quality.

The Central Valley's geographical, topographical and meteorological features create exceptionally challenging air quality

conditions. For example, it receives air pollution transported from the San Francisco Bay Area and northern Central Valley communities, and the southern portion of the Central Valley includes three mountain ranges (Sierra, Tehachapi, and Coastal) that, under some meteorological conditions, effectively trap air pollution. Central Valley air pollution is only a fraction of what the Bay Area and Los Angeles produce, but these natural conditions result in air quality conditions that are only marginally better than Los Angeles, even though about ten times more pollution is emitted in the Los Angeles region. Bay Area air quality is much better than the Central Valley's, even though the Bay Area produces about six times more pollution. The Central Valley also receives air pollution transported from the Bay Area and northern counties in the Central Valley, including Sacramento, and transboundary anthropogenic ozone from as far away as China.

Notwithstanding these challenges, the Central Valley has reduced emissions at the same or better rate than other areas in California and has achieved unparalleled milestones in protecting public health and the environment:

- In the last decade, the Central Valley became the first air basin classified by the federal government under the Clean Air Act as a “serious nonattainment” area to come into attainment of health-based National Ambient Air Quality Standard (“NAAQS”) for coarse particulate matter (PM₁₀), an achievement made even more notable given the Valley's extensive agricultural sector. Unhealthy levels of particulate matter can cause and exacerbate a range of chronic and acute illnesses.
- In 2013, the Central Valley became the first air basin in the country to improve from a federal designation of “extreme” nonattainment to

actually attain (and quality for an attainment designation) of the 1-hour ozone NAAQS; ozone creates “smog” and, like PM10, causes adverse health impacts.

- The Central Valley also is in full attainment of federal standards for lead, nitrogen dioxide, sulfur dioxide, and carbon monoxide.
- The Central Valley continues to make progress toward compliance with its last two attainment standards, with the number of exceedences for the 8-hour ozone NAAQS reduced by 74% (for the 1997 standard) and 38% (for the 2008 standard) since 1991, and for the small particulate matter (PM2.5) NAAQS reduced by 85% (for the 1997 standard) and 61% (for the 2006 standard).

Sustained improvement in Central Valley air quality requires a rigorous and comprehensive regulatory framework that includes prohibitions (e.g., on wood-burning fireplaces in new residences), mandates (e.g., requiring the installation of best available pollution reduction technologies on new and modified equipment and industrial operations), innovations (e.g., fees assessed against residential development to fund pollution reduction actions to “offset” vehicular emissions associated with new residences), incentive programs (e.g., funding replacements of older, more polluting heavy duty trucks and school buses)¹, ongoing planning for continued air quality improvements, and enforcement of Air District permits and regulations.

The Air District is also an expert air quality agency for the eight counties and cities in the San Joaquin Valley. In that capacity, the Air District has developed air quality emission guidelines for use by the Central

¹ San Joaquin’s incentive program has been so successful that through 2012, it has awarded over \$ 432 million in incentive funds and has achieved 93,349 tons of lifetime emissions reductions. See SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 2012 PM2.5 PLAN, 6-6 (2012) available at <http://www.valleyair.org/Workshops/postings/2012/12-20-12PM25/FinalVersion/06%20Chapter%206%20Incentives.pdf>.

Valley counties and cities that implement the California Environment Quality Act (CEQA).² In its guidance, the Air District has distinguished between toxic air contaminants and criteria air pollutants.³ Recognizing this distinction, the Air District's CEQA Guidance has adopted distinct thresholds of significance for *criteria* pollutants (i.e., ozone, PM2.5 and their respective precursor pollutants) based upon scientific and factual data which demonstrates the level that can be accommodated on a cumulative basis in the San Joaquin Valley without affecting the attainment of the applicable NAAQS.⁴ For *toxic air* pollutants, the District has adopted different thresholds of significance which scientific and factual data demonstrates has the potential to expose sensitive receptors (i.e., children, the elderly) to levels which may result in localized health impacts.⁵

The Air District's CEQA Guidance was followed by the County of Fresno in its environment review of the Friant Ranch project, for which the Air District also served as a commenting agency. The Court of Appeal's holding, however, requiring correlation between the project's criteria

² See, e.g., SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, PLANNING DIVISION, GUIDE FOR ASSESSING AND MITIGATING AIR QUALITY IMPACTS (2015), available at http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf ("CEQA Guidance").

³ Toxic air contaminants, also known as hazardous air pollutants, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as birth defects. There are currently 189 toxic air contaminants regulated by the United States Environmental Protection Agency ("EPA") and the states pursuant to the Clean Air Act. 42 U.S.C. § 7412. Common TACs include benzene, perchloroethylene and asbestos. *Id.* at 7412(b).

In contrast, there are only six (6) criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead. Although criteria air pollutants can also be harmful to human health, they are distinguishable from toxic air contaminants and are regulated separately. For instance, while criteria pollutants are regulated by numerous sections throughout Title I of the Clean Air Act, the regulation of toxic air contaminants occurs solely under section 112 of the Act. Compare 42 U.S.C. §§ 7407 – 7411 & 7501 – 7515 with 42 U.S.C. § 7411.

⁴ See, e.g., CEQA Guidance at http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf, pp. 64-66, 80.

⁵ See, e.g., CEQA Guidance at http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf, pp. 66, 99-101.

pollutants and local health impacts, departs from the Air District's Guidance and approved methodology for assessing criteria pollutants. A close reading of the administrative record that gave rise to this issue demonstrates that the Court's holding is based on a misunderstanding of the distinction between toxic air contaminants (for which a local health risk assessment is feasible and routinely performed) and criteria air pollutants (for which a local health risk assessment is not feasible and would result in speculative results).⁶ The Air District has a direct interest in ensuring the lawfulness and consistent application of its CEQA Guidance, and will explain how the Court of Appeal departed from the Air District's long-standing CEQA Guidance in addressing criteria pollutants and toxic air contaminants in this amicus brief.

2. How the Proposed Amicus Curiae Brief Will Assist the Court

As counsel for the proposed amicus curiae, we have reviewed the briefs filed in this action. In addition to serving as a "commentary agency" for CEQA purposes over the Friant Ranch project, the Air District has a strong interest in assuring that CEQA is used for its intended purpose, and believes that this Court would benefit from additional briefing explaining the distinction between criteria pollutants and toxic air contaminants and the different methodologies employed by local air pollution control agencies such as the Air District to analyze these two categories of air pollutants under CEQA. The Air District will also explain how the Court of Appeal's opinion is based upon a fundamental misunderstanding of these two different approaches by requiring the County of Fresno to correlate the project's *criteria* pollution emissions with *local* health impacts. In doing

⁶ CEQA does not require speculation. *See, e.g., Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 6 Cal. 4th 1112, 1137 (1993) (upholding EIR that failed to evaluate cumulative toxic air emission increases given absence of any acceptable means for doing so).

so, the Air District will provide helpful analysis to support its position that at least insofar as criteria pollutants are concerned, CEQA does not require an EIR to correlate a project's air quality emissions to specific health impacts, because such an analysis is not reasonably feasible.

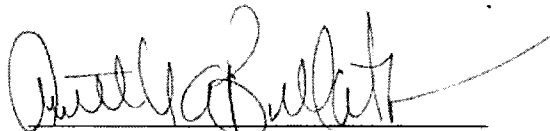
Rule 8.520 Disclosure

Pursuant to Cal. R. 8.520(f)(4), neither the Plaintiffs nor the Defendant or Real Party In Interest or their respective counsel authored this brief in whole or in part. Neither the Plaintiffs nor the Defendant or Real Party in Interest or their respective counsel made any monetary contribution towards or in support of the preparation of this brief.

CONCLUSION

On behalf of the San Joaquin Valley Unified Air Pollution Control District, we respectfully request that this Court accept the filing of the attached brief.

Dated: April 2, 2015



Annette A. Ballatore-Williamson
District Counsel
Attorney for Proposed Amicus Curiae

SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL
DISTRICT

CASE NO. S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,
Plaintiffs and Appellants

v.

COUNTY OF FRESNO,
Defendant and Respondent

FRIANT RANCH, L.P.,
Real Party in Interest and Respondent

After a Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726

**AMICUS CURIAE BRIEF OF
SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN
SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO AND
REAL PARTY IN INTEREST AND RESPONDENT, FRIANT RANCH, L.P.**

CATHERINE T. REDMOND (State Bar No. 226957)
261 High Street
Duxbury, Massachusetts 02332
Tel. (339) 236-5720
Catherinetredmond22@gmail.com

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT
Annette A. Ballatore-Williamson, District Counsel (State Bar. No. 192176)
1990 E. Gettysburg Avenue
Fresno, California 93726
Tel. (559) 230-6033
Annette.Ballatore-Williamson@valleyair.org
Counsel for San Joaquin Valley Unified Air Pollution Control District

TABLE OF CONTENTS

APPLICATION.....	1
1. Background and Interest of San Joaquin Valley Unified Air Pollution Control District.....	1
2. How the Proposed Amicus Curiae Brief Will Assist the Court	5
CONCLUSION.....	6
I. INTRODUCTION	1
II. THE COURT OF APPEAL ERRED IN FINDING THE FRIANT RANCH EIR INADEQUATE FOR FAILING TO ANALYZE THE SPECIFIC HUMAN HEALTH IMPACTS ASSOCIATED CRITERIA AIR POLLUTANTS.....	3
A, Currently Available Modeling Tools are not Equipped to Provide a Meaningful Analysis of the Correlation between an Individual Development Project’s Air Emissions and Specific Human Health Impacts.....	4
B. The Court of Appeal Improperly Extrapolated a Request for a Health Risk Assessment for Toxic Air Contaminants into a Requirement that the EIR contain an Analysis of Localized Health Impacts Associated with Criteria Air Pollutants	11
III. CONCLUSION.....	15
CERTIFICATE OF WORD COUNT.....	17

TABLE OF AUTHORITIES

CASES

<i>Bakersfield Citizens for Local Control v. City of Bakersfield</i> (2004) 124 Cal.App.4th 1184, 1199, 22 Cal.Rptr.3d 203	15
<i>Citizens for Responsible Equitable Environmental Development</i> <i>v. City of San Diego</i> , (2011) 196 Cal.App.4th 515, 527 129 Cal.Rptr.3d 512, 521	14
<i>Kings County Farm Bureau v. City of Hanford</i> (1990) 221 Cal.App.3d 692, 717 n. 8.	10
<i>Sierra Club v. City of Orange</i> (2008) 163 Cal.App.4 th 523, 535, 78 Cal.Rptr.3d 1, 13	14
<i>Sierra Club v. City of Orange</i> , 163 Cal.App.4 th at 536.....	15
<i>Sierra Club v. County of Fresno</i> (2014) 172 Cal.Rptr.3d 271, 306.....	12
<i>Sierra Club, supra</i> , 172 Cal.Rptr.3d at 303; AR 4554	8

FEDERAL STATUTES

United States Environmental Protection Agency (“EPA”) Clean Air Act. 42 U.S.C. § 7412	1,2,5,6
42 U.S.C. § 7412.....	1
U.S.C. §§ 7407 – 7411.....	1
U.S.C. §§ 7501 – 7515.....	1
42 U.S.C. § 7411.....	1
42 U.S.C. § 7412(b).....	1,2
42 U.S.C. § 7409(b)(1)	2, 6

CALIFORNIA STATUTES

California Environmental Quality Act (“CEQA”).....	<i>passim</i>
---	---------------

OTHER AUTHORITIES

- United States Environmental Protection Agency,
Ground-level Ozone: Basic Information,
available at: <http://www.epa.gov/airquality/ozonepollution/basic.html>
(visited March 10, 015).....4
- San Joaquin Valley Air Pollution Control District 2007 Ozone Plan*,
Executive Summary p. ES-6, available at:
http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/03%20Executive%20Summary.pdf (visited March 10, 2015).....5
- United States Environmental Protection Agency, *Particulate Matter: Basic Information*, available at:
<http://www.epa.gov/airquality/particlepollution/basic.html>
(visited March 10, 2015).....5
- United States Environmental Protection Agency, *Table of National Ambient Air Quality Standards*, available at:
<http://www.epa.gov/air/criteria.html#3> (visited March 10, 2015)6
- San Joaquin Valley Unified Air Pollution Control District 2013 Plan for the Revoked 1-Hour Ozone Standard*, Ch. 2 p. 2-16,
available at: http://www.valleyair.org/Air_Quality_Plans/OzoneOneHourPlan2013/02Chapter2ScienceTrendsModeling.pdf (visited March 10, 2015).....6
- Ch. 2 p. 2-19 (visited March 12, 2015); *San Joaquin Valley Unified Air Pollution Control District 2008 PM_{2.5} Plan*,
Appendix F, pp. F-2 – F-5, available at:
http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Final_Adopted_PM2.5/20%20Appendix%20F.pdf (visited March 19, 2015).....6
- San Joaquin Valley Unified Air Pollution Control District Rule 2201 §§ 2.0; 3.3.9; 4.14.1, available at:
<http://www.valleyair.org/rules/currnrules/Rule22010411.pdf>
(visited March 19, 2015).....7
- San Joaquin Valley Unified Air Pollution Control District Guide to Assessing and Mitigating Air Quality Impacts*, (March 19, 2015) p. 22,
available at:
<http://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI%20Jan%202002%20Rev.pdf> (visited March 30, 2015).....7

San Joaquin Valley Unified Air Pollution Control District Environmental Review Guidelines (Aug. 2000) p. 4-11, available at: http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf (visited March 12, 2015).....8

San Joaquin Valley Unified Air Pollution Control District 2007 Ozone Plan, Appendix B pp. B-6, B-9, available at: http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/19%20Appendix%20B%20April%202007.pdf (visited March 12, 2015).....9

I. INTRODUCTION.

The San Joaquin Valley Unified Air Pollution Control District (“Air District”) respectfully submits that the Court of Appeal erred when it held that the air quality analysis contained in the Environmental Impact Report (“EIR”) for the Friant Ranch development project was inadequate under the California Environmental Quality Act (“CEQA”) because it did not include an analysis of the correlation between the project’s criteria air pollutants and the potential adverse human health impacts. A close reading of the portion of the administrative record that gave rise to this issue demonstrates that the Court’s holding is based on a misunderstanding of the distinction between toxic air contaminants and criteria air pollutants.

Toxic air contaminants, also known as hazardous air pollutants, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as birth defects. There are currently 189 toxic air contaminants (hereinafter referred to as “TACs”) regulated by the United States Environmental Protection Agency (“EPA”) and the states pursuant to the Clean Air Act. 42 U.S.C. § 7412. Common TACs include benzene, perchloroethylene and asbestos. *Id.* at 7412(b).

In contrast, there are only six (6) criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead. Although criteria air pollutants can also be harmful to human health,

they are distinguishable from TACs and are regulated separately. For instance, while criteria pollutants are regulated by numerous sections throughout Title I of the Clean Air Act, the regulation of TACs occurs solely under section 112 of the Act. *Compare* 42 U.S.C. §§ 7407 – 7411 & 7501 – 7515 *with* 42 U.S.C. § 7411.

The most relevant difference between criteria pollutants and TACs for purposes of this case is the manner in which human health impacts are accounted for. While it is common practice to analyze the correlation between an individual facility's TAC emissions and the expected localized human health impacts, such is not the case for criteria pollutants. Instead, the human health impacts associated with criteria air pollutants are analyzed and taken into consideration when EPA sets the national ambient air quality standard ("NAAQS") for each criteria pollutant. 42 U.S.C. § 7409(b)(1). The health impact of a particular criteria pollutant is analyzed on a regional and not a facility level based on how close the area is to complying with (attaining) the NAAQS. Accordingly, while the type of individual facility / health impact analysis that the Court of Appeal has required is a customary practice for TACs, it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task.

It is clear from a reading of both the administrative record and the Court of Appeal's decision that the Court did not have the expertise to fully

appreciate the difference between TACs and criteria air pollutants. As a result, the Court has ordered the County of Fresno to conduct an analysis that is not practicable and not likely yield valid information. The Air District respectfully requests that this portion of the Court of Appeal's decision be reversed.

II. THE COURT OF APPEAL ERRED IN FINDING THE FRIANT RANCH EIR INADEQUATE FOR FAILING TO ANALYZE THE SPECIFIC HUMAN HEALTH IMPACTS ASSOCIATED CRITERIA AIR POLLUTANTS.

Although the Air District does not take lightly the amount of air emissions at issue in this case, it submits that the Court of Appeal got it wrong when it required Fresno County to revise the Friant Ranch EIR to include an analysis correlating the criteria air pollutant emissions associated with the project with specific, localized health-impacts. The type of analysis the Court of Appeal has required will not yield reliable information because currently available modeling tools are not well suited for this task. Further, in reviewing this issue de novo, the Court of Appeal failed to appreciate that it lacked the scientific expertise to appreciate the significant differences between a health risk assessment commonly performed for toxic air contaminants and a similar type of analysis it felt should have been conducted for criteria air pollutants.

///

///

A. Currently Available Modeling Tools are not Equipped to Provide a Meaningful Analysis of the Correlation between an Individual Development Project's Air Emissions and Specific Human Health Impacts.

In order to appreciate the problematic nature of the Court of Appeals' decision requiring a health risk type analysis for criteria air pollutants, it is important to understand how the relevant criteria pollutants (ozone and particulate matter) are formed, dispersed and regulated.

Ground level ozone (smog) is not directly emitted into the air, but is formed when precursor pollutants such as oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight.¹ Once formed, ozone can be transported long distances by wind.² Because of the complexity of ozone formation, a specific tonnage amount of NO_x or VOCs emitted in a particular area does not equate to a particular concentration of ozone in that area. In fact, even rural areas that have relatively low tonnages of emissions of NO_x or VOCs can have high levels of ozone concentration simply due to wind transport.³ Conversely, the San Francisco Bay Area has six times more NO_x and VOC emissions per square mile than the San Joaquin Valley, but experiences lower

¹ See United States Environmental Protection Agency, *Ground-level Ozone: Basic Information*, available at: <http://www.epa.gov/airquality/ozonepollution/basic.html> (visited March 10, 2015).

² *Id.*

³ *Id.*

concentrations of ozone (and better air quality) simply because sea breezes disperse the emissions.⁴

Particulate matter (“PM”) can be divided into two categories: directly emitted PM and secondary PM.⁵ While directly emitted PM can have a localized impact, the tonnage emitted does not always equate to the local PM concentration because it can be transported long distances by wind.⁶ Secondary PM, like ozone, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SO_x) and NO_x.⁷ Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area.

The disconnect between the *tonnage* of precursor pollutants (NO_x, SO_x and VOCs) and the *concentration* of ozone or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting ozone or PM. Indeed, the national ambient air quality standards (“NAAQS”), which are statutorily required to be set by the United States Environmental Protection

⁴ *San Joaquin Valley Air Pollution Control District 2007 Ozone Plan*, Executive Summary p. ES-6, available at: http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/03%20Executive%20Summary.pdf (visited March 10, 2015).

⁵ United States Environmental Protection Agency, *Particulate Matter: Basic Information*, available at: <http://www.epa.gov/airquality/particulatepollution/basic.html> (visited March 10, 2015).

⁶ *Id.*

⁷ *Id.*

Agency (“EPA”) at levels that are “requisite to protect the public health,” 42 U.S.C. § 7409(b)(1), are established as concentrations of ozone or particulate matter and not as tonnages of their precursor pollutants.⁸

Attainment of a particular NAAQS occurs when the concentration of the relevant pollutant remains below a set threshold on a consistent basis throughout a particular region. For example, the San Joaquin Valley attained the 1-hour ozone NAAQS when ozone concentrations remained at or below 0.124 parts per million Valley-wide on 3 or fewer days over a 3-year period.⁹ Because the NAAQS are focused on achieving a particular concentration of pollution region-wide, the Air District’s tools and plans for attaining the NAAQS are regional in nature.

For instance, the computer models used to simulate and predict an attainment date for the ozone or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO_x, SO_x and VOCs) and the atmospheric chemistry and meteorology of the Valley.¹⁰ At a very basic level, the models simulate future ozone or PM levels based on predicted changes in precursor

⁸ See, e.g., United States Environmental Protection Agency, *Table of National Ambient Air Quality Standards*, available at: <http://www.epa.gov/air/criteria.html#3> (visited March 10, 2015).

⁹ *San Joaquin Valley Unified Air Pollution Control District 2013 Plan for the Revoked 1-Hour Ozone Standard*, Ch. 2 p. 2-16, available at: http://www.valleyair.org/Air_Quality_Plans/OzoneOneHourPlan2013/02Chapter2ScienceTrendsModeling.pdf (visited March 10, 2015).

¹⁰ *Id.* at Ch. 2 p. 2-19 (visited March 12, 2015); *San Joaquin Valley Unified Air Pollution Control District 2008 PM_{2.5} Plan*, Appendix F, pp. F-2 – F-5, available at: http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Final_Adopted_PM2.5/20%20Appendix%20F.pdf (visited March 19, 2015).

emissions Valley wide.¹¹ Because the NAAQS are set levels necessary to protect human health, the closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant.

The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which *all* of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment.¹²

Accordingly, the Air District has based its thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the Valley can accommodate without affecting the attainment date for the NAAQS.¹³ The Air District has tied its CEQA significance thresholds to the level at which stationary pollution sources permitted by the Air District must "offset" their emissions.¹⁴ This "offset"

¹¹ *Id.*

¹² Although the Air District does have a dispersion modeling tool used during its air permitting process that is used to predict whether a particular project's directly emitted PM will either cause an exceedance of the PM NAAQS or contribute to an existing exceedance, this model bases the prediction on a worst case scenario of emissions and meteorology and has no provision for predicting any associated human health impacts. Further, this analysis is only performed for stationary sources (factories, oil refineries, etc.) that are required to obtain a New Source Review permit from the Air District and not for development projects such as Friant Ranch over which the Air District has no preconstruction permitting authority. See San Joaquin Valley Unified Air Pollution Control District Rule 2201 §§ 2.0; 3.3.9; 4.14.1, available at: <http://www.valleyair.org/rules/curnrules/Rule22010411.pdf> (visited March 19, 2015).

¹³ *San Joaquin Valley Unified Air Pollution Control District Guide to Assessing and Mitigating Air Quality Impacts*, (March 19, 2015) p. 22, available at: <http://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI%20Jan%202002%20Rev.pdf> (visited March 30, 2015).

¹⁴ *Id.* at pp. 22, 25.

level allows for growth while keeping the cumulative effects of all new sources at a level that will not impede attainment of the NAAQS.¹⁵ In the Valley, these thresholds are 15 tons per year of PM, and 10 tons of NOx or VOC per year. *Sierra Club, supra*, 172 Cal.Rptr.3d at 303; AR 4554. Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional, “cumulative impacts.”

Accordingly, the significance thresholds applied in the Friant Ranch EIR (15 tons per year of PM and 10 tons of NOx or VOCs) are not intended to be indicative of any localized human health impact that the project may have. While the health effects of air pollution are of primary concern to the Air District (indeed, the NAAQS are established to protect human health), the Air District is simply not equipped to analyze whether and to what extent the criteria pollutant emissions of an individual CEQA project directly impact human health in a particular area. This is true even for projects with relatively high levels of emissions of criteria pollutant precursor emissions.

For instance, according to the EIR, the Friant Ranch project is estimated to emit 109.52 tons per year of ROG (VOC), 102.19 tons per year of NOx, and 117.38 tons per year of PM. Although these levels well

¹⁵ ¹⁵ *San Joaquin Valley Unified Air Pollution Control District Environmental Review Guidelines* (Aug. 2000) p. 4-11, available at: http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf (visited March 12, 2015).

exceed the Air District's CEQA significance thresholds, this does not mean that one can easily determine the concentration of ozone or PM that will be created at or near the Friant Ranch site on a particular day or month of the year, or what specific health impacts will occur. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone or PM. This is especially true for a project like Friant Ranch where most of the criteria pollutant emissions derive not from a single "point source," but from area wide sources (consumer products, paint, etc.) or mobile sources (cars and trucks) driving to, from and around the site.

In addition, it would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have. As discussed above, the currently available modeling tools are equipped to model the impact of *all* emission sources in the Valley on attainment. According to the most recent EPA-approved emission inventory, the NO_x inventory for the Valley is for the year 2014 is 458.2 tons per day, or 167,243 tons per year and the VOC (or ROG) inventory is 361.7 tons per day, or 132,020.5 tons per year.¹⁶ Running the photochemical grid model used for predicting ozone attainment with the

¹⁶ *San Joaquin Valley Unified Air Pollution Control District 2007 Ozone Plan*, Appendix B pp. B-6, B-9, available at: http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/19%20Appendix%20B%20April%202007.pdf (visited March 12, 2015).

emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NOx and VOC in the Valley) is not likely to yield valid information given the relative scale involved.

Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like ozone and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level.

For these reasons, it is not the norm for CEQA practitioners, including the Air District, to conduct an analysis of the localized health impacts associated with a project's criteria air pollutant emissions as part of the EIR process. When the accepted scientific method precludes a certain type of analysis, "the court cannot impose a legal standard to the contrary." *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 717 n. 8. However, that is exactly what the Court of Appeal has done in this case. Its decision upends the way CEQA air quality analysis of criteria pollutants occurs and should be reversed.

///

///

///

B. The Court of Appeal Improperly Extrapolated a Request for a Health Risk Assessment for Toxic Air Contaminants into a Requirement that the EIR contain an Analysis of Localized Health Impacts Associated with Criteria Air Pollutants.

The Court of Appeal's error in requiring the new health impact analysis for criteria air pollutants clearly stems from a misunderstanding of terms of art commonly used in the air pollution field. More specifically, the Court of Appeal (and Appellants Sierra Club et al.) appear to have confused the health risk analysis ("HRA") performed to determine the health impacts associated with a project's toxic air contaminants ("TACs"), with an analysis correlating a project's criteria air pollutants (ozone, PM and the like) with specific localized health impacts.

The first type of analysis, the HRA, is commonly performed during the Air District's stationary source permitting process for projects that emit TACs and is, thus, incorporated into the CEQA review process. An HRA is a comprehensive analysis to evaluate and predict the dispersion of TACs emitted by a project and the potential for exposure of human populations. It also assesses and quantifies both the individual and population-wide health risks associated with those levels of exposure. There is no similar analysis conducted for criteria air pollutants. Thus, the second type of analysis (required by the Court of Appeal), is not currently part of the Air District's process because, as outlined above, the health risks associated

with exposure to criteria pollutants are evaluated on a regional level based on the region's attainment of the NAAQS.

The root of this confusion between the types of analyses conducted for TACs versus criteria air pollutants appears to stem from a comment that was presented to Fresno County by the City of Fresno during the administrative process.

In its comments on the draft EIR, the City of Fresno (the only party to raise this issue) stated:

[t]he EIR must disclose the human health related effects of the Project's air pollution impacts. (CEQA Guidelines section 15126.2(a).) The EIR fails completely in this area. The EIR should be revised to disclose and determine the significance of TAC impacts, and of human health risks due to exposure to Project-related air emissions.

(AR 4602.)

In determining that the issue regarding the correlation between the Friant Ranch project's criteria air pollutants and adverse health impacts was adequately exhausted at the administrative level, the Court of Appeal improperly read the first two sentences of the City of Fresno's comment in isolation rather than in the context of the entire comment. *See Sierra Club v. County of Fresno* (2014) 172 Cal.Rptr.3d 271, 306. Although the comment first speaks generally in terms of "human health related effects" and "air pollution," it requests only that the EIR be revised to disclose "the significance of TACs" and the "human health risks due to exposure."

The language of this request in the third sentence of the comment is significant because, to an air pollution practitioner, the language would only have indicated only that a HRA for TACs was requested, and not a separate analysis of the health impacts associated with the project's criteria air pollutants. Fresno County clearly read the comment as a request to perform an HRA for TACs and limited its response accordingly. (AR 4602.)¹⁷ The Air District submits that it would have read the City's comment in the same manner as the County because the City's use of the terms "human health risks" and "TACs" signal that an HRA for TACs is being requested. Indeed, the Air District was also concerned that an HRA be conducted, but understood that it was not possible to conduct such an analysis until the project entered the phase where detailed site specific information, such as the types of emission sources and the proximity of the sources to sensitive receptors became available. (AR 4553.)¹⁸ The City of Fresno was apparently satisfied with the County's discussion of human health risks, as it did not raise the issue again when it commented on the final EIR. (AR 8944 – 8960.)

¹⁷ Appellants do not challenge the manner in which the County addressed TACs in the EIR. (Appellants' Answer Brief p. 28 fn. 7.)

¹⁸ Appellants rely on the testimony of Air District employee, Dan Barber, as support for their position that the County should have conducted an analysis correlating the project's criteria air pollutant emissions with localized health impacts. (Appellants Answer Brief pp. 10-11; 28.) However, Mr. Barber's testimony simply reinforces the Air District's concern that a risk assessment (HRA) be conducted once the actual details of the project become available. (AR 8863.) As to criteria air pollutants, Mr. Barber's comments are aimed at the Air District's concern about the amount of emissions and the fact that the emissions will make it "more difficult for Fresno County and the Valley to reach attainment which means that the health of Valley residents maybe [sic] adversely impacted." Mr. Barber says nothing about conducting a separate analysis of the localized health impacts the project's emissions may have.

The Court of Appeal's holding, which incorrectly extrapolates a request for an HRA for TACs into a new analysis of the localized health impacts of the project's criteria air pollutants, highlights two additional errors in the Court's decision.

First, the Court of Appeal's holding illustrates why the Court should have applied the deferential substantial evidence standard of review to the issue of whether the EIR's air quality analysis was sufficient. The regulation of air pollution is a technical and complex field and the Court of Appeal lacked the expertise to fully appreciate the difference between TACs and criteria air pollutants and tools available for analyzing each type of pollutant.

Second, it illustrates that the Court likely got it wrong when it held that the issue regarding the criteria pollutant / localized health impact analysis was properly exhausted during the administrative process. In order to preserve an issue for the court, '[t]he "exact issue" must have been presented to the administrative agency....' [Citation.] *Citizens for Responsible Equitable Environmental Development v. City of San Diego*, (2011) 196 Cal.App.4th 515, 527 129 Cal.Rptr.3d 512, 521; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 535, 78 Cal.Rptr.3d 1, 13. "[T]he objections must be sufficiently specific so that the agency has the

opportunity to evaluate and respond to them.’ [Citation.]” *Sierra Club v. City of Orange*, 163 Cal.App.4th at 536.¹⁹

As discussed above, the City’s comment, while specific enough to request a commonly performed HRA for TACs, provided the County with no notice that it should perform a new type of analysis correlating criteria pollutant tonnages to specific human health effects. Although the parties have not directly addressed the issue of failure to exhaust administrative remedies in their briefs, the Air District submits that the Court should consider how it affects the issues briefed by the parties since “[e]xhaustion of administrative remedies is a jurisdictional prerequisite to maintenance of a CEQA action.” *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1199, 22 Cal.Rptr.3d 203.

III. CONCLUSION

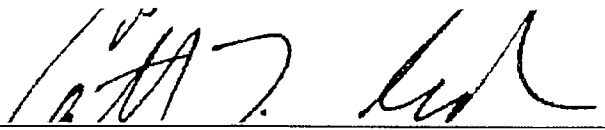
For all of the foregoing reasons, the Air District respectfully requests that the portion of the Court of Appeal’s decision requiring an analysis correlating the localized human health impacts associated with an individual project’s criteria air pollutant emissions be reversed.

¹⁹ *Sierra Club v. City of Orange*, is illustrative here. In that case, the plaintiffs challenged an EIR approved for a large planned community on the basis that the EIR improperly broke up the various environmental impacts by separate project components or “piecemealed” the analysis in violation of CEQA. In evaluating the defense that the plaintiffs had failed to adequately raise the issue at the administrative level, the Court held that comments such as “the use of a single document for both a project-level and a program-level EIR [is] ‘confusing’,” and “[t]he lead agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project,” were too vague to fairly raise the argument of piecemealing before the agency. *Sierra Club v. City of Orange*, 163 Cal.App.4th at 537.

correlating the localized human health impacts associated with an individual project's criteria air pollutant emissions be reversed.

Respectfully submitted,

Dated: April 2, 2015

A handwritten signature in black ink, appearing to read 'C. T. Redmond', is written over a horizontal line.

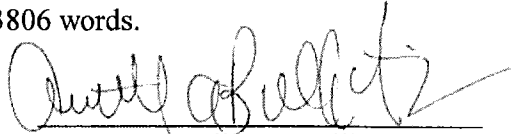
Catherine T. Redmond
Attorney for Proposed Amicus
Curiae

SAN JOAQUIN VALLEY
UNIFIED
AIR POLLUTION CONTROL
DISTRICT

CERTIFICATE OF WORD COUNT

Pursuant to Rule 8.204 of the California Rules of Court, I hereby certify that this document, based on the Word County feature of the Microsoft Word software program used to compose and print this document, contains, exclusive of caption, tables, certificate of word count, signature block and certificate of service, 3806 words.

Dated: April 2, 2015

A handwritten signature in cursive script, appearing to read "Annette A. Ballatore-Williamson", written over a horizontal line.

Annette A. Ballatore-Williamson
District Counsel (SBN 192176)

Sierra Club et al, v. County of Fresno, et al
Supreme Court of California Case No.: S219783
Fifth District Court of Appeal Case No.: F066798
Fresno County Superior Court Case No.: 11CECG00726

PROOF OF SERVICE

I am over the age of 18 years and not a party to the above-captioned action; that my business address is San Joaquin Valley Unified Air Pollution Control District located at 1990 E. Gettysburg Avenue, Fresno, California 93726.

On April 2, 2015, I served the document described below:

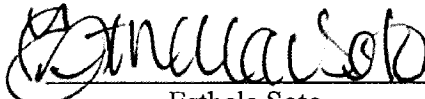
**APPLICATION FOR LEAVE TO FILE AMICUS CURIAE BRIEF OF
SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN
SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO**

On all parties to this action at the following addresses and in the following manner:

PLEASE SEE ATTACHED SERVICE LIST

- (XX) **(BY MAIL)** I caused a true copy of each document(s) to be laced in a sealed envelope with first-class postage affixed and placed the envelope for collection. Mail is collected daily at my office and placed in a United State Postal Service collection box for pick-up and delivery that same day.
- () **(BY ELECTRONIC MAIL)** I caused a true and correct scanned image (.PDF file) copy to be transmitted via electronic mail transfer system in place at the San Joaquin Valley Unified Air Pollution Control District ("District"), originating from the undersigned at 1990 E. Gettysburg Avenue, Fresno, CA, to the address(es) indicated below.
- () **(BY OVERNIGHT MAIL)** I caused a true and correct copy to be delivered via Federal Express to the following person(s) or their representative at the address(es) listed below.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I executed this document on April 2, 2015, at Fresno, California.



Esthela Soto

SERVICE LIST

Sierra Club et al, v. County of Fresno, et al

Supreme Court of California Case No.: S219783

Fifth District Court of Appeal Case No.: F066798

Fresno County Superior Court Case No.: 11CECG00726

Sara Hedgpeth-Harris, Esq. LAW OFFICE OF SARA HEDGPETH-HARRIS 2125 Kern Street, Suite 301 Fresno, California 93721 Telephone: (559) 233-0907 Facsimile: (559) 272-6046 Email: sara.hedgpethharris@shh-law.com	Attorney for Plaintiffs and Appellants, Sierra Club, et al
Daniel C. Cederborg, Esq. Bruce B. Johnson, Jr., Esq. OFFICE OF THE FRESNO COUNTY COUNSEL 2220 Tulare Street, Suite 500 Fresno, California 93721 Telephone: (559) 600-3479 Facsimile: (559) 600-3480 Email: bjohnson@co.fresno.ca.us	Attorneys for Defendant and Respondent, County of Fresno
Bryan N. Wagner, Esq. WAGNER & WAGNER 7110 N. Fresno Street, Suite 340 Fresno, California 93720 Telephone: (559) 224-0871 Facsimile: (559) 224-0885 Email: bryan@wagnerandwagner.com	Attorneys for Real Party in Interest/Respondent Friant Ranch, L.P.
Clerk of the Court Superior Court of California County of Fresno 1130 'O' Street Fresno, California 93721 Telephone: (559) 457-1900	
Clerk of the Court Fifth District Court of Appeal 2424 Ventura Street Fresno, California 93721 Telephone: (559) 445-5491	

R. Tyson Sohagim, Esq. THE SOHAGI LAW GROUP 11999 San Vicente Blvd., Suite 150 Los Angeles, California 90049 Telephone: (310) 475-5700 Facsimile: (310) 475-5707 Email: tsohagi@sohagi.com	Attorney for Amici Curiae; League of California Cities, and the California State Association of Counties
Marcia L. Scully, Esq. General Counsel METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA Post Office Box 54153 Los Angeles, California 90054 Telephone: (213) 217-6115	Attorney for Amicus Curiae, The Metropolitan Water District of Southern CA
Amy Minter, Esq. CHATEN-BROWN & CARSTENS LLP 2200 Pacific Coast Highway, Suite 318 Hermosa Beach, California 90254 Telephone: (310) 798-2400 Facsimile: (310) 798-2402 Email: ACM@CBCEarthlaw.com	Attorney for Amici Curiae, Association of Irrigated Residents, Medical Advocates for Healthy Air, and Coalition for Clean Air
Shanda M. Beltran, Esq. General Counsel BUILDING INDUSTRY LEGAL DEFENSE FOUNDATION 17744 Sky Park Cr., Suite 170 Irvine, California 92614 Telephone: (949) 553-9500 Facsimile: (949) 769-8943 Email: sbeltran@biasec.org	Attorney for Amicus Curiae, Building Industry Legal Defense Foundation
Gene Talmadge, President CALIFORNIA ASSOCIATION OF ENVIRONMENTAL PROFESSIONALS 40747 Baranda Court Palm Desert, California 92260 Telephone: (760) 340-4499 Facsimile: (760) 674-2479	Attorney for Amicus Curiae, California Association of Environmental Professionals
Jennifer L. Hernandez, Esq. HOLLAND & KNIGHT LLP 50 California Street, Suite 2800 San Francisco, California 94111	On behalf of Amicus Curiae, CEQA Research Council

Telephone: (415) 743-6927 Facsimile: (415) 743-6910 Email: Jennifer.hernandez@hklaw.com	
---	--

Appendix C

Biological Technical Report

Biological Resources Technical Report

Poplar 18 Project

AUGUST 2022

Prepared for:

POPLAR 18, LLC.

14180 Dallas Parkway, Suite 730

Dallas, Texas 75254

Contact: Dana Whitmer

Prepared by:

DUDEK

38 North Marengo Avenue

Pasadena, California 91101

Contact: Megan Enright, Senior Biologist

Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	v
1 Introduction	1
1.1 Project Description	1
1.1.1 Project Location	1
1.1.2 Project Components	1
2 Regulatory Setting.....	3
2.1 Federal	3
2.1.1 Federal Endangered Species Act.....	3
2.1.2 Migratory Bird Treaty Act	3
2.1.3 Clean Water Act	3
2.2 State.....	5
2.2.1 California Endangered Species Act.....	5
2.2.2 California Fish and Game Code	5
2.2.3 California Environmental Quality Act	6
2.2.4 Porter–Cologne Water Quality Control Act	7
2.2.5 California Native Desert Plants Act.....	8
2.3 Local.....	8
2.3.1 San Bernardino County General Plan and Development Code.....	8
2.3.2 The City of Hesperia General Plan	9
2.3.3 Hesperia Municipal Code, Chapter 16.24 – Protected Plant Policy	9
3 Methods.....	13
3.1 Literature Review.....	13
3.2 Field Surveys.....	13
3.2.1 Vegetation Community and Land Cover Mapping	14
3.2.2 Flora.....	15
3.2.3 Fauna.....	15
3.2.4 Special-Status and Regulated Resources	15
3.2.5 Survey Limitations	19
4 Environmental Setting	21
4.1 Climate	21
4.2 Geology and Topography.....	21
4.3 Soils.....	21
4.4 Surrounding Land Uses.....	21
4.5 Watersheds and Hydrology	22

5	Results.....	23
5.1	Vegetation Communities and Land Covers.....	23
5.1.1	Rubber Rabbitbrush Scrub.....	23
5.1.2	Joshua Tree Woodland	24
5.1.3	Upland Mustards	24
5.1.4	Disturbed Habitat.....	24
5.1.5	Non-Native Grassland.....	25
5.1.6	Urban/Developed Land	25
5.2	Plants and Wildlife Observed.....	25
5.2.1	Plants.....	25
5.2.2	Wildlife.....	26
5.3	Special-Status and Regulated Resources.....	26
5.3.1	Special-Status Plants.....	26
5.3.2	Western Joshua Tree	27
5.3.3	Desert Native Plants.....	27
5.3.4	Special-Status Wildlife.....	27
5.3.5	Potential Aquatic Resources	30
5.4	Wildlife Corridors and Habitat Linkages.....	30
6	Project Impacts	33
6.1	Impacts to Sensitive Vegetation Communities.....	33
6.1.1	Direct Impacts.....	33
6.1.2	Indirect Impacts	34
6.2	Impacts to Special-Status Plants.....	34
6.2.1	Direct Impacts.....	34
6.2.2	Indirect Impacts	35
6.3	Impacts to Special-Status Wildlife.....	35
6.3.1	Direct Impacts.....	35
6.3.2	Indirect Impacts	37
6.4	Impacts to Jurisdictional Wetlands and Waters	38
6.4.1	Direct Impacts.....	38
6.4.2	Indirect Impacts	38
6.5	Impacts to Wildlife Corridors and Habitat Linkages.....	39
6.5.1	Direct Impacts.....	39
6.5.2	Indirect Impacts	39
6.6	Impacts Associated with Local Policies and Ordinances	39
6.7	Impacts Associated with Habitat Conservation Plans.....	40
7	Significant Impacts and Mitigation	41
7.1	Explanation of Findings of Significance	41
7.2	Impact BIO-1: Special-Status Species.....	42

7.2.1	Direct Impacts.....	42
7.2.2	Indirect Impacts	44
7.2.3	Mitigation Measures.....	47
7.3	Impact BIO-2: Sensitive Vegetation Communities.....	52
7.3.1	Direct Impacts.....	52
7.3.2	Indirect Impacts	53
7.3.3	Mitigation Measures.....	53
7.4	Impact BIO-3: Jurisdictional Wetlands	53
7.4.1	Direct Impacts.....	53
7.4.2	Indirect Impacts	54
7.4.3	Mitigation Measures.....	55
7.5	Impact BIO-4: Wildlife Corridors and Migratory Routes.....	56
7.5.1	Direct Impacts.....	56
7.5.2	Indirect Impacts	56
7.6	Impact BIO-5: Local Policies or Ordinances.....	57
7.7	Impact BIO-6: Habitat Conservation Plans.....	57
8	References	59

TABLES

1	Survey Conditions	14
2	Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types within the Biological Survey Area	23
3	Special-status Plant Species Observed or with Moderate or High Potential to Occur within the Biological Survey Area	27
4	Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Biological Survey Area	28
5	Impacts to Vegetation Communities and Land Cover Types within the BSA.....	34

FIGURES

1	Regional Map	65
2	Project Vicinity	67
3	Project Site Plan	69
4	Biological Resources.....	71
5	Jurisdictional Delineation	73
6	Impacts to Biological Resources.....	75
7	Impacts to Jurisdictional Aquatic Resources.....	77
8	Historical Mohave Ground Squirrel Occurrences	79

APPENDICES

- A Aquatic Resources Delineation Report
- B Mojave Desert Tortoise Data Sheet
- C Mohave Ground Squirrel Protocol Survey Report
- D Plant Compendium
- E Wildlife Compendium
- F Joshua Tree Preservation, Protection, and Relocation Plan, and Desert Native Plant Relocation Plan
- G Special-Status Plants Potentially Occurring within the Biological Survey Area
- H Special-Status Wildlife Potentially Occurring within the Biological Survey Area
- I Burrowing Owl Relocation Plan

Acronyms and Abbreviations

Acronym	Definition
amsl	above mean sea level
BMP	best management practice
BSA	biological survey area
CDFW	California Department of Fish and Wildlife
CDNPA	California Desert Native Plants Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
City	City of Hesperia
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
FESA	Federal Endangered Species Act
HUC	Hydrologic Unit Code
I	Interstate
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
OHWM	ordinary high water mark
Project	Poplar 18 Project
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WEAP	Worker Environmental Awareness Program

INTENTIONALLY LEFT BLANK

1 Introduction

This report documents the results of surveys conducted to identify potential biological resources constraints for the Poplar 18 Project (Project) in the City of Hesperia, San Bernardino County, California. A cumulative analysis of the Project is provided within this report. Figure 1, Regional Map, shows the regional location of the Project, and the site vicinity.

The purpose of this report is to (1) describe the conditions of biological resources within the Project site in terms of vegetation communities, plants, wildlife, wildlife habitats, and wetlands; (2) quantify potential direct and indirect impacts to sensitive biological resources that would result from the Project; (3) discuss those impacts in terms of biological significance in view of federal, state, and local laws, and County of San Bernardino General Plan and City of Hesperia General Plan and Municipal Code policies; and (4) specify measures to avoid, minimize, and/or mitigate any significant impacts that would occur to biological resources as a result of Project implementation.

1.1 Project Description

1.1.1 Project Location

The approximately 22.9-acre Project, including the 17.84-acre Project site and 5.06-acre Off-Site Improvement Area, is located in the western part of Hesperia, which is within the Victor Valley region of San Bernardino County (Figure 1, Regional Map; Figure 2, Project Vicinity). The Project is on the southwest quadrant of Interstate (I) 15 and Main Street. The Project site is located south of Main Street, west of Cataba Road and Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The Project consists of Assessor's Parcel Numbers 3064-581-04-0000 and 3064-581-05-0000. Specifically, the Project is located in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map. Regional access to the Project is provided via I-15 and U.S. Highway 395.

1.1.2 Project Components

The Project would involve construction of an industrial/warehouse building and associated improvements on 17.84 acres of vacant land (see Figure 3, Project Site Plan). The proposed project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape areas. Offices within the building would be distributed among four individual office spaces in each corner of the building.

On-Site and Off-Site Improvements

The Project would include improvements along Mesa Linda Street, Lassen Street, and Poplar Street, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project frontage's landscape setback area, as well as within the landscape areas found around the proposed industrial/warehouse building and throughout the Project site.

Site Access, Circulation, and Parking

Access to the Project site would be provided by four driveways: two driveways on the western side of the Project site off Lassen Street and two driveways on the eastern side of the Project site along Mesa Linda Street. Paved passenger vehicle parking areas would be provided within areas north, east, and west of the warehouse building, and tractor-trailer stalls and loading docks would be located on the northern side of the warehouse building. The Project would provide approximately 54 loading dock positions, approximately 54 tractor-trailer stalls, roughly 182 passenger vehicle parking spaces (including accessible and electric vehicle charging stalls), and approximately 14.9% landscape area coverage.

Utility Improvements

Given the vacant, undeveloped nature of the Project site, both wet and dry utilities, including domestic water, sanitary sewer, and electricity, would need to be extended onto the Project site. Stormwater would be managed on site using at-grade detention basins and subsurface catch basins to capture and treat on-site stormwater.

Operations

Tenants for the Project have not been identified; however, the final layout of the industrial warehouse building is complete. Business operations would be expected to be conducted within the enclosed building, with the exception of the ingressing and egressing of trucks and passenger vehicles accessing the site; passenger and truck parking; the loading and unloading of trailers within designated truck courts/loading areas; and the internal and external movement of materials around the Project site via forklifts, pallet jacks, yard hostlers, and similar equipment. It is anticipated that the facilities would be operated 24 hours a day, 7 days a week. At this time, the Project applicant does not anticipate leasing any portion of the building to a tenant that would require refrigerated space, and this use is not contemplated in this environmental analysis.

2 Regulatory Setting

2.1 Federal

2.1.1 Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under FESA, it is unlawful to “take” any listed species; “take” is defined as, “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the intentional and unintentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, “take” is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Currently, the Migratory Birds office considers nests that support eggs, nestlings, or juveniles to be active. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

2.1.3 Clean Water Act

The Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The Regional Water Quality Control Boards (RWQCBs) administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found at 33 Code of Federal Regulations (CFR) Parts 320 through 332. Guidelines for implementation are referred to as the

Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

Based on a recent court case ordering vacation of the Navigable Waters Protection Rule, USACE and the U.S. Environmental Protection Agency halted implementation of the rule and are interpreting waters of the United States consistent with the pre-2015 regulatory regime until further notice. Per 33 CFR 328.3(a), “waters of the United States” are defined as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.
8. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

The USACE/U.S. Environmental Protection Agency Rapanos Guidance states that USACE regulates traditional navigable waters, adjacent wetlands, relatively permanent waters tributary to traditional navigable waters, and adjacent wetlands. Non-relatively permanent waters (those exhibiting less than 3 months of continuous surface flows) and their adjacent wetlands are regulated if there is a significant nexus from the site to traditional navigable waters.

The State Water Resources Control Board has authority over wetlands through Section 401 of the CWA, as well as the Porter–Cologne Water Quality Control Act (Porter–Cologne Act), California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredge or fill material into waters of the United States) first obtain certification from the appropriate state agency stating that the fill is consistent with the state’s water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the State Water Resources Control Board to the nine RWQCBs. A request for certification is submitted to the RWQCB at the same time that an application is filed with USACE.

2.2 State

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code, Sections 2050–2068) provides protection and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, under CESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to FESA, and is prohibited for both listed and candidate species. Take authorization may be obtained by a project applicant from the California Department of Fish and Wildlife (CDFW) under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of mitigation implementation, and monitoring of mitigation measures.

On October 21, 2019, the California Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list western Joshua tree (*Yucca brevifolia*) (Center for Biological Diversity 2019).¹ On November 1, 2019, the Commission referred the petition to CDFW for evaluation. CDFW evaluated the scientific information presented in the petition and other relevant information possessed by CDFW at the time of review, and prepared a report for submittal to the Commission. The report states that CDFW recommended that the Commission accept the petition for further consideration of western Joshua tree under CESA. On September 22, 2020, the Commission approved the petition to accept the candidacy proposal for western Joshua tree, effective October 9, 2020 (CDFW 2020a). When a plant or wildlife species is granted candidacy under CESA, the species is given the same protection as a threatened or endangered species while the Commission evaluates whether formal listing as threatened or endangered under is warranted. For this Project, take or removal of western Joshua trees would require a 2081 Incidental Take Permit from CDFW.

2.2.2 California Fish and Game Code

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the “take” of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

¹ On October 21, 2019, the California Fish and Game Commission received a petition to list the following as threatened under the California Endangered Species Act: (1) western Joshua tree (*Yucca brevifolia*) throughout its California range, or, in the event the Commission determines that listing of *Yucca brevifolia* throughout its California range is not warranted, then (2) the western Joshua tree population within the northern part of western Joshua tree’s California range, or (3) the western Joshua tree population within the southern part of western Joshua tree’s California range.

Sections 1600–1616

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. CDFW takes jurisdiction to the top of bank of the stream or the limit of the adjacent riparian vegetation, which may include oak woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high water mark (OHWM) to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under California Fish and Game Code Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete, certified California Environmental Quality Act (CEQA) document.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (Section 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the Legislature’s intent to “preserve, protect and enhance rare and endangered plants in this State.” The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as “endangered” or “rare,” and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, the categories of “threatened” and “endangered” species were added to CESA. All “rare” animals in CESA were converted to “threatened,” but this did not change for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

Nesting Birds

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

2.2.3 California Environmental Quality Act

CEQA requires identification of a project’s potentially significant impacts on biological resources, and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

The State of California CEQA Guidelines (CEQA Guidelines) Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose “survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors.” A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists “in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or ... [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered ‘threatened’ as that term is used in the federal Endangered Species Act.” Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of “Special Species” as “a general term that refers to all of the taxa the California Natural Diversity Database (CNDDB) is interested in tracking, regardless of their legal or protection status.” This is a broader list than those species that are protected under FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List Species. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as California Rare Plant Rank (CRPR) 1 and 2 by the California Native Plant Society (CNPS), and potentially some CRPR 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines requires an evaluation of impacts to “any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.”

2.2.4 Porter-Cologne Water Quality Control Act

Pursuant to provisions of the Porter-Cologne Act, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code Section 13260[a]). The State Water Resources Control Board defines a water of the state as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code, Section 13050[e]). All waters of the United States are waters of the state. Waters of the state include wetlands, and the State Water Resources Control Board definition of wetlands includes the following:

1. Natural wetlands.
2. Wetlands created by modification of a surface water of the state.
3. Artificial wetlands that meet any of the following criteria:
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration.
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state.
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape.
 - d. Greater than or equal to 1 acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to

regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

Wetlands that may not meet all of USACE's wetland delineation criteria are considered wetland waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation" (SWRCB 2019). Additionally, aquatic resources that USACE determines to not be waters of the United States because they lack a significant nexus to a traditional navigable water or are above the OHWM limit of federal jurisdiction, may also be considered waters of the state. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (waste discharge requirements) for impacts to waters of the state under the Porter–Cologne Act.

2.2.5 California Native Desert Plants Act

The purpose of the California Desert Native Plants Act (CDNPA) is to protect certain species of California desert native plants from unlawful harvesting on both public and privately owned lands. The CDNPA only applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties. Within these counties, the CDNPA prohibits the harvest, transport, sale, or possession of specific native desert plants unless a person has a valid permit or wood receipt, and the required tags and seals. The appropriate permits, tags, and seals must be obtained from the sheriff or commissioner of the county where collecting will occur, and the county will charge a fee. More information on the CDNPA, including the species protected under the law, is available by reading the provisions of the law.

2.3 Local

2.3.1 San Bernardino County General Plan and Development Code

The County of San Bernardino General Plan contains the goals and policies that guide future development within San Bernardino County (County of San Bernardino 2007a). San Bernardino County is broken into three distinct geographic planning regions: the Valley, the Mountains, and the Desert. The Project site occurs within the Desert Planning Region of San Bernardino County. The Desert Planning Region has two goals and policies: (1) to preserve open lands by working with the Bureau of Land Management, and (2) to ensure that off-highway-vehicle use is managed to protect environmentally sensitive resources.

The Project would also need to comply with the Development Code. The County of San Bernardino Development Code (County of San Bernardino 2007b) implements the goals and policies of the County of San Bernardino General Plan. Chapter 88.01.060, Desert Native Plant Protection, of the Development Code is a subset of the Plant Protection and Management Code (Chapter 88.01 of the Development Code) and focuses on the conservation of specified desert plant species.

2.3.2 The City of Hesperia General Plan

The City of Hesperia (City) General Plan Conservation and Open Space Elements (City of Hesperia 2010) contain goals and policies that address biological resources. The following goals and policies pertain to biological resources and are relevant to the Project:

Goal CN-3. Minimize development and set aside necessary open space near and along the surface waters as well as those washes and other water passageways located in the City to preserve and protect plant and animal species and their natural habitat dependent on such surface waters and waterways.

Policy CN-3.1. Monitor the development impacts to these surface water resources within the City.

Policy CN 3.2. Preserve areas within the Oro Grande wash and un-named wash #1 that exhibit ideal native habitat in a natural state.

Goal CN 4. Establish policies and regulations to protect the natural environment and habitat of the City's biological resources.

Policy CN-4.1. Preserve pristine open space areas and known wildlife corridors areas for conservation to protect sensitive species and their habitats.

Policy CN-4.2. Encourage the protection, preservation and long-term viability of environmentally sensitive habitats and species in the City.

Policy CN-4.3. Identify lands that are suitable for preservation for sensitive species and their habitats.

Policy CN-4.4. In those areas known as possible habitat for endangered and sensitive species, require proper assessments before authorizing development.

Policy CN-4.5. Where such assessments indicate the presence of endangered or sensitive species, require appropriate actions to preserve the habitat and protect the identified species.

2.3.3 Hesperia Municipal Code, Chapter 16.24 – Protected Plant Policy

Chapter 16.24 of the Hesperia Municipal Code contains the City's protected plant policies. This chapter establishes policies governing the removal of protected plants, including the following (City of Hesperia 2009):

1. The following regulated desert native plants with stems two inches or greater in diameter or six feet or greater in height:
 - a. *Dalea spinosa* (smoketree);
 - b. All species of the family *Agavaceae* (century plants, nolinias, yuccas);
 - c. All species of the genus *Prosopis* (mesquites).
2. Creosote rings, ten feet or greater in diameter.
3. All Joshua trees (mature and immature).
4. All plants protected or regulated by the California Desert Native Plants Act.

Additionally, Section 16.24.060 of the Hesperia Municipal Code states the following (City of Hesperia 2009):

Prior to the issuance of a native tree or plant removal permit in conjunction with a development permit and/or approval of a land use application which authorizes such removal, a plot plan or grading plan shall be approved by the appropriate City review authority for each site indicating exactly which trees or plants are authorized to be removed. The required information can be added to any other required site plan. Prior to issuance of development permits in areas with native trees or plants that are subject to the provisions of this chapter, a preconstruction inspection shall be conducted by the appropriate authority. Such preconstruction inspections may be combined with any other required inspection.

2.3.3.1 Protected Plant Plan and Relocation/Adoption

Furthermore, the City's Protected Plants Policy (City of Hesperia 2009) states the following for Tentative Tract, non-single-family residential developments (i.e., commercial, industrial, and apartment development):

- A protected plant plan shall be prepared by a certified arborist or registered botanist.
- An application and fee shall be completed and paid to the City.
- Healthy, transplantable plants shall be relocated on site or may be placed in an adoption program.

To qualify as an approved adoption program, a developer shall provide a letter on company letterhead, describing the program and the community notification process. The program shall identify the following, as a minimum:

- A. A public notice process which may include publication in local newspapers, radio advertisement, hand distributed fliers, and other noticing techniques. Noticing must occur over a period of not less than three weeks.
- B. The location where the trees may be viewed by the public and a clearly identified period of at least two weeks (including weekends) when trees/plants are available for adoption.
- C. The person that will be available on-site to assist those adopting trees to find the actual trees/plants for removal. An on-site or cell phone number for that person is required.
- D. A note that a copy of the City Joshua Tree Transplanting Guidelines will be provided to each adopter.
- E. A log showing the name, address, and phone number of each adopter and the number and type of trees/plants they received.

Note: At least 50% of the transplantable trees and plants shall be adopted or the remaining number below 50% shall be purchased at \$350 per transplantable tree. Purchased trees must be recycled at Advance Disposal.

2.3.3.2 Findings for Removals

Per Hesperia Municipal Code Section 16.24.040, the reviewing authority must authorize the removal of a native tree or plant subject to the provisions of the Hesperia Municipal Code only if the following findings are made:

- A. The removal of the native tree or plant does not have a significant adverse impact on any proposed mitigation measures, soil retention, soil erosion and sediment control measures, scenic routes, flood and surface water runoff and wildlife habitats (flora and fauna), especially those with limited habitats (e.g., eagles).
- B. The removal of the native tree or plant is justified for one of the following reasons:
 - 1. The location of the native tree or plant and/or its drip line interferes with the reasonable improvement of the site with an allowed structure, sewage disposal area, paved area or other approved improvement or ground disturbing activity. Also such improvements have been designed in such a manner as to save as many healthy native trees and/or plants as reasonably practicable in conjunction with the proposed improvements;
 - 2. The location of the native tree or plant and/or its drip line interferes with the planned improvement of a street or development of an approved access to the subject or adjoining private property;
 - 3. The location of the native tree or plant is hazardous to pedestrian or vehicular travel or safety as determined by the director of transportation, flood control and airports or other county reviewing authority;
 - 4. The native tree or plant or its presence interferes with or is causing excessive damage to utility services or facilities, roadways, sidewalks, curbs, gutters, pavement, sewer line(s), drainage or flood control improvements, foundations, existing structures, or municipal improvements;
 - 5. The condition or location of the native plant or tree is adjacent to and in such close proximity to existing or proposed structure that the native plant or tree has or will sustain significant damage.
- C. Joshua trees that are proposed to be removed have been transplanted or stockpiled for future transplanting wherever possible. In the instance of stockpiling the permittee has posted a bond to insure such Joshua trees are transplanted appropriately.

INTENTIONALLY LEFT BLANK

3 Methods

Data regarding biological resources present within the 29.18-acre biological survey area (BSA), which includes the Project site and Off-Site Improvement Area plus a 100-foot buffer (see Figure 4, Biological Resources), was obtained through a review of pertinent literature, field reconnaissance, habitat assessments, and protocol/focused surveys, which are described in detail in this chapter. For purposes of this report, special-status resources are defined as follows:

- Special-status plant species include the following:
 - Species designated as either rare, threatened, or endangered by CDFW or USFWS, and are protected under either CESA (California Fish and Game Code Section 2050 et seq.) or FESA (16 USC 1531 et seq.).
 - Species that are candidate species being considered or proposed for listing under FESA or CESA.
 - Species that are included on the CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2022a), or species with a CRPR of 1 or 2 in the CNPS Inventory of Rare and Endangered Plants of California (CNPS Inventory) (CNPS 2022a).
- Special-status wildlife species include the following:
 - Species designated as either rare, threatened, or endangered by CDFW or USFWS and are protected under either CESA (California Fish and Game Code Section 2050 et seq.) or FESA (16 USC 1531 et seq.).
 - Species that are candidate species being considered or proposed for listing under FESA or CESA.
 - Species that are included on the CDFW Special Animals List (CDFW 2022b).
 - Species designated as a California Fish and Game Code Section 4000 fur-bearing animal.
- Special-status vegetation communities are those designated as sensitive by CDFW.

3.1 Literature Review

Prior to conducting a field assessment, a literature search and database review were conducted by Dudek biologists to evaluate the natural resources found or potentially occurring within the BSA. The database review included the most recent versions of the CNDDDB and special-status species lists (CDFW 2022a, 2022b, 2022c), and the CNPS Inventory (CNPS 2022a). These databases were reviewed to identify sensitive biological resources present or potentially present for the U.S. Geological Survey 7.5-minute quadrangle on which the BSA is located (Baldy Mesa) and the eight surrounding quadrangles (Shadow Mountains SE, Adelanto, Victorville, Hesperia, Cajon, Silverwood Lake, Phelan, and Telegraph Peak). The CDFW occurrence data and critical habitat databases were queried using GIS software based on a 5-mile buffer around the BSA. Potential and/or historical drainages and aquatic features were investigated based on a review of U.S. Geological Survey topographic maps (1:24,000-scale), aerial photographs, the USFWS National Wetland Inventory database (USFWS 2022a), and the Natural Resource Conservation Service's Web Soil Survey (USDA 2022a).

3.2 Field Surveys

Dudek biologist Tracy Park conducted an initial reconnaissance-level field survey of the BSA to document biological resources and vegetation communities on November 11, 2021. On May 9, 2022, Dudek biologist Erin Bergman conducted a focused special-status plant survey and desert native plant survey. An aquatic resources jurisdictional delineation (Appendix A) was conducted by Dudek biologist Tracy Park on November 11, 2021. The purpose of the

aquatic resources jurisdictional delineation is to identify and map potential waters of the United States, including wetlands, under USACE jurisdiction pursuant to Section 404 of the federal CWA; under RWQCB jurisdiction pursuant to the Section 401 of the CWA and the Porter–Cologne Water Quality Control Act; and under CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code. Additional field surveys included a focused western Joshua tree (*Yucca brevifolia*) mapping survey, and a protocol presence/absence survey for Mojave desert tortoise (*Gopherus agassizii*) (Appendix B) and Mohave ground squirrel (*Xerospermophilus mohavensis*) (Appendix C).

Table 1 lists the dates, focus, scope, conditions, and personnel for each survey. Photos of the Project site can be found in the specific survey reports.

Table 1. Survey Conditions

Date	Biologist	Type of Survey	Times	Weather Conditions
11/11/2021	T. Park	Biological Reconnaissance Survey; Aquatic Resources Delineation	9:58 AM–12:15 PM	71°F–72°F; 0% cloud cover; 1–5 mph wind
11/11/2021	K. Burritt; N. Stamm	Western Joshua Tree Mapping Survey	N.R.	N.R.
04/07/2022	K. Burritt; K. Ortiz	Western Joshua Tree Mapping Survey	N.R.	N.R.
04/19/2022	S. Greely	Desert Tortoise Protocol Survey	8:18 AM–3:24 PM	59°F–69°F; 0%–10% cloud cover; 1–27 mph wind
05/09/2022	E. Bergman	Special-Status Plant Survey and Desert Native Plant Survey	11:07 AM–4:57 PM	62°F–65°F; 20%–40% cloud cover; 0–4 mph wind
03/2022– 07/2022 ¹	Dipodomys Ecological Consulting	Mohave Ground Squirrel Protocol Surveys	Varied ¹	Varied ¹

Notes: mph = miles per hour; N.R. = not recorded.

¹ Survey conditions for the Mohave ground squirrel protocol surveys are provided in Appendix C.

3.2.1 Vegetation Community and Land Cover Mapping

Dudek biologists conducted vegetation mapping within the BSA on November 11, 2021. The survey date, biologist, and weather conditions are included in Table 1. Dudek biologists used CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018) and California Natural Community List (CDFW 2021), also referred to as the Natural Communities List, based on A Manual of California Vegetation, Online Edition (CNPS 2022b), to map the entire BSA. These classification systems focus on a quantified, hierarchical approach that includes both floristic (plant species) and physiognomic (community structure and form) factors as currently observed (as opposed to predicting climax or successional stages). Vegetation communities and land covers were delineated to the vegetation alliance level and, where appropriate, the association level. Some modifications, such as the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986; Oberbauer et al. 2008), were incorporated to accommodate the lack of conformity of the observed communities to those included in these references.

Vegetation mapping was conducted on foot to visually cover 100% of the BSA. Vegetation communities and land cover types were mapped in the field using an ESRI ArcGIS mobile application. Vegetation communities were

classified based on site factors, descriptions, distribution, and characteristic species present within an area. Information was recorded, including dominant species and associated cover classes, aspect, canopy height, and visible disturbance factors.

Minimum mapping units were established to standardize the scale and appropriate evaluation of stands, as recommended by CDFW (2020b). Mapping standards call for a minimum mapping unit of not greater than 10 acres for upland natural communities not considered sensitive, but usually 1 or 2 acres, and 0.25 acres for sensitive vegetation communities and wetland or riparian vegetation communities. Visible disturbance factors were also noted during vegetation mapping.

Following completion of the fieldwork, Dudek GIS analysts digitized the vegetation boundaries as delineated by the field biologists and created a GIS coverage for vegetation communities.

3.2.2 Flora

Latin and common names for plant species with a CRPR follow the CNPS Inventory (CNPS 2022a). For plant species without a CRPR, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2022), and common names follow the California Natural Community List (CDFW 2021) or the United States Department of Agriculture Natural Resources Conservation Service Plants Database (USDA 2022b). Plant species observed within the BSA are provided in Appendix D.

3.2.3 Fauna

All wildlife species detected during the field surveys by sight, vocalizations, burrows, tracks, scat, and other signs were recorded. The BSA was visually scanned with and without binoculars to identify wildlife. Latin and common names of animals follow Crother (2017) for reptiles and amphibians, American Ornithological Society (AOS 2018) for birds, and Wilson and Reeder (2005) for mammals. Wildlife species observed within the BSA are provided in Appendix E.

3.2.4 Special-Status and Regulated Resources

3.2.4.1 Special-Status Plant Survey

Based on the results of the literature review discussed in Section 3.1, six special-status plant species were determined to have a moderate potential to occur within the BSA based on known species distribution, species-specific habitat preferences, and habitat conditions on site: western Joshua tree (further discussed in Section 3.2.4.2), white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), Mojave monkeyflower (*Diplacus mohavensis*), sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*), short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), and beaver dam breadroot (*Pediomelum castoreum*). Therefore, focused surveys were conducted for these species. In addition, focused surveys for desert native plants, in accordance with the CDNPA and Chapter 16.24 of the Hesperia Municipal Code, were conducted and are further discussed in Section 3.2.4.3.

Dudek biologists conducted a focused special-status plant survey within the BSA on May 9, 2022. The survey date, biologist, and weather conditions are included in Table 1. Field survey methods and mapping of rare plants conformed to CNPS's Botanical Survey Guidelines (CNPS 2001), Protocols for Surveying and Evaluating Impacts to

Special Status Native Populations and Natural Communities (CDFW 2018), and General Rare Plant Survey Guidelines (Cypher 2002). The surveys consisted of one survey pass in May that provided 100% coverage of the BSA. Western Joshua tree mapping within the BSA was conducted during a separate focused survey and is further discussed in Section 3.2.4.2, Western Joshua Tree Focused Survey.

Before conducting the surveys, Dudek botanists conducted reference population checks to ensure the focal special-status plant species were in bloom and identifiable. Reference checks were conducted for white-bracted spineflower on March 31, 2022, along the Lytle Creek upper terrace near Keenbrook Road west of I-15. This reference population check determined that the phenology for white-bracted spineflower was 98% vegetative and only 2% in bloom. Short-joint beavertail is a conspicuous stem succulent species that can be identified outside the blooming period, and therefore was not included in the 2022 reference check.

3.2.4.2 Western Joshua Tree Focused Survey

The California Fish and Game Commission determined that listing western Joshua tree as threatened or endangered under CESA may be warranted and is currently under review (CDFW 2020a). During the status review, western Joshua tree is protected under CESA as a candidate species.

Per the City's Protected Plants Policy, Dudek's International Society of Arboriculture (ISA) certified arborists performed a western Joshua tree survey to inventory and evaluate the health and relocation potential for each Joshua tree located on the Project site, in the off-site improvements area, and in a 186-foot buffer (Joshua Tree Inventory Survey Area). The western Joshua tree survey inventory and evaluation survey methods are provided in Appendix F. The inventory was conducted by ISA-certified arborists Noah Stamm and Katrina Burritt on November 11, 2021; Joshua tree phenological data was collected by Katrina Burritt and Kalie Ortiz on April 7, 2022 (Table 1). During the inventory, the GPS position of each Joshua tree found in the Joshua Tree Inventory Survey Area was recorded. Furthermore, the following attributes of each tree were collected:

- Species
- Diameter at standard height (4.5 feet above ground level)
- Height (feet)
- Spread (feet)
- Health (excellent, good, fair, poor, critical, and dead)²
- Number of branches
- Clonal status (clone or single trunk)

² **Health Rating Descriptions:**

Excellent. Tree has excellent health and strong vigor. No damage. Flowering and fruiting expected. Typically, only given to large, high-quality specimens (taller than 15 feet in height). Transplanting generally not recommended due to size.

Good. Tree has good health and vigor. All branches are alive and healthy. Damage is very localized and minimal. Flowering and fruiting likely, if tree is large enough. Tree is transplantable.

Fair. Tree health is average. Some stressors or damage possible, but any damage is minimal to moderate (e.g., rodent grazing, insect damage). No dead/broken branches. Tree is transplantable.

Poor. Tree is under stress, and overall health is in decline, or tree has taken significant damage. Mortality likely unless stressors relieved and/or conditions change. Broken/dead limbs likely present. Tree is generally not transplantable.

Critical. Tree is in extreme decline. One or more branches dead. One or more branches dying. Physical damage likely present. Damage is significant and extensive. Mortality expected within 2 to 4 years. Tree is not transplantable.

Dead. Tree is dead.

In addition to the general Joshua tree attributes that were collected, per CDFW, Dudek arborists collected the following phenological data for each Joshua tree found in the Joshua Tree Inventory Survey Area:

- Number of panicles
- New growth
- Leaves
- Flowers
- Open flowers
- Presence of fruit

All inventoried and assessed protected trees were tagged with an aluminum tag bearing a unique identification number, which was placed on the main trunk on the north side of each western Joshua tree. Tagging on the north side allows for proper orientation during relocation (each relocated western Joshua tree needs to be oriented in the same direction as it was in its original location).

3.2.4.3 Desert Native Plant Survey

On May 9, 2022, a desert native plant survey within the BSA was conducted in accordance with the CDNPA and Chapter 16.24 of the Hesperia Municipal Code. The survey date, biologist, and weather conditions are provided in Table 1. All of the desert native plant target species are conspicuous shrubs that would have been identifiable during the survey.

In accordance with the City of Hesperia's Municipal Code, Chapter 16.24, the following desert native plants were considered target species:

1. The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:
 - a. *Dalea, Spinosa* (smoketree);
 - b. All species of the family Agavaceae (century plants, nolina, yuccas);
 - c. All species of the genus *Prosopis* (mesquites).
2. Creosote rings, ten feet or greater in diameter.
3. All Joshua trees (mature and immature).

In accordance with the CDNPA, Chapter 3, the following desert native plants were target species:

- (a) All species of the family Agavaceae (century plants, nolin, yuccas).
- (b) All species of the family Cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 which may be harvested under a permit obtained pursuant to that section.
- (c) All species of the family Fouquieriaceae (ocotillo, candlewood).
- (d) All species of the genus *Prosopis* (mesquites).
- (e) All species of the genus *Cercidium* (palos verdes).
- (f) *Acacia greggii* (catclaw).
- (g) *Atriplex hymenelytra* (desert-holly).
- (h) *Dalea spinosa* (smoke tree).
- (i) *Olneya tesota* (desert ironwood), including both dead and live desert ironwood.

3.2.4.4 Desert Tortoise Protocol-Level Survey

On April 2, 1990, the Mojave population of the desert tortoise was listed by USFWS as threatened (55 FR 12178-12191). Proposed actions within the range of desert tortoise fall under purview of FESA. Because the Project lies within the range of desert tortoise (CDFW 2022c) and in the Western Recovery Unit (USFWS 2011), Dudek biologists conducted focused surveys for desert tortoise to determine the status of the species in the BSA. To evaluate the impacts to desert tortoise, protocol surveys were conducted in accordance with the USFWS Pre-Project Field Survey Protocol for Potential Desert Tortoise, included in Preparing for any Action That May Occur Within the Range of the Mojave Desert Tortoise (*Gopherus agassizii*) (USFWS 2010). Following the protocol, Dudek biologists conducted surveys during May, one of the two periods when desert tortoises are most active. Biologists surveyed the BSA by walking approximately 10-meter-wide transects for 100% coverage of the BSA.

3.2.4.5 Mohave Ground Squirrel Protocol Survey

Dipodomys Ecological Consulting biologists conducted an initial Mohave ground squirrel visual survey in March 2022. The visual survey was conducted using methods described within the 2003 California Department of Fish and Game Mohave Ground Squirrel Survey Guidelines (CDFG 2003). Field methods are described in detail in Appendix C. Following an initial visual survey, three 5-day live trapping surveys for Mohave ground squirrel were conducted between March 23 and July 14, 2022. The methods used for this trapping effort followed the most recent Mohave Ground Squirrel Survey Guidelines, issued in 2003, with minor modifications in 2010 (CDFG 2003). Camera trappings consisted of three camera stations in locations designated by CDFW; methods are described in detail in Appendix C.

3.2.4.6 Aquatic Resources Delineation

Before conducting fieldwork for the aquatic resources delineation, Dudek reviewed aerial maps from the National Wetlands Inventory (USFWS 2022a), the National Hydrography database (USGS 2022), and the Natural Resource Conservation Service (USDA 2022a, 2022b), and historic aerials and topographic maps (Google 2022; Historic Aerials Online 2022). Dudek biologist Tracy Park conducted an aquatic resources delineation field visit on November 11, 2021. The survey date, biologist, and weather conditions are included in Table 1. Survey datasheets and forms are included in the Aquatic Resources Delineation Report, provided in Appendix A. The surveys were conducted on foot to visually cover 100% of the BSA.

Dudek conducted a delineation of state and federal jurisdictional waters and wetlands within the BSA in accordance with current policies. Federal wetlands were mapped based on the procedures in USACE's 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and its 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Non-wetland waters were mapped at the OHWM based on the procedures defined in USACE's 2008 A Field Guide to Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b). Waters of the state were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, adopted on April 2, 2019. CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under California Fish and Game Code Section 1602.

To aid in the delineation and in conformance with the USACE 2008 Field Guide, two OHWM datasheets (T-1 and T-2) were recorded at potential non-wetland waters within the BSA to determine the OHWM indicators within those features. OHWM datasheets are included in Appendix F of Appendix A. The jurisdictional delineation did not contain

any features that met the State Water Resources Control Board wetland criteria, and due to the lack of hydrophytic vegetation and hydric soils, wetland determination data forms were not completed.

The limits of aquatic resources were collected in the field using a Trimble GeoXT GPS unit or ESRI Collector mobile application with sub-meter accuracy. The geographic extents were digitized in GIS based on the GPS data and data collected directly onto field maps into a Project-specific GIS using ArcGIS software.

3.2.5 Survey Limitations

Limitations of the surveys include a diurnal bias and the absence of trapping for reptiles, amphibians, and small mammals at night. The surveys were conducted during the daytime to maximize the detection of most wildlife. Most birds are active in the daytime, so diurnal surveys maximize the number of bird observations. Conversely, diurnal surveys usually result in few observations of mammals, many of which may only be active at night. In addition, many species of reptiles and amphibians are secretive in their habits and are difficult to observe using standard meandering transects.

The average rainfall in 2022 was below average, which has potential to limit the growth of flora. However, initial botanical reference surveys were conducted prior to focused sensitive plant surveys, and therefore conditions were monitored prior to collecting data. Surveys for sensitive plant species adequately covered flora that are known to bloom within the vicinity.

INTENTIONALLY LEFT BLANK

4 Environmental Setting

The purpose of this chapter is to describe the general existing conditions within and adjacent to the BSA to document the baseline conditions for this report and subsequent analysis.

4.1 Climate

The BSA is located in the Victor Valley/High Desert region in western San Bernardino County. Average annual temperatures range from 44°F to 81°F. The average annual precipitation is 6.72 inches (WRCC 2022). Periods of extended drought are common throughout the region.

4.2 Geology and Topography

The BSA is composed of one vacant site separated by Mesa Linda Street and an undeveloped property. The BSA is subject to disturbance as a result of illegal dumping and trespassing. These unpermitted activities have led to areas of exposed bare soils (where trails have formed) and several debris piles. The BSA's surface elevation ranges from approximately 3,600 to 3,630 feet above mean sea level (amsl). The BSA and immediate surrounding area is relatively flat with a slight slope from the southwestern to northeastern corner. The BSA is located 7.5 miles north of Cleghorn Mountain, which occurs above Cajon Pass that divides the San Gabriel Mountains from the San Bernardino Mountains.

4.3 Soils

According to the U.S. Department of Agriculture Natural Resource Conservation Service's Web Soil Survey (USDA 2022a), the BSA occurs within the San Bernardino County, Mojave River Area (CA671). The BSA consists of one soil type: Hesperia loamy fine sand (2% to 5% slopes). This soil type is described in more detail below.

Hesperia Series consists of very deep, well-drained soils that formed in alluvium derived primarily from granite and related rocks. Hesperia soils are on alluvial fans, valley plains, and stream terraces at elevations of 200 to 4,800 feet amsl. These soils have low runoff and moderately rapid permeability. Creosote bush and annual grasses and forbs are common vegetation found on these soils.

4.4 Surrounding Land Uses

The BSA is currently vacant undeveloped property bound to the west by Lassen Road, to the east by Mesa Linda Street, and to the south by Poplar Street. The BSA is located within the Main Street and Freeway Corridor Specific Plan. According to the Main Street and Freeway Corridor Specific Plan, the BSA is located within the Highway 395/Interstate 15 District, and the land use and zoning designations for the BSA are Commercial/Industrial Business Park (CIBP) (City of Hesperia 2010, 2021).

Land uses surrounding the BSA primarily consist of vacant land, along with some scattered residential, commercial, light industrial, and utility uses. Specific land uses located in the immediate vicinity of the BSA include the following:

- **North:** Vacant land and scattered commercial, light industrial, and residential uses
- **East:** Commercial uses and I-15

- **South:** Vacant land, scattered commercial, and I-15
- **West:** Vacant land, U.S. Highway 395, and scattered commercial and light industrial

4.5 Watersheds and Hydrology

The BSA is within the Mojave Subbasin Hydrologic Unit Code (HUC) 8 (18090208), Bell Mountain Wash-Mojave River HUC 10 (1809020807), and Oro Grande Wash HUC 12 (180902080704) watersheds. The Mojave Subbasin HUC 8 watershed is approximately 4,618 square miles and consists of several waterbodies, waterways, dry washes, and valleys (UCD SIG 2021). The Mojave River is approximately 8.5 miles to the east. The Oro Grande Wash is a tributary to the Mojave River and is located approximately 0.25 miles west of the BSA, and the California Aqueduct is 1 mile to the north (USGS 2022).

5 Results

This chapter describes the results of the literature review, field surveys, and habitat assessments within the BSA.

5.1 Vegetation Communities and Land Covers

Six vegetation communities or land cover types were mapped within the BSA (Table 2). The spatial distribution of the vegetation communities and land covers are presented in Figure 4. The Off-Site Improvement Area includes Mesa Linda Street, Lassen Street, and Poplar Street.

Table 2. Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types within the Biological Survey Area

Floristic Alliance	Association	Vegetation Community ¹	Project Site (Acres)	Off-Site Area (Acres)	100-Foot Buffer (Acres)	Total BSA (Acres) ²
<i>Ericameria nauseosa</i>	<i>Ericameria nauseosa</i>	Rubber rabbitbrush scrub	3.05	0.14	0.34	3.54
<i>Yucca brevifolia</i>	N/A	Joshua tree woodland	1.49	0.03	0.77	2.28
<i>Brassica nigra</i>	<i>Brassica nigra</i>	Upland mustards	0.39	1.07	0.07	1.52
N/A	N/A	Disturbed habitat	0.05	0.22	0.13	0.40
<i>Avena</i> spp. – <i>Bromus</i> spp. Herbaceous Semi-Natural	Wild oats and annual brome grasslands	Non-native grassland	12.86	1.36	4.73	18.94
N/A	N/A	Urban/Developed	—	2.25	0.25	2.50
Total²			17.84	5.06	6.28	29.18

Notes: BSA = biological survey area; N/A = not applicable

¹ The spatial distribution of the vegetation communities and land covers is presented in Figure 4.

² Total acreages may not sum exactly due to rounding.

CDFW rankings of 1, 2, or 3 are considered high priority for inventory or special status, and impacts to these communities typically require mitigation. One vegetation community, Joshua tree woodland, has a CDFW ranking of 3.2 and is considered special status.

5.1.1 Rubber Rabbitbrush Scrub

Rubber rabbitbrush scrub, or *Ericameria nauseosa* shrubland alliance, is recognized by the Natural Communities List, and the community includes rubber rabbitbrush (*Ericameria nauseosa*) as the dominant or codominant species in the shrub canopy, with a sparse or grassy herbaceous layer (CNPS 2022b). Rubber rabbitbrush scrub has an open to continuous shrub canopy of less than 3 meters (9 feet) in height (CNPS 2022b). This alliance consists of at least 2% absolute cover of rubber rabbitbrush or more than 25% relative cover in the shrub canopy (CNPS 2022b). Rubber rabbitbrush scrub occurs in disturbed settings on well-drain sands and gravels (CNPS 2022b).

Rubber rabbitbrush scrub occurs north of Poplar Street along the southern boundary and within the central portions of the BSA. This community is dominated by rubber rabbitbrush.

The rubber rabbitbrush scrub alliance is ranked as S5 and therefore is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

5.1.2 Joshua Tree Woodland

Joshua tree woodland, or *Yucca brevifolia* alliance, is recognized by the Natural Communities List, and the community includes western Joshua tree as an emergent small tree over a shrub or grass layer (CNPS 2022b). Joshua tree woodland has an open to intermittent tree canopy less than 14 meters (45 feet) in height, and an open to intermittent shrub and herbaceous layer with perennial grasses and seasonal annuals (CNPS 2022b). This alliance consists of Joshua trees evenly distributed of at least 1% cover, with *Juniperus* and/or *Pinus* spp. of at least more than 1% absolute cover in the tree canopy (CNPS 2022b). Joshua tree woodland alliance occurs on gentle alluvial fans, ridges, and gentle to moderate slopes. Joshua tree woodland may occupy coarse sands, very fine silts, gravel, or sandy loams (CNPS 2022b).

Joshua tree woodland occurs within the western portion of the BSA, west of Lassen Street. In addition, there are portions of the eastern BSA where individual Joshua trees are located; however, these areas do not meet the minimum requirement of 1% cover, and therefore were not mapped as Joshua tree woodland alliance.

Joshua tree woodland alliance is ranked as S3.2 and is considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

5.1.3 Upland Mustards

The upland mustards and other ruderal forbs alliance features black mustard (*Brassica nigra*), shortpod mustard (*Hirschfeldia incana*), Maltese star-thistle (*Centaurea melitensis*), or yellow star-thistle (*Centaurea solstitialis*), among other similar ruderal forbs, as the dominant species in the herbaceous layer. Per alliance membership rules, black mustard and shortpod mustard or other mustards must make up more than 80% of the relative cover, along with other non-native plant species. Communities within this alliance can grow in an open to continuous layer under 3 meters (10 feet) in height. Emergent shrubs may be present but at low cover. Upland mustards and other ruderal forbs occur in fallow fields, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, and generally within disturbed areas under 1,500 meters (4,921 feet) amsl (CNPS 2022b).

Upland mustards occur in one patch immediately north of Poplar Street, within the southern portions of the BSA. This community is dominated by shortpod mustard, ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), and common Mediterranean grass (*Schismus barbatus*), with a low cover of redstem stork's bill (*Erodium cicutarium*).

The upland mustards and other ruderal forbs semi-natural alliance is not ranked by CDFW (2021), and therefore is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

5.1.4 Disturbed Habitat

Although not recognized by the California Natural Communities List (CDFW 2021), disturbed habitat refers to areas that have had physical anthropogenic disturbance and, as a result, cannot be identified as a native or naturalized

vegetation association. However, these areas do have a recognizable soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species.

Within the BSA, disturbed habitat includes the existing dirt roads, including Lassen Street within the western portion of the BSA, and an unnamed dirt road located within the southeastern portion of the BSA. These roads are commonly used by hikers and vehicles.

Disturbed habitat is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

5.1.5 Non-Native Grassland

Non-native grassland, or *Avena* spp. - *Bromus* spp. herbaceous semi-natural alliance, is recognized by the Natural Communities List, and the community includes wild oats (*Avena* spp.) and annual brome (*Bromus* spp.) as the dominant or co-dominant species, along with other non-natives in the herbaceous layer (CNPS 2022b). Non-native grassland has an open to continuous herbaceous cover of less than 1.2 meters (4 feet) in height (CNPS 2022b). Non-native grassland occurs in foothills, waste places, rangelands, and opening in woodlands (CNPS 2022b).

Non-native grassland is the largest community found within the BSA, and occurs throughout the site. It is co-dominated by a mix of non-native grasses, including ripgut brome, red brome, soft brome (*Bromus hordeaceus*), cheatgrass (*Bromus tectorum*), and common Mediterranean grass, with a low cover of redstem stork's bill.

Non-native grassland is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

5.1.6 Urban/Developed Land

Although not recognized by the Natural Communities List (CDFW 2021), urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

Within the BSA, urban/developed land consists of the paved roads: Poplar Street running east/west along the southern boundary, and Mesa Linda Street continuing north/south through the eastern portion of the BSA.

Urban/Developed is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2021).

5.2 Plants and Wildlife Observed

5.2.1 Plants

A total of 48 species of native or naturalized plants, 36 native (75%) and 12 non-native (25%), were recorded within the BSA. A full list of plant species observed is provided in Appendix D, Plant Compendium. In addition to those species observed by Dudek biologists, Dipodomys Ecological Consulting biologists observed the following plant species: bristly fiddleneck (*Amsinckia tessellata*), compact brome (*Bromus madritensis*), blue dicks (*Dipterostemon capitatus*), California goldfields (*Lasthenia californica*), and Mojave cottonthorn (*Tetradymia stenolepis*) (Appendix C).

5.2.2 Wildlife

A total of 17 wildlife species, consisting of 16 native species (94%) and one non-native species (6%), were recorded within the BSA or vicinity during surveys (Appendix E). Birds detected on or in the immediate vicinity of the BSA included house finch (*Haemorrhous mexicanus*), common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), house sparrow (*Passer domesticus*), phainopepla (*Phainopepla nitens*), mountain bluebird (*Sialia currucoides*), yellow-rumped warbler (*Setophaga coronata*), cactus wren (*Campylorhynchus brunneicapillus*), and white-crowned sparrow (*Zonotrichia leucophrys*). Mammals detected included coyote (*Canis latrans*), black-tailed jackrabbit (*Lepus californicus*), and desert cottontail (*Sylvilagus audubonii*). One reptile was detected: common side-blotched lizard (*Uta stansburiana*). In addition to those species observed by Dudek biologists, Dipodomys Ecological Consulting biologists observed the following mammal species: California ground squirrel (*Otospermophilus beecheyi*), white-tailed antelope ground squirrel (*Otospermophilus beecheyi*), and Panamint kangaroo rat (*Dipodomys panamintinus*), and one additional reptile species: tiger whiptail (*Aspidoscelis tigris*) (Appendix C).

5.3 Special-Status and Regulated Resources

Appendix G and Appendix H provide tables of all special-status species with geographic ranges that fall within the general BSA vicinity. Special-status species' potential to occur within the BSA were evaluated based on known species distribution, species-specific habitat preferences, and Dudek biologists' knowledge of regional biological resources. Species potentially occurring within the BSA are identified as having moderate or high potential to occur based on habitat conditions on site, and species for which there is little or no suitable habitat are identified as not expected to occur or having low potential to occur.

5.3.1 Special-Status Plants

Special-status plants include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, and species identified as rare by CNPS (particularly CRPR 1A, presumed extinct in California; CRPR 1B, rare, threatened, or endangered throughout its range; and CRPR 2, rare or endangered in California, more common elsewhere).

Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status plant species to occur within the BSA. Each special-status plant species was assigned a rating of "not expected," "low," "moderate," or "high" potential to occur based on relative location to known occurrences, vegetation community, soil, and elevation. Based on the results of the literature review and database searches, 28 special-status plant species were identified as potentially occurring within the region of the BSA, and six species were determined to have at least a moderate potential to occur within the BSA: western Joshua tree, white-bracted spineflower, Mojave monkeyflower, sagebrush loeflingia, short-joint beavertail, and beaver dam breadroot. Therefore, a focused survey for these species was conducted on May 9, 2022, as discussed in Section 3.2.4.1, Special-Status Plant Survey. No additional special-status plant species were determined to have a moderate or high potential to occur within the BSA based on the soils; vegetation communities (habitat) present; elevation range; and previous known locations based on the CNDDb, USFWS Information for Planning and Conservation database, and CNPS Inventory (Appendix G).

One special-status plant species, western Joshua tree, was observed within the BSA and is further discussed in Section 5.3.2, Western Joshua Tree. No other listed or non-listed CRPR 1 or CRPR 2 plants were observed during the focused surveys conducted on May 9, 2022.

Details on western Joshua tree are provided in Table 3.

Table 3. Special-Status Plant Species Observed or with Moderate or High Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Yucca brevifolia</i>	western Joshua tree	None/SC/None	Great Basin grassland, Great Basin scrub, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland, Sonoran desert scrub, valley and foothill grassland/perennial leaf succulent/Apr–May/1,310–6,560	Observed. This species was observed within the BSA.

Status Designations

SC: State listed candidate species

Note: CRPR = California Rare Plant Rank; BSA = biological survey area

5.3.2 Western Joshua Tree

Western Joshua tree is a California State Candidate for Listing. Western Joshua tree is a monocot tree in the asparagus family (*Agavaceae*) that occurs within Joshua tree woodland, Great Basin grassland and scrub, Mojavean desert scrub, pinyon and juniper woodland, Sonoran desert scrub, and valley and foothill grassland. This species occurs in San Bernardino County and other southern and eastern counties in California from 1,310 to 6,560 feet amsl (CNPS 2022b). This species typically blooms in April and May.

A total of 32 western Joshua tree individuals were observed in the western and northern portions of the BSA within Joshua tree woodland, rubber rabbitbrush scrub, and non-native grassland (Figure 4).

5.3.3 Desert Native Plants

No desert native plant species, except for western Joshua tree, were observed within the BSA during the focused desert native plant survey (Figure 4).

5.3.4 Special-Status Wildlife

Special-status wildlife include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, and those designated as Species of Special Concern by CDFW and as sensitive by USFWS.

Similar to special-status plants, Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status wildlife species to occur within the BSA. Each special-status wildlife species was assigned a rating of “not expected,” “low,” “moderate,” or “high” potential to occur based on relative location to known occurrences and vegetation community/habitat association. Based on the results of the literature review and database searches, 42 special-status wildlife species were reported in the CNDDDB and USFWS databases as occurring in the vicinity of the BSA. Of these, two wildlife species were determined to have at least a moderate potential to occur within the BSA based on habitat present and previous known

locations in the CNDDDB (CDFW 2022c) and USFWS Information for Planning and Conservation database (USFWS 2022b): burrowing owl (*Athene cunicularia*) and loggerhead shrike (*Lanius ludovicianus*). The details of these species are presented in Table 4.

Table 4. Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Athene cunicularia</i> (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Moderate potential to occur. The biological survey area (BSA) contains flat, open scrub habitat that could support this species. Although an official burrow survey was not conducted, one potentially suitable burrow was noted during the focused protocol desert tortoise survey. The nearest California Natural Diversity Database (CNDDDB) occurrence is from 1989 and located approximately 0.75 miles southwest (CDFW 2022c). Several more recent occurrences have been documented within 5 miles north of the BSA.
<i>Lanius ludovicianus</i> (nesting)	loggerhead shrike	BCC/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Moderate potential to occur. The BSA contains open habitat that contains tall shrubs (e.g., Joshua tree, California juniper) that can be used for perching and nesting. The nearest CNDDDB occurrence is from 2007 and located approximately 3 miles north (CDFW 2022).

Status Designations:

BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

SSC: California Species of Special Concern

Protocol surveys for desert tortoise and Mohave ground squirrel were negative. Although desert kit fox (*Vulpes macrotis arsipus*) and American badger (*Taxidea taxus*) are not expected to occur within the BSA, in an abundance of caution, these species were also included and analyzed. These species, in addition to burrowing owl and loggerhead shrike, are detailed in the following discussion.

Burrowing Owl

Burrowing owl is a USFWS Bird of Conservation Concern and a California Species of Special Concern. With a relatively wide-ranging distribution throughout the west, burrowing owls are considered to be habitat generalists (Lantz et al. 2004). In California, burrowing owls are yearlong residents of open, dry grassland and desert habitats, and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats (Zeiner et al. 1990). Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils (Haug et al. 1993).

The presence of burrows is the most essential component of burrowing owl habitat because they are required for nesting, roosting, cover, and caching prey (Coulombe 1971; Martin 1973; Green and Anthony 1989; Haug et al. 1993). In California, western burrowing owls most commonly live in burrows created by California ground squirrels (*Spermophilus beecheyi*). Burrowing owls may occur in human-altered landscapes, such as agricultural areas, ruderal grassy fields, vacant lots, and pastures, if the vegetation structure is suitable (i.e., open and sparse), useable burrows are available, and foraging habitat occurs in close proximity (Gervais et al. 2008). Debris piles, riprap, culverts, and pipes can be used for nesting and roosting.

Burrowing owl has moderate potential to occur within the BSA.

Loggerhead Shrike

Loggerhead shrike is a USFWS Bird of Conservation Concern and a California Species of Special Concern. It is widespread throughout the United States, Mexico, and portions of Canada (Humple 2008). The species is a yearlong resident in most of the United States, including from California east to Virginia and south to Florida, and in Mexico. In California, although shrikes are widespread at the lower elevations in the state, the largest breeding populations are located in portions of the Central Valley, the Coast Ranges, and the southeastern deserts (Humple 2008).

Preferred habitats for loggerhead shrike is open areas that include scattered shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground, as well as nearby spiny vegetation or human-made structures (such as the top of chain-link fences or barbed wire) that provide a location to impale prey upon for storage or manipulation (Humple 2008). Loggerhead shrikes occur most frequently in riparian areas along woodland edges, grasslands with sufficient perch and butcher sites, scrublands, and open canopied woodlands, although they can be quite common in agricultural and grazing areas, and can sometimes be found in mowed roadsides, cemeteries, and golf courses. Loggerhead shrikes occur only rarely in heavily urbanized areas. For nesting, the height of shrubs and presence of canopy cover are most important (Yosef 1996).

Loggerhead shrike has moderate potential to occur within the BSA.

Desert Tortoise

Desert tortoise is a federally and state-listed threatened species. The range of the Mojave population includes portions of the Mojave Desert and the Colorado Desert in Southern California (parts of Inyo, Kern, Los Angeles, San Bernardino, and Riverside Counties), southern Nevada (Clark, Esmeralda, Nye, and Lincoln Counties), northwestern Arizona (Mohave County), and southwestern Utah (Washington County).

The typical habitat for desert tortoise in the Mojave Desert is creosote bush scrub where precipitation ranges from 2 to 8 inches, with relatively high diversity of perennial plants and high productivity of ephemeral plants. Throughout most of the Mojave Desert, desert tortoises occur most commonly on gently sloping terrain with sandy gravel soils and where there is sparse cover of low-growing shrubs, which allows for the establishment of herbaceous plants. Soils must be friable enough for digging burrows, but firm enough so that burrows do not collapse (USFWS 2008). Although populations of desert tortoise are not generally known to inhabit elevations much higher than 4,000 feet amsl, they occur from below sea level to an elevation of 7,300 feet amsl. Occupied habitat varies from flats and slopes dominated by creosote bush scrub at low elevations, to rocky slopes in blackbrush and juniper woodland ecotones at higher elevations (USFWS 2008).

Desert tortoise was not observed during 2022 focused protocol surveys.

Mohave Ground Squirrel

Mohave ground squirrel is a State of California threatened species. This species' distribution range is restricted to the Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo Counties (Zeiner et al. 1990). Mohave ground squirrels generally inhabit areas where the soil is friable and sandy or gravelly. Mohave ground squirrels occur in desert scrub habitats dominated by creosote bush and desert saltbush scrub at elevations from 1,800 to 5,000 feet amsl.

Mohave ground squirrel was not observed during 2022 focused protocol surveys.

American Badger and Desert Kit Fox

American badger is a California Species of Special Concern. Desert kit fox is considered a "fur-bearing mammal," protected from take under the California Fish and Game Commission's Mammal Hunting Regulations (Subdivision 2, Chapter 5), which effectively protects it from hunting pressure. Desert kit fox is not listed by USFWS or CDFW under any special-status designation. Desert kit fox lives in the open desert, on creosote bush flats, and amongst sand dunes, and American badgers prefer open scrub or grassy areas (NPS 2015; USGS 2020). The BSA includes Joshua tree woodland, but lacks creosote bush flats, sand dunes, or larger areas of open scrub or grassy areas. Thus, American badger is not expected to occur within the BSA due to a lack of suitable vegetation to support this species. Desert kit fox is not expected to occur within the BSA due to the surrounding areas that are conducive to stray dogs that further limit the potential for this species to occur. The BSA is not expected to support either desert kit fox or American badger. Furthermore, no desert kit fox or American badger individuals (or sign) were observed during desert tortoise or Mohave ground squirrel surveys, or incidentally observed during other focused surveys conducted within the BSA.

Notwithstanding, in an abundance of caution and to ensure that potential impacts to these species are less than significant, these species are analyzed.

5.3.5 Potential Aquatic Resources

The Jurisdictional Aquatic Resources Delineation identified one ephemeral drainage within the BSA (Appendix A). The results of the jurisdictional delineation concluded there is approximately 0.06 acres (396 linear feet) of jurisdictional aquatic resources within the BSA (Figure 5, Jurisdictional Delineation). Of that total, all 0.06 acres is non-wetland waters of the state under RWQCB jurisdiction, and streambeds under CDFW jurisdiction. This feature is not likely subject to USACE jurisdiction because this feature is isolated and does not meet the relatively permanent or significant nexus standard as a waters of the United States.

The BSA also included a swale south of Poplar Street in the southern portion of the BSA. The swale appears to have been developed to collect seasonal precipitation, but lacked a defined bed and bank, OHWM, established hydrophytic vegetation, or indicators of hydric soil. This topographical feature would not constitute jurisdictional resources regulated by CDFW and/or RWQCB.

5.4 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes

between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals, and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The Project site is located in an area of encroaching development and is regionally isolated by U.S. Highway 395 to the west and I-15 to the east. All terrestrial species' movement is hindered by I-15 and U.S. Highway 395, and, to a lesser degree, surface streets and paved roads, including Poplar Street running east/west along the southern boundary, and Mesa Linda Street continuing north/south along the eastern boundary of the BSA. As a result, the BSA does not provide for regional wildlife movement or serve as a regional wildlife corridor. However, on a local level, wildlife may move across the site when migrating or foraging/hunting. Because the BSA does not provide for regional wildlife movement or serve as a regional wildlife corridor, the Project is not expected to contribute to the impediment of local or seasonal movement of wildlife through the surrounding habitat.

INTENTIONALLY LEFT BLANK

6 Project Impacts

This chapter addresses direct and indirect impacts to biological resources that would result from implementation of the Project. The significance determinations for proposed or potential impacts are described, and proposed mitigation is provided in Chapter 7, Significant Impacts and Mitigation. Cumulative impacts are addressed in the Project's environmental impact report (City of Hesperia, In Progress).

Direct impacts refer to complete loss of a biological resource. For purposes of this report, it refers to the area where vegetation clearing, grubbing, or grading replaces biological resources. Direct impacts were quantified by overlaying the proposed impact limits on the biological resources map of the BSA. Direct impacts would occur from construction of an industrial/warehouse building and associated off-site improvements.

Indirect impacts are reasonably foreseeable effects caused by a project's implementation on remaining or adjacent biological resources outside the direct disturbance zone. For purposes of this report, indirect impacts may affect areas outside of the disturbance area. Indirect impacts may be short-term and construction-related, or long-term and associated with development in proximity to biological resources.

Cumulative impacts refer to the combined environmental effects of a project and other relevant projects. These impacts may be minor when analyzed individually, but become collectively significant as they occur over time. Cumulative impacts are addressed in the Project's environmental impact report (City of Hesperia, In Progress).

The evaluation of Project impacts is organized by the resource potentially affected: riparian and sensitive vegetation communities (special-status vegetation communities), special-status species, jurisdictional waters and wetlands, and wildlife movement.

6.1 Impacts to Sensitive Vegetation Communities

6.1.1 Direct Impacts

A total of 22.90 acres, including 17.84 acres within the Project site and 5.06 acres within the Off-Site Improvement Area, would be permanently impacted from the Project (Figure 6, Impacts to Biological Resources). Table 5 summarizes permanent direct impacts to vegetation communities and land covers within the BSA. As stated in Section 5.1, Vegetation Communities and Land Covers, CDFW state rankings of 1, 2, or 3 are considered high priority for inventory or special status, and impacts to these communities typically require mitigation. Joshua tree woodland is considered a sensitive biological resource by CDFW under CEQA.

All ground-disturbing activities, even areas temporarily impacted, are considered permanent impacts to Joshua tree woodland. The Project would result in permanent impacts to 1.52 acres of Joshua tree woodland, which would be a significant impact under CEQA, absent mitigation.

The Project would also result in permanent impacts to 21.39 acres of vegetation communities and land cover types that are not considered sensitive by CDFW, including upland mustards, rubber rabbitbrush scrub, disturbed habitat, non-native grassland, and urban/developed lands. Therefore, these direct impacts would be less than significant under CEQA.

Table 5. Impacts to Vegetation Communities and Land Cover Types within the BSA

Floristic Alliance	Association	Vegetation Community	Total Existing BSA (Acres)	On-Site Permanent Impacts (Acres)	Off-Site Permanent Impacts Areas (Acres)	Total Permanent Impacts (Acres)
<i>Ericameria nauseosa</i>	<i>Ericameria nauseosa</i>	Rubber rabbitbrush scrub	3.54	3.05	0.14	3.20
<i>Yucca brevifolia</i>	N/A	Joshua tree woodland	2.28	1.49	0.03	1.52
<i>Brassica nigra</i>	<i>Brassica nigra</i>	Upland mustards	1.52	0.39	1.07	1.46
N/A	N/A	Disturbed habitat	0.40	0.05	0.22	0.27
<i>Avena</i> spp. – <i>Bromus</i> spp. Herbaceous Semi-Natural	Wild oats and annual brome grasslands	Non-native grassland	18.94	12.86	1.36	14.22
N/A	N/A	Urban/Developed	2.50	—	2.25	2.25
Total¹			29.18	17.84	5.06	22.90

Notes: BSA = biological survey area; N/A = not applicable

¹ Total acreages may not sum exactly due to rounding.

6.1.2 Indirect Impacts

Construction-related indirect impacts may include inadvertent spillover impacts outside of the construction footprint, dust accumulation on Joshua tree woodland, chemical spills, stormwater erosion and sedimentation, and increased wildfire risk. Potential long-term (post-construction) indirect impacts from operation and maintenance activities may include effects of herbicides, changes in water quality, increased wildfire risk, induced demand on the surrounding area, increased traffic and vehicle emissions, and accidental chemical spills. Indirect impacts to Joshua woodland would be significant absent mitigation.

6.2 Impacts to Special-Status Plants

6.2.1 Direct Impacts

No non-listed special-status plant species were observed or have high or moderate potential to occur within the BSA; therefore, the Project would have no direct or indirect impacts to non-listed special-status plant species. One listed special-status plant species was observed within the BSA: western Joshua tree.

Western Joshua Tree

Western Joshua tree, a candidate for state listing under CESA, was observed and would be directly impacted by the Project. Based on the site plan, implementation of the Project would result in direct impacts to 16 western Joshua tree individuals. All ground-disturbing activities, even areas temporarily impacted, are considered permanent impacts to western Joshua trees. Direct impacts to western Joshua trees would be significant absent mitigation under CEQA.

Based on a literature review completed by CDFW (Vander Wall et al. 2006), CDFW would like the western Joshua tree locations to be buffered by 186 feet to account for the impacts to the seed bank for western Joshua trees and their associated habitat. Therefore, a 186-foot buffer (or radius) was applied to each western Joshua tree location. Direct impacts to this 186-foot buffer were analyzed, and the Project would result in 10.9 acres of impacts to western Joshua trees, their seed bank, and their associated habitat.

6.2.2 Indirect Impacts

Any western Joshua tree within 186 feet of the direct impact footprint would be considered indirectly impacted (Vander Wall et al. 2006). Thus, although these 16 western Joshua trees would be directly avoided, CDFW would consider these trees to be indirectly impacted due to loss of seedbank and associated species.

Potential construction- and operation-related indirect impacts to western Joshua tree individuals would be the same as the indirect impacts to Joshua woodland, as described under Section 6.1.2, Indirect Impacts.

With the incorporation of mitigation, and with adherence to both the CDNPA and the Hesperia Municipal Code, impacts associated with Joshua tree woodland would be less than significant.

6.3 Impacts to Special-Status Wildlife

6.3.1 Direct Impacts

The Project could result in significant impacts to two special-status wildlife species: burrowing owl and loggerhead shrike.

Burrowing Owl

Burrowing owl was not observed within the BSA; however, suitable habitat exists on site, and the species could occupy the BSA prior to construction.

The Project would result in the loss of 16 acres of suitable habitat for burrowing owl, including impacts to disturbed habitat, Joshua tree woodland, and non-native grassland. These potential direct impacts to burrowing owls would be significant absent mitigation under CEQA.

Loggerhead Shrike

Loggerhead shrike is a CDFW Species of Special Concern during its nesting period. It can be found in lowlands and foothills throughout California. It prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and western Joshua tree habitats. Loggerhead shrike was not observed during the biological surveys, but has a moderate potential to occur in the BSA. Extensive suitable nesting habitat, particularly near western Joshua trees, is present within the BSA.

In addition, the Project would result in the loss of 1.5 acres of suitable habitat for loggerhead shrike (i.e., impacts to Joshua tree woodland). These potential direct impacts to loggerhead shrike would be significant absent mitigation under CEQA.

Desert Tortoise

The results of the survey determined that desert tortoise is currently considered absent from the BSA. On-site vegetation has been determined to provide low-quality habitat for desert tortoise. Although suitable (albeit low-quality) habitat for this species would be removed as a result of construction of the Project, this habitat is unoccupied, and the Project would not result in any direct or indirect impacts to desert tortoise. Therefore, impacts to desert tortoise associated with the Project and BSA would be less than significant under CEQA.

Mohave Ground Squirrel

The Project site is located in an area that is cut off from known Mohave ground squirrel populations by I-15 and U.S. Highway 395 to the east, and by the California Aqueduct to the north. Disturbances from human presence and fragmentation from surrounding roadways, including off-highway-vehicle use and illegal waste dumping within the BSA, has had a negative effect on habitat quality for Mohave ground squirrel. Records from the CNDDB reveal two more recent occurrences of Mohave ground squirrel near the BSA that were detected in 2005 and 2011 (Figure 7, Historical Mohave Ground Squirrel Occurrences) (CDFW 2022b). However, both these records are from sites located across the California Aqueduct, making dispersal to the Project site highly unlikely, because the aqueduct creates a considerable barrier to dispersal.

The visual survey concluded that the BSA provides low-quality/disturbed suitable habitat for Mohave ground squirrel. Specifically, foraging plants for Mohave ground squirrel, such as spiny hopsage (*Grayia spinosa*) and winterfat (*Krascheninnikovia lanata*), were absent. However, other foraging plants, including peach thorn (*Lycium cooperi*), western Joshua tree, fiddleneck (*Amsinckia* spp.), and red-stemmed filaree (redstem stork's bill), were observed within the BSA, along with burrows and burrow complexes that showed that soils present are suitable for burrowing. However, surrounding roadways and various forms of human presence, including trash and litter, have marginalized the habitat quality.

Although low-quality/disturbed suitable Mohave ground squirrel habitat is present in the BSA, no Mohave ground squirrels were detected at the camera stations or captured during the trapping surveys. Additionally, the BSA is located within the southern portion of the mapped Mohave ground squirrel range, where Mohave ground squirrel occurrences are rare and populations densities have historically been low, with the closest occurrences north of the California Aqueduct, which presents a significant barrier to Mohave ground squirrel dispersal. As such, the survey results indicate that Mohave ground squirrel does not inhabit the BSA.

Therefore, the Project would not result in any direct or indirect impacts to Mohave ground squirrel. Therefore, impacts to Mohave ground squirrel associated with the Project would be less than significant under CEQA.

American Badger and Desert Kit Fox

No desert kit fox or American badger individuals (or sign) were observed during desert tortoise or Mohave ground squirrel surveys, or incidentally observed during other focused surveys conducted within the BSA. In addition, no suitable habitat exists on site. Disturbances from human presence and fragmentation from surrounding roadways, including off-highway-vehicle use and illegal waste dumping within the BSA, have had a negative effect on habitat quality for these species. However, albeit unlikely, these species could eventually occupy the BSA prior to construction; therefore, potential direct impacts to American badger and kit fox would be significant absent mitigation.

Nesting Migratory Birds and Raptors

Similar to most other sites containing trees, shrubs, and other vegetation, the BSA contains opportunities for birds of prey (raptors) and other avian species to nest on site. Native nesting bird species with potential to occur within the BSA are protected by California Fish and Game Code Sections 3503 and 3503.5, and by the federal MBTA (16 USC 703–711). In particular, California Fish and Game Code Section 3503 provides that it is unlawful to take, possess, or needlessly destroy the active nests or eggs of any bird in California; Section 3503.5 protects all raptors and their eggs and active nests; and the MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of native migratory bird species throughout the United States. Currently, California considers any nest that is under construction or modification, or is supporting eggs, nestlings, or juveniles, as “active.” Therefore, impacts to nesting migratory birds and raptors would be significant absent mitigation under CEQA.

6.3.2 Indirect Impacts

Burrowing Owl

Construction activities have the potential to result in short-term indirect impacts to burrowing owls and their habitat. Those impacts could include dust, noise and vibration, trash and debris, increased human presence, vehicle collisions, chemical spills, and night-time lighting. These potential short-term or temporary indirect impacts to burrowing owls would be significant absent mitigation under CEQA.

Post-construction (long-term) activities have the potential to result in indirect impacts to burrowing owls and their habitat. Long-term impacts that could result from development within or adjacent to burrowing owl habitat include night-time lighting and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to burrowing owls would be significant absent mitigation under CEQA.

Loggerhead Shrike

Construction activities have the potential to result in short-term indirect impacts to loggerhead shrike and their habitat. Those impacts could include dust, noise and vibration, increased human presence, vehicle collisions, chemical spills, and night-time lighting. These potential short-term or temporary indirect impacts to loggerhead shrike would be significant absent mitigation under CEQA.

Post-construction (long-term) activities have the potential to result in indirect impacts to loggerhead shrike and their habitat. Long-term impacts that could result from development within or adjacent to loggerhead shrike habitat include night-time lighting and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to loggerhead shrikes would be significant absent mitigation under CEQA.

American Badger and Desert Kit Fox

No desert kit fox or American badger individuals (or sign) were observed during desert tortoise or Mohave ground squirrel surveys, or incidentally observed during other focused surveys conducted within the BSA. In addition, no suitable habitat exists on site.

Construction activities have the potential to result in short-term indirect impacts to American badger and kit fox, and their habitats. Those impacts could include dust, noise and vibration, trash and debris, increased human

presence, vehicle collisions, chemical spills, and night-time lighting. However, albeit unlikely, these species could eventually occupy the BSA prior to construction; therefore, these potential short-term or temporary indirect impacts to these species would be significant absent mitigation under CEQA.

Post-construction (long-term activities) have the potential to result in indirect impacts to these species and their habitats. These impacts could include trash and debris, increased human presence, vehicle collisions, chemical spills, and night-time lighting. However, albeit unlikely, these species could eventually occupy the BSA prior to construction; therefore, potential long-term indirect impacts to American badger and kit fox would be significant absent mitigation.

Nesting Migratory Birds and Raptors

Construction activities have the potential to result in indirect impacts to nesting migratory birds and raptors and their habitats. Those impacts could include the loss of a nest through increased dust, noise and vibration, increased human presence, and night-time lighting. Potential short-term or temporary indirect impacts to these species would be significant absent mitigation under CEQA.

Post-construction (long-term) activities have the potential to result in indirect impacts to migratory birds and raptors, and their habitat. Long-term impacts that could result from development within or adjacent to suitable habitat include night-time lighting and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to migratory birds and raptors would be significant absent mitigation under CEQA.

6.4 Impacts to Jurisdictional Wetlands and Waters

The BSA supports 0.06 acres (396 linear feet) of ephemeral drainages. The one ephemeral drainage feature is likely subject to CDFW and/or RWQCB jurisdiction based on evidence of bed and bank. This feature is not likely subject to USACE jurisdiction because this feature is isolated and does not meet the relatively permanent or significant nexus standard as a waters of the United States. One swale was also investigated but determined to be non-jurisdictional.

6.4.1 Direct Impacts

The Project would result in the loss of 0.06 acres of potential jurisdictional waters likely subject to CDFW and/or RWQCB jurisdiction (Figure 8, Impacts to Jurisdictional Aquatic Resources). These potential direct impacts to jurisdictional waters would be significant absent mitigation under CEQA.

6.4.2 Indirect Impacts

Construction-related (short-term) indirect impacts may include inadvertent spillover impacts outside of the construction footprint, chemical spills, and stormwater erosion and sedimentation. These potential short-term or temporary indirect impacts to jurisdictional aquatic resources would be significant absent mitigation under CEQA.

Post-construction (long-term) indirect impacts from operations and maintenance activities may include changes in water quality and accidental chemical spills. These potential long-term indirect impacts to jurisdictional aquatic resources would be significant absent mitigation under CEQA.

6.5 Impacts to Wildlife Corridors and Habitat Linkages

6.5.1 Direct Impacts

The Project site is located in an area of encroaching development and has been regionally isolated by U.S. Highway 395 to the west and I-15 to the east. As a result, the Project site does not provide for regional wildlife movement or serve as a regional wildlife corridor. Wildlife movement may be temporarily disrupted during the construction phase of the Project, although this effect would be both localized and short-term. Nearby corridors that could support wildlife movement in the region include the Oro Grande Wash and La Bureau of Power and Light Road immediately to the west; these would not be impacted by the Project. Further, the Project site does not contain nursery sites, such as bat colony roosting sites or colonial bird nesting areas. Therefore, impacts associated with wildlife movement, wildlife corridors, and wildlife nursery sites would be less than significant under CEQA.

6.5.2 Indirect Impacts

Some short-term indirect impacts to localized wildlife movement could occur due to construction-related noise and work in the vicinity. However, these impacts would be temporary and would not be expected to significantly disrupt wildlife movement due to ambient noise conditions and the ability for wildlife to continue to move around the construction area and upland portions of the BSA during and after construction. Work activities are not currently proposed during the night-time.

Post-construction (long-term) indirect impacts from operations and maintenance activities may include night-time lighting. These potential long-term indirect impacts to wildlife movement would be significant absent mitigation under CEQA.

6.6 Impacts Associated with Local Policies and Ordinances

California Desert Native Plants

No desert native plant species, except western Joshua tree, were recorded in the BSA (Figure 6, Impacts to Biological Resources). Western Joshua tree is further discussed below.

Western Joshua Tree

In accordance with Chapter 16.24 of the Hesperia Municipal Code, preparation of a western Joshua tree and desert native plants relocation plan is required to mitigate impacts to Joshua trees as a result of the Project. As such, a Joshua Tree Preservation, Protection, and Relocation Plan and Desert Native Plant Relocation Plan (Appendix F) was prepared for the Project to provide detailed specifications for the Project applicant to meet the requirements of Chapter 16.24 of the Hesperia Municipal Code to protect, preserve, and mitigate impacts to western Joshua trees.

The Joshua Tree Preservation, Protection, and Relocation Plan addresses the requirements of the City's Protected Plant Policy, and provides details for the initial survey of the Project site's Joshua trees, detailed specifications for the protection of trees to be preserved on site, and relocation/salvage requirements for those trees requiring removal and relocation (Appendix F).

6.7 Impacts Associated with Habitat Conservation Plans

The Project is located within the California Desert Conservation Area Plan (BLM 1980). The Project is also located within the Draft West Mojave Plan (BLM 2005) and the Desert Renewable Energy Conservation Plan (BLM 2016) areas. The West Mojave Plan and Desert Renewable Energy Conservation Plan are amendments to the California Desert Conservation Area Plan. The Bureau of Land Management issued a Record of Decision for the West Mojave Plan in 2006, although the West Mojave Plan has not been formally adopted. The Project will not conflict with the conservation criteria associated with the California Desert Conservation Area Plan or Desert Renewable Energy Conservation Plan. Therefore, impacts associated with an adopted habitat conservation plan would be less than significant under CEQA.

7 Significant Impacts and Mitigation

7.1 Explanation of Findings of Significance

Impacts to special-status vegetation communities, plant and wildlife species, and jurisdictional waters, including wetlands, must be quantified and analyzed to determine whether such impacts are significant under CEQA. CEQA Guidelines Section 15064(b) states that an ironclad definition of “significant” effect is not possible, because the significance of an activity may vary with the setting. Appendix G of the CEQA Guidelines, however, does provide “examples of consequences which may be deemed to be a significant effect on the environment” (14 CCR 15064[e]). These effects include substantial effects on rare or endangered species of animals or plants, or the habitat of the species. CEQA Guidelines Section 15065(a) is also helpful in defining whether a project may have a significant effect on the environment. Under that section, a proposed project may have a significant effect on the environment if the project has the potential to (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of a major period of California history or prehistory.

The following are the significance thresholds for biological resources provided in the CEQA Guidelines Appendix G Environmental Checklist, which states that a project would potentially have a significant effect if it does any of the following:

- **Impact BIO-1.** Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- **Impact BIO-2.** Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- **Impact BIO-3.** Has a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- **Impact BIO-4.** Interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites.
- **Impact BIO-5.** Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- **Impact BIO-6.** Conflicts with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

The evaluation of whether an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a rare plant or wildlife species. Impacts may be important locally because they result in an adverse alteration of existing site conditions, but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether that impact can be mitigated to a level below significance.

7.2 Impact BIO-1: Special-Status Species

The following significance determinations were made based on the impacts of the Project. Proposed mitigation measures referenced in Section 7.2 are provided in Section 7.2.3.

7.2.1 Direct Impacts

Western Joshua Tree

As required by Mitigation Measure (MM) BIO-1 (Conservation of Western Joshua Tree Lands), mitigation for direct and indirect impacts to 32 western Joshua trees would be fulfilled through conservation of western Joshua trees through purchase of credits at a CDFW-approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Additionally, as required by MM-BIO-2 (Relocation of Desert Native Plants) and in accordance with Chapter 16.24 of the Hesperia Municipal Code, the preparation of a western Joshua tree and desert native plants relocation plan is required to mitigate impacts to western Joshua trees as a result of the Project (also further discussed in Section 6.5, Impacts to Wildlife Corridors and Habitat Linkages). As such, a Joshua Tree Preservation, Protection, and Relocation Plan, and California Desert Native Plant Relocation Plan (Appendix F) was prepared to provide detailed specifications for the Project applicant to meet the requirements of Chapter 16.24 of the Hesperia Municipal Code to protect, preserve, and mitigate impacts to western Joshua trees. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to Joshua tree woodland.

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-2 (Relocation of Desert Native Plants) would reduce potential direct impacts to western Joshua trees to less than significant.

Burrowing Owl

Pursuant to the California Fish and Game Code and MBTA, a pre-construction survey in compliance with the Staff Report on Burrowing Owl Mitigation, State of California Natural Resource Agency, Department of Fish and Game, May 7, 2012 (CDFW 2012) would be necessary to reevaluate the locations of potential burrowing owl burrows within the Project limits so take of owls and active owl nests can be avoided. Consistent with MM-BIO-3 (Pre-Construction Surveys for Burrowing Owl and Avoidance), a pre-construction survey for burrowing owl would be conducted in areas supporting potentially suitable habitat and within 14 days prior to the start of construction activities. A Burrowing Owl Relocation Plan has been prepared to facilitate implementation of this mitigation measure, and is attached to this report as Appendix I.

As required by MM-BIO-1 (Conservation of Western Joshua Tree Lands), mitigation for direct impacts to western Joshua trees would be fulfilled through conservation of western Joshua tree through purchase of credits at a CDFW-approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Conservation efforts for western Joshua tree will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to loss of suitable habitat for burrowing owl.

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-3 (Pre-Construction Surveys for Burrowing Owl and Avoidance) would reduce potential direct impacts to burrowing owl to less than significant.

Loggerhead Shrike

To avoid potential impacts to nesting loggerhead shrikes, it is recommended that vegetation removal activities be conducted outside the general bird nesting season (February 1 through August 31). If vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal. This requirement is outlined in MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance).

As required by MM-BIO-1 (Conservation of Western Joshua Tree Lands), mitigation for direct impacts to western Joshua trees would be fulfilled through conservation of Western Joshua tree through purchase of credits at a CDFW-approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Conservation efforts for western Joshua tree will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to loss of suitable habitat for loggerhead shrike.

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance) would reduce potential direct impacts to loggerhead shrike to less than significant.

American Badger and Kit Fox

To avoid potential direct impacts to American badger and kit fox, a pre-construction survey for American badger and desert kit fox would be conducted within 10 days prior to the start of construction to determine the presence/absence of either species. As such, in an abundance of caution and to ensure that potential impacts to these species are less than significant, the Project applicant would prepare a mitigation and monitoring plan that addresses desert kit fox and American badger if either species is determined to occur on the Project site prior to the start of construction, pursuant to MM-BIO-5 (Pre-Construction Survey for American Badger and Desert Kit Fox and Avoidance). With the incorporation of mitigation, impacts associated with desert kit fox and American badger would be less than significant.

Nesting Migratory Birds and Raptors

To ensure compliance with the California Fish and Game Code and MBTA, and to avoid potential impacts to nesting birds, it is recommended that vegetation removal activities be conducted outside the general bird nesting season (February 1 through August 31, depending on the species), and if vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal. This requirement is outlined in MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance). With the incorporation of mitigation, impacts associated with nesting birds, including raptors, would be less than significant.

Implementation of MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance) would reduce potential direct impacts to nesting migratory birds and raptors to less than significant.

7.2.2 Indirect Impacts

Western Joshua Tree

Implementation of MM-BIO-6 (Designated Biologist Authority) gives the Project's designated biologist the authority to stop work if construction is not compliant with CEQA. MM-BIO-7 (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts to the Project impact footprint. MM-BIO-8 (Education Program) would provide construction personnel with training related to western Joshua trees that are present on and adjacent to the impact footprint. MM-BIO-9 (Construction Monitoring Notebook) provides for documentation that an education program is administered to applicable personnel. MM-BIO-10 (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to western Joshua trees that are outside the permitted Project footprint. Thus, implementation of MM-BIO-6 through MM-BIO-10 would enable the Project to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint.

To reduce fugitive dust resulting from Project construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the Mojave Desert Air Quality Management District's Rules 401 and 403.2, which limit the amount of fugitive dust generated during construction.

MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills will be implemented, and that repair and clean-up of any hazardous waste occurs. Thus, implementation of MM-BIO-11 would help to avoid and minimize impacts to western Joshua tree from any construction-related chemical spills.

A Stormwater Pollution Prevention Plan would be prepared and implemented to prevent all construction pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and any other pollutants from moving off site and into receiving waters. Best management practices (BMPs) employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a Stormwater Pollution Prevention Plan would help to avoid and minimize the potential effects of stormwater erosion during construction.

Construction of the Project would introduce potential ignition sources to the Project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. However, the Project would be required to comply with City of Hesperia and state requirements for fire safety practices to reduce the possibility of fires during construction activities. Further, vegetation would be removed from the site prior to the start of construction. Adherence to City and state regulatory standards during Project construction would reduce the risk of wildfire ignition and spread during construction activities. Therefore, short-term construction impacts involving wildland fires would not be substantial.

Potential long-term (post-construction) indirect impacts from operations and maintenance activities may include effects of herbicides, changes in water quality, increased wildfire risk, and accidental chemical spills.

MM-BIO-12 (Herbicides) would limit herbicide use to instances where hand or mechanical efforts are infeasible, and would only be applied when wind speeds are less than 7 miles per hour to prevent drift into off-site western Joshua trees.

Implementation of low-impact-development features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); the improper management of hazardous materials; trash and debris; and the improper management of portable restroom facilities (e.g., regular service) in accordance with all relevant local and state development standards. In addition, in accordance with CalGreen requirements (California Green Building Standards Code, CCR Title 24, Part 11), Project source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, and outdoor loading/unloading areas. Therefore, impacts to western Joshua trees due to changes in water quality would be avoided and minimized through implementation of low-impact-development features and BMPs.

Upon completion of Project construction, with adherence to the City of Hesperia's Municipal Code and because of the low ignitability of the proposed structures and implementation of fire-resistant and irrigated landscaping, the Project would not facilitate wildfire spread or exacerbate wildfire risk. Further, given that surrounding off-site fuels consist of moderately spaced vegetation, wildfires in the immediate surrounding area are not common, and it is unlikely that the Project site would be exposed to the uncontrolled spread of a wildfire. It is not anticipated that the Project, due to slope, prevailing winds, and other factors, would exacerbate wildfire risks or the uncontrolled spread of a wildfire; thus, with adherence to the City of Hesperia's Municipal Code, long-term indirect impacts to western Joshua tree associated with increased wildlife risk is not expected to occur.

Implementation of MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-10 (Delineation of Property Boundaries), MM-BIO-11 (Hazardous Waste), and MM-BIO-12 (Herbicides) would reduce potential indirect impacts to western Joshua tree to less than significant.

Burrowing Owl

MM-BIO-3 (Pre-Construction Surveys for Burrowing Owl and Avoidance) would require burrowing owl surveys and result in establishment of construction buffers around any burrowing owl burrows found, thus limiting effects from most short-term indirect impacts, including noise and vibration, increased human presence, night-time lighting, and vehicle collisions. MM-BIO-13 (Lighting) would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward. Additionally, MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), and MM-BIO-9 (Construction Monitoring Notebook) would require that all workers complete a Worker Environmental Awareness Program (WEAP) training, and would require ongoing biological monitoring and compliance with all biological resource mitigation requirements. MM-BIO-14 (Trash and Debris) would require trash and debris to be removed regularly, and would require animal-resistant trash receptacles to avoid attracting urban-related, predator species. MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the Mojave Desert Air Quality Management District's Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction.

Potential long-term indirect impacts that could result from development within or adjacent to burrowing owl habitat include night-time lighting and increased invasive plant species that may degrade habitat. MM-BIO-13 (Lighting) would require night-time lighting during operations within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-15 (Invasive Plant Management) would require that landscape plants within 200 feet of native

vegetation communities not be on the most recent version of the California Invasive Plant Council's Inventory of Invasive Plants (<http://www.cal-ipc.org/ip/inventory/index.php>).

Implementation of MM-BIO-3 (Pre-Construction Surveys for Burrowing Owl and Avoidance), MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), MM-BIO-13 (Lighting), MM-BIO-14 (Trash and Debris), and MM-BIO-15 (Invasive Plant Management) would reduce potential indirect impacts to burrowing owl to less than significant.

Loggerhead Shrike

MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance) would require nesting bird surveys and would result in establishment of construction buffers around nests, thus limiting effects from most short-term indirect impacts, including noise and vibration, increased human presence, night-time lighting, and vehicle collisions. MM-BIO-13 (Lighting) would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), and MM-BIO-9 (Construction Monitoring Notebook) would require that all workers complete a WEAP training, and would require ongoing biological monitoring and compliance with all biological resource mitigation requirements. MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the Mojave Desert Air Quality Management District's Rules 401 and 403.2, which limit the amount of fugitive dust generated during construction.

Potential long-term indirect impacts that could result from development within or adjacent to loggerhead shrike habitat include night-time lighting and increased invasive plant species that may degrade habitat. MM-BIO-13 (Lighting) would require night-time lighting during operations within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-15 (Invasive Plant Management) would require that landscape plants within 200 feet of native vegetation communities not be on the most recent version of the California Invasive Plant Council's Inventory of Invasive Plants (<http://www.cal-ipc.org/ip/inventory/index.php>).

Implementation of MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance), MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), MM-BIO-13 (Lighting), and MM-BIO-15 (Invasive Plant Management) would reduce potential indirect impacts to loggerhead shrike to less than significant.

American Badger and Kit Fox

MM-BIO-5 (Pre-Construction Survey for American Badger and Desert Kit Fox and Avoidance) would require a pre-construction survey for American badger and desert kit fox, and if determined present, would result in establishment of an American Badger/Desert Kit Fox Mitigation and Monitoring Plan, which would include avoidance and minimization measures to reduce potential impacts to either species, as well as compensatory mitigation to offset indirect impacts, including noise and vibration, increased human presence, night-time lighting, and vehicle collisions. MM-BIO-13 (Lighting) would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), and MM-BIO-9 (Construction Monitoring Notebook) would require that all workers complete a WEAP training, and would require ongoing biological monitoring and compliance with all biological resource

mitigation requirements. MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the Mojave Desert Air Quality Management District's Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction.

Potential long-term indirect impacts that could result from development within or adjacent to the BSA include night-time lighting and increased invasive plant species that may degrade habitat. MM-BIO-13 (Lighting) would require night-time lighting during operations within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-15 (Invasive Plant Management) would require that landscape plants within 200 feet of native vegetation communities not be on the most recent version of the California Invasive Plant Council's Inventory of Invasive Plants (<http://www.cal-ipc.org/ip/inventory/index.php>).

Implementation of MM-BIO-5 (Pre-Construction Survey for American Badger and Desert Kit Fox and Avoidance), MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), MM-BIO-13 (Lighting), and MM-BIO-15 (Invasive Plant Management) would reduce potential indirect impacts to American badger and desert kit fox to less than significant.

Nesting Migratory Birds and Raptors

To ensure compliance with the California Fish and Game Code and MBTA, and to avoid potential indirect impacts to nesting birds, vegetation removal activities should be conducted outside the general bird nesting season (February 1 through August 31, depending on the species), and if vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal through implementation of MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance). Indirect impacts including increased dust, noise and vibration, increased human presence, and night-time lighting, would be offset through implementation of MM-BIO-13 (Lighting), which would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward. MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), and MM-BIO-9 (Construction Monitoring Notebook) would require that all workers complete a WEAP training, ongoing biological monitoring, and compliance with all biological resource mitigation requirements. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the Mojave Desert Air Quality Management District's Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction.

Implementation of MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance), MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), and MM-BIO-13 (Lighting) would reduce potential indirect impacts to nesting birds and raptors to less than significant.

7.2.3 Mitigation Measures

One candidate for state listing under CESA, western Joshua tree, was observed and would be directly impacted by the Project. Two wildlife species were determined to have a moderate potential to occur within the BSA and could

occur during construction of the Project: burrowing owl and loggerhead shrike. Suitable habitat for burrowing owl and loggerhead shrike would be directly impacted by the Project.

The Project could result in potentially significant impacts to species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS, including native desert plants protected under the CDNPA and City of Hesperia Municipal Code, western Joshua trees, burrowing owl, loggerhead shrike, and nesting migratory birds and raptors. Implementation of MM-BIO-1 through MM-BIO-15 is required to reduce impacts to less than significant level.

MM-BIO-1 Conservation of Western Joshua Tree Lands. Based on a literature review completed by the California Department of Fish and Wildlife (CDFW), CDFW indicated that western Joshua tree locations shall be buffered by 186 feet to account for the take of seed bank for western Joshua trees and their associated habitat. Therefore, a 186-foot buffer (or radius) shall be applied to each western Joshua tree location. The direct impacts to this 186-foot buffer were analyzed, and the Project would result in 10.9 acres of impacts to western Joshua trees, their seed bank, and their associated habitat. Mitigation for direct impacts to 10.9 acres of western Joshua trees and their 186-foot buffer shall be fulfilled through conservation of western Joshua trees at a 2:1 habitat replacement of equal or better functions and values to those impacted by the Project, for a total of 21.8 acres. Mitigation shall be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank and lands are conserved separately, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement(s) area in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a Project-specific Property Analysis Record (PAR) to calculate the costs of in-perpetuity land management. The PAR shall take into account all of the management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

Additionally, no take of western Joshua tree shall occur without authorization from CDFW in the form of an Incidental Take Permit pursuant to California Fish and Game Code 2081. The Project applicant shall adhere to measures and conditions set forth within the Incidental Take Permit

MM-BIO-2 Relocation of Desert Native Plants. Prior to the issuance of grading permits, the Project applicant shall submit an application and applicable fee paid to the City of Hesperia for removal or relocation of protected native desert plants under Hesperia Municipal Code Chapter 16.24 as required, and schedule a pre-construction site inspection with the Planning Division and the Building Division. The application shall include certification from a qualified western Joshua tree and native desert plant expert(s) to determine that proposed removal or relocation of protected native desert plants are appropriate, supportive of a healthy environment, and in compliance with the City of Hesperia Municipal Code. Protected plants subject to Hesperia Municipal Code Chapter 16.24 may be relocated on site, or within an area designated for species to be adopted later.

The application shall include a detailed plan for removal of all protected plants on the Project site. The Joshua Tree Preservation, Protection, and Relocation Plan and Desert Native Plant Relocation

Plan shall be prepared by a qualified western Joshua tree and native desert plant expert(s). The plan shall include the following measures:

- Salvaged plants shall be transplanted expeditiously to either their final on-site location or to an approved off-site area. If the plants cannot be expeditiously taken to their permanent relocation area at the time of excavation, they may be transplanted to a temporary area (stockpiled) prior to being moved to their permanent relocation site(s).
- Western Joshua trees shall be marked on their north-facing side prior to excavation. Transplanted western Joshua trees shall be planted in the same orientation as they currently occur on the Project site, with the marking on the north side of the trees facing north at the relocation site(s).
- Transplanted plants shall be watered prior to and at the time of transplantation. The schedule of watering shall be determined by the qualified tree expert and desert native plant expert(s) to maintain plant health. Watering of the transplanted plants shall continue under the guidance of a qualified tree expert and desert native plant expert(s) until it has been determined that the transplants have become established in the permanent relocation site(s) and no longer require supplemental watering.

MM-BIO-3 **Pre-Construction Surveys for Burrowing Owl and Avoidance.** One pre-construction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the Project site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the 2012 (or current version) Staff Report on Burrowing Owl Mitigation prepared by the California Department of Fish and Wildlife (CDFW).

If burrowing owls are detected, a Burrowing Owl Relocation Plan shall be implemented in consultation with CDFW. As required by the Burrowing Owl Relocation Plan, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (current version). No Project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed.

Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Owls shall be excluded from burrows in the immediate Project area and within a buffer zone by installing one-way doors in burrow entrances. These doors shall be placed at least 48 hours prior to ground-disturbing activities. The Project area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Compensatory mitigation for permanent loss of owl habitat shall be provided following the guidance in the Staff Report on Burrowing Owl Mitigation (current version).

Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow.

- MM-BIO-4 **Pre-Construction Nesting Bird Surveys and Avoidance.** Construction activities shall avoid the migratory bird nesting season (typically February 1 through August 31) to reduce any potential significant impact to birds that may be nesting in the survey area. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the Project site and within 500 feet of all impact areas must be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treat Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans, along with an appropriate buffer established around the nest, which shall be determined by a biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when construction occurs in proximately to an active nest buffer. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that nestlings have fledged and the nest is no longer active.
- MM-BIO-5 **Pre-Construction Survey for American Badger and Desert Kit Fox and Avoidance.** A pre-construction survey for American badger and desert kit fox shall be conducted on the Project site and Off-Site Improvement Area within 10 days prior to the start of construction to determine the presence/absence of either species. If either species is discovered during the survey, an American badger/desert kit fox mitigation and monitoring plan shall be developed. The mitigation and monitoring plan shall include avoidance and minimization measures to reduce potential impacts to either species, as well as compensatory mitigation to offset direct or indirect impacts. The plan shall be developed in consultation with California Department of Fish and Wildlife. At a minimum, the plan shall contain the following:
- Identify pre-construction survey methods for American badger and desert kit fox
 - Describe feasible pre-construction and construction-phase avoidance methods
 - Describe pre-construction and construction-phase relocation methods, including the possibility for passive relocation
 - For burrows that will not be impacted by the Project, identify an appropriate construction exclusion zones for active and natal burrows
 - Coordinate survey findings prior to and during construction to meet the information needs of wildlife health officials in monitoring the health of kit fox populations
- MM-BIO-6 **Designated Biologist Authority.** The designated biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures and/or to order any reasonable measure to avoid the unauthorized take of an individual western Joshua tree.
- MM-BIO-7 **Compliance Monitoring.** The designated biologist shall be on site daily when impacts occur. The designated biologist shall conduct compliance inspections to minimize incidental take of western Joshua trees and impacts to other sensitive biological resources; prevent unlawful take of western Joshua trees; and ensure that signs, stakes, and fencing are intact, and that impacts are only

occurring outside the permitted impact footprint. Weekly written observation and inspection records that summarize oversight activities and compliance inspections and monitoring activities required by the Incidental Take Permit shall be prepared.

- MM-BIO-8 **Education Program.** An education program (Worker Environmental Awareness Program [WEAP]) for all persons employed or otherwise working in the Project area shall be administered before impacts occur. The WEAP shall consist of a presentation from the designated biologist that includes a discussion of the biology and status of western Joshua tree, burrowing owl, and loggerhead shrike, and other biological resources mitigation measures described in the California Environmental Quality Act document. Interpretation for non-English-speaking workers shall be provided, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project area. Upon completion of the WEAP, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees who will be conducting work in the Project area.
- MM-BIO-9 **Construction Monitoring Notebook.** The designated biologist shall maintain a construction-monitoring notebook on site throughout the construction period, which shall include a copy of the biological resources mitigation measures with attachments and a list of signatures of all personnel who have successfully completed the education program. The permittee shall ensure that a copy of the construction monitoring notebook is available for review at the Project site upon request by the California Department of Fish and Wildlife.
- MM-BIO-10 **Delineation of Property Boundaries.** Before beginning activities that will cause impacts, the contractor shall, in consultation with the designated biologist, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area.
- MM-BIO-11 **Hazardous Waste.** The Project applicant shall immediately stop work and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so.
- MM-BIO-12 **Herbicides.** The Project applicant shall limit herbicide use for invasive plant species, and shall use herbicides only if it has been determined that hand or mechanical efforts are infeasible. To prevent drift, the permittee shall apply herbicides only when wind speeds are less than 7 miles per hour. All herbicide application shall be performed by a licensed applicator and in accordance with all applicable federal, state, and local laws and regulations.
- MM-BIO-13 **Lighting.** Lighting for construction activities and operations within 50 feet of the outside edge of the impact footprint containing habitat for special-status wildlife shall be directed away from natural areas.

MM-BIO-14 **Trash and Debris.** The following avoidance and minimization measures shall be implemented during Project construction:

- Fully covered trash receptacles that are animal-proof shall be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles shall be removed at least once a week from the Project site.
- Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter, vehicle fluids, and food waste from the Project site on a daily basis.

MM-BIO-15 **Invasive Plant Management.** To reduce the spread of invasive plant species, landscape plants within 200 feet of native vegetation communities shall not be on the most recent version of the California Invasive Plant Council's Inventory of Invasive Plants (<http://www.cal-ipc.org/ip/inventory/index.php>). Post-construction, the Project applicant shall continually remove invasive plant species on site by hand or mechanical methods, as feasible.

7.3 Impact BIO-2: Sensitive Vegetation Communities

The following significance determinations were made based on the impacts of the Project. Proposed mitigation measures referenced in Section 7.3 are provided in Section 7.2.3.

7.3.1 Direct Impacts

Mitigation for direct and indirect impacts to 32 western Joshua tree individuals would also mitigate for impacts to 1.52 acres of Joshua tree woodland. As required by MM-BIO-1 (Conservation of Western Joshua Tree Lands), mitigation for direct and indirect impacts to 32 western Joshua trees would be fulfilled through conservation of western Joshua trees through purchase of credits at a CDFW-approved mitigation bank, or other conservation mechanism approved by the City of Hesperia and CDFW. Conservation efforts for western Joshua tree would focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to 1.52 acres of Joshua tree woodland.

Additionally, as required by MM-BIO-2 (Relocation of Desert Native Plants) and in accordance with Chapter 16.24 of the Hesperia Municipal Code, the preparation of a western Joshua Tree and desert native plants relocation plan is required to mitigate for impacts to western Joshua trees as a result of the Project. As such, a Joshua Tree Preservation, Protection, and Relocation Plan (Appendix F) was prepared for the Project to provide detailed specifications for the Project applicant to meet the requirements of Chapter 16.24 of the Hesperia Municipal Code to protect, preserve, and mitigate impacts to Joshua trees. Thus, mitigation for impacts to western Joshua tree would also mitigate for impacts to Joshua tree woodland.

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-2 (Relocation of Desert Native Plants) would reduce potential direct impacts to sensitive vegetation communities (i.e., Joshua tree woodland) to less than significant.

7.3.2 Indirect Impacts

Potential construction- and operation-related indirect impacts to Joshua tree woodland would be the same as the indirect impacts to western Joshua tree, as described in Section 7.2.2, Indirect Impacts.

Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-2 (Relocation of Desert Native Plants), and adherence to both the CDNPA and the Hesperia Municipal Code would reduce potential indirect impacts to sensitive vegetation communities (i.e., Joshua tree woodland) to less than significant.

7.3.3 Mitigation Measures

The Project could result in potentially significant impacts to Joshua tree woodland, a CDFW sensitive natural community. Implementation of MM-BIO-1 and MM-BIO-2 is required to reduce impacts to less than significant.

7.4 Impact BIO-3: Jurisdictional Wetlands

The following significance determinations were made based on the impacts of the Project, and proposed mitigation measures referenced in Section 7.4 are provided in Section 7.2.3 and Section 7.4.3.

7.4.1 Direct Impacts

Direct impacts to 0.06 acres of jurisdictional aquatic resources would occur with Project implementation. For direct impacts to 0.06 acres of waters and streams that are regulated under the California Porter–Cologne Water Quality Control Act and California Fish and Game Code, permits would be required from each of the regulatory agencies, and typically entail providing mitigation to offset the impacts and loss of beneficial uses and functions and values to the jurisdictional waters and habitats. MM-BIO-16 (Aquatic Resources Mitigation) would require obtaining permits from each of the regulatory agencies. A waste discharge report would be required for impacts to waters of the state, and a Streambed Alteration Agreement would be required for impacts to jurisdictional streambed. MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), and MM-BIO-9 (Construction Monitoring Notebook) would require that all workers complete a WEAP training, and would require ongoing biological monitoring and compliance with all biological resource mitigation requirements. MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste would occur. To reduce fugitive dust resulting from construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the Mojave Desert Air Quality Management District’s Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction.

Implementation of MM-BIO-6 (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-11 (Hazardous Waste), and MM-BIO-16 (Aquatic Resources Mitigation) would reduce potential direct impacts to jurisdictional aquatic resources to less than significant.

7.4.2 Indirect Impacts

Potential short-term indirect impacts would be significant absent mitigation. Implementation of MM-BIO-6 (Designated Biologist Authority) gives the Project's designated biologist the authority to stop work if construction is not compliant with this CEQA document. MM-BIO-7 (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts within the Project footprint. MM-BIO-8 (Education Program) would provide construction personnel with training related to waters of the state that are present on and adjacent to the impact footprint. MM-BIO-9 (Construction Monitoring Notebook) provides for documentation that the education program was administered to applicable personnel. MM-BIO-10 (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to waters of the state that are outside the permitted Project footprint. Thus, implementation of MM-BIO-6 through MM-BIO-10 would enable the Project to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint.

MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste would occur. Thus, implementation of MM-BIO-11 (Hazardous Waste) would help to avoid and minimize impacts to waters of the state from any construction-related chemical spills.

A Stormwater Pollution Prevention Plan would be prepared and implemented to prevent all construction pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and any other pollutants from moving off site and into receiving waters. BMPs employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a Stormwater Pollution Prevention Plan would help to avoid and minimize the potential effects of stormwater erosion during construction.

Potential long-term (post-construction) indirect impacts from operations and maintenance activities may include changes in water quality and accidental chemical spills.

Implementation of low-impact-development features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); the improper management of hazardous materials; trash and debris; and the improper management of portable restroom facilities (e.g., regular service) in accordance with all relevant local and state development standards. In addition, in accordance with CalGreen requirements (California Green Building Standards Code, CCR, Title 24, Part 11), Project source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, and outdoor loading/unloading areas. Therefore, impacts to western Joshua trees due to changes in water quality would be avoided and minimized through implementation of low-impact-development features and BMPs.

MM-BIO-11 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and repair and clean-up of any hazardous waste occurs. Thus, implementation of MM-BIO-11 (Hazardous Waste) would help to avoid and minimize impacts to jurisdictional aquatic resources from any operations-related chemical spills.

Implementation of MM-BIO-6, (Designated Biologist Authority), MM-BIO-7 (Compliance Monitoring), MM-BIO-8 (Education Program), MM-BIO-9 (Construction Monitoring Notebook), MM-BIO-10 (Delineation of Property

Boundaries), and MM-BIO-11 (Hazardous Waste) would reduce potential indirect impacts to jurisdictional aquatic resources to less than significant.

7.4.3 Mitigation Measures

Significant direct permanent impacts would occur to state-defined non-wetland waters as a result of Project activities. Short-term and long-term indirect impacts to jurisdictional waters relating to construction activities (edge effects) and trash/pollution would not likely result in significant impacts, especially with the application of the standard BMPs that would be implemented during Project construction. Incorporation of MM-BIO-6 through MM-BIO-11 and MM-BIO-16 is required to reduce impacts to a less-than-significant level.

MM-BIO-16 Aquatic Resources Mitigation. The Project site supports aquatic resources that are jurisdictional under the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW). Prior to construction activity, the Project applicant shall coordinate with the Lahontan RWQCB (Region 6) to ensure conformance with the requirements of Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Prior to activity within CDFW jurisdictional streambeds or associated riparian habitat, the applicant shall coordinate with CDFW (Inland Deserts Region 6) relative to conformance with the Lake and Streambed Alteration permit requirements.

The Project shall mitigate to ensure no-net-loss of waters at a minimum of 1:1 with re-establishment credits (0.06 acres RWQCB/CDFW) for impacts to aquatic resources as part of an overall strategy to ensure no net loss. Mitigation shall be completed through the use of a mitigation bank (e.g., West Mojave Mitigation Bank) or other applicant-sponsored mitigation. Final mitigation ratios and credits shall be determined in consultation with the RWQCB and/or CDFW based on agency evaluation of current resource functions and values and through each agency's respective permitting process.

Should applicant-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared in accordance with State Water Resources Control Board guidelines and approved by the agencies in accordance with the applicable permits. The HMMP shall include a conceptual planting plan, including planting zones, grading, and irrigation, as applicable; a conceptual planting plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity.

Best management practices shall be implemented to avoid any indirect impacts on jurisdictional waters, including the following:

- Vehicles and equipment shall not be operated in ponded or flowing water except as described in permits.
- Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows.

- Spoil sites shall not be located within 30 feet from the boundaries of jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages.
- Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources resulting from Project-related activities shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters.
- No equipment maintenance shall be performed within 100 feet of jurisdictional waters, including wetlands and riparian areas, where petroleum products or other pollutants from the equipment may enter these areas. Fueling of equipment shall not occur on the Project site.

7.5 Impact BIO-4: Wildlife Corridors and Migratory Routes

The following significance determinations were made based on the impacts of the Project, and proposed mitigation measures referenced in Section 7.5 are provided in Section 7.2.3.

7.5.1 Direct Impacts

No significant direct permanent impacts would occur on wildlife movement or use of native wildlife nursery sites associated with Project activities. Existing nearby habitat linkages and wildlife corridor functions would remain intact while construction activities are conducted and following Project completion. Therefore, implementation of the Project would not result in significant direct impacts to wildlife corridors or migratory routes.

7.5.2 Indirect Impacts

Construction-related short-term noise and work in the vicinity would be temporary and would not be expected to significantly disrupt wildlife movement due to ambient noise conditions and the ability for wildlife to continue to move around the construction area and upland portions of the BSA during and after construction. Temporary disturbance to local species may occur but would not substantially degrade the quality or use of the vegetation communities in the vicinity. Work activities are not currently proposed during the night-time. Therefore, implementation of the Project would not result in significant short-term indirect impacts to wildlife corridors or migratory routes.

Potential long-term (post-construction) indirect impacts from operations and maintenance activities could disrupt wildlife movement around the Project site due to increased lighting from buildings. MM-BIO-13 (Lighting) would ensure all lighting during operations and within 50 feet of the outside edge of the impact footprint containing habitat for special-status wildlife would be directed away from natural areas.

Implementation of MM-BIO-13 (Lighting) would reduce potential indirect impacts to wildlife movement to less than significant.

7.6 Impact BIO-5: Local Policies or Ordinances

The following significance determinations were made based on the impacts of the Project, and proposed mitigation measures referenced in Section 7.6 are provided in Section 7.2.3.

California Desert Native Plants and Western Joshua Tree

Pursuant to MM-BIO-2 (Relocation of Desert Native Plants), the Project applicant will submit an application and applicable fee paid to the City of Hesperia for removal or relocation of protected native desert plants (i.e., western Joshua tree) under Hesperia Municipal Code Chapter 16.24. The application will include certification from a qualified Joshua tree and native desert plant expert(s) to determine that proposed removal or relocation of protected native desert plants are appropriate, supportive of a healthy environment, and in compliance with the City of Hesperia Municipal Code. The application will include the Joshua Tree Preservation, Protection, and Relocation Plan and Desert Native Plant Relocation Plan (Appendix F). The plan will be prepared by a qualified Joshua Tree and native desert plant expert. With the incorporation of mitigation, and with adherence to both the CDNPA and the Hesperia Municipal Code, impacts associated with western Joshua tree and desert native plants would be less than significant.

The Project could result in potentially significant impacts to native desert plants (e.g., western Joshua trees), which are addressed by state and local plant and tree preservation regulations, absent mitigation. Implementation of MM-BIO-1 (Conservation of Western Joshua Tree Lands) and MM-BIO-2 (Relocation of Desert Native Plants) would reduce potential impacts California desert native plants (including western Joshua tree) to less than significant.

7.7 Impact BIO-6: Habitat Conservation Plans

The Project would not conflict with the conservation criteria associated with the California Desert Conservation Area Plan or Desert Renewable Energy Conservation Plan. Therefore, the project would not be in conflict with any Habitat Conservation Plans.

INTENTIONALLY LEFT BLANK

8 References

- AOS (American Ornithological Society). 2018. "Check-List of North and Middle American Birds."
<http://checklist.aou.org/>.
- BLM (Bureau of Land Management). 1980. *Desert Conservation Area Plan*. 1980.
https://eplanning.blm.gov/public_projects/lup/66949/82080/96344/CDCA_Plan.pdf.
- BLM. 2005. *West Mojave Plan: A Habitat Conservation and California Desert Conservation Area Plan Amendment. Final Environmental Impact Report and Statement*. Vols. 1 and 2.
<https://eplanning.blm.gov/eplanning-ui/project/72544/570>.
- BLM. 2016. *Land Use Plan Amendment to the California Desert Conservation Plan, Bishop Resource Management Plan, and Bakersfield Resource Management Plan*. BLM/CA/PL-2016/03+1793+8321. Prepared by the BLM. September 2016.
- CDFG (California Department of Fish and Game). 2003. *Mohave Ground Squirrel Survey Guidelines*. January 2003. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83975>.
- CDFW (California Department of Fish and Wildlife). 2012. *Staff Report on Burrowing Owl Mitigation, State of California Natural Resource Agency, Department of Fish and Game, May 7, 2012*.
- CDFW. 2018. *Protocols for Surveying and Evaluating Impacts to Special-Status Native Populations and Natural Communities*. March 20, 2018. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>.
- CDFW. 2020a. "California Fish and Game Commission Notice Of Findings, Western Joshua Tree (*Yucca brevifolia*)."
September 24, 2020. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=183565&inline>.
- CDFW. 2020b. "Survey of California Vegetation Classification and Mapping Standards." June 22, 2020.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=102342&inline>.
- CDFW. 2021. "California Natural Communities List." Sacramento, California: CDFW, Vegetation Classification and Mapping Program. September 9, 2020. Accessed May 2022. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>.
- CDFW. 2022a. "Special Vascular Plants, Bryophytes, and Lichens List." California Natural Diversity Database. Sacramento, California: CDFW, Biogeographic Data Branch. April 2022. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline>.
- CDFW. 2022b. "Special Animals List." California Natural Diversity Database. Sacramento, California: CDFW, Biogeographic Data Branch. April 2022. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1>.
- CDFW. 2022c. RareFind 5, Version 5.2.14. California Natural Diversity Database. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed November 2021. <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>.

- Center for Biological Diversity. 2019. “Before the California Fish And Game Commission: A Petition to List the Western Joshua Tree (*Yucca brevifolia*) as Threatened under the California Endangered Species Act (CESA).” October 15, 2019. <https://www.biologicaldiversity.org/species/plants/pdfs/CESA-petition-Western-Joshua-Tree-10-15-19.pdf>.
- City of Hesperia. 2009. “Protected Plant Policy.” May 29, 2009. <http://www.cityofhesperia.us/DocumentCenter/View/1571/PL-17-protected-plant-policy-5-29-09?bidId=>.
- City of Hesperia. 2010. *The City of Hesperia General Plan 2010*. Hesperia, California. Accessed May 2022. <https://www.cityofhesperia.us/409/Hesperia-General-Plan>.
- City of Hesperia. 2021. *Hesperia Main Street & Freeway Corridor Specific Plan*. Adopted October 16, 2008; amended July 15, 2021. <https://www.cityofhesperia.us/DocumentCenter/View/15940/MSFCSP-update>.
- City of Hesperia. In Progress. *Poplar 18 Industrial Park Project Environmental Impact Report*. Prepared by Dudek for Poplar 18 LLC.
- CNPS (California Native Plant Society). 2001. “CNPS Botanical Survey Guidelines.” Published December 9, 1983; revised June 2, 2001.
- CNPS. 2022a. Inventory of Rare and Endangered Plants (online edition, v8-03). Sacramento, California: California Native Plant Society, Rare Plant Program. Accessed February 2022. <http://www.rareplants.cnps.org/>.
- CNPS. 2022b. *A Manual of California Vegetation, Online Edition*. California Native Plant Society, Sacramento, CA. Accessed June 2022. <http://www.cnps.org/cnps/vegetation/>.
- Coulombe, H.N. 1971. “Behavior and Population Ecology of the Burrowing owl, *Speotyto cunicularia*, in the Imperial Valley of California.” *Condor* 73:162–176.
- County of San Bernardino. 2007a. *2006 General Plan Program, Final Environmental Impact Report and Appendices*. SCH No. 2005101038. February 2007. <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FinalEIR2007.pdf>.
- County of San Bernardino. 2007b. *County of San Bernardino 2007 Development Code*. Amended 2014. <http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DC011614.pdf>.
- Crother, B.I. 2017. “Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding.” 8th ed. Herpetological Circular No. 43. Ed. J.J. Moriarty. Shoreview, Minnesota: Society for the Study of Amphibians and Reptiles.
- Cypher, E.A. 2002. “General Rare Plant Survey Guidelines.” Bakersfield, California: California State University, Stanislaus, Endangered Species Recovery Program. Revised July 2002. http://www.fws.gov/sacramento/ES/Survey-Protocols-Guidelines/Documents/rare_plant_protocol.pdf.

- Gervais, J.A., D.K. Rosenberg, and L.A. Comrack. 2008. "Burrowing Owl (*Athene cunicularia*)." In *California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*, edited by W.D. Shuford and T. Gardali, 218–226. Studies of Western Birds no. 1. California: Western Field Ornithologists (Camarillo), and California Department of Fish and Game (Sacramento). February 4, 2008. <http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html>.
- Google. 2022. Historical Aerials and Topographic Maps. Accessed November 2021.
- Green, G.A., and R.G. Anthony. 1989. "Nesting Success and Habitat Relationships of Burrowing Owls in the Columbia Basin, Oregon." *Condor* 91:347–354.
- Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. "The Burrowing Owl (*Speotyto cunicularia*)." In *The Birds of North America*, edited by A. Poole and F. Gill. Philadelphia, Pennsylvania: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.
- Historical Aerials Online. 2022. Historical Aerials by NETRonline. Accessed November 2021. <https://www.historicaerials.com/>.
- Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. October 1986.
- Humple, D. 2008. "Loggerhead Shrike (*Lanius ludovicianus*)." In *California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*, edited by W.D. Shuford and T. Gardali, 271–277. Studies of Western Birds no. 1. California: Western Field Ornithologists (Camarillo) and California Department of Fish and Game (Sacramento). February 4, 2008. <http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html>.
- Jepson Flora Project. 2022. Jepson eFlora. Berkeley, California: University of California. Accessed January 2022. <http://ucjeps.berkeley.edu/interchange/index.html>.
- Lantz, S.J., H. Smith, and D.A. Keinath. 2004. *Species Assessment for Western Burrowing Owl (*Athene cunicularia hypugaea*) in Wyoming*. Prepared for the U.S. Department of Interior and Bureau of Land Management, Wyoming State Office, Cheyenne, Wyoming. September 2004.
- Martin, D.J. 1973. "Selected Aspects of Burrowing Owl Ecology and Behavior." *Condor* 75: 446–456.
- NPS (National Park Service). 2015. "Desert Kit Fox." February 28, 2015. <https://www.nps.gov/jotr/learn/nature/kitfox.htm>.
- Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202013-12-19_OberbauerTM2008.pdf.
- SWRCB (State Water Resources Control Board). 2019. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Adopted April 2, 2019. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf.

- UCD SIG (University of California Davis Sustainability Indicators Group). 2021. "Oro Grande Wash." California Water Sustainability. Accessed July 2021. <https://indicators.ucdavis.edu/cwip/huc/180902080704>.
- USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual*. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. <http://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf>.
- USACE. 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046489.pdf.
- USACE. 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual*. ERDC/CRREL TR-08-12. Prepared by R.W. Lichvar and S.M. McColley. Hanover, New Hampshire: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. August 2008. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a486603.pdf>.
- USDA (U.S. Department of Agriculture). 2022a. "Web Soil Survey." USDA, Natural Resources Conservation Service. Accessed February 2022. <http://websoilsurvey.nrcs.usda.gov/>.
- USDA. 2022b. PLANTS Database. USDA Natural Resources Conservation Service. Accessed February 2022. <http://plants.usda.gov/java/>.
- USFWS (U.S Fish and Wildlife Service). 2008. *Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)*. California and Nevada Region, Sacramento, California.
- USFWS. 2010. *Preparing for Any Action that May Occur Within the Range of the Mojave Desert Tortoise (Gopherus agassizii)*.
- USFWS. 2011. *Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)*. Sacramento, California: Region 8, Pacific Southwest Region, U.S. Fish and Wildlife Service. May 6, 2011. https://www.fws.gov/nevada/desert_tortoise/documents/recovery_plan/RRP%20for%20the%20Mojave%20Desert%20Tortoise%20-%20May%202011.pdf.
- USFWS. 2022a. "National Wetlands Inventory." U.S. Department of the Interior, USFWS. Accessed May 2022. <http://www.fws.gov/wetlands/>.
- USFWS. 2022b. Environmental Conservation Online System, Information for Planning and Conservation Report (online edition, v2.3.2). Accessed November 2021. <http://ecos.fws.gov/ipac/>.
- USGS (U.S. Geological Survey). 2020. "American Badgers." Accessed August 2020. https://www.usgs.gov/centers/werc/science/american-badgers-san-diego-county?qt-science_center_objects=0#qt-science_center_objects.
- USGS. 2022. Flow Lines, Water Points, Watershed Boundaries for Hydrologic Units, Water Bodies (GIS data). National Hydrology Dataset. Last accessed November 2021. <http://nhd.usgs.gov/>.

- Vander Wall, S.B., T.C. Esque, B.A. Waitman, D.F. Haines, and M.G. Garnett. 2006. "Joshua Tree (*Yucca brevifolia*) Seeds are Dispersed by Seed-Caching Rodents." *Ecoscience* 13: 539–543.
- Wilson, D.E., and D.M. Reeder, eds. 2005. *Mammal Species of the World: A Taxonomic and Geographic Reference*, 3rd ed. (MSW3 database). <http://www.bucknell.edu/msw3/>.
- WRCC (Western Regional Climate Center). 2022. "Hesperia, California: Period of Record Monthly Climate Summary." Accessed May 2022. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3935>.
- Yosef, R. 1996. "Loggerhead Shrike." In *The Birds of North America Online*, edited by A. Poole. Ithaca, New York: Cornell Lab of Ornithology. <http://bna.birds.cornell.edu/bna/species/231>.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1990. *California's Wildlife*. Vol. II. Birds. Sacramento, California: California Department of Fish and Game.

INTENTIONALLY LEFT BLANK



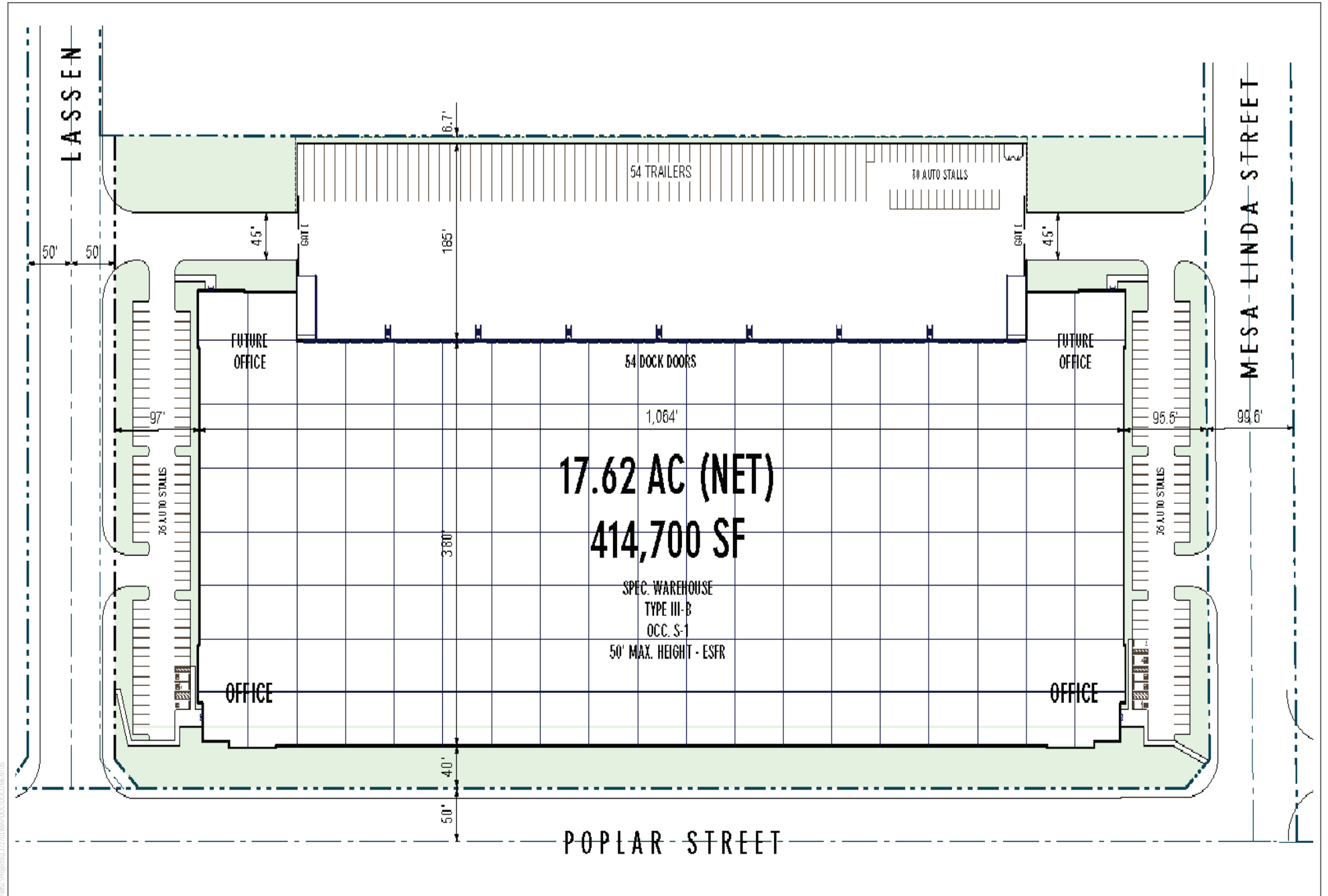
Biological Resources Technical Report for the Poplar 18 Project

INTENTIONALLY LEFT BLANK



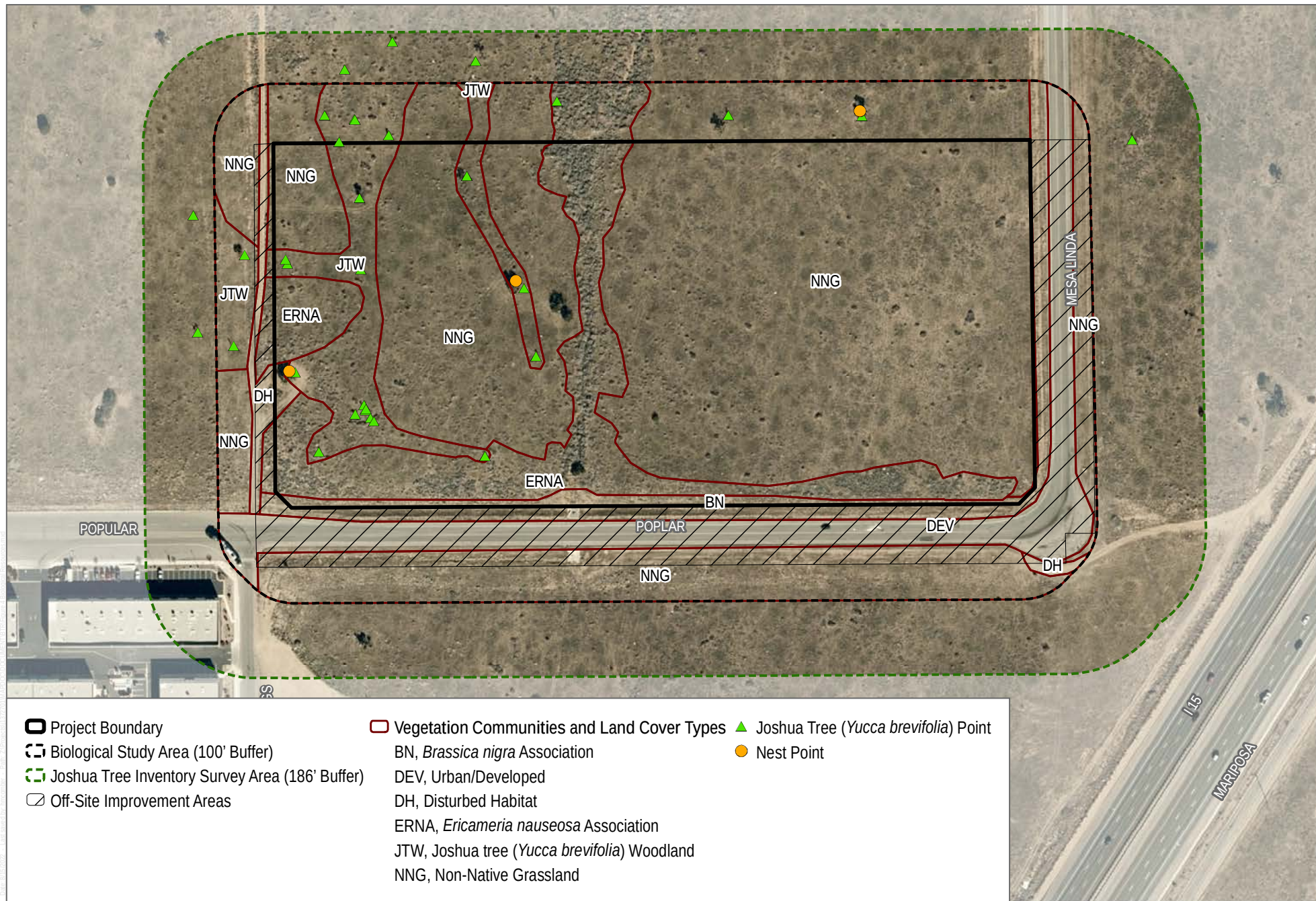
SOURCE: Bing Maps; County of San Bernadino 2017

INTENTIONALLY LEFT BLANK



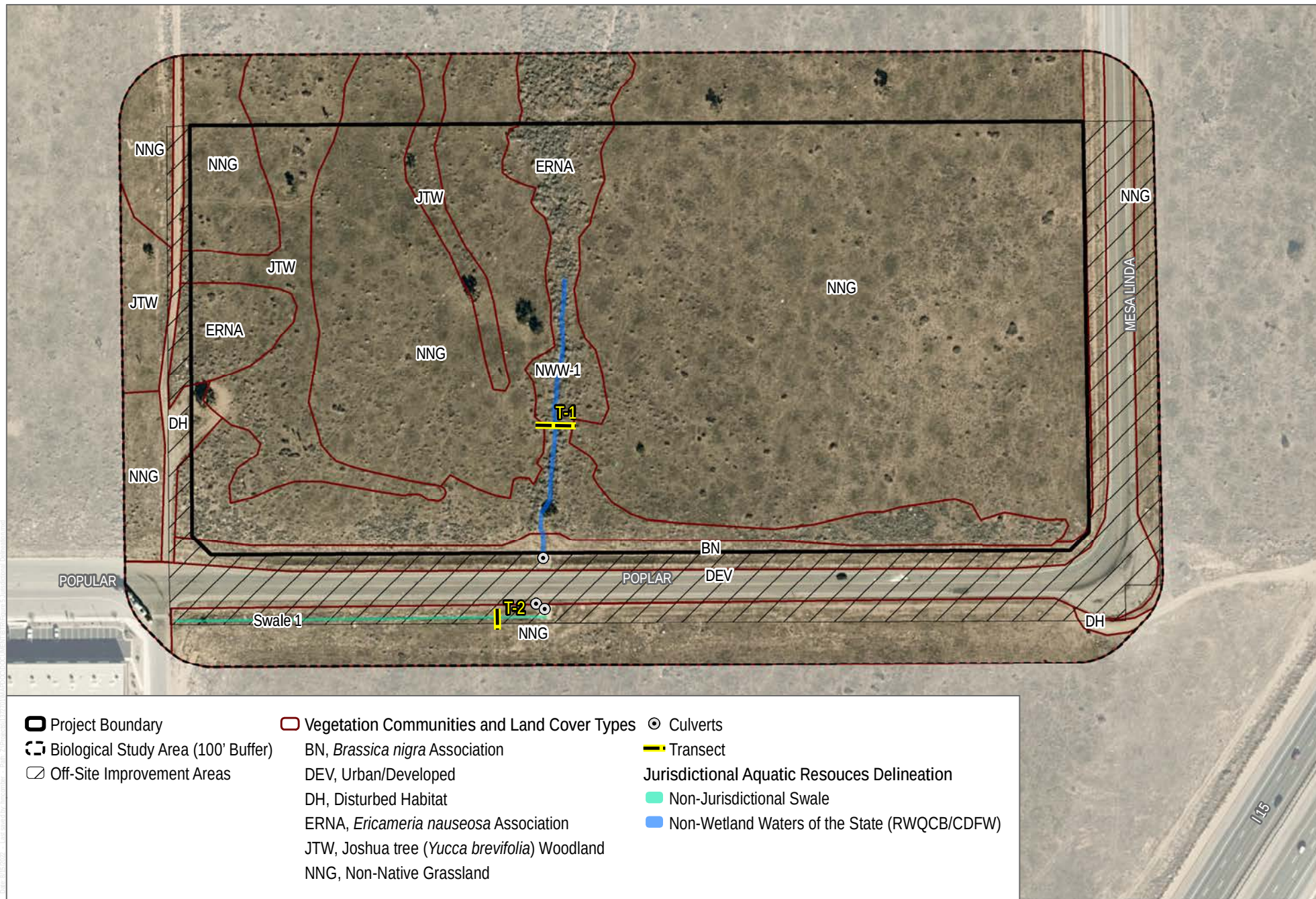
SOURCE: RGA Office of Architectural Design 2021

INTENTIONALLY LEFT BLANK



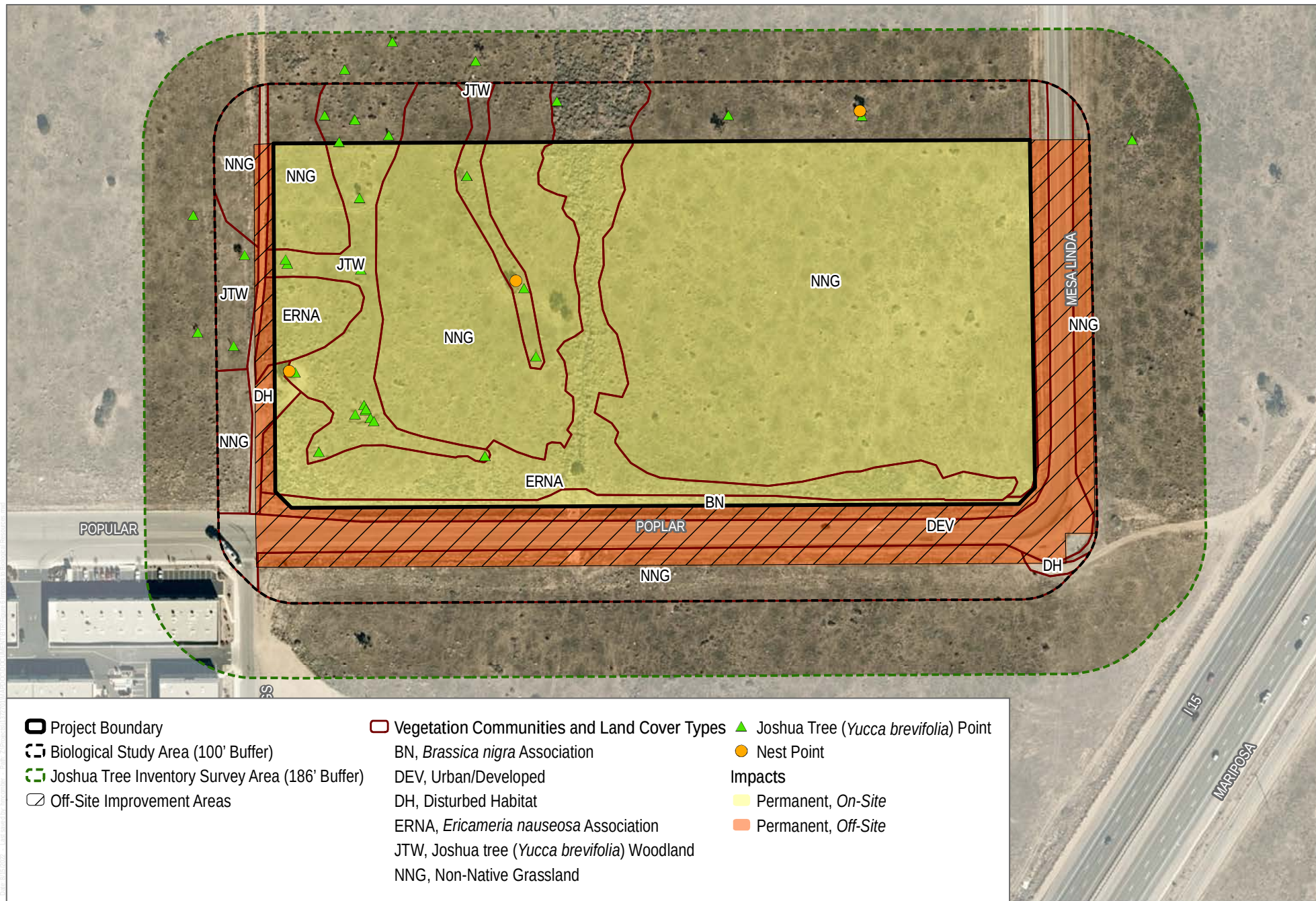
SOURCE: Bing Maps; County of San Bernadino 2017

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps; County of San Bernadino 2017

INTENTIONALLY LEFT BLANK



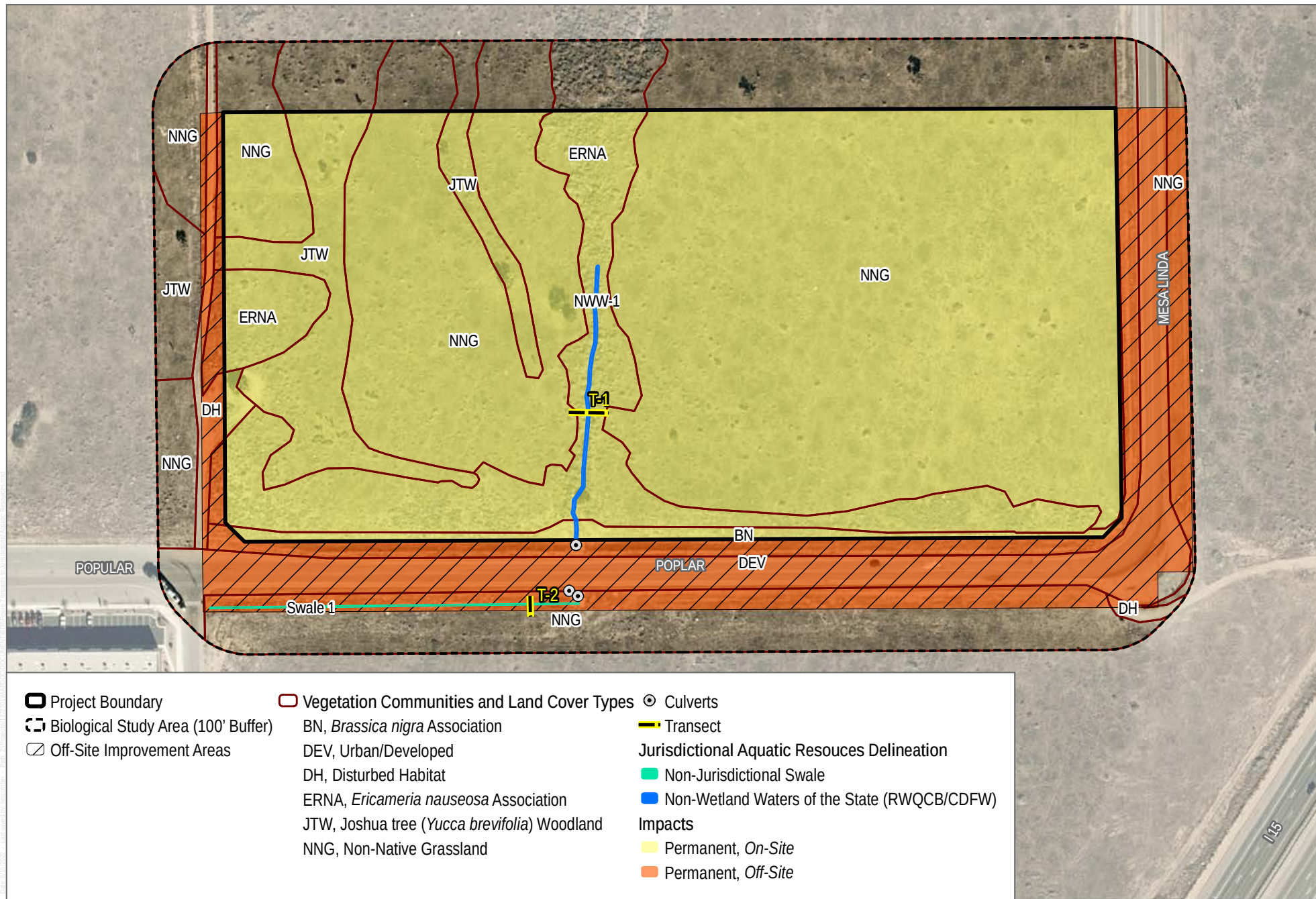
SOURCE: Bing Maps; County of San Bernadino 2017

FIGURE 6

Impacts to Biological Resources

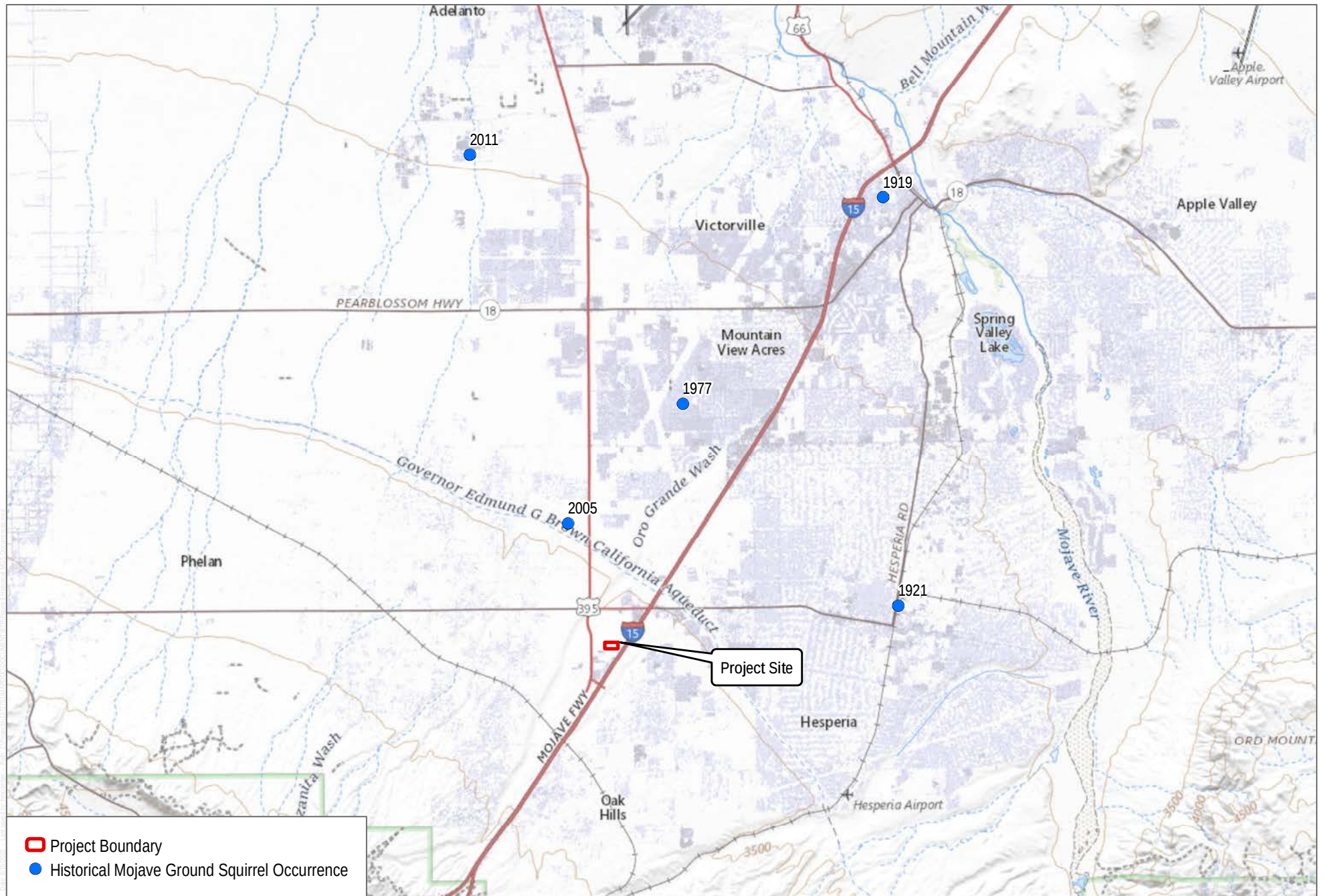
Biological Resources Technical Report for Poplar 18Project

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps; County of San Bernardino 2017

INTENTIONALLY LEFT BLANK



SOURCE: CNDDDB 2021, USGS

FIGURE 8

Historical Mojave Ground Squirrel Occurrences

Biological Resources Technical Report for Poplar 18 Project

INTENTIONALLY LEFT BLANK

Appendix A

Aquatic Resources Delineation Report

August 15, 2022

13727

Dana Whitmer
Poplar 18, LLC
14180 Dallas Parkway, Suite 730
Dallas, Texas 75254

Subject: Aquatic Resources Delineation Report for the Poplar 18 Project, Hesperia, San Bernardino County, California

Dear Mr. Whitmer:

This Aquatic Resources Delineation Report is being provided for the Poplar 18 Project (Project) to the U.S. Army Corps of Engineers (USACE) in accordance with the Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (USACE 2016). This report and supporting attachments provide the 20 items listed in the Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (USACE 2016).

Item 1: Request for a Jurisdictional Determination

Attachment A contains the USACE Regulatory Program Approved Jurisdictional Determination Form and Request for a Jurisdictional Determination.

Item 2: Contact Information

Applicant	Poplar 18, LLC	Agent	Dudek
Contact Name	Dana Whitmer	Contact Name	Britney Strittmater
Address	14180 Dallas Parkway, Suite 730 Dallas, Texas 75254	Address	78-075 Main Street, Suite G-203 La Quinta, California 92253
Phone	949.514.0274	Phone	760.341.6660
Fax	None	Fax	760.346.6118
Email	dana@mcwhitproperties.com	Email	bstrittmater@dudek.com

Item 3: Site Access

The applicant or agent will accompany USACE staff to the Project site (review area) if site visits are deemed necessary.

Item 4: Directions to the Review Area

The review area is located at the southwest quadrant of Interstate (I) 15 and Main Street, specifically, south of Main Street, west of Cataba Road and Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road in Hesperia, California (Figure 1, Project Location; all figures are provided in Attachment B). Specifically, the review area is located in in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map (Figure 2, USGS Topographic Map).

Regional access to the review area is provided via I-15, directly east of the review area, and U.S. Highway 395, directly west of the review area. Local access to the review area is provided via Poplar Street to Lassen Road or off Mesa Linda Street. Heading north on I-15, take exit 141 to U.S. Highway 395 North, continue north on U.S. Highway 395 approximately 1.1 miles, turn right on Poplar Street continuing east approximately 0.5 miles; the review area is north of Poplar Street.

Item 5: Aquatic Resources Delineation Methods

The USACE Regulatory Program regulates activities pursuant to Section 404 of the Clean Water Act. USACE regulates “discharge of dredged or fill material” into “waters of the United States.” The limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the “ordinary high water mark” (OHWM), which is defined in 33 Code of Federal Regulations 328.3(c)(7) as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.” The term “adjacent wetlands” (a subset of waters of the United States) is defined in 33 Code of Federal Regulations 328.3(c)(16) as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

USACE defines wetlands as areas that contain hydrophytic vegetation, hydric soils, and wetland hydrology, in accordance with the procedures established in the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008a). This aquatic resources delineation followed these two manuals, plus the additional information from A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008b).

An Antecedent Precipitation Tool was used to document the climatological data around the delineation dates (see Attachment C). The review area received rainfall in early September and late October 2021, and the conditions were considered “wetter than normal”; however, the drought index is considered “severe.”

Item 6: Aquatic Resources Narrative

Overall, the review area landscape drains water in a northeasterly direction. One unvegetated ephemeral drainage (NWW-1) is present within the review area, specifically within the central portion of the review area, north of Poplar Street. This feature bisects the review area flowing south to north, and likely originates from stormwater flows/runoff from Poplar Street. A culvert and storm drain are located north and south of Poplar Street. This feature flows approximately 396 feet until dissipating as sheet flow across the landscape. Therefore, these features do not meet the relatively permanent or significant nexus standard as a waters of the United States. Therefore, no potential USACE jurisdictional aquatic resources (i.e., USACE regulated non-wetland waters or wetlands) were delineated within the review area, as shown in Figure 3, Aquatics Resource Delineation. The review area did not contain any features that met the USACE three-parameter wetland criteria, and lacked riparian or hydrophytic vegetation; therefore, wetland determination data forms were not completed. A discussion of the USACE jurisdictional aquatic resources is described below.

Wetlands

No riparian or hydrophytic vegetation occurs within the review area, and no hydric soils are mapped within the review area; therefore, there are no wetlands with the review area.

Non-Wetland Waters

As described above, there are no non-wetland waters of the United States with the review area because these features do not meet the relatively permanent or significant nexus standard.

Non-USACE Jurisdictional Aquatics Resources

See Attachment D for a discussion of areas under the jurisdiction of the California Department of Fish and Wildlife and Regional Water Quality Control Board.

Item 7: Delineation Maps

All maps of delineated aquatic resources are provided in Attachment B.

Item 8: Dates of Fieldwork

Dudek biologist Tracy Park conducted an aquatic resources delineation for the review area in November 2021. Table 1 provides the survey date and conditions for the survey.

Table 1. Schedule of the Aquatic Resources Delineation

Date	Hours	Personnel	Conditions
11/11/2021	9:58 AM–12:15 PM	Tracy Park	71°F – 72°F; 0% cloud cover; 1–5 mph wind

Item 9: Table of Aquatic Resources

No potential USACE jurisdictional aquatic resources (i.e., USACE regulated non-wetland waters or wetlands) were delineated within the review area; therefore, no table is provided. Attachment A includes the Approved Jurisdictional Determination Form, which describes that aquatic resources do not meet the relatively permanent or significant nexus standard.

Item 10: Review Area Description

The review area consists of Assessor's Parcel Numbers 3064-581-04-0000 and 3064-581-05-0000, and is located in the western part of the City of Hesperia, within the Victor Valley region of San Bernardino County (see Figure 1). The review area is located on the southwest quadrant of I-15 and Main Street. The Project site is located south of Main Street, west of Cataba Road and Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The review area is currently open, vacant desert lands with surface elevation ranging between approximately 3,600 and 3,630 feet above mean sea level. The review area is located in in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map (see Figure 2). The approximate center of the review area corresponds to 34.416294 latitude and -117.393089 longitude.

Within the review area, vegetation communities and land cover types include rubber rabbitbrush (*Ericameria nauseosa*) scrub, Joshua tree (*Yucca brevifolia*) woodland, upland mustards, non-native grasslands, disturbed habitat, and urban/developed lands. The review area is dominated by upland plant species, including rubber rabbitbrush, creosote bush (*Larrea tridentata*), Cooper's goldenbush (*Ericameria cooperi* var. *cooperi*), California buckwheat (*Eriogonum fasciculatum* var. *polifolium*), and Mexican bladdersage (*Scutellaria mexicana*), along with non-native grasses including ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), cheatgrass (*Bromus tectorum*), and common Mediterranean grass (*Schismus barbatus*).

Item 11: Hydrology

The review area is within the South Lahontan Basin, specifically within the Mojave Hydrologic Unit (628.00) and Upper Mojave Hydrologic Area (628.20) (RWQCB 2021). Additionally, the review area is within the Mojave Subbasin Hydrologic Unit Code (HUC) 8 (18090208), Bell Mountain Wash-Mojave River HUC 10 (1809020807), and Oro Grande Wash HUC 12 (180902080704) watersheds. The Mojave Subbasin HUC 8 watershed is approximately 4,618 square miles and consists of several waterbodies, waterways, dry washes, and valleys (UCD SIG 2021). The Mojave River is approximately 8.5 miles to the east. The Oro Grande Wash is a tributary to the Mojave River and is located approximately 0.25 miles west of the review area, and the California Aqueduct is 1 mile to the north (USGS 2022). See Figure 4, Hydrologic Setting.

Item 12: Remote Sensing

No remote sensing was used for this aquatic resources delineation.

Item 13: Soils

According to the U.S. Department of Agriculture Natural Resource Conservation Service's Web Soil Survey (USDA 2022), the review area occurs within the San Bernardino County, Mojave River Area (CA671). The review area consists of one soil type: Hesperia loamy fine sand (2% to 5% slopes). This soil type is shown in Figure 5, Soils, and presented in Table 2. There are no hydric soils within the review area (USDA 2022).

Table 2. Soils within the Review Area

Soil Code	Soil Name	Hydric Rating	Acreage
134	Hesperia loamy fine sand, 2% to 5% slopes	Not Hydric	29.2
Total			29.2

Item 14: Site Location Maps

All maps are provided in Attachment B.

Item 15: Aquatic Features Spreadsheet

A copy of the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet is not submitted with this report because there are no waters of the United States.

Item 16: Delineation Maps

All maps are provided in Attachment B.

Item 17: Photographs

Photos of the review area are provided in Attachment E.

Item 18: Data Forms

The OHWM datasheets are provided in Attachment F. Wetland determination data forms were not completed because the review area lacked hydrophytic vegetation.

Item 19: Methods

Jurisdictional boundaries were mapped in the field using an ESRI Collector mobile application with sub-meter accuracy and aerial imagery. Following the fieldwork, aquatic resources were digitized using ArcGIS.

Additionally, the delineation defined areas under the jurisdiction of the California Department of Fish and Wildlife pursuant to California Fish and Game Code Sections 1600–1603, and the Regional Water Quality Control Board pursuant to Clean Water Act Section 401 and the Porter–Cologne Water Quality Control Act. See Attachment D for additional detail regarding California Department of Fish and Wildlife and Regional Water Quality Control Board jurisdictional areas.

Item 20: Digital Data

GIS data of the review area and potential aquatic resources regulated by USACE will be shared via a zip file.

Sincerely,



Britney Strittmater
Biologist

Atts.: A, USACE Regulatory Program Approved Jurisdictional Determination Form and Request for a Jurisdictional Determination
B, Figures
C, Antecedent Precipitation Tool
D, California Department of Fish and Wildlife and Regional Water Quality Control Board Jurisdictional Resources
E, Photographs
F, OHWM Datasheets

References Cited

- RWQCB (State of California, Regional Water Quality Control Board, Lahontan Region). 2021. *Water Quality Control Plan for the Lahontan Region North and South Basins*. Effective March 31, 1995; last amended September 22, 2021. https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.html.
- UCD SIG (University of California Davis Sustainability Indicators Group). 2021. “Oro Grande Wash.” California Water Sustainability. Accessed July 2021. <https://indicators.ucdavis.edu/cwip/huc/180902080704>.
- USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual*. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. <http://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf>.
- USACE. 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0). Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046489.pdf.

- USACE. 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual*. ERDC/CRREL TR-08-12. Prepared by R.W. Lichvar and S.M. McColley. Hanover, New Hampshire: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. August 2008. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a486603.pdf>.
- USACE. 2016. *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. Sacramento, California: USFWS, Sacramento District. January 2016. https://www.spk.usace.army.mil/Portals/12/documents/regulatory/jd/minimum-standards/Minimum_Standards_for_Delineation_with_Template-final.pdf.
- USDA (U.S. Department of Agriculture). 2022. Web Soil Survey. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed May 2022. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.
- USGS (U.S. Geological Survey). 2022. Flow Lines, Water Points, Watershed Boundaries for Hydrologic Units, Water Bodies (GIS data). National Hydrology Dataset. Last accessed November 2021. <http://nhd.usgs.gov/>.

Attachment A

USACE Regulatory Program Approved Jurisdictional
Determination Form and Request for a
Jurisdictional Determination

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: District Name Here

- I am requesting a JD on property located at: NE of 12221 Poplar St.
(Street Address)
City/Township/Parish: Hesperia County: San Bernardino State: CA
Acreage of Parcel/Review Area for JD: 160
Section: 22 Township: 4N Range: 5W
Latitude (decimal degrees): 34.416889 Longitude (decimal degrees): -117.392611
(For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- ☐ I currently own this property. ☐ I plan to purchase this property.
☒ I am an agent/consultant acting on behalf of the requestor.
☐ Other (please explain): _____.
- Reason for request: (check as many as applicable)
☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
☒ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
☐ A Corps JD is required in order to obtain my local/state authorization.
☒ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
☐ I believe that the site may be comprised entirely of dry land.
☐ Other: _____
- Type of determination being requested:
☒ I am requesting an approved JD.
☐ I am requesting a preliminary JD.
☐ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
☐ I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: _____ Date: _____

- Typed or printed name: Dana Whitmer
Company name: Poplar 18, LLC
Address: 14180 Dallas Parkway, Suite 730
Dallas, TX 75254
Daytime phone no.: 949-514-0274
Email address: dana@mcwhitproperties.com

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

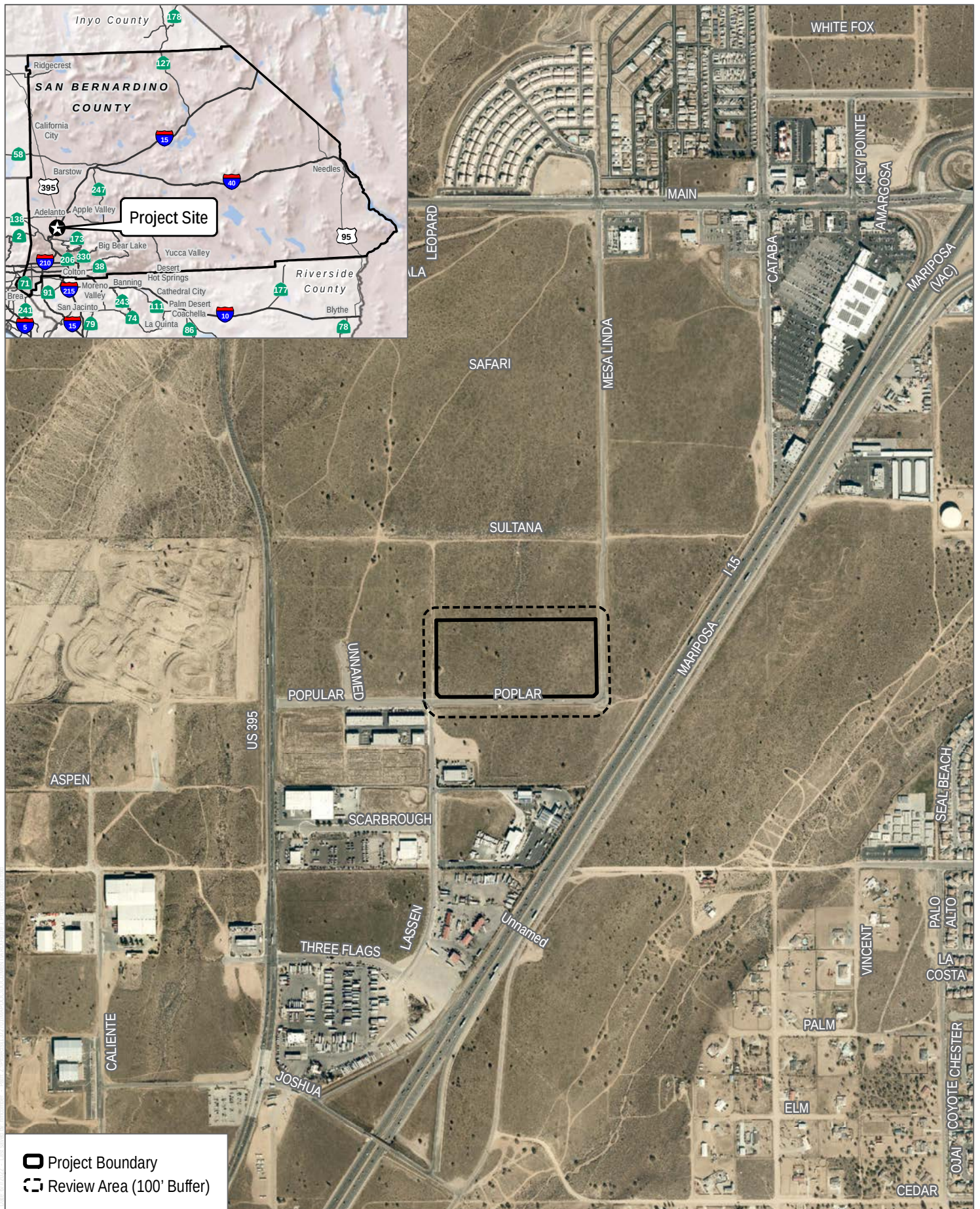
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

Attachment B

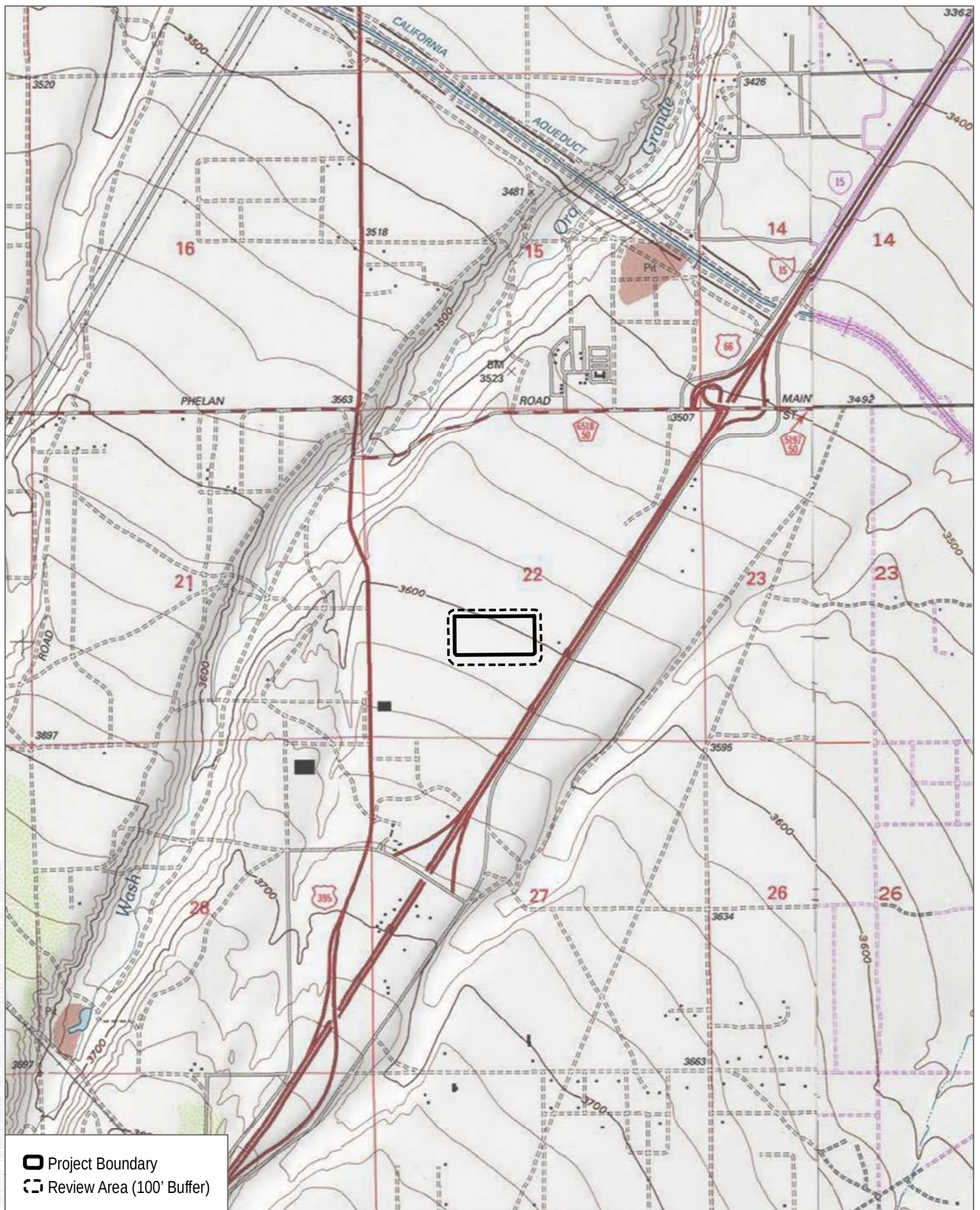
Figures



SOURCE: Bing Maps; County of San Bernardino 2017

FIGURE 1

Project Location



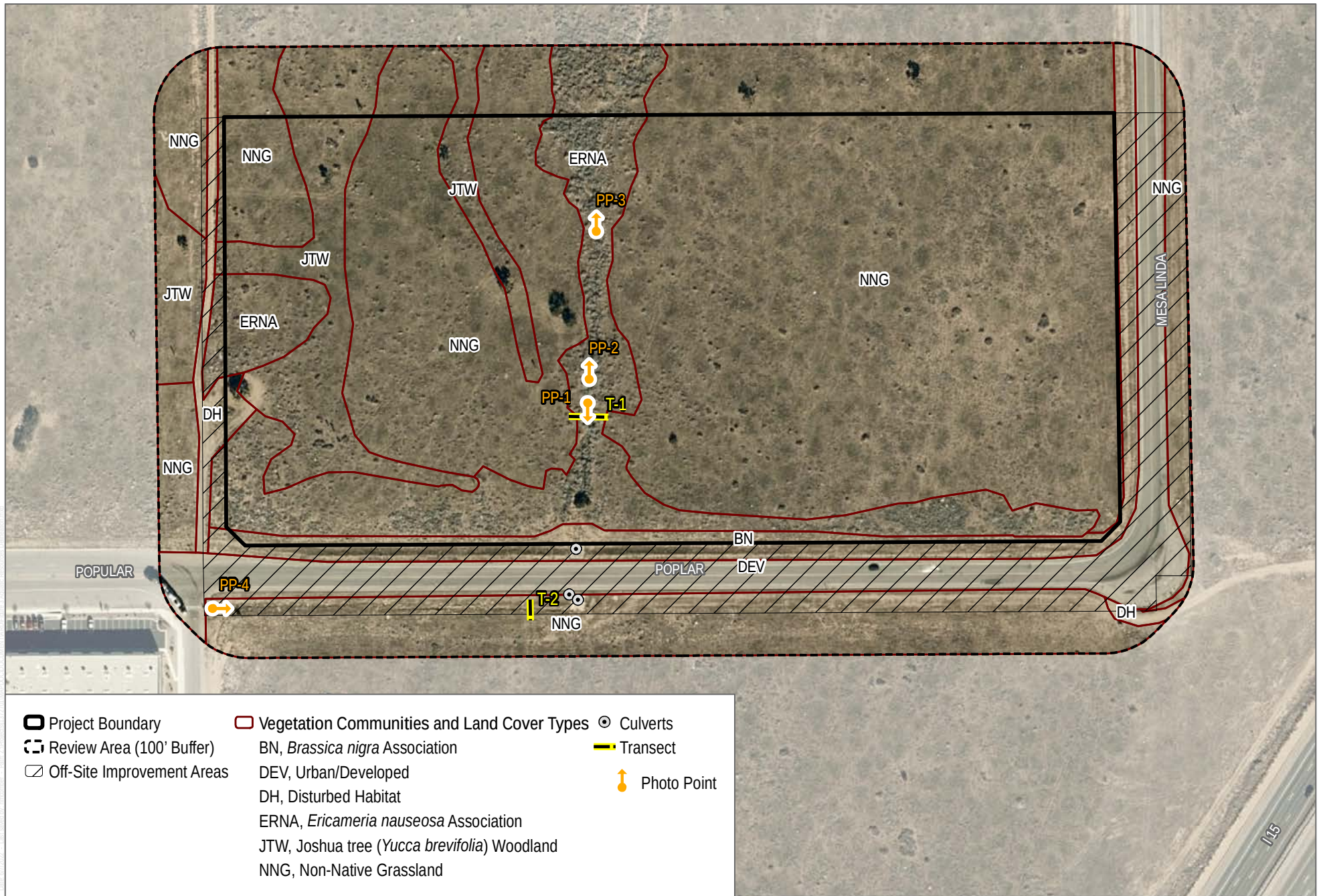
SOURCE: USA Topo Maps 7.5 Minute Quadrangle Baldy Mesa Series
Township 4N; Range 5W; Section 22

DUDEK  0 1,000 2,000 Feet

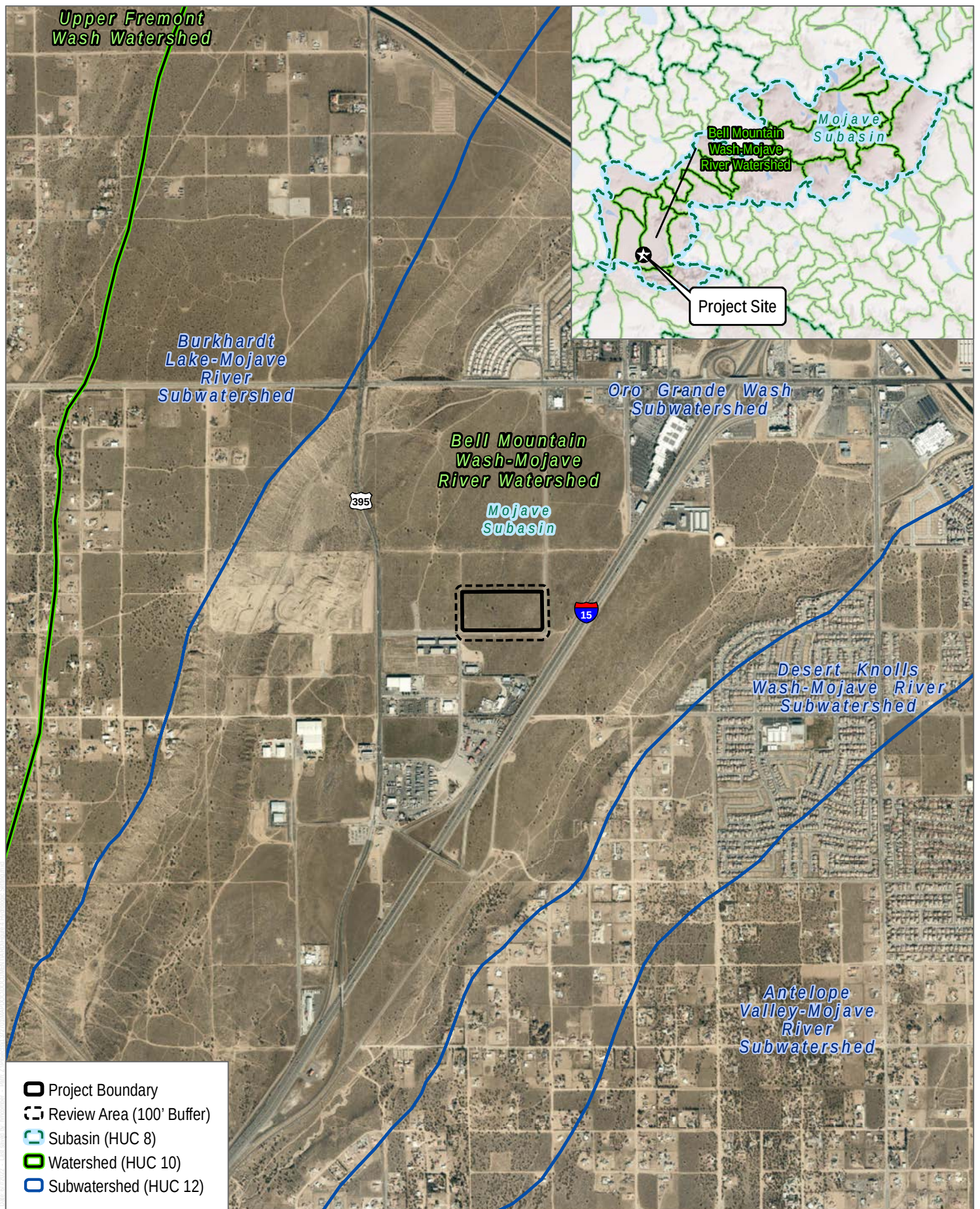
FIGURE 2

USGS Topographic Map

Aquatic Resources Delineation Report for the Poplar 18 Project



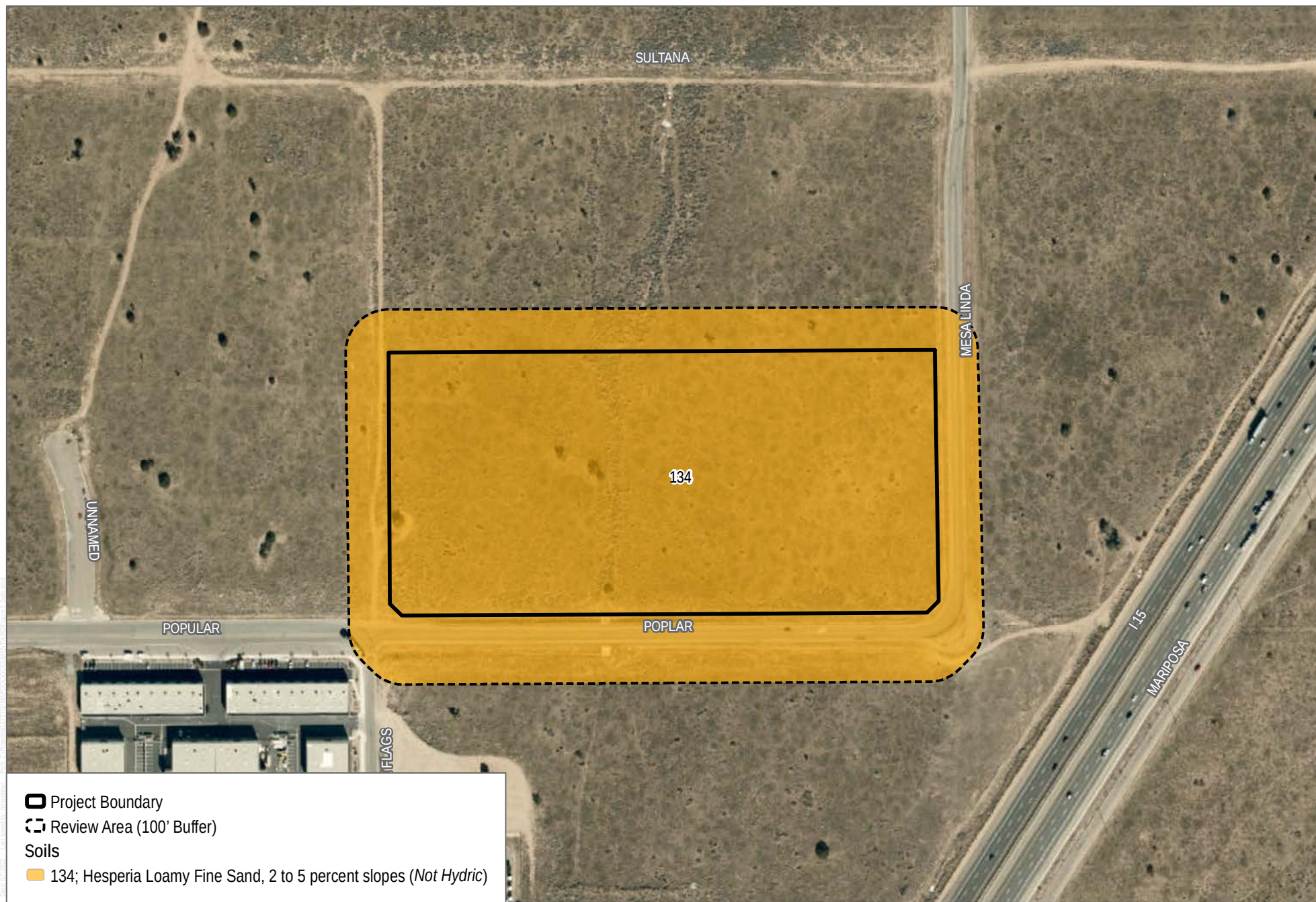
SOURCE: Bing Maps; County of San Bernardino 2017



SOURCE: Bing Maps; County of San Bernardino 2017; USGS 2021

FIGURE 4

Hydrologic Setting



SOURCE: Bing Maps; County of San Bernardino 2017; USDA SSURGO 2020

FIGURE 5

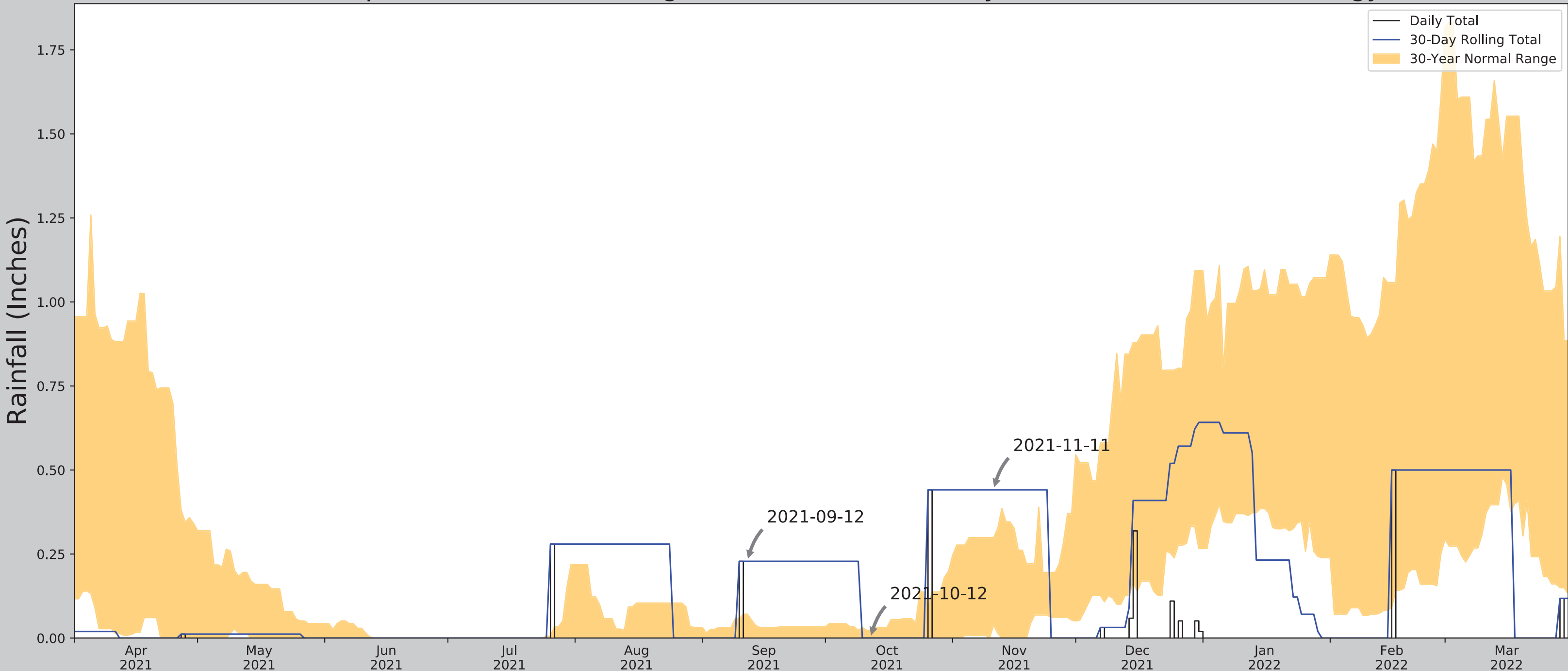
Soils

Aquatic Resources Delineation Report for Poplar 18 Project

Attachment C

Antecedent Precipitation Tool

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	34.416294, -117.393089
Observation Date	2021-11-11
Elevation (ft)	3612.25
Drought Index (PDSI)	Severe drought
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-11-11	0.03937	0.298819	0.440945	Wet	3	3	9
2021-10-12	0.0	0.023228	0.0	Normal	2	2	4
2021-09-12	0.0	0.07126	0.228346	Wet	3	1	3
Result							Wetter than Normal - 16

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
VICTORVILLE	34.5292, -117.2928	2879.921	9.669	732.329	11.432	11065	90
HESPERIA 3.9 SW	34.3725, -117.3404	3578.084	4.264	34.166	2.064	4	0
HESPERIA 2E	34.4206, -117.2661	3055.118	7.244	557.132	7.296	22	0
ADELANTO 3.1 S	34.5253, -117.4331	3084.974	7.869	527.276	7.69	2	0
APPLE VALLEY 2.6 SSW	34.4957, -117.2353	2880.906	10.531	731.344	12.441	70	0
LYTLE CREEK RS	34.2383, -117.4708	2729.987	13.073	882.263	17.417	68	0
EL MIRAGE	34.5892, -117.6303	2950.131	18.032	662.119	20.054	122	0

Attachment D

California Department of Fish and Wildlife and
Regional Water Quality Control Board
Jurisdictional Resources

Methods

Dudek biologist Tracy Park conducted an aquatic resources delineation for the review area. Table 1 provides the survey date and conditions for the survey. Figure D-1, CDFW and RWQCB Aquatic Resources, depicting waters of the state, is provided at the end of this attachment.

Table 1. Schedule of the Jurisdictional Delineation

Date	Hours	Personnel	Conditions
11/11/2021	9:58 AM–12:15 PM	Tracy Park	71°F –72°F; 0% cloud cover; 1–5 mph wind

Jurisdictional boundaries were mapped in the field using an ESRI Collector mobile application with sub-meter accuracy and aerial imagery. Following the fieldwork, aquatic resources were digitized using ArcGIS.

The jurisdiction-specific methods used to delineate California Department of Fish and Wildlife (CDFW) and Regional Water Quality Control Board (RWQCB) jurisdiction are described below.

CDFW Jurisdiction Methods

The delineation defined areas under the jurisdiction of CDFW pursuant to Sections 1600–1603 of the California Fish and Game Code. CDFW asserts jurisdiction over rivers, streams, lakes, and riparian vegetation associated with these features. A predominance of hydrophytic vegetation, where associated with a stream channel, was used to determine CDFW-regulated riparian areas. Streambeds under the jurisdiction of CDFW were delineated using the Cowardin method of waters classification, which defines waters boundaries by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology). Additionally, waters of the state were delineated based on watercourse characteristics present in the field, which include surface flow, sediment transportation and sorting, physical indicators of channel forms, channel morphology, and riparian habitat associated with a streambed.

RWQCB Jurisdiction Methods

The RWQCB typically asserts jurisdiction over the same areas as the U.S. Army Corps of Engineers (USACE). Guidance from USACE was used to determine the extent of resources regulated by the RWQCB under the Porter-Cologne Act and are described below. Non-wetland waters subject to RWQCB jurisdiction were delineated based on the presence of an ordinary high water mark, as determined by USACE guidance, or any other surface water regulated under the Porter-Cologne Act. Wetland waters subject to RWQCB jurisdiction were assessed based on methods described in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008a). A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b) and the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2010) were reviewed to assist in determining the limits of non-wetland waters under the jurisdiction of the RWQCB. In 2019, the State Water Resources Control Board issued the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2021). These procedures define wetlands that encompass “the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific

understanding of the formation and functioning of wetlands.” Per the State Water Resources Control Board, “An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.”

Results

There is 0.06 acres of RWQCB and/or CDFW jurisdictional resources in the review area (Table 2). Figure D-1 shows all aquatic resources identified within the review area.

Table 2. California Department of Fish and Wildlife and Regional Water Quality Control Board Jurisdictional Resources

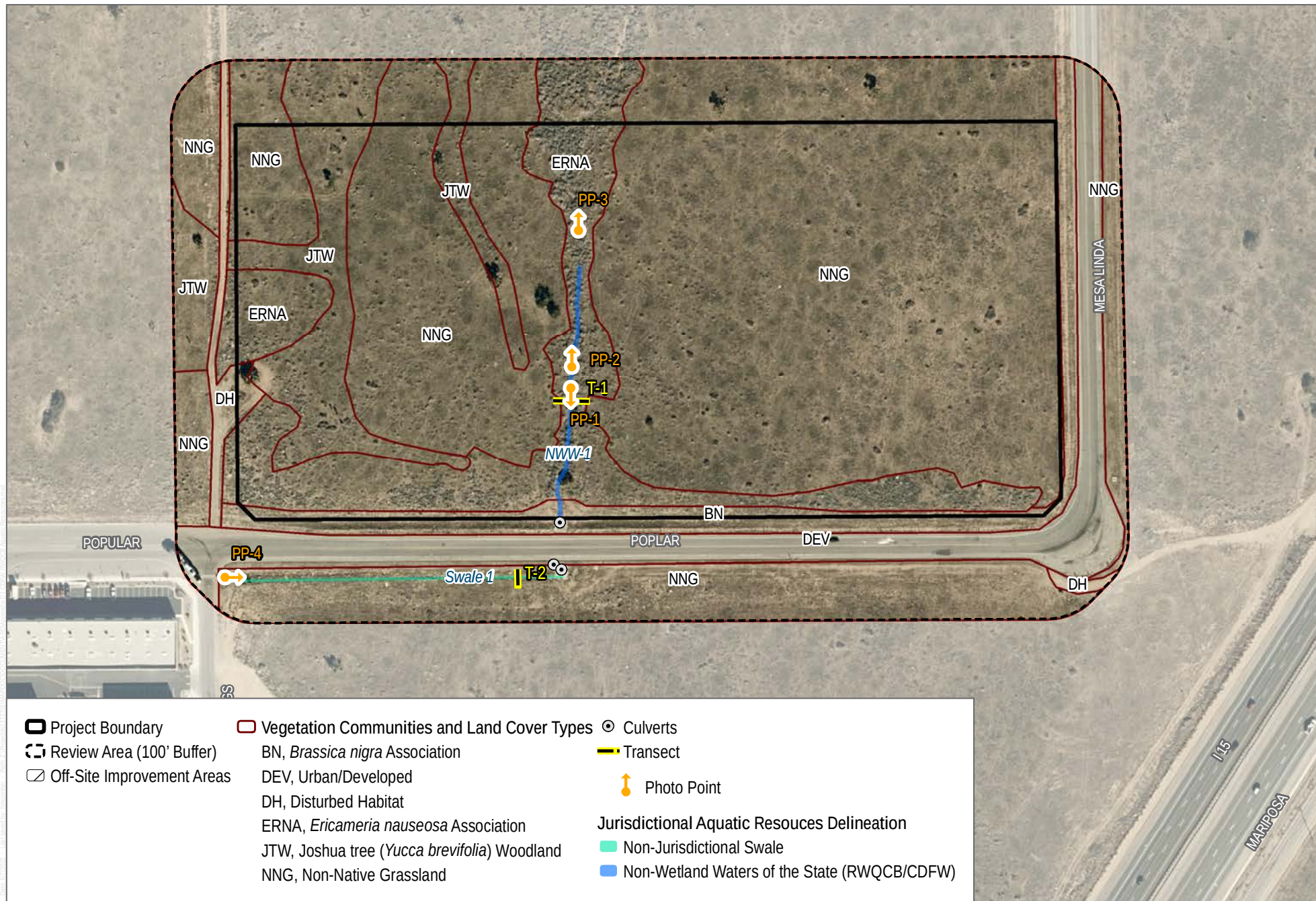
CDFW Type	RWQCB Type	Total (acres)
Waters of the State (RWQCB and CDFW)		
Streambed	Non-wetland waters	0.06
<i>Subtotal CDFW and RWQCB Jurisdictional Resources</i>		<i>0.06</i>
Grand Total		0.06

CDFW = California Department of Fish and Wildlife; RWQCB = Regional Water Quality Control Board.

References

- SWRCB (State Water Resources Control Board). 2021. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Adopted April 2, 2019; revised April 6, 2021. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf.
- USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual*. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. <http://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf>.
- USACE. 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046489.pdf.
- USACE. 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual*. ERDC/CRREL TR-08-12. Prepared by R.W. Lichvar and S.M. McColley. Hanover, New Hampshire: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. August 2008. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a486603.pdf>.

USACE. 2010. *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States*. Wetland Regulatory Assistance Program, ERDC/CRREL TN-10-1. Prepared by K.E. Curtis and R.W. Lichvar. Hanover, New Hampshire: U.S. Army Engineer Research and Development Center Cold Regions Research and Engineering Laboratory. July 2010.



SOURCE: Bing Maps; County of San Bernadino 2017

FIGURE D1

Attachment E

Photographs



PP-1. NWW-1 facing south.



PP-2. NWW-1 facing north.



PP-3. Facing north. No OHWM indicators present; flows assumed to dissipate as sheetflow through area.

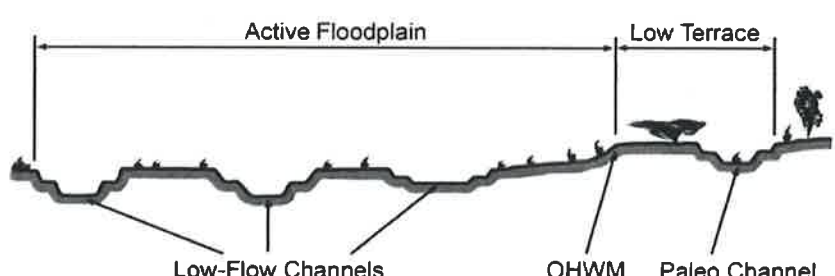


PP-4. Swale facing east; no OHWM indicators present.

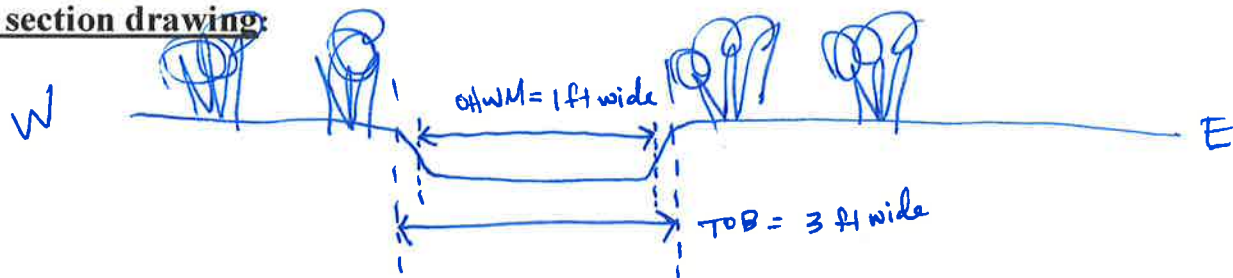
Attachment F

OHWM Datasheets

Arid West Ephemeral and Intermittent Streams OHEM Datasheet

Project: <i>Poplar 18 Industrial Project</i> Project Number: <i>13727</i> Stream: <i>NWW-1</i> Investigator(s): <i>TKP</i>		Date: <i>11 Nov 2021</i> Time: <i>—</i> Town: <i>Hesperia</i> State: <i>CA</i> Photo begin file#: <i>—</i> Photo end file#: <i>—</i>	
Y ☒ / N ☐ Do normal circumstances exist on the site? Y ☐ / N ☒ Is the site significantly disturbed?		Location Details: <i>Drainage north of Poplar</i> Projection: Datum: Coordinates: <i>34.41643735°N 117.39307598°W</i>	
Potential anthropogenic influences on the channel system: <i>Drainage is located adjacent to a paved road and likely collects runoff. Littering and trash dumping observed within feature</i>			
Brief site description: <i>NWW-1 is located at the approximate center of the project site, with higher elevations along the southern boundary. Any flow likely travels from Poplar Street to the center of the site. NWW-1 runs S-N.</i>			
Checklist of resources (if available): ☒ Aerial photography Dates: <i>1994-2020; 1938-2018</i> ☒ Topographic maps ☐ Geologic maps ☒ Vegetation maps ☒ Soils maps ☐ Rainfall/precipitation maps ☐ Existing delineation(s) for site ☒ Global positioning system (GPS) ☐ Other studies ☐ Stream gage data Gage number: Period of record: ☐ History of recent effective discharges ☐ Results of flood frequency analysis ☐ Most recent shift-adjusted rating ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event			
Hydrogeomorphic Floodplain Units 			
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHEM: 1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site. 2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units. 3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit. c) Identify any indicators present at the location. 4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section. 5. Identify the OHEM and record the indicators. Record the OHEM position via: ☐ Mapping on aerial photograph ☐ Digitized on computer ☒ GPS ☐ Other:			

Cross section drawing:



OHWM

GPS point: T-1

Indicators:

- | | |
|--|---|
| ☒ Change in average sediment texture | ☒ Break in bank slope |
| ☒ Change in vegetation species | ☐ Other: _____ |
| ☒ Change in vegetation cover | ☐ Other: _____ |

Comments: Erinan on top of bank. finer sediment within drainage.

Floodplain unit: ☒ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

GPS point: T-1

Characteristics of the floodplain unit:

Average sediment texture: fine sand/silt

Total veg cover: 30% Tree: 0% Shrub: 0% Herb: 30%

Community successional stage:

- | | |
|--|--|
| ☐ NA | ☐ Mid (herbaceous, shrubs, saplings) |
| ☒ Early (herbaceous & seedlings) | ☐ Late (herbaceous, shrubs, mature trees) |

Indicators:

- | | |
|--|---|
| ☐ Mudcracks | ☐ Soil development |
| ☐ Ripples | ☐ Surface relief |
| ☐ Drift and/or debris | ☐ Other: _____ |
| ☒ Presence of bed and bank | ☐ Other: _____ |
| ☒ Benches | ☐ Other: _____ |

Comments: Non-native Bromes and Horner made up vegetation within drainage.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Poplar 18 Industrial Project Project Number: 13727 Stream: Swale 1 Investigator(s): TKP		Date: 11 Nov 2021 Town: Hesperia Photo begin file#: —		Time: — State: CA Photo end file#: —	
Y ☒ / N ☐ Do normal circumstances exist on the site? Y ☐ / N ☒ Is the site significantly disturbed?		Location Details: Swale south of Poplar Projection: Datum: Coordinates: 34.41568070°N 117.39335463°W			
Potential anthropogenic influences on the channel system: Swale is located adjacent to road and likely collects runoff. Littering and trash dumping observed.					
Brief site description: Swale is located adjacent to a paved road and parking lot for an industrial business. Swale runs E-W.					
Checklist of resources (if available): ☒ Aerial photography Dates: 1994 - 2020; 1938 - 2018 ☒ Topographic maps ☐ Geologic maps ☒ Vegetation maps ☒ Soils maps ☐ Rainfall/precipitation maps ☐ Existing delineation(s) for site ☒ Global positioning system (GPS) ☐ Other studies ☐ Stream gage data Gage number: Period of record: ☐ History of recent effective discharges ☐ Results of flood frequency analysis ☐ Most recent shift-adjusted rating ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event					
Hydrogeomorphic Floodplain Units					
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM: - Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site. - Select a representative cross section across the channel. Draw the cross section and label the floodplain units. - Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. - Record the floodplain unit and GPS position. - Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit. - Identify any indicators present at the location. - Repeat for other points in different hydrogeomorphic floodplain units across the cross section. - Identify the OHWM and record the indicators. Record the OHWM position via: ☐ Mapping on aerial photograph ☐ Digitized on computer ☒ GPS ☐ Other:					

Project ID: 13727 Cross section ID: T-2

Date: 11 Nov 2021 Time: —

Cross section drawing:



OHWM

GPS point: T-2

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover

- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

No OHWM indicators observed except slight depressional channel, likely built to capture runoff from road.

Floodplain unit:

☐ Low-Flow Channel

☐ Active Floodplain

☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____% Tree: _____% Shrub: _____% Herb: _____%

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches

- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Appendix B

Mojave Desert Tortoise Data Sheet

Date of survey: 19-Apr-22 Survey biologist(s): Sarah Greely, sgreely@dudek.com, 760-601-3414
(day, month, year) (name, email, and phone number)

Site description: Poplar 18 in Hesperia, CA, 18-acre site
(project name and size; general location)

County: San Bernardino Quad: Baldy Mesa Location: 34°25'0.08"N 117°23'34.36"W
(UTM coordinates; lat-long; and/or TRS; map datum)

Circle one: 100% coverage or Sampling Area size to be surveyed: 18 acres Transect #: 45 Transect length: 0.1 - 0.2 mi

GPS Start-point: 11S 463699E, 3808346N, 3624ft Start time: 8:18 am/pm
(easting, northing, elevation in meters)

GPS End-point: 11S 464115E, 3808347N, 3614ft End time: 3:24 am/pm
(easting, northing, elevation in meters)

Start Temp: 15 °C End Temp: 20.6 °C

Live Tortoises

Detection number	GPS location Easting Northing		Time	Tortoise location (in burrow: all of tortoise beneath plane of burrow opening, or not in burrow)	Approx MCL ≥180 mm? (Yes, No or Unknown)	Existing tag # and color, if present
1						
2						
3						
4						
5						
6						
7						
8						

Tortoise Sign (burrows, scats, carcasses, etc)

Detection number	GPS location Easting Northing		Type of sign (burrows, scats, carcass, etc)	Description and comments
1				
2				
3				
4				
5				
6				
7				
8				

No tortoises observed.

No sign observed.

No active burrows observed.

Appendix C

Mohave Ground Squirrel Protocol Survey Report

July 30, 2022

Patrick Cruz
Dudek
27372 Calle Arroyo
San Juan Capistrano, CA 92675
Via email: pcruz@dudek.com

Subject: Results of Mohave Ground Squirrel Protocol Surveys for the Poplar 18 Project, City of Hesperia, San Bernardino County, California

Dear Mr. Cruz:

The purpose of this report is to document the results of a California Department of Fish and Wildlife (CDFW) protocol survey for Mohave ground squirrel (*Xerospermophilus mohavensis*; MGS) conducted by Dipodomys Ecological Consulting LLC (DEC) for the Poplar 18 Project (project). Presented in this report are a description of the project, project location, the biological setting of the site, MGS natural history, survey methodology, results of trapping efforts for MGS, and conclusions.

Project Description and Location

Covington Group, Inc., proposes to develop a speculative industrial distribution warehouse on an 18-acre parcel. The 18-acre project parcel is located within the City of Hesperia, in San Bernardino County, California. The parcel is bordered by Poplar Street on the south, Sultana Street on the north, Highway 395 west, and Mesa Linda Street on the east (**Figures 1 and 2**). The parcel is surrounded by undeveloped land to the north, east and west. Light industrial development, interspersed with undeveloped land, is present to the south of the project. The primary sources of disturbance on the site are past and current off-highway vehicle (OHV) activity, illegal dumping, and debris associated with transient encampments. The project site can be found on U.S. Geological Survey (USGS) 7.5-minute Baldy Mesa topographic quadrangle map within Section 22, Township 4 North, and Range 5 West, as shown in **Figure 1**, Project Location.

Biological Setting

Vegetation communities within the 18-acre project consist of highly disturbed California juniper woodland (CDFW CA Code 89.100.00) and rubber rabbitbrush scrub (35.310.00) within the wash area. Dominant plants include California juniper (*Juniperus californica*), Joshua tree (*Yucca brevifolia*), Cooper's boxthorn (*Lycium cooperi*), cottonthorn (*Tetradymia stenolepis*), Mexican bladder sage (*Scutellaria mexicana*), Nevada joint-fir (*Ephedra nevadensis*), California buckwheat (*Eriogonum fasciculatum*), Big sagebrush (*Artemisia tridentata*) and rubber rabbitbrush (*Ericameria nauseosa*). Herbaceous plants present include red-stemmed filaree (*Erodium cicutarium*), rattlesnake sandmat

(*Euphorbia albomarginata*), fiddleneck (*Amsinckia tessellata*), blue dicks (*Dipterostemon capitatum*), goldfields (*Lasthenia californica*), foxtail brome (*Bromus madritensis*), Russian thistle (*Salsola tragus*), short-podded mustard (*Hirschfeldia incana*), and London rocket (*Sisymbrium irio*).

Soils consist of Hesperia loamy fine sand (WebSoil 2022). The project site is located at an elevation of approximately 3,612 feet above mean sea level (amsl).

Mohave Ground Squirrel Natural History

Mohave ground squirrels (*Xerospermophilus mohavensis*) are medium-sized (210-230mm, 85-130g), diurnal squirrels. Their dorsal pelage is light gray to cinnamon-brown, while their ventral side is creamy. Unlike round-tailed ground squirrels, which occur sympatrically in the southeast portion of their range, MGS have a short, flat tail that is light-colored on its underside, and have brown cheeks instead of white.

MGS inhabit a small geographic area in the western Mojave Desert. This species ranges from Palmdale in the southwest, the Lucerne Valley in the southeast, Olancha in the northwest, and the Avawatz Mountains in the northeast (Gustafson 1993). Although occurrences in the southern portion of their range are rare, occurrences have been documented on the California Natural Diversity Database (CNDDDB) as recently as 2011 (Figure 3). Vegetation communities (as classified by the California Native Plant Society) typically associated with MGS include Mojave Creosote Scrub, Shadscale Scrub, Desert Saltbush Scrub, Desert Sink Scrub, and Joshua Tree Woodland. MGS feed primarily on the leaves and seeds of forbs and shrubs. In the northern portion of their range, MGS have been found to feed on spiny hopsage (*Grayia spinosa*), winterfat (*Krascheninnikovia lanata*) and saltbush (*Atriplex* sp.), especially in early spring when forbs are unavailable, during summer when forbs have dried out, and during drought conditions (Leitner and Leitner 1998). Recent studies have also indicated that MGS feed on the following forbs and shrubs: freckled milkvetch (*Astragalus lentiginosus*), Mojave lupine (*Lupinus odoratus*), buckwheat (*Eriogonum* sp.), white mallow (*Eremalche exilis*), fiddleneck (*Amsinckia tessellata*), Russian thistle (*Salsola tragus*), desert pincushion (*Chaenactis* sp.), Cryptantha (*Cryptantha pterocarya*), Coreopsis (*Leptosyne bigelovii*), Valley lessingia (*Lessingia glandulifera*), desert dandelion (*Malacothrix glabrata*), Phacelia (*Phacelia* sp.), wire lettuce (*Stephanomeria* sp.) Anderson's desert thorn (*Lycium andersonii*), spiny horsebrush (*Tetradimya spinosa*), and Joshua tree (*Yucca brevifolia*) (Leitner and Leitner 2017).

MGS have adapted to live in hot desert environments by limiting their activity aboveground through estivation and hibernation. The timing of emergence from hibernation varies by location: in the northern portion of their range male MGS emerge mid-March (Leitner and Leitner 1998); however, in the southern portion of their range, MGS may emerge as early as mid-January (Recht 1977). Throughout their active period, MGS store fat in preparation for estivation, which typically occurs between July and September, but may occur as early as April or May during drought conditions (Leitner et al. 1995). MGS reproduction is dependent on fall and winter rains and individuals may forgo breeding entirely if low rainfall (<80mm) results in reduced herbaceous plants (Leitner and Leitner 2017).

Throughout the range of MGS, they may co-occur with antelope ground squirrels, round-tailed ground squirrels, and California ground squirrels. MGS may be misidentified with round-tailed ground squirrels, but this is unlikely to occur with antelope ground squirrels, because the latter species has white dorsal stripes that makes them resemble a chipmunk more than an MGS. California ground squirrels are notably larger and are not typically confused with MGS.

MGS are classified as threatened and are protected under the California Endangered Species Act. Primary threats to MGS include limited distribution, low abundance, and habitat loss from by converting suitable habitat to urban, suburban, agricultural and military land uses (Gustafson 1993, Leitner and Leitner 2017).

Methods

Mohave ground squirrel (MGS) Protocol surveys for the Poplar 18 Project MGS were generally conducted in accordance with the 2010 CDFW MGS Survey Guidelines. One adjustment, reducing the number of traps from 100 to 50, was made to ensure that all traps remained within the 18-acre project footprint. Surveys generally consisted of an initial visual survey followed by live trapping and camera trapping efforts. Details for each survey type are described below.

Visual Survey

An initial review of the California Natural Diversity Database (CNDDB) was conducted prior to the visual assessment to determine the historical recorded occurrences of MGS near the project site (**Figure 3**). The visual survey was conducted by Principal Investigator Karla Flores (MOU and Scientific Collection Permit SC-10572) and Independent Researcher Karl Fairchild (SCP S-182820007-18333-001) on March 22, 2022. The visual survey consisted of driving and walking throughout the project site to identify suitable habitat for MGS. This included identifying plants known to provide forage material for MGS such as spiny hopsage, winterfat, Cooper's boxthorn, Anderson's desert thorn, fiddleneck red-stemmed filaree and Joshua tree (Leitner 2022). Areas supporting suitable habitat for MGS where these plants are concentrated were recorded on an aerial map. Suitable soil types for burrowing and burrow densities were also noted.

Live Trapping

Live trapping surveys were conducted utilizing a modified 10x5 (315x140 meters) 50-trap grid by Karla Flores. The adjusted survey grid ensured that all traps remained within the 18-acre project footprint. CDFW Region 6 was notified of the adjustment. Coordinate locations for the survey grid are listed in **Table 1**. Traps in each grid were spaced 35 meters apart and utilized XLK Sherman live-traps (3x3.75x12") with accompanying A-frame cardboard shade covers staked to the ground with metal tent stakes. All traps were baited with 4-way livestock feed and peanut butter powder and were opened within one hour of sunrise and were checked no more than every four hours. All traps were closed within hour of sunset. Trapping was conducted when temperatures were between 50 degrees Fahrenheit and 90 degrees Fahrenheit, and inclement conditions (rain, thunderstorms) were not present. All animals captured were released at their capture location, and the following information recorded for each capture: species, weight, age, sex, and reproductive condition. Live trapping surveys were conducted for a period of five days in each of the three survey windows established by the MGS survey guidelines (1st: March 15-April 3; 2nd May 1-31; 3rd June 15-July 15). Details for each survey period are presented in **Table 2**. MGS Survey and Trapping Forms, including weather details, are presented in **Attachment A** and **Attachment B**.

TABLE 1
UTM COORDINATES FOR CORNERS OF NORTH AND SOUTH LIVE TRAPPING GRIDS

Corner	Zone	Easting	Northing
NW	11	463740	3808520
SW	11	463740	3808380
NE	11	464055	3808520
SE	11	464055	3808380

*Datum: WGS 1984

TABLE 2
MOHAVE GROUND SQUIRREL SURVEY DATE AND TYPE

Session	Date	Survey Type	Surveyor
1	March 23-27, 2022	LT/CT	Karla Flores
2	May 2-6, 2022	LT/CT	Karla Flores
3	July 10-14, 2022	LT/CT	Karla Flores

LT: Live Trapping CT: Camera Trapping

Camera Trapping

Camera trapping surveys were used to supplement live trapping efforts and consisted of setting up three camera trapping stations throughout the project site (**Figure 2**). Each camera trap station consisted of a Bushnell Core Low Glow Trail Camera (Model 1199932CB) secured to a 36-inch U-post facing a bait station. The bait station consisted of a feeding tube filled with 4-way livestock feed staked to the ground with a 12-inch railroad spike. Cameras operated 24 hours a day, concurrent with live trapping surveys, and followed the set-up specifications described in Delaney et al. (2017). Coordinate locations for each camera trap station are listed below in **Table 3**.

Photos from the camera trap stations were downloaded and reviewed by the Principal Investigator after every five-day trapping session. A list of species detected at the camera trap stations is included in **Table 5**.

TABLE 3
COORDINATE LOCATIONS FOR CAMERA TRAP STATIONS

Camera	Zone	Easting	Northing
1	11	463789	3808412
2	11	463848	3808479
3	11	463987	3808486

*Datum: WGS 1984

Results

Visual Survey

Based on the habitat data collected during the visual survey, low-quality/disturbed MGS habitat is present onsite. Primary MGS food plants such as winterfat and spiny hopsage are not present onsite. However, other plants identified as being associated with MGS in microhistology and metabarcoding studies (Leitner 2022) are present onsite, these include: Cooper’s boxthorn, Joshua tree, fiddleneck, and red-stemmed filaree. Visual observations of burrows and burrow complexes showed that soil onsite is suitable for burrowing.

Live Trapping

No Mohave ground squirrels were captured during the three live trapping survey periods. Live trapping captures consisted entirely of non-target species including white-tailed antelope ground squirrel (*Ammospermophilus leucurus*), California ground squirrel (*Otospermophilus beecheyi*), Panamint kangaroo rat (*Dipodomys panamintinus*), and Great Basin whiptail (*Aspidoscelis tigris*) (Table 4; Figure 4).

TABLE 4
RESULTS OF MOHAVE GROUND SQUIRREL PROTOCOL SURVEYS

Common name	Scientific name	Session			Total
		1	2	3	
White-tailed antelope ground squirrel	<i>Ammospermophilus leucurus</i>	0	0	8	8
California ground squirrel	<i>Otospermophilus beecheyi</i>	2	3	16	21
Panamint kangaroo rat	<i>Dipodomys panamintinus</i>	1	0	0	1
Great Basin Whiptail	<i>Aspidoscelis tigris</i>	0	4	0	4
Total		3	7	24	34

Camera Trapping

No Mohave ground squirrels were detected in the images collected during the camera trapping surveys. Species observed utilizing the camera trap stations included: California ground squirrel, Panamint kangaroo rat, deer mouse (*Peromyscus maniculatus*), coyote (*Canis latrans*), horned lark (*Eremophila alpestris*), common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*) and white-crowned sparrow (*Zonotrichia leucophrys*).

TABLE 5
RESULTS OF MOHAVE GROUND SQUIRREL CAMERA TRAPPING

Common Name	Scientific Name
Horned lark	<i>Eremophila alpestris</i>
California ground squirrel	<i>Otospermophilus beecheyi</i>
Common raven	<i>Corvus corax</i>
Coyote	<i>Canis latrans</i>
Deer mouse	<i>Peromyscus maniculatus</i>
Panamint kangaroo rat	<i>Dipodomys panamintinus</i>
Northern mockingbird	<i>Mimus polyglottos</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>

Conclusions

The Poplar 18 Project is located within the southern portion of the mapped MGS range, where MGS occurrences are rare, and population densities have historically been low. A review of the California Natural Diversity Database (CNDDDB) for the Baldy Mesa and eight surrounding quadrangles showed that the most recent MGS occurrence recorded in the vicinity of the project occurred in 2011 approximately 9.3 miles northwest of the project site (recent aerial photos show that this area has been developed into a solar farm). The closest MGS occurrence recorded was documented in 2005 approximately 2.3 miles northwest of the project site (recent aerials show intact habitat). Both the 2005 and 2011 MGS occurrences were recorded north of the California Aqueduct, which likely presents a significant barrier to MGS dispersal (no MGS occurrences are recorded in CNDDDB south of the California Aqueduct and east of Pinon Hills since the aqueduct was constructed). Additionally, the project site is located outside of MGS core population areas, peripheral population areas and linkage areas described in the 2019 CDFW MGS Conservation Strategy.

Although some suitable habitat was detected during the visual survey, including the presence of some MGS food plants: Joshua tree, Cooper's boxthorn, fiddleneck and red-stemmed filaree (Leitner 2022), no MGS were captured during the live trapping or camera trapping surveys. Furthermore, the distance from core population areas and significant barriers to dispersal between the project site and documented recent occurrences make it unlikely that colonization from core MGS populations will occur within the near future. Based on the results of this survey, the CDFW survey guidelines indicate that the department will stipulate that no MGS occur on the project site. This stipulation will expire one year from the last day of trapping, July 14, 2022.

I hereby certify that the information in this report is true, and that it conforms to accepted biological standards. Please feel free to contact Karla Flores by phone at (619) 972-4319 or by email at kflores@dipodomys ecological.com with any questions regarding this report.

Sincerely,



Karla L. Flores
Principal Investigator



Karl Fairchild
Independent Researcher

Figures and Attachments

Figure 1-Project Location

Figure 2-Survey Area

Figure 3- Historical MGS Occurrences

Figure 4- Results

Attachment A-CDFW Mohave Ground Squirrel Survey and Trapping Form(s)

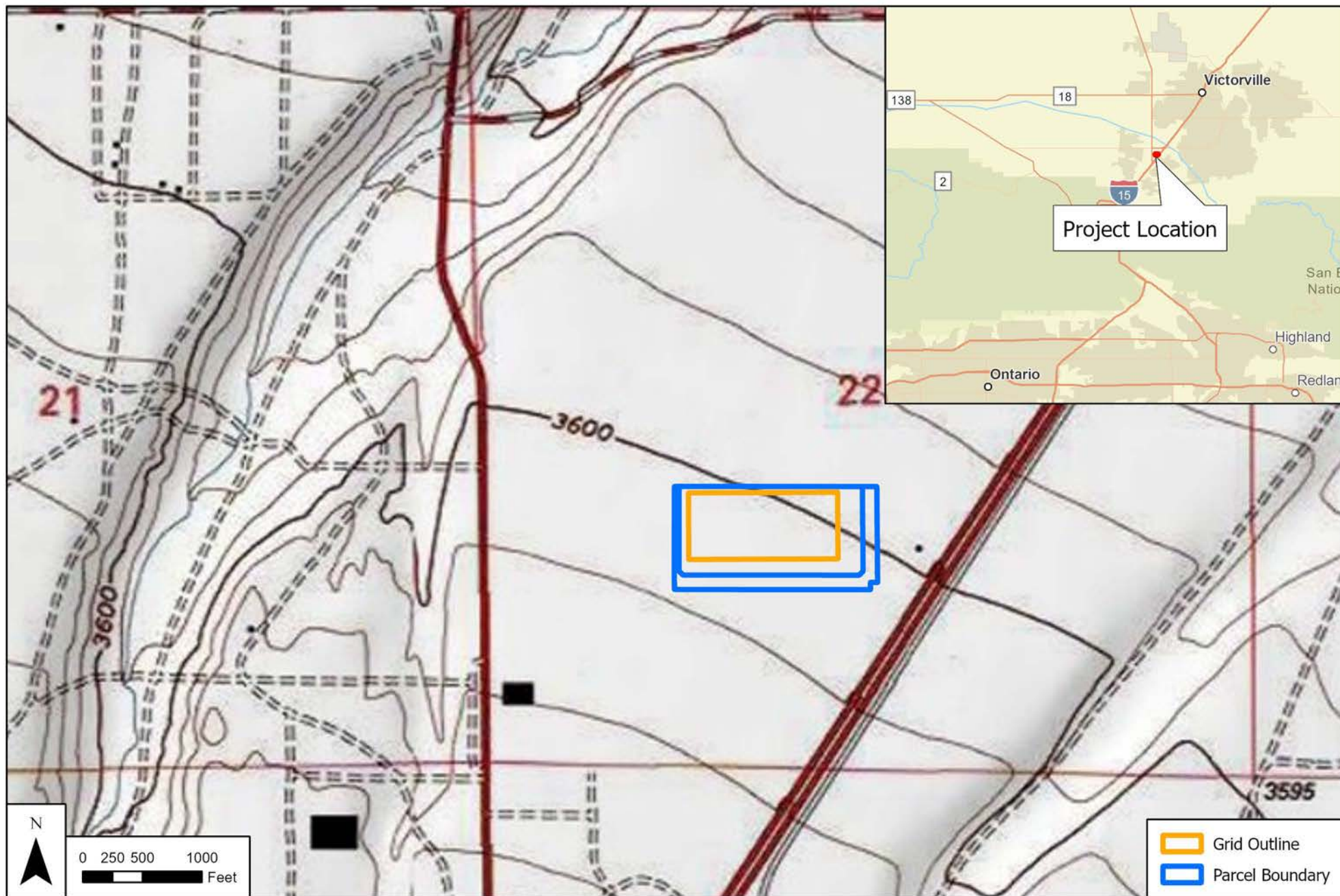
Attachment B-Weather Details

Attachment C-Species Compendium

Attachment D-Representative Photographs

References

- California Department of Fish and Game. Mohave Ground Squirrel Survey Guidelines. July 2010.
- California Department of Fish and Wildlife. California Natural Diversity Database Rarefind. March 14, 2022.
- Delaney D.K., Leitner, P. and D. Hacker. 2017. Use of Cameras in Mohave ground Squirrel Studies.
- Gustafson, J.R. 1993. A Status Review of the Mohave Ground Squirrel (*Spermophilus mohavensis*). Department of Fish and Game. Nongame Bird and Mammal Report 93-9.
- Leitner, P. and B.M. Leitner. 1998. Coso grazing exclosure monitoring study, Mohave ground squirrel study Coso Known Geothermal Resource Area, Major Findings 1988-1996. Final Report.
- Leitner, P. and B.M. Leitner. 2017. Diet of the Mohave ground squirrel (*Xerospermophilus mohavensis*) in relation to season and rainfall. *Western North American Naturalist*, 77(1), 1-13.
- Leitner, B. 2022. Primary Food Items Consumed by Mohave Ground Squirrels based on visual observations of MGS and microhistology and metabarcoding of fecal pellets from 1988-2021.
- Recht, M.A. 1977. The biology of the Mohave ground squirrel, *Spermophilus mohavensis*. Ph.D. Dissertation, University of California, Los Angeles. 117 pp.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: <http://websoilsurvey.sc.egov.usda.gov/>. Accessed [07/11/2022].

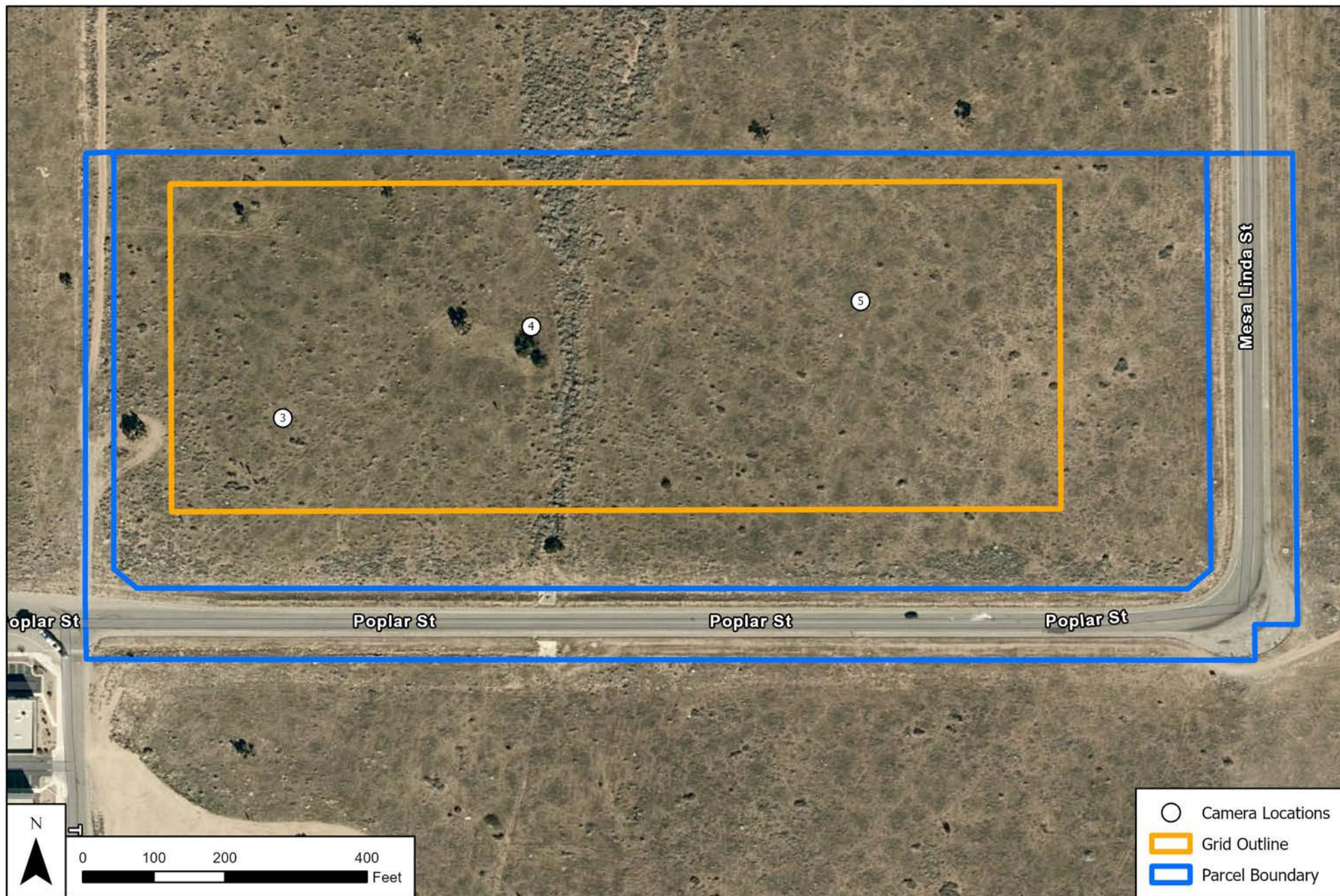


SOURCE: ESRI

Poplar 18 Project

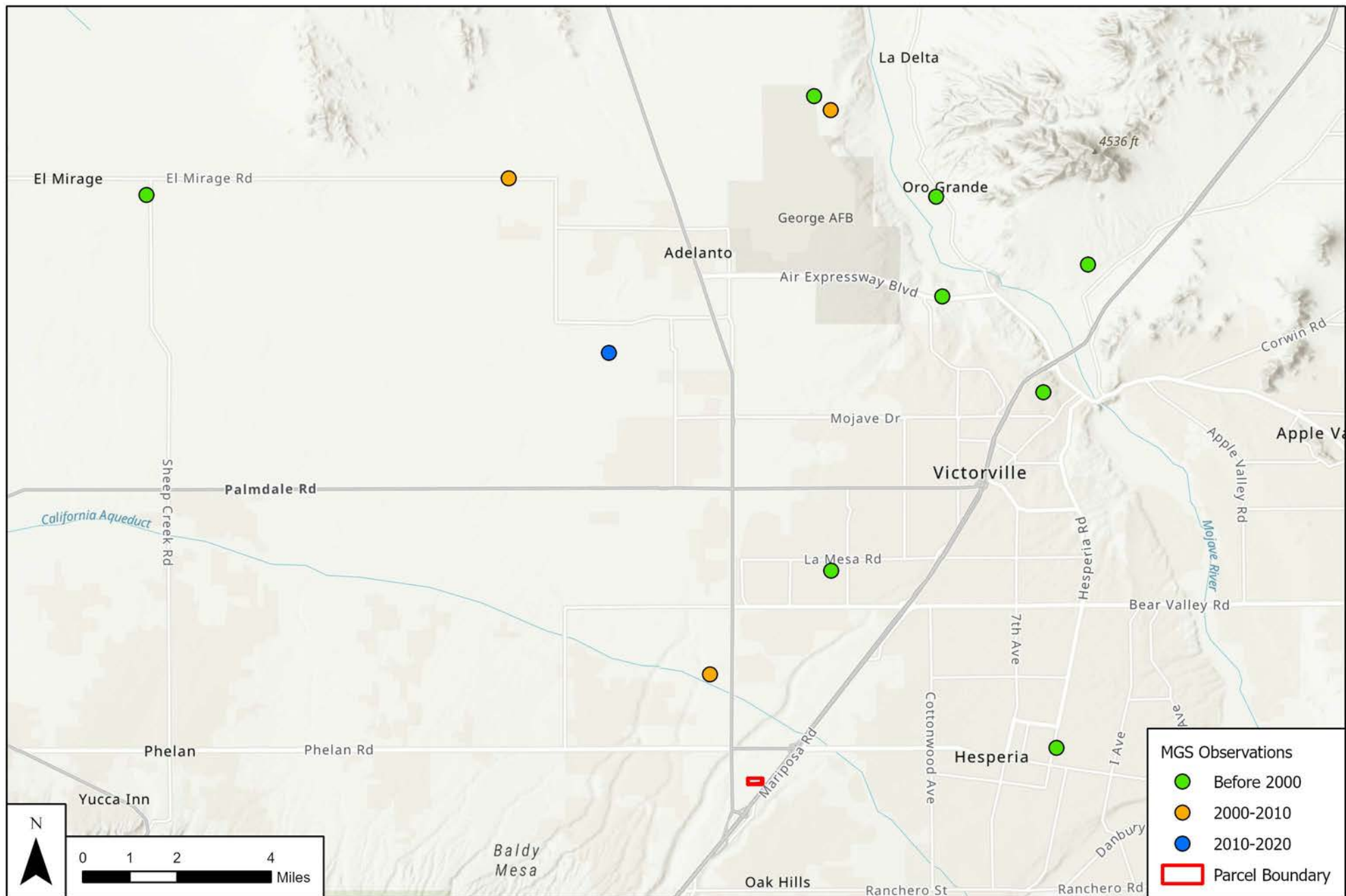
Figure 1

Project Location



SOURCE: ESRI

Poplar 18 Project

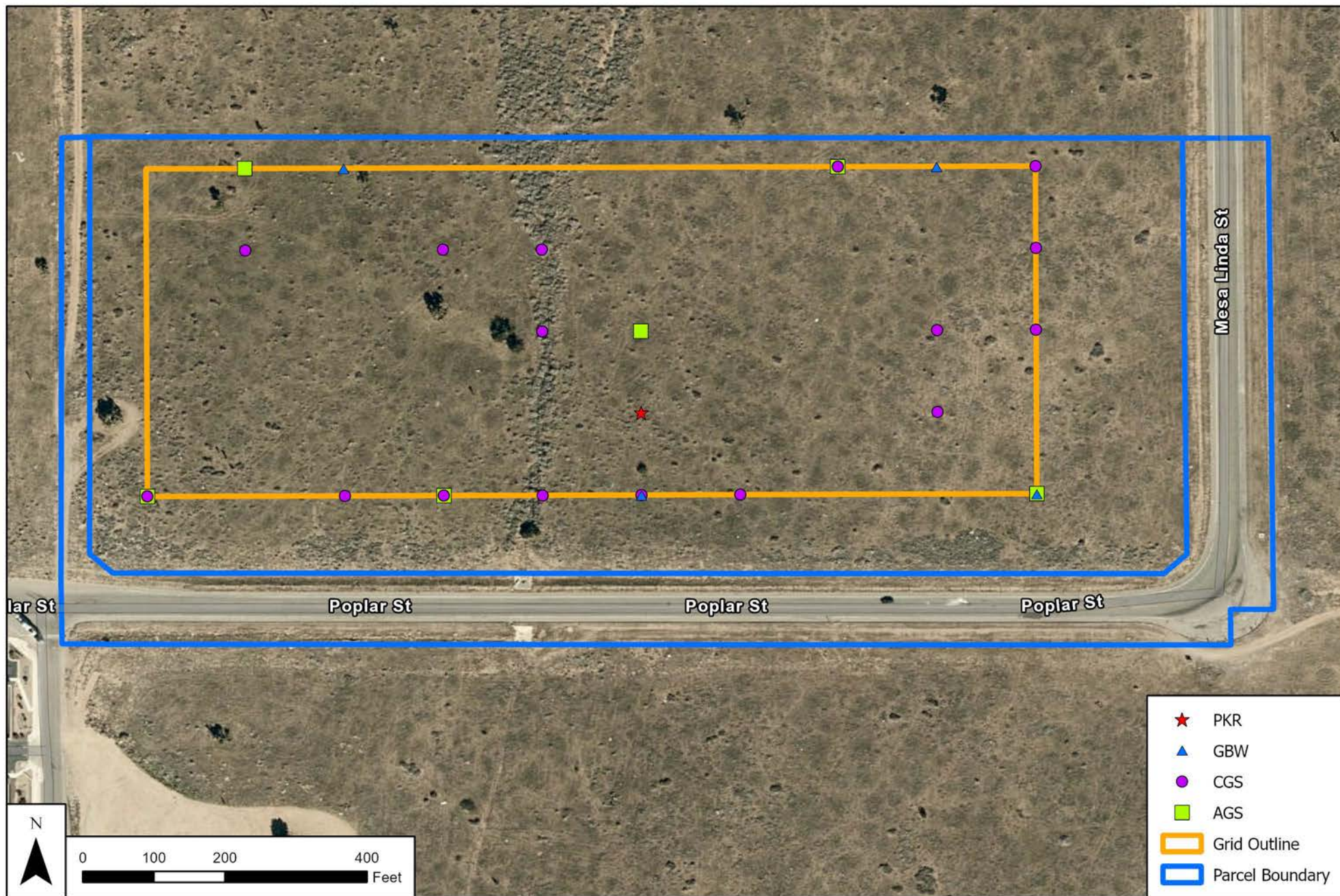


SOURCE: ESRI

Poplar 18 Project

Figure 3

Historical MGS Occurrences



SOURCE: ESRI

Poplar 18 Project

Figure 4

Trapping Results

Attachment A

Mohave Ground Squirrel (MGS) Survey and Trapping Form (photocopy as needed)

PART I - PROJECT INFORMATION (use a separate form for each sampling grid)

Project name: Poplar 18 Project Property owner: Covington Group, Inc.

Location: Township 04N; Range 05W; Section 22; $\frac{1}{4}$ Section _____

Quad map/series: Baldy Mesa UTM coordinates: NW:463740 3808520 SW: 463740 3808380
NE: 464055 3808520 SE: 464055 3808380
GPS coordinates of trapping-grid corners

Acreage of Project Site: 18 acres Acreage of potential MGS habitat on site: 18 acres

Total acreage visually surveyed on project site: 18 acres Date(s): March 22, 2022
visual surveys

Visual surveys conducted by: Karla Flores and Karl Fairchild
names of all persons by date (use back of form, if needed)

Total acres trapped: 18 acres Number of sampling grids: 1

Trapping conducted by: Karla Flores and Karl Fairchild
names of all persons by sampling term and sampling grid (use back of form, if needed)

Dates of sampling term(s): FIRST March 23-27, 2022 SECOND May 2-6, 2022 THIRD July 10-14, 2022
if required if required

PART II - GENERAL HABITAT DESCRIPTION (use back of form, if needed)

Vegetation: dominant perennials: Juniperus californica, Yucca brevifolia, Lycium cooperi, Scutellaria mexicana, Ericameria nauseosa

other perennials: Eriogonum fasciculatum, Tetradymia stenolepis, Ephedra nevadensis

dominant annuals: Amsinckia tessellata, Erodium cicutarium, Lasthenia californica, Dichelostemma capitatum, Cryptantha sp.

other annuals: Hirschfeldia incana, Sisymbrium irio, Bromus sp., Salsola tragus

Land forms (mesa, bajada, wash): mesa, desert plain

Soils description: Hesperia Loamy Fine Sand

Elevation: 3,612 feet Slope: 2-5%

PART III - WEATHER (report measurements in the following categories for each day of visual survey and each day of trapping; using 24-hour clock, indicate time of day that each measurement was made; use a separate blank sheet for each day)

Temperature: AIR minimum and maximum; SOIL minimum and maximum; Cloud Cover: % in AM and % in PM; Wind Speed: in AM and in PM

Attachment B

Attachment B: Weather details for California Department of Fish and Wildlife (CDFW) Mohave ground squirrel (*Xerospermophilus mohavensis*) protocol surveys. Details include date, survey (1-3), air temperature (min-max ° Fahrenheit), soil temperature (min-max ° Fahrenheit), wind speed (mph) and percent cloud cover (%).

Date		Air Temperature (°F)		Soil temperature (°F)		Wind (mph)		Cloud Cover (%)	
		Min	Max	Min	Max	Start	End	Start	End
3/23/2022	1	61	82	56.3	88.2	7.5	2	0	0
3/24/2022	1	65	77	59.6	83.4	0.9	4.5	0	0
3/25/2022	1	68.7	80.3	60.3	71.1	1.1	8.8	0	20
3/26/2022	1	65	74	58.7	77.9	5.8	14.8	0	15
3/27/2022	1	59	71.3	52.8	63	9.4	18.8	25	10
5/2/2022	2	64	85.3	58.5	74.7	1.6	13.5	0	10
5/3/2022	2	62	82.1	60.5	88.6	7.1	6.3	0	0
5/4/2022	2	64.6	88.1	59.2	72.1	1.6	8.2	0	1
5/5/2022	2	70.3	90	65.1	71.3	0.9	12.3	0	10
5/6/2022	2	70.2	81.9	64.4	81.3	4.1	16.2	10	5
7/10/2022	3	72.8	90	74.4	76.4	2.7	3.1	0	0
7/11/2022	3	78.3	90	77	78.3	3.1	2.7	0	0
7/12/2022	3	79.2	90	78.8	80.2	5.3	13	0	0
7/13/2022	3	79.9	90	76.9	79.4	4.7	6.2	0	2
7/14/2022	3	84.9	90	81.6	82.2	4.3	10.7	10	5

Attachment C

Common name	Scientific name	SSC
Plants		
blue dicks	<i>Dipterostemon capitatum</i>	
California buckwheat	<i>Eriogonum fasciculatum</i>	
California juniper	<i>Juniperus californica</i>	
Cooper's boxthorn	<i>Lycium cooperi</i>	
cottonthorn	<i>Tetradymia stenolepis</i>	
fiddleneck	<i>Amnsinckia tessellata</i>	
foxtail brome	<i>Bromus madritensis</i>	
goldfields	<i>Lasthenia californica</i>	
Joshua tree	<i>Yucca brevifolia</i>	
London rocket	<i>Sisymbrium irio</i>	
Mexican bladdersage	<i>Scutellaria mexicana</i>	
Nevada joint-fir	<i>Ephedra nevadensis</i>	
red-stemmed filaree	<i>Erodium cicutarium</i>	
rubber rabbitbrush	<i>Ericameria nauseosa</i>	
rattlesnake sandmat	<i>Euphorbia albomarginata</i>	
Russian thistle	<i>Salsola tragus</i>	
short-podded mustard	<i>Hirschfeldia incana</i>	
Birds		
Bell's sparrow	<i>Artemisiospiza belli</i>	
cactus wren	<i>Campylorhynchus brunneicapillus</i>	
California gull	<i>Larus californicus</i>	
common raven	<i>Corvus corax</i>	
greater roadrunner	<i>Geococcyx californianus</i>	
horned lark	<i>Eremophila alpestris</i>	
house finch	<i>Haemorhous mexicanus</i>	
house sparrow	<i>Passer domesticus</i>	
Lawrence's goldfinch	<i>Spinus lawrencei</i>	
loggerhead shrike	<i>Lanius ludovicianus</i>	Y
mourning dove	<i>Zenaida macroura</i>	
northern mockingbird	<i>Mimus polyglottos</i>	
prairie falcon	<i>Falco mexicanus</i>	
red-tailed hawk	<i>Buteo jamaicensis</i>	
rock pigeon	<i>Columba livia</i>	
savannah sparrow	<i>Passerculus sandwichensis</i>	
turkey vulture	<i>Cathartes aura</i>	
western kingbird	<i>Tyrannus verticalis</i>	
western meadowlark	<i>Sturnella neglecta</i>	
white-crowned sparrow	<i>Zonotrichia leucophrys</i>	
Mammals		
black-tailed jackrabbit	<i>Lepus californicus</i>	
California ground squirrel	<i>Otospermophilus leucurus</i>	

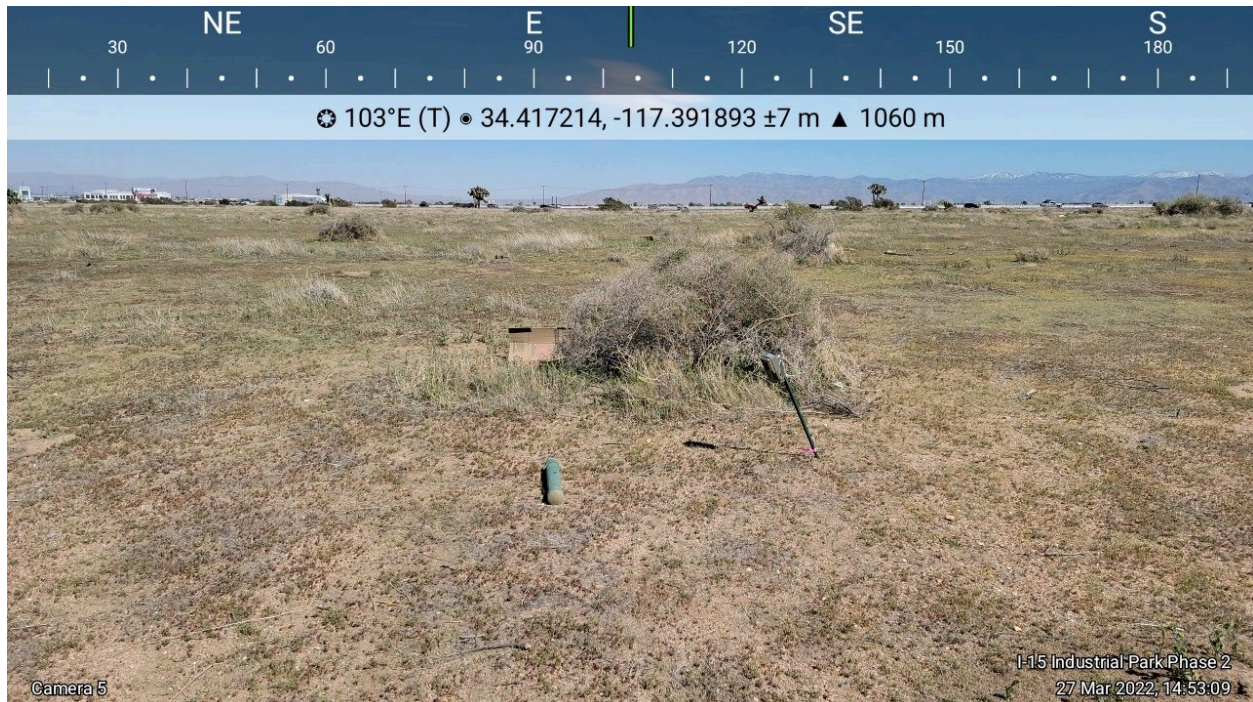
Common name	Scientific name	SSC
coyote	<i>Canis latrans</i>	
desert cottontail	<i>Sylvilagus audubonii</i>	
Panamint kangaroo rat	<i>Dipodomys panamintinus</i>	
white-tailed antelope ground squirrel	<i>Ammospermophilus leucurus</i>	
Reptiles		
Great Basin gopher snake	<i>Pituophis catenifer deserticola</i>	
Great Basin whiptail	<i>Aspidoscelis tigris tigris</i>	

SSC: Species of special concern

Attachment D



Photograph 1: Representative vegetation, facing north.



Photograph 2: Representative camera trap station. Each station consisted of a Bushnell camera secured to a 36-inch u-post facing a bait station.



Photograph 3: White-tailed antelope ground squirrel (*Ammospermophilus leucurus*) captured at trap station.



Photograph 4: Panamint kangaroo rat (*Dipodomys panamintinus*) captured at trap location.



Photograph 5: Great Basin gopher snake (*Pituophis catenifer deserticola*) found near trap station.

Appendix D

Plant Compendium

Vascular Species

Eudicots

ASTERACEAE – SUNFLOWER FAMILY

- Ambrosia acanthicarpa* – flatspine bur ragweed
- Ambrosia salsola* var. *salsola* – burrobrush
- Ericameria cooperi* var. *cooperi* – Cooper's goldenbush
- Ericameria nauseosa* var. *mohavensis* – Mojave rabbitbrush
- Lasthenia californica* – California goldfields
- Lasthenia gracilis* – needle goldfields
- Lessingia glandulifera* var. *glandulifera* – valley lessingia
- Stephanomeria exigua* ssp. *exigua* – small wirelettuce
- Stephanomeria pauciflora* – brownplume wirelettuce
- Tetradymia axillaris* – longspine horsebrush
- Tetradymia comosa* – hairy horsebrush
- Tetradymia stenolepis* – Mojave cottonthorn

BORAGINACEAE – BORAGE FAMILY

- Amsinckia tessellata* – bristly fiddleneck
- Cryptantha micrantha* – redroot cryptantha
- Pectocarya penicillata* – sleeping combseed

BRASSICACEAE – MUSTARD FAMILY

- * *Hirschfeldia incana* – shortpod mustard
- * *Sisymbrium altissimum* – tall tumbled mustard
- * *Sisymbrium irio* – London rocket
- Tropidocarpum gracile* – dobie pod

CHENOPODIACEAE – GOOSEFOOT FAMILY

- Chenopodium californicum* – California goosefoot
- * *Salsola tragus* – prickly Russian thistle

EUPHORBIACEAE – SPURGE FAMILY

- Euphorbia albomarginata* – whitemargin sandmat

FABACEAE – LEGUME FAMILY

- Acemispom strigosus* – strigose bird's-foot trefoil
- Lupinus bicolor* – miniature lupine
- Lupinus concinnus* – bajada lupine

GERANIACEAE – GERANIUM FAMILY

- * *Erodium cicutarium* – redstem stork's bill

LAMIACEAE – MINT FAMILY

- Salvia columbariae* – chia
- Scutellaria mexicana* – Mexican bladdersage

MALVACEAE – MALLOW FAMILY

- Sphaeralcea ambigua* var. *ambigua* – apricot globemallow

NYCTAGINACEAE – FOUR O'CLOCK FAMILY

- Mirabilis laevis* var. *crassifolia* – California four o'clock

POLEMONIACEAE – PHLOX FAMILY

- Eriastrum sapphirinum* ssp. *sapphirinum* – sapphire woollystar

POLYGONACEAE – BUCKWHEAT FAMILY

- Chorizanthe watsonii* – fivetooth spineflower
- Eriogonum fasciculatum* var. *polifolium* – California buckwheat

SOLANACEAE – NIGHTSHADE FAMILY

- Lycium cooperi* – peach thorn

ZYGOPHYLLACEAE – CALTROP FAMILY

- Larrea tridentata* – creosote bush

Gymnosperms and Gnetophytes

CUPRESSACEAE – CYPRESS FAMILY

- Juniperus californica* – California juniper

EPHEDRACEAE – EPHEDRA FAMILY

- Ephedra nevadensis* – Nevada joint fir

Monocots

AGAVACEAE – AGAVE FAMILY

- Yucca brevifolia* – Joshua tree

POACEAE – GRASS FAMILY

- * *Bromus diandrus* – ripgut brome
- * *Bromus hordeaceus* – soft brome
- * *Bromus madritensis* – compact brome

- * *Bromus rubens* – red brome
- * *Bromus tectorum* – cheatgrass
- Elymus elymoides* – squirreltail
- * *Hordeum murinum* – mouse barley
- * *Schismus barbatus* – common Mediterranean grass
- Stipa speciosa* – desert needlegrass

THEMIDACEAE – BRODIAEA FAMILY

Dipterostemon capitatus – bluedicks

- * signifies introduced (non-native) species

INTENTIONALLY LEFT BLANK

Appendix E

Wildlife Compendium

Birds

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus – house finch

Jays, Magpies and Crows

CORVIDAE – CROWS AND JAYS

Corvus corax – common raven

Larks

ALAUDIDAE – LARKS

Eremophila alpestris – horned lark

Old World Sparrows

PASSERIDAE – OLD WORLD SPARROWS

* *Passer domesticus* – house sparrow

Silky Flycatchers

PTILOGONATIDAE – SILKY-FLYCATCHERS

Phainopepla nitens – phainopepla

Thrushes

TURDIDAE – THRUSHES

Sialia currucoides – mountain bluebird

Wood Warblers and Allies

PARULIDAE – WOOD-WARBLERS

Setophaga coronata – yellow-rumped warbler

Wrens

TROGLODYTIDAE – WRENS

Campylorhynchus brunneicapillus – cactus wren

New World Sparrows

PASSERELLIDAE – NEW WORLD SPARROWS

Zonotrichia leucophrys – white-crowned sparrow

Mammals

Canids

CANIDAE – WOLVES AND FOXES

Canis latrans – coyote

Hares and Rabbits

LEPORIDAE – HARES AND RABBITS

Lepus californicus – black-tailed jackrabbit

Sylvilagus audubonii – desert cottontail

Kangaroo Rats

HETEROMYIDAE – POCKET MICE AND KANGAROO RATS

Dipodomys panamintinus – Panamint kangaroo rat

Squirrels

SCIURIDAE – SQUIRRELS

Ammospermophilus leucurus – white-tailed antelope squirrel

Otospermophilus beecheyi – California ground squirrel

Reptiles

Lizards

PHRYNOSOMATIDAE – IGUANID LIZARDS

Uta stansburiana – common side-blotched lizard

TEIIDAE – WHIPTAIL LIZARDS

Aspidoscelis tigris – tiger whiptail

* signifies introduced (non-native) species

INTENTIONALLY LEFT BLANK

Appendix F

Joshua Tree Preservation, Protection, and Relocation Plan, and Desert Native Plant Relocation Plan

Joshua Tree Preservation, Protection, and Relocation Plan, and Desert Native Plant Relocation Plan

Poplar 18 Project

OCTOBER 2022

Prepared for:

POPLAR 18, LLC.

14180 Dallas Parkway, Suite 730

Dallas, Texas 75254

Contact: Dana Whitmer

Prepared by:

DUDEK

38 North Marengo Avenue

Pasadena, California 91101

Contact: Chris Kallstrand

ISA-Certified Arborist, No. WE-8208A

Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	iii
1 Introduction	1
1.1 Applicability	1
1.2 Project Location	2
1.3 Project Characteristics	2
1.4 Site Characteristics	2
2 Policy and Permits.....	5
2.1 City of Hesperia	5
2.1.1 City Policy	5
2.1.2 City Permits	6
2.1.3 Findings for Removals	6
2.2 California Department of Fish and Wildlife	7
2.2.1 Department of Fish and Game Code Section 2073.3.....	7
3 Joshua Tree Survey	9
3.1 Joshua Tree Survey Methods.....	9
3.2 Joshua Tree Survey Findings	9
3.3 Project Impacts – Joshua Trees	10
4 City of Hesperia Requirements	11
4.1 Plot Plan Requirements	11
4.2 Relocation and Protection Trees	11
4.3 Relocation Specifications.....	11
4.3.1 Salvage	11
4.4 Storage.....	13
4.4.1 Storage Guidelines	13
4.4.2 Storage Direction	13
4.4.3 Stabilization.....	13
4.4.4 Irrigation	13
4.4.5 Duration.....	13
4.4.6 Summer Salvage: Temporary Shade Structure.....	14
4.5 Transplant Planting	14
4.5.1 Site Preparation	14
4.5.2 Pre-Watering.....	14
4.5.3 Planting Direction	14
4.5.4 Planting.....	15
4.5.5 Post-Transplant Stabilization	15

4.6 Post-Relocation Care..... 15

4.6.1 Irrigation 15

4.6.2 Stabilization..... 15

4.6.3 Fertilization..... 16

4.7 Monitoring and Reporting 16

4.7.1 Monitoring 16

4.7.2 Reporting..... 16

4.8 Transplantation Success Criteria 16

5 California Department of Fish and Wildlife Mitigation..... 17

5.1 Proposed Measures to Minimize and Fully Mitigate the Impacts of the Proposed Taking..... 17

6 Tree Protection 19

6.1 Tree Protection Measures prior to Construction 19

6.2 Protection and Maintenance During Construction 19

6.3 Maintenance after Construction..... 20

7 Fees 23

8 Desert Native Plants 25

9 References 27

TABLES

1 Summary of Protected Tree Impact Determinations 10

2 Mitigation for Direct Impacts to Western Joshua Tree 18

FIGURES

1 Regional Map 28

2 Project Vicinity 31

3 Project Site Plan 32

APPENDICES

A Joshua Tree Locations

B Tree Information Matrix

C Site Photographs

D Joshua Tree Impacts

E Landscape Plan

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
City	City of Hesperia
Commission	California Fish and Game Commission
HMC	Hesperia Municipal Code
I	Interstate
ISA	International Society of Arboriculture
ITP	Incidental Take Permit
Project	Poplar 18 Project

INTENTIONALLY LEFT BLANK

1 Introduction

The purpose of this Joshua Tree Preservation, Protection, and Relocation Plan (Joshua Tree Plan) for the Poplar 18 Project (Project) is to provide detailed specifications to meet the requirements of Chapter 16.24 of the City of Hesperia (City) Municipal Code and the evolving California Department of Fish and Wildlife (CDFW) requirements to protect, preserve, and mitigate impacts to Joshua trees (*Yucca brevifolia*). In October 2019, the California Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list western Joshua tree¹ (Center for Biological Diversity 2019). On November 1, 2019, the Commission referred the petition to the California Department of Fish and Wildlife (CDFW) for evaluation. CDFW evaluated the scientific information presented in the petition and other relevant information possessed by CDFW at the time of review and prepared a report for submittal to the Commission. The report states that CDFW recommended that the Commission accept the petition for further consideration of western Joshua tree under the California Endangered Species Act (CESA). On September 24, 2020, the Commission approved the petition to accept the candidacy proposal for western Joshua tree, effective October 9, 2020 (CDFW 2020). When a plant or wildlife species is granted candidacy under CESA, the species is given the same protection as a threatened or endangered species while the Commission evaluates whether formal listing as threatened or endangered under CESA is warranted. For this Project, take or removal of western Joshua tree would require a 2081 Incidental Take Permit (ITP) from CDFW.

Furthermore, Chapter 16.24 of the Hesperia Municipal Code (HMC) states that “it is in the public interest to preserve and protect specified desert native plants and provide for the conservation and wise use of our desert resources, through regulation, guidelines and enforcement that manage the removal or harvesting of such plants. They are also necessary to augment and coordinate with the State Department of Food and Agriculture in its efforts to implement and enforce the Desert Native Plant Act.” Furthermore, the City’s Protected Plants Policy (HMC 16.24) states the following for Tentative Tract, non-single-family residential (commercial, industrial, apartments):

- A protected plant plan shall be prepared by a certified arborist or registered botanist.
- An application and fee shall be completed and paid to the City.
- Healthy, transplantable plants shall be relocated on site or may be placed in an adoption program.

As such, this Joshua Tree Plan addresses the requirements of the City’s Protected Plants Policy and the proposed mitigation required by CDFW under the 2081 ITP, and provides details regarding the Project site’s Joshua trees, detailed specifications for the protection of trees to be preserved on site, and relocation/salvage requirements for those trees requiring removal and relocation.

1.1 Applicability

The provisions of this Joshua Tree Plan apply toward the protection and removal of Joshua trees located within the City of Hesperia, California, as defined in the City’s Protected Plants Policy (HMC 16.24).

¹ On October 21, 2019, the California Fish and Game Commission received a petition to list the following as threatened under the California Endangered Species Act: (1) western Joshua tree (*Yucca brevifolia*) throughout its California range, or, in the event the Commission determines that listing of *Yucca brevifolia* throughout its California range is not warranted, then (2) the western Joshua tree population within the northern part of western Joshua tree’s California range, or (3) the western Joshua tree population within the southern part of western Joshua tree’s California range.

1.2 Project Location

The approximately 17.87-acre Project site is in the western part of Hesperia, which is within the Victor Valley region of San Bernardino County (Figure 1, Regional Map; Figure 2, Project Vicinity). The Project site is located on the southwest quadrant of Interstate (I) 15 and Main Street. The Project site is located south of Main Street, west of Cataba Road and Mesa Linda Street, north of I-15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The Project site consists of two parcels: Assessor's Parcel Numbers 3064-581-04-0000 and 3064-581-05-0000. Specifically, the Project site is located in Section 22, Township 4 North, Range 5 West, as depicted on the U.S. Geological Survey Baldy Mesa, California 7.5-minute topographic quadrangle map (USGS 2007).

Regional access to the Project site is provided via I-15, directly east of the Project site, and U.S. Highway 395, directly west of the Project site. Local access to the Project site is provided via Poplar Street to Lassen Road or off of Mesa Linda Street (Figure 3, Project Site Plan).

1.3 Project Characteristics

The Project would involve construction of two industrial/warehouse buildings and associated improvements on 17.87 acres of vacant land. The Project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscaped areas (Figure 3).

The Project would include improvements along Mesa Linda Street, Lassen Street, and Poplar Street, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project frontage's landscape setback area, as well as within the landscape areas found around the proposed industrial/warehouse buildings and throughout the Project site.

1.4 Site Characteristics

The Project site is composed of two disjointed sites separated by Mesa Linda Street and an undeveloped property. These two sites collectively constitute the Project site. The site for Building 1 is located west of Mesa Linda Street, east of Cataba Road, and north of I-15. The site is irregularly shaped and located on two parcels. The Project site is vacant and undeveloped, with the exception of an approximately 440-foot segment of Bishop Street that terminates in a cul-de-sac.

Ground surface cover consists of moderate native brush and shrub growth, with occasional California juniper (*Juniperus californica*) and Joshua trees located throughout the site. The Project site has been subject to disturbance as a result of illegal dumping and trespassing. These unpermitted activities have led to areas of exposed bare soils (where trails have formed) and several debris piles.

Land uses surrounding the Project site primarily consist of vacant land, along with some scattered residential, commercial, light industrial, and utility uses. Specific land uses located in the immediate vicinity of the Project site include the following:

- **North:** Vacant land and scattered commercial, light industrial, and residential uses
- **East:** Commercial uses and I-15

- **South:** Vacant land and I-15
- **West:** Vacant land; U.S. Highway 395; and scattered commercial, light industrial, and commercial uses

In the broader Project vicinity, development includes commercial uses, trucking-related uses (i.e., truck stops), lodging accommodations, big-box retail developments, and residential subdivisions.

Climate

The Project site is located in the Victor Valley/High Desert region in western San Bernardino County. Average annual temperatures range from 44 °F to 81 °F. The average annual precipitation is 6.72 inches (WRCC 2022). Periods of extended drought are common throughout the region.

Topography and Soils

The Project site's surface elevation ranges between approximately 3,522 and 3,602 feet above mean sea level. The Project site and immediate surrounding area is relatively flat with a slight slope toward the northeast, and the southwestern corner of the site slopes moderately downward to the west.

According to the U.S. Department of Agriculture Natural Resources Conservation Service's Web Soil Survey (USDA 2022), the Project site occurs within the San Bernardino County, Mojave River Area (CA671). It consists of two types of soils: Cajon sand (0% to 2% slopes, 2% to 9% slopes, and 9% to 15% slopes) and Hesperia loamy fine sand (2% to 15% slopes).

Vegetation

The Project site is primarily composed of non-native grassland and Joshua tree woodland. Dominant plants include Joshua tree, slender oat (*Avena barbata*), and annual brome (*Bromus* sp.), followed by California juniper, black mustard (*Brassica nigra*), rubber rabbitbrush (*Ericameria nauseosa*), Nevada joint fir (*Ephedra nevadensis*), and California buckwheat (*Eriogonum fasciculatum* var. *polifolium*). The herbaceous layer is primarily dominated by non-native annuals and grasses such as red-stemmed filaree (*Erodium cicutarium*), longbeak stork's bill (*Erodium botrys*), ripgut brome (*Bromus diandrus*), red-brome (*Bromus madritensis*), and cheat grass (*Bromus tectorum*). Vegetation within the southwestern portion and along the southern boundary and through the center of the Project site is more sparse and disturbed due to human activity, including existing dirt and paved roads.

INTENTIONALLY LEFT BLANK

2 Policy and Permits

2.1 City of Hesperia

2.1.1 City Policy

Per the City's Protected Plants Policy (HMC 16.24), the City seeks to preserve the natural environment in the City while respecting the lawful development of private property. As such, native protected plants create a dilemma because of their high public appeal coupled with very limited transplant success and potential safety concerns for the public. Furthermore, HMC 16.24 states the following regarding Tentative Tract, non-single-family residential (commercial, industrial, apartments):

- A protected plant plan shall be prepared by a certified arborist or registered botanist.
- An application and fee shall be completed and paid to the City.
- Healthy, transplantable plants shall be relocated on site or may be placed in an adoption program.

In addition to the requirements previously stated, HMC 16.24 discusses approval of an adoption program, as follows:

1. Approved Adoption Program

To qualify as an approved adoption program the developer shall provide a letter on company letterhead, describing the program and the community notification process. The program shall identify the following, as a minimum:

- a) A public notice process which may include publication in local newspapers, radio advertisement, hand distributed fliers, and other noticing techniques. Noticing must occur over a period of not less than three weeks.
- b) The location where the trees may be viewed by the public and a clearly identified period of at least two weeks (including weekends) when trees/plants are available for adoption.
- c) The person that will be available on-site to assist those adopting trees to find the actual trees/plants for removal. An on-site or cell phone number for that person is required.
- d) A note that a copy of the City Joshua Tree Transplanting Guidelines will be provided to each adopter.
- e) A log showing the name, address, and phone number of each adopter and the number and type of trees/plants they received.

Note: At least 50% of the transplantable trees and plants shall be adopted or the remaining number below 50% shall be purchased at \$350 per transplantable tree. Purchased trees must be recycled at Advance Disposal.

2.1.2 City Permits

Per the City's Protected Plants Policy (HMC 16.24), a Joshua tree relocation and removal application must be completed and a fee paid to the City prior to initiation of removal and/or relocation of Joshua trees. HMC Section 16.24.040, Removal Permit, states the following:

- a) A removal permit shall be required for the removal of any native tree or plant that is subject to the provisions of this chapter.
- f) A land use application, a building permit and all other development permits (e.g., grading, mobile home set downs, etc.), shall consider and include a review of any proposed native tree or plant removal. Any approved land use application and/or development permit shall be a permit for the removal of native plants, if such land use application or development permit specifically reviews and approves such removals. Such reviews shall consider and require compliance with the provisions of this chapter.
- g) The reviewing authority may require certification from an appropriate tree expert or desert native plant expert that such tree removals are appropriate, supportive of a healthy environment and are in compliance with the provisions of this article.
- h) Removals of native trees or plants that are not requested in conjunction with a land use application or development permit may be accomplished only under a permit issued by either the county agricultural commission or the fire marshal, subject to the provisions of this article.
- i) The building official shall require a preconstruction inspection prior to approval of development permits.
- j) The duration of a plant or tree removal permit when issued in conjunction with a land use application and/or a development permit shall be coterminous with the duration of the associated application or permit, unless otherwise specified. The reviewing authority shall specify the expiration date for all other tree and/or plant removal permits.

2.1.3 Findings for Removals

Per HMC Section 16.24.040, the reviewing authority must authorize the removal of a native tree or plant subject to the provisions of the HMC only if the following findings are made:

- a) The removal of the native tree or plant does not have a significant adverse impact on any proposed mitigation measures, soil retention, soil erosion and sediment control measures, scenic routes, flood and surface water runoff and wildlife habitats (flora and fauna), especially those with limited habitats (e.g., eagles).
- b) The removal of the native tree or plant is justified for one of the following reasons:
 - 1) The location of the native tree or plant and/or its drip line interferes with the reasonable improvement of the site with an allowed structure, sewage disposal area, paved area or other approved improvement or ground disturbing activity. Also such improvements have been designed in such a manner as to save as many healthy native trees and/or plants as reasonably practicable in conjunction with the proposed improvements;
 - 2) The location of the native tree or plant and/or its drip line interferes with the planned improvement of a street or development of an approved access to the subject or adjoining private property;

- 3) The location of the native tree or plant is hazardous to pedestrian or vehicular travel or safety as determined by the director of transportation, flood control and airports or other county reviewing authority;
 - 4) The native tree or plant or its presence interferes with or is causing excessive damage to utility services or facilities, roadways, sidewalks, curbs, gutters, pavement, sewer line(s), drainage or flood control improvements, foundations, existing structures, or municipal improvements;
 - 5) The condition or location of the native plant or tree is adjacent to and in such close proximity to existing or proposed structure that the native plant or tree has or will sustain significant damage.
- c) Joshua trees that are proposed to be removed have been transplanted or stockpiled for future transplanting wherever possible. In the instance of stockpiling the permittee has posted a bond to ensure such Joshua trees are transplanted appropriately.

2.2 California Department of Fish and Wildlife

2.2.1 Department of Fish and Game Code Section 2073.3

Pursuant to the provisions of Section 2073.3 of the California Fish and Game Code, the Commission received a petition from the Center for Biological Diversity on October 21, 2019, to list western Joshua tree as a threatened species under the CESA (Center for Biological Diversity 2019). Pursuant to Section 2073 of the California Fish and Game Code, on November 1, 2019, Commission staff transmitted the petition to the CDFW for review pursuant to Section 2073.5 of said code. After reviewing the petition and other relevant information, CDFW determined that the petition provides sufficient information to indicate that the petitioned action may be warranted for western Joshua tree, and CDFW recommended that the Commission accept the petition for further consideration under CESA (CDFW 2020).

The Commission has the authority to list certain species or subspecies as threatened or endangered under CESA (California Fish and Game Code Sections 2062, 2067, and 2070). The listing process is the same for species and subspecies (California Fish and Game Code Sections 2070–2079.1). CESA sets forth a two-step process for listing a species as threatened or endangered. First, the Commission determines whether to designate a species as a candidate for listing by evaluating whether the petition provides “sufficient information to indicate that the petitioned action may be warranted” (California Fish and Game Code Section 2074.2[e][2]). If the petition is accepted for consideration, the second step requires CDFW to produce, within 12 months of the Commission’s acceptance of the petition, a peer reviewed report based on the best scientific information available that indicates whether the petitioned action is warranted (California Fish and Game Code Section 2074.6). Finally, the Commission, based on that report and other information in the administrative record, determines whether the petitioned action to list the species as threatened or endangered is warranted (California Fish and Game Code Section 2075.5). A petition to list a species under CESA must include the following (California Fish and Game Code Section 2072.3; see also 14 CCR 670.1[d][1]):

Information regarding the population trend, range, distribution, abundance, and life history of a species, the factors affecting the ability of the population to survive and reproduce, the degree and immediacy of the threat, the impact of existing management efforts, suggestions for future management, and the availability and sources of information. The petition shall also include information regarding the kind of habitat necessary for species survival, a detailed distribution map, and any other factors that the petitioner deems relevant.

The range of a species for CDFW's petition evaluation and recommendation is the species' California range (*California Forestry Association v. California Fish and Game Commission* [2007] 156 Cal.App.4th 1535, 1551).

CDFW must evaluate the petition on its face and in relation to other relevant information, and submit to the Commission a written evaluation report with one of the following recommendations:

- Based upon the information contained in the petition, there is not sufficient information to indicate that the petitioned action may be warranted, and the petition should be rejected; or
- Based upon the information contained in the petition, there is sufficient information to indicate that the petitioned action may be warranted, and the petition should be accepted and considered.

CDFW's candidacy recommendation to the Commission is based on an evaluation of whether the petition provides sufficient scientific information relevant to the petition components set forth in California Fish and Game Code Section 2072.3 and the California Code of Regulations (CCR), Title 14, Section 670.1(d)(1).

At its June 2020 meeting, after conversations with the petitioner and other stakeholders, the Commission continued to its August 2020 meeting the consideration and potential action on the petition to determine whether listing western Joshua tree under CESA may be warranted. The item was heard at the August 2020 Commission hearing, but once again continued to the September 2020 hearing. On September 22, 2020, the Commission approved the petition to accept the candidacy proposal for western Joshua tree, effective October 9, 2020 (CDFW 2020). Western Joshua tree was made a candidate under CESA to determine whether the species should become listed. At that point, a second recommendation and vote will confer or deny final protection under the law. When a plant or wildlife species is granted candidacy under CESA, the species is given the same protection as a threatened or endangered species while the Commission evaluates whether formal listing as threatened or endangered under CESA is warranted.

3 Joshua Tree Survey

3.1 Joshua Tree Survey Methods

Per the City's Protected Plants Policy (HMC 16.24), Dudek's International Society of Arboriculture (ISA)–certified arborists performed a Joshua tree survey to inventory and evaluate the health and relocation potential for each Joshua tree located on and within 186 feet of the Project site. The survey encompassed the entire Project site plus a 186-foot buffer (Appendix A, Joshua Tree Locations). The inventory was conducted by ISA-certified arborists Noah Stamm and Katrina Burritt on November 11, 2021; Joshua tree phenological data was collected by Katrina Burritt and Kalie Ortiz on April 7, 2022. During the inventory, the GPS position of each Joshua tree found on site was recorded. Furthermore, the following attributes of each tree were collected:

- Species
- Diameter at standard height (4.5 feet above ground level)
- Height (feet)
- Spread (feet)
- Health (excellent, good, fair, poor, critical, and dead)²²
- Number of branches
- Clonal status (clone or single trunk)

In addition to the general Joshua tree attributes that were collected, per CDFW, Dudek collected the following phenological data for each Joshua tree found on-site:

- Number of panicles
- New growth
- Leaves
- Flowers
- Open flowers
- Presence of fruit

All inventoried and assessed protected trees were tagged with an aluminum tag bearing a unique identification number, which was placed on the main trunk on the north side of each Joshua tree. Tagging on the north side allows for proper orientation during relocation (each relocated Joshua tree will need to be oriented in the same direction as it was in its original location).

3.2 Joshua Tree Survey Findings

Dudek's arborists recorded 32 Joshua trees within and adjacent to (within 186 feet) the limits of the Project site, as presented in Appendix B, Tree Information Matrix. In total, 16 Joshua trees are located within the Project site,

²² Health Rating Descriptions

Excellent. Tree has excellent health and strong vigor. No damage. Flowering and fruiting expected. Typically, only given to large, high-quality specimens (taller than 15 feet in height). Transplanting generally not recommended due to size.

Good. Tree has good health and vigor. All branches are alive and healthy. Damage is very localized and minimal. Flowering and fruiting likely, if tree is large enough. Tree is transplantable.

Fair. Tree health is average. Some stressors or damage possible, but any damage is minimal to moderate (e.g., rodent grazing, insect damage). No dead/broken branches. Tree is transplantable.

Poor. Tree is under stress, and overall health is in decline, or tree has taken significant damage. Mortality likely unless stressors relieved and/or conditions change. Broken/dead limbs likely present. Tree is generally not transplantable.

Critical. Tree is in extreme decline. One or more branches dead. One or more branches dying. Physical damage likely present. Damage is significant and extensive. Mortality expected within 2 to 4 years. Tree is not transplantable.

Dead. Tree is dead.

and an additional 16 trees are located within 186 feet of the Project site (survey area) Trees in the tree survey area vary in size and stature according to age and location. In total, 23 single-/multi-trunk Joshua trees and 9 clonal (multiple trunks or those trees within 6 feet of an individual) trees were mapped throughout the tree survey area. Stem diameter for single and clonal trees range from 1 to 19 inches. Tree heights vary from 1 foot for younger trees to 20 feet for mature Joshua trees. Tree crown extents range from 1 foot to nearly 18 feet at their widest location for single-stemmed trees. The total number of branches on the Joshua trees range from 0 (single trunk) to 4 for mature trees. The health of the Joshua trees varies across the site, and ranges from fair to good. In total, 31 trees (96.88%) exhibit good health and 1 tree (3.12%) exhibits fair health.

In addition to the general tree and health characteristics, Dudek arborists collected baseline phenological data for each tree. In total, 17 trees were observed to have panicles, and the number of panicles observed on each tree ranged from 1 to 32. New growth was observed on 31 trees, and no new growth was observed a single tree. Leaves were observed on all 32 trees. Flowers were observed on 10 trees, with 4 of those trees exhibiting open flowers. Lastly, fruit was observed on 13 trees, and fruit drop was observed on 16 trees. Individual attributes of each tree are presented in Appendix B, and representative photographs are presented in Appendix C, Site Photographs.

3.3 Project Impacts – Joshua Trees

There is wide variation in tolerance to construction impacts among tree species, and the response of an individual tree to impacts also varies with age and condition. Impacts assessed for the Project include those trees with protected zones within 20 feet of proposed improvements and identified disturbance areas (as defined in the Project site plan). The impact discussion in this section identifies all impacts to protected Joshua trees that are anticipated to occur based on an evaluation of tree locations compared with the Project site plan. Trees identified for retention and removal are graphically presented in Appendix D, Tree Impacts.

Based on grading and development plans for the proposed Project, it is estimated that 16 trees (50%) will require removal to accommodate the Project. The proposed Project would preserve the remaining 16 trees (50%), which would remain in place. Table 1 summarizes impact determinations for Joshua trees within the tree survey area that are subject to regulation under Section 16.24.060, Plot Plan Requirements, of the HMC.

Table 1. Summary of Protected Tree Impact Determinations

Health	Impact Determination		Total (number)
	Removal (number)	No Impact (number)	
Good	16	15	31
Fair	0	1	1
Poor	0	0	0
Critical	0	0	0
Dead	0	0	0
Total	16	16	32

4 City of Hesperia Requirements

4.1 Plot Plan Requirements

Section 16.24.060 of the HMC states the following:

Prior to the issuance of a native tree or plant removal permit in conjunction with a development permit and/or approval of a land use application which authorizes such removal, a plot plan or grading plan shall be approved by the appropriate City review authority for each site indicating exactly which trees or plants are authorized to be removed. The required information can be added to any other required site plan. Prior to issuance of development permits in areas with native trees or plants that are subject to the provisions of this chapter, a preconstruction inspection shall be conducted by the appropriate authority. Such preconstruction inspections may be combined with any other required inspection.

As such, Appendix D details the post-construction status of each mapped and evaluated Joshua tree found on the Project site.

4.2 Relocation and Protection Trees

Per Section 16.24.060 of the HMC, each tree was evaluated for its relocation potential. Due to the low success rate of mature Joshua tree relocation, only single-stemmed trees in good health and less than 15 feet in height were selected. Based on Project-related impacts, 16 Joshua trees would be directly impacted by the proposed Project. Of the 16 direct impacts, 13 Joshua trees met the defined criteria for improved likelihood of post-transplant success. As such, per Section the HMC, relocation and/or mitigation is required for the 13 trees meeting the minimum requirements for relocation. The Project site can accommodate all 13 relocatable Joshua trees.

Furthermore, based on the impact analysis, one Joshua tree may be encroached upon, and 16 Joshua trees would not be directly impacted by the proposed Project. As such, it is recommended that the 16 non-impacted trees be protected in place in accordance with the tree protection measures identified in this Joshua Tree Plan. The locations of the 13 Joshua trees recommended for relocation and 16 preservations are shown in Appendix D.

4.3 Relocation Specifications

The following sections identify the designated storage and relocation locations for the proposed transplanted/salvaged trees. Details and specifications for the Joshua tree relocation, storage, and care in the post-development landscape are also provided in this section.

4.3.1 Salvage

Joshua trees have fragile, shallow root systems that are easily damaged during the salvaging and relocation process. During the excavation of the rootball, it is important that as much of the existing root structure as possible be captured so that an intact rootball is maintained during the salvaging and relocation process. The following sections include recommendations to help increase the chances of successful salvage/relocation.

4.3.1.1 Contractor

Joshua tree salvage and relocation will be completed by an experienced Joshua tree relocation specialist.

4.3.1.2 Pre-Salvage Meeting

Prior to initiating Joshua tree salvage, all contractors involved in the salvage project will attend a site meeting with the Project arborist. The Project arborist will provide the contractor(s) with a copy of the Joshua Tree Plan and will review all relevant components of the Joshua Tree Plan.

4.3.1.3 Salvage Timing

To increase the chances of a successful relocation, trees should be relocated during October through February. To increase Joshua tree survivability, the trees should not be dug out and/or salvaged in warmer months (April through September). However, should Project limitations and timing require a date not during the recommended October through February salvage period, salvaged trees should be stored in a temporary, on-site location, per the recommendations in Section 4.4, Storage.

4.3.1.4 Pre-Irrigation

Prior to Joshua tree digging, each identified Joshua tree relocation candidate will be pre-watered. Specifically, each tree will be watered 24 hours prior to relocation. Pre-watering will thoroughly soak the rootball of each tree.

4.3.1.5 Equipment Sanitization

Equipment will be sterilized prior to digging up and transplanting each tree. Equipment sterilization will reduce the likelihood of pathogens being passed from tree to tree.

4.3.1.6 Digging

Tree relocation is best completed through the use of machinery. A front-end loader or hydraulic tree spade is recommended. The hydraulic tree spade may be best used in instances where the soil type is sandy or silty. However, hand-digging of smaller Joshua trees (1 to 2 feet in height) is acceptable. The goal of relocation is to maintain a high root-to-shoot ratio. Joshua tree excavation will capture as much of the rootball as possible; however, due to the tree's shallow root system, holes do not need to be deep. In general, the digging holes may range from 12 to 18 inches in depth for smaller trees (1 to 2 feet tall) to 24 to 36 inches deep for larger trees. The entire rootball will be removed intact, if possible.

4.3.1.7 Root Maintenance

All attempts will be made to minimize exposure of the rootball to air; exposed roots will be kept wet at all times during the relocation process. Damaged and exposed roots will be cleaned and dusted with sulfur or a fungicide to decrease the likelihood of root pathogens.

4.4 Storage

All 13 Joshua trees recommended for relocation will be transplanted to locations throughout the Project site. All 13 trees will be stored within a temporary storage location approved by a qualified arborist. The temporary storage location will be based on the development schedule. The storage location will be determined at a later date once the final schedule is confirmed. Trees requiring storage or stockpiling in the short term (i.e., 1 to 4 weeks) will adhere to the storage recommendations provided in the following sections.

4.4.1 Storage Guidelines

Trees stockpiled for longer than 2 weeks will be temporarily stored in shallow ditches, backfilled with native soils, and tamped down. The shallow ditches will be dug prior to tree relocation, and the final depth will be comparable to the depth at which each Joshua tree is dug. Temporary storage trench depths will be approximately 12 to 24 inches deep, depending on the size of the tree's rootball. Trench widths will be 1 foot larger than the rootball of the tree, and long enough to accommodate the tree, with enough room for equipment between each tree. Multiple trenches may be required to accommodate all salvaged trees.

4.4.2 Storage Direction

During storage, all trees will be oriented in the same direction that they were prior to removal. Each Joshua tree will be tagged on its northern side and will be reoriented with the tagged side facing north. Prior to tree relocation, each tag will be inspected to ensure that it is securely attached to the tree.

4.4.3 Stabilization

Larger plants, over 5 feet tall, may require stabilization until the roots have had the opportunity to become reestablished. To support larger trees, guy-wire staking may be necessary. Guywires will be connected to the ground (i.e., preferably via a "dead-man" anchor below grade) and attached to the trunk or limbs with an expandable, non-abrasive connector. Multiple guywires may be required (i.e., recommended three equally spaced around the rootball for stability). Trees requiring stabilization are identified in Appendix B.

4.4.4 Irrigation

Stored trees will be watered 1 to 2 times per week during the storage period to ensure tree health and increase relocation success. During the storage period, the trees will be watered by hand or by temporary irrigation. Should temporary irrigation be installed, the use of drip emitters is recommended. Irrigation emitters will be spaced according to the watering zone specified for each tree. The watering zone for each tree is identified in Appendix B. The total amount of water required for each tree will be dependent on the season and tree size. Irrigation needs may range from 2 to 20 gallons per watering cycle, and will be dependent on ambient daytime temperatures and rainfall totals. Additionally, persistent wet soil will cause mildew and root rot. As such, soil moisture levels will be routinely checked at the time of watering, and allowed to dry out between watering cycles. The irrigation schedule will be adjusted to meet the conditions described above.

4.4.5 Duration

Trees will not be stockpiled or stored for longer than 45 days.

4.4.6 Summer Salvage: Temporary Shade Structure

Per Section 4.3.1.3, Salvage Timing, should Project limitations and timing require an earlier start date than the recommended October through February salvage period, salvaged trees will be stored as described in Section 4.3.1, Salvage. Furthermore, to reduce tree stress and reduce the risk of post-transplant mortality, the salvaged trees will be stored underneath a temporary shade structure. The temporary shade structure will be sufficient in size to cover the salvaged trees and provide protection from the direct heat of the summer sun. The shade structure will use a minimum 30% shade cloth to shade the trees during the warmer months. The shade structure will be attached to galvanized steel structural poles (or similar) to ensure the shade structure is structurally stable. The shade structure will be installed per the manufacturer's recommendations. Due to the potential for high winds, the shade structure will be attached to the ground using diagonal "dead-man" cable supports and concrete-post footings. The shade structure will be of adequate height to cover the trees. For trees that are greater than 10 feet in height (8 trees), individual shade structures may be established for each tree. The remaining trees, under 10 feet in height, may be stored under a contiguous structure. In addition to the temporary shade structure, all salvaged trees will be relocated and maintained per the recommendations specified throughout this Joshua Tree Plan.

4.5 Transplant Planting

All 13 salvaged Joshua trees will be relocated into the post-construction landscape. The 13 final planting locations are presented in Appendix E, Landscape Plan. The following sections detail transplanting guidelines for the salvaged Joshua trees.

4.5.1 Site Preparation

Prior to tree transplantation, each receiver location will be dug. The 13 final planting locations will be finalized once the final landscape plan has been developed and approved. Prior to digging, the sites will be flagged for identification by the Project arborist or registered botanist. In general, the digging hole may range from 12 to 18 inches in depth for smaller trees (1 to 2 feet tall) to 24 to 36 inches deep for larger trees. The width of the hole will be approximately 1 foot larger than the rootball of the transplanted tree. Holes may require additional digging prior to Joshua tree installation.

4.5.2 Pre-Watering

A water and root hormone mixture will be prepared prior to transplanting the trees. The mixture will be composed of vitamin B1, which is commonly sold by nurseries. The mixture will be mixed per the manufacturer's directions, which is typically at a 1:250 ratio (B1-to-water ratio). The receiving hole will be filled with the diluted mixture of rooting hormone and water, and allowed to drain prior to placing the tree in the hole.

4.5.3 Planting Direction

Proper orientation of the relocated trees is important to the success of the salvaged trees. Improper planting can result in sunburn and growth distortion. As such, the north side of each tree will be clearly marked/tagged prior to digging, and each tree will be replanted (and stored) in the same orientation as it was in prior to removal.

4.5.4 Planting

Prior to final installation, the hole size will be inspected by the Project arborist to ensure that the planting hole is at minimum 1 foot wider than the rootball and is neither too deep nor too shallow. The hole may require minor adjustments prior to installation. The depth of the hole must be less than the height of the root ball. If the hole is inadvertently dug too deep, soil will be added and compacted by hand or foot. Breaking up compacted soil in a large area around the tree (outside the drip line of the tree) provides the newly emerging roots room to expand into loose soil. This will hasten root growth, translating into quicker establishment. Once the size of the hole is finalized, the tree will be lowered into the hole in the proper orientation, backfilled with native soil, and watered again. Following backfilling and placement, the rootball will be tamped down into the hole to eliminate water pockets.

Following planting, a water basin will be installed approximately 1 foot outside of the pre-determined watering zone. The watering basin will be approximately 3 to 4 inches in height and will surround the tree. The basin will be left intact throughout the establishment period.

4.5.5 Post-Transplant Stabilization

Larger plants, over 5 feet tall, may require stabilization until the roots have had the opportunity to become reestablished. To support larger trees, guy-wire staking may be necessary. Guy-wires will be connected to the ground (i.e., preferably via a “dead-man” anchor below grade) and attached to the trunk or limbs with an expandable, non-abrasive connector. Multiple guy-wires may be required (i.e., recommended three equally spaced around the rootball for stability). Guy-wires will be removed once the tree is determined to be established by the Project arborist. Trees requiring stabilization are identified in Appendix B.

4.6 Post-Relocation Care

4.6.1 Irrigation

Trees that have been relocated to their final planting location will be watered 1 to 2 times per week for an initial 2 to 3 months, depending on the season, rainfall totals, tree size, and watering zone size. Irrigation will be adjusted seasonally, with a goal of removing the transplanted trees from supplemental irrigation after 2 years have passed and growth has resumed. The total amount of water required for each tree will be dependent on the season and tree size. Persistent wet soil will cause mildew and root rot. As such, soil moisture levels will be routinely checked at the time of watering, and the soil will be allowed to drain and dry out between watering cycles. Watering will be accomplished by hand or by a temporary irrigation system. During irrigation, the tree basin will be filled and allowed to fully drain. Irrigation needs may range from 2 to 20 gallons per watering. The watering cycle will be adjusted based on tree health and season. The watering zone for each tree (distance from the trunk) is defined for each tree in Appendix B.

4.6.2 Stabilization

Trees that have been stabilized will be routinely inspected by the Project arborist to ensure that the guy-wires and straps are not damaging the trees. The expandable, non-abrasive connectors will be adjusted, as needed, to minimize damage to the trees. The guy-wires can be removed once the Project arborist has determined that the

trees have become established. In general, little to no movement should be observed on the rootball when the tree is gently pushed. Once the roots are well established, it is important to remove the tree stakes. This will encourage a natural strengthening of the tree trunk so it can support the weight of the branches as they begin grow and spread.

4.6.3 Fertilization

Post-transplantation fertilization is not required.

4.7 Monitoring and Reporting

Tree relocation, stockpiling, maintenance, and watering will be monitored by a certified arborist or registered botanist.

4.7.1 Monitoring

The City does not define a minimum post-transplantation monitoring period. However, an annual inspection and report for 4 years is recommended. For the initial 3 months following transplantation, weekly monitoring by a certified arborist or registered botanist will occur to ensure that the watering needs of each relocated tree are being met. Following the initial 3-month monitoring period, the relocated trees will be monitored on a monthly basis for 9 months. Following the first year of monitoring, the trees will be monitored quarterly (every 3 months) for 3 years to ensure tree establishment. Monitoring may be adjusted based on tree health and observations by the Project arborist. The monitoring period will begin once all trees have been installed.

4.7.2 Reporting

Annual reports will be prepared at the end of each calendar year to document the status of the transplantation program and the health/survivability of the relocated trees. Reports of all monitoring will be submitted to the City. Monitoring will track the location, health, and status of each transplanted Joshua tree. The monitoring arborist or registered botanist will include recommendations for maintenance and irrigation, should they be needed.

4.8 Transplantation Success Criteria

The City does not define a minimum success ratio for transplanted Joshua trees. Due to the low relocation success rate of Joshua trees, the transplantation program would be considered successful if, after four growing seasons (4 years)—including two growing seasons with supplemental irrigation and two without—the transplanted trees maintain a minimum of 70% survivability. As such, based on 13 potential relocation trees, the relocation would be considered successful should approximately 9 Joshua trees survive past the 4-year threshold. Should the surviving number of trees drop below 70%, it is recommended that trees be obtained from a local adoption program or from a local nursery to meet the 4-year, 70% threshold. The City may define alternative minimum success criteria.

5 California Department of Fish and Wildlife Mitigation

The following section details the proposed mitigation program described within the ITP application for the Project (Item No. 9 in the application).

5.1 Proposed Measures to Minimize and Fully Mitigate the Impacts of the Proposed Taking

Conservation efforts for western Joshua tree should focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site.

Mitigation efforts should contribute to the conservation of large, interconnected Joshua tree woodlands. Larger preserves have several advantages over multiple smaller preserves, even if the total area preserved is the same. Larger preserves have a greater chance of preserving habitat diversity at all scales, supporting larger local populations, helping maintain functioning metapopulations (partially isolated subpopulations of the same species that support immigration and emigration and provide for recolonization following local extirpations), and supporting greater species genetic diversity, and are more likely to maintain intact watershed functions. Larger preserves also have less habitat fragmentation and provide greater protection from edge effects due to a larger area-to-perimeter ratio compared to smaller preserves. Additionally, large preserves usually facilitate more cost-effective land management.

Natural land covers preserved as habitat linkages connect larger habitat tracts that would otherwise be isolated to movement of wildlife and movement of plant species pollinators between preserves (i.e., movement corridors). Movement corridors should be as wide, continuous, natural, and vegetatively diverse as possible to accommodate as many species as possible and protect against adverse edge effects. Some smaller, less-mobile species may actually reside within a linkage, and larger and/or more mobile species may only use each linkage as a movement corridor.

Species populations with larger numbers of individuals are known to be more stable in the long term, less vulnerable to adverse demographic effects caused by environmental stochasticity (probabilistic events such as floods, fires, and disease), and less vulnerable to extirpation (extermination) compared to smaller populations. Larger populations tend to possess higher genetic diversity, which can reduce the chance of genetic bottlenecks, genetic drift, and inbreeding depression. Larger populations better cope with and/or adapt to changing environmental conditions and local stochastic effects due to their greater number of individuals and likely greater genetic heterogeneity.

Mitigation for Direct Impacts

Mitigation for direct impacts to 32 western Joshua trees will be fulfilled through conservation of western Joshua trees at a 2:1 habitat replacement of equal or better functions and values to those impacted by the Project. Mitigation will be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank and lands are conserved separately, a cost estimate will

be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement(s) area in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record will take into account all of the management activities required in the ITP to fulfill the requirements of the conservation easement(s), which are currently in review and development.

Table 2 summarizes the direct impacts to western Joshua tree by size class, the radius or buffer distance applied by class size, and the total acreage of the impacted buffer (i.e., 61.8 acres).

Table 2. Mitigation for Direct Impacts to Western Joshua Tree

	No. of Trees 1 Meter or Less	No. of Trees More than 1 Meter but Less than 5 Meters	No. of Trees 5 Meters or Greater	Total Number of Trees
Direct Impacts	7	19	6	32
Buffer Distance	186 feet	186 feet	186 feet	—
Buffer Impacts Acres	N/A	N/A	N/A	61.8

Furthermore, the ITP states that western Joshua trees will be relocated and planted on site, as feasible. Additional details related to CDFW requirements can be found within the proposed mitigation program described within the ITP application for the Project.

6 Tree Protection

For Joshua trees that do not require relocation, the following measures are recommended so that they have protected zones (crown/canopy width plus 6 feet) around each tree within and immediately adjacent to (within 25 feet of) all active construction areas. For protected trees on site that remain within undisturbed areas, similar tree protection measures are recommended to ensure against potential inadvertent disturbance.

6.1 Tree Protection Measures prior to Construction

Fencing: Orange polyethylene construction fencing, no less than 4 feet in height, with tree protection signs, will be erected around all undisturbed trees (or tree groups). The protective fencing will be installed at the protected zone boundary of each tree (or tree group), which is defined as 6 feet beyond the tree crown/canopy dripline. The intent of protective fencing is to prevent root damage and/or compaction of the soil by grading equipment. An ISA-certified arborist may be required on site if grading activities occur within a tree's protected zone. Fencing will be secured to 6-foot-tall, heavy-gauge T-bar posts pounded into the ground a minimum of 18 inches and spaced a minimum of 8 feet on center. Fencing will be attached to the T-bar posts, with minimum 14-gauge wire fastened to the top, middle, and bottom of each post. Tree protection signs will be attached to every fourth post. The contractor will maintain the fence to keep it upright, taut, and aligned at all times. Fencing will be removed only after all construction activities in the vicinity of the protected trees are complete.

Pre-Construction Meeting: A pre-construction meeting will be held between all contractors (including grading, tree removal/pruning, and builders) and an ISA-certified arborist or registered botanist. The meeting will focus on instructing the contractors on tree protection practices and on answering any questions. All equipment operators and spotters, assistants, and those directing operators from the ground will provide written acknowledgment of having received tree protection training. This training will include information on the location and marking of protected trees, the necessity of preventing damage, and the discussion of work practices that will accomplish these tasks.

6.2 Protection and Maintenance During Construction

Once construction activities have begun, the following protection measures will be followed:

Equipment Operation and Storage: Contractors will avoid heavy equipment operation around protected trees. Operating heavy machinery around the root zones of trees will increase soil compaction, which decreases soil aeration and consequently reduces water penetration into the soil. All heavy equipment and vehicles will, at minimum, stay out of the fenced protected tree zone except where specifically approved in writing and under the supervision of a certified arborist or registered botanist.

Materials Storage and Disposal: Contractors will not store or discard any supplies or materials, including paint, lumber, and concrete overflow, within the protected zone, and will remove all foreign debris within the protected zone. However, the contractors will leave the duff, mulch, chips, and other organic material around the retained trees for water retention and nutrient supply. In addition, the contractors will avoid draining or leakage of equipment fluids near retained trees. Fluids such as gasoline; diesel; oils; hydraulic, brake, and transmission fluids; paint; paint thinners; and glycol (anti-freeze) will be disposed of properly. Contractors will ensure that equipment is parked outside of the protected zone to avoid the possibility of leakage of equipment fluids into the soil. The effect of toxic equipment fluids on the trees could result in tree decline and mortality.

Grade Changes: Contractors will ensure that grade changes, including adding fill, are not permitted within the protected zone without special written authorization and under supervision by an ISA-certified arborist or registered botanist. Lowering the grade within the protected zone would necessitate cutting main support and feeder roots, jeopardizing the health and structural integrity of the trees. Adding soil, even temporarily, on top of the existing grade would compact the soil further and decrease water and air availability to the tree roots. Contractors will ensure that grade changes made outside of the protected tree zone will not create conditions that allow water to pond at the base of trees. Water trapped at the base of a tree could lead to root rot and other detrimental tree impacts.

Moving Construction Materials: Contractors will ensure that care is exercised when moving construction equipment and supplies near undisturbed Joshua trees, especially overhead. Contractors will ensure that damage to the trees is avoided when transporting or moving construction materials and working around trees (even outside of the fenced protected zone). Contractors will flag aboveground tree parts that could be damaged (e.g., low limbs, scaffold branches, and trunks) with high-visibility flagging, such as fluorescent red or orange flagging.

Trenching: Except where specifically approved in writing beforehand, all trenching will be outside the fenced protected zone. Where trenching is necessary in areas that contain roots from retained trees, contractors will use trenching techniques that include the use of either a root pruner (Dosko root pruner or equivalent) or an Air-Spade to limit root impacts. An ISA-certified arborist or registered botanist will ensure that all pruning cuts are clean and sharp to minimize ripping, tearing, and fracturing of the root system. Root damage caused by backhoes, earthmovers, dozers, or graders is severe and may result in tree mortality. Use of root-pruning and Air-Spade equipment will be accompanied only by hand removal of soil from trench locations. The trench will be made no deeper than necessary to accommodate the intended materials.

Irrigation/Hand Watering: Irrigation/hand watering of retained Joshua trees on site will seek to mimic natural rainfall patterns in Southern California. As such, irrigation/hand watering is not required unless recommended by the monitoring ISA-certified arborist or registered botanist.

Inspection/Reporting: An ISA-certified arborist or registered botanist will inspect the preserved trees adjacent to grading and construction activity on a monthly basis for the duration of the Project's construction period. A site observation report summarizing site conditions, observations, tree health, and recommendations for minimizing tree damage will be submitted by the ISA-certified arborist or registered botanist following each inspection. Annual monitoring reports to document year-end conditions will also be submitted.

6.3 Maintenance after Construction

Following completion of the construction activity within 20 feet of the protected zones of undisturbed Joshua trees, the tree protection fencing may be removed, and the following measures may be performed to sustain and enhance the vigor of the trees:

Pruning: Regular pruning of the trees is not required.

Watering: The retained trees should not require regular irrigation/hand watering, other than during the 12 months following substantial root pruning, if applicable. Supplemental irrigation/hand watering for the retained trees that sustained root pruning and any newly planted trees may be necessary, especially in years with low winter rainfall.

Watering Adjacent Plant Material: All watering near retained Joshua trees and adjacent vegetation should mimic natural rainfall patterns. Supplemental irrigation of adjacent plant material should not be required.

Monitoring: For the initial 3 months, weekly monitoring by an ISA-certified arborist or registered botanist is recommended to ensure that the watering needs of each tree is being met. Following the initial 3-month monitoring period, it is recommended that the trees be monitored on a monthly basis for 9 months. Following the first year of monitoring, it is recommended that the trees be monitored quarterly (every 3 months) for 3 years. Following each monitoring visit, a site observation report summarizing site conditions, observations, tree health, and recommendations for promoting tree health should be submitted. Any tree mortality will be noted, and any tree dying during the monitoring period will be replaced with the same species as specified per City replacement standards.

INTENTIONALLY LEFT BLANK

7 Fees

Per HMC Section 16.24.080, where permits or reviews are required and they are not incorporated into other review or permit procedures, fees will be paid in accordance with the City's fee schedule.

INTENTIONALLY LEFT BLANK

8 Desert Native Plants

Based on the results of the surveys conducted by Dudek botanists on May 9, 2022, no desert native plant species, except for western Joshua tree, were observed within the Project footprint. Joshua tree is protected by the City of Hesperia's Protected Plant Policy (HMC Chapter 16.24 et seq.), the County of San Bernardino's Desert Native Plant Protection Ordinance, and the state Desert Native Plants Act (i.e., Food and Agricultural Code 80001 et seq.).

In accordance with the California Desert Native Plants Act and HMC Section 16.24.040 (Protected Plant Ordinance), a native plant removal permit must be obtained from the City prior to the removal of Joshua tree.

INTENTIONALLY LEFT BLANK

9 References

CDFW (California Department of Fish and Wildlife). 2020. *California Fish and Game Commission Notice Of Findings, Western Joshua Tree* (Yucca brevifolia). September 24, 2020. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=183565&inline>.

Center for Biological Diversity. 2019. *Before the California Fish And Game Commission: A Petition to List the Western Joshua Tree* (Yucca brevifolia) as *Threatened under the California Endangered Species Act (CESA)*. October 15, 2019. <https://www.biologicaldiversity.org/species/plants/pdfs/CESA-petition-Western-Joshua-Tree-10-15-19.pdf>.

USDA (U.S. Department of Agriculture). 2022. "Web Soil Survey." USDA, Natural Resources Conservation Service. Accessed February 2022. <http://websoilsurvey.nrcs.usda.gov/>.

USGS (U.S. Geological Survey). 2007. Baldy Mesa, California, U.S. Geological Survey 7.5-Minute Topographic Quadrangle Map.

WRCC (Western Regional Climate Center). 2022. "Hesperia, California: Period of Record Monthly Climate Summary." Accessed May 2022. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3935>.

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps; County of San Bernadino 2017

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

Appendix A

Joshua Tree Locations



Appendix B

Tree Information Matrix

Table 1. Western Joshua Tree Information Matrix

Tree No.	Botanical Name	Common Name	D.B.H. (in)	Height (ft.)	Height Classification	Spread (ft.)	Health	Number of Branches	Clonal Status	Number of Clones	Number of Panicles	New Growth	Leaves	Flowers	Open Flowers	Fruit	Fruit Drop	Relocation Potential ¹	Impact Disposition	Location	Notes	Easting (X-Coordinate)	Northing (Y-Coordinate)
1	<i>Yucca brevifolia</i>	Joshua Tree	6	7	>1 meter but <5 meters	4	Good (80)	2	Single Trunk	0	0	Yes	Yes	No	No	No	Yes	Yes	Removal	On-Site	—	6744267.025	1974394.418
2	<i>Yucca brevifolia</i>	Joshua Tree	14	15	>1 meter but <5 meters	18	Good (80)	3	Clone	10	25	Yes	Yes	Yes	Yes	Yes	Yes	No	Removal	On-Site	14, 2, 14, 7,6,13, 8,6,10, 11	6744227.113	1974528.054
3	<i>Yucca brevifolia</i>	Joshua Tree	3	1	≤1 meter	1	Good (80)	1	Single Trunk	0	0	Yes	Yes	No	No	No	No	Yes	Removal	On-Site	—	6744214.416	1974710.253
4	<i>Yucca brevifolia</i>	Joshua Tree	4	1	≤1 meter	1	Good (80)	1	Single Trunk	0	0	No	Yes	No	No	No	No	Yes	Removal	On-Site	—	6744210.936	1974717.188
5	<i>Yucca brevifolia</i>	Joshua Tree	5	6	>1 meter but <5 meters	2	Good (80)	0	Single Trunk	0	0	Yes	Yes	No	No	No	No	N/A	Preserve	Within 186-Ft Buffer	—	6744276.718	1974958.784
6	<i>Yucca brevifolia</i>	Joshua Tree	6	6	>1 meter but <5 meters	2	Good (80)	2	Single Trunk	0	0	Yes	Yes	No	No	No	No	N/A	Preserve	Within 186-Ft Buffer	—	6744326.451	1974952.615
7	<i>Yucca brevifolia</i>	Joshua Tree	1	1	≤1 meter	1	Good (80)	0	Single Trunk	0	0	Yes	Yes	No	No	No	No	N/A	Preserve	Within 186-Ft Buffer	—	6744327.283	1974951.874
8	<i>Yucca brevifolia</i>	Joshua Tree	5	5	>1 meter but <5 meters	1	Good (80)	0	Single Trunk	0	1	Yes	Yes	Yes	No	No	No	No	Preserve	Within 186-Ft Buffer	—	6744301.053	1974914.788
9	<i>Yucca brevifolia</i>	Joshua Tree	13	15	>1 meter but <5 meters	10	Good (80)	3	Single Trunk	0	8	Yes	Yes	Yes	No	Yes	Yes	Yes	Removal	On-Site	—	6744335.056	1974820.176
10	<i>Yucca brevifolia</i>	Joshua Tree	1	3	≤1 meter	1	Good (80)	0	Single Trunk	0	0	Yes	Yes	No	No	No	No	Yes	Removal	On-Site	—	6744337.428	1974700.428
11	<i>Yucca brevifolia</i>	Joshua Tree	6	7	>1 meter but <5 meters	3	Good (80)	2	Single Trunk	0	1	Yes	Yes	No	No	Yes	Yes	Yes	Removal	On-Site	—	6744342.697	1974473.376
12	<i>Yucca brevifolia</i>	Joshua Tree	1	1	≤1 meter	1	Good (80)	0	Single Trunk	0	0	Yes	Yes	No	No	No	No	Yes	Removal	On-Site	—	6744345.353	1974464.232
13	<i>Yucca brevifolia</i>	Joshua Tree	5	8	>1 meter but <5 meters	4	Good (80)	2	Single Trunk	0	2	Yes	Yes	No	No	No	Yes	Yes	Removal	On-Site	—	6744345.905	1974466.774
14	<i>Yucca brevifolia</i>	Joshua Tree	5	6	>1 meter but <5 meters	2	Good (80)	0	Clone	1	1	Yes	Yes	Yes	Yes	No	No	No	Removal	On-Site	6	6744353.424	1974451.693
15	<i>Yucca brevifolia</i>	Joshua Tree	1	1	≤1 meter	1	Good (80)	0	Single Trunk	0	0	Yes	Yes	Yes	No	No	No	Yes	Removal	On-Site	—	6744359.577	1974445.872
16	<i>Yucca brevifolia</i>	Joshua Tree	5	4	>1 meter but <5 meters	1	Good (80)	0	Single Trunk	0	0	Yes	Yes	No	No	No	Yes	Yes	Removal	On-Site	—	6744328.063	1974457.205
17	<i>Yucca brevifolia</i>	Joshua Tree	5	6	>1 meter but <5 meters	2	Good (80)	0	Single Trunk	0	0	Yes	Yes	No	No	No	No	Yes	Removal	On-Site	—	6744545.786	1974387.602
18	<i>Yucca brevifolia</i>	Joshua Tree	6	6	>1 meter but <5 meters	3	Good (80)	3	Single Trunk	0	2	Yes	No	Yes	No	Yes	Yes	Yes	Removal	On-Site	—	6744631.073	1974554.903
19	<i>Yucca brevifolia</i>	Joshua Tree	17	18	≥5 meters	12	Good (80)	3	Clone	2	21	Yes	Yes	Yes	Yes	Yes	Yes	No	Removal	On-Site	16, 16	6744611.043	1974669.150
20	<i>Yucca brevifolia</i>	Joshua Tree	14	12	>1 meter but <5 meters	10	Good (80)	4	Single Trunk	0	5	Yes	Yes	Yes	Yes	No	No	Yes	Removal	On-Site	—	6744515.502	1974857.649

Table 1. Western Joshua Tree Information Matrix

Tree No.	Botanical Name	Common Name	D.B.H. (in)	Height (ft.)	Height Classification	Spread (ft.)	Health	Number of Branches	Clonal Status	Number of Clones	Number of Panicles	New Growth	Leaves	Flowers	Open Flowers	Fruit	Fruit Drop	Relocation Potential ¹	Impact Disposition	Location	Notes	Easting (X-Coordinate)	Northing (Y-Coordinate)
21	<i>Yucca brevifolia</i>	Joshua Tree	19	20	≥5 meters	15	Good (80)	4	Single Trunk	0	10	Yes	Yes	No	No	Yes	Yes	N/A	Preserve	Within 186-Ft Buffer	—	6744666.356	1974982.627
22	<i>Yucca brevifolia</i>	Joshua Tree	4	6	>1 meter but <5 meters	2	Good (80)	0	Clone	1	0	Yes	Yes	No	No	No	No	N/A	Preserve	Within 186-Ft Buffer	—	6744954.841	1974959.602
23	<i>Yucca brevifolia</i>	Joshua Tree	15	20	≥5 meters	15	Good (80)	3	Clone	7	32	Yes	Yes	No	No	Yes	Yes	N/A	Preserve	Within 186-Ft Buffer	6, 13, 13, 11, 7, 6, 11	6745178.785	1974958.128
24	<i>Yucca brevifolia</i>	Joshua Tree	17	20	≥5 meters	15	Good (80)	4	Single Trunk	0	13	Yes	Yes	No	No	Yes	Yes	N/A	Preserve	Within 186-Ft Buffer	—	6744142.001	1974725.131
25	<i>Yucca brevifolia</i>	Joshua Tree	10	12	>1 meter but <5 meters	8	Fair (60)	3	Clone	1	10	Yes	Yes	No	No	Yes	Yes	N/A	Preserve	Within 186-Ft Buffer	Clone is dead	6744384.100	1974925.802
26	<i>Yucca brevifolia</i>	Joshua Tree	3	2	≤1 meter	1	Good (80)	0	Single Trunk	0	0	Yes	Yes	No	No	Yes	Yes	N/A	Preserve	Within 186-Ft Buffer	—	6744310.286	1975036.517
27	<i>Yucca brevifolia</i>	Joshua Tree	6	10	>1 meter but <5 meters	5	Good (80)	3	Single Trunk	0	5	Yes	Yes	No	No	Yes	Yes	N/A	Preserve	Within 186-Ft Buffer	—	6744390.459	1975083.148
28	<i>Yucca brevifolia</i>	Joshua Tree	17	18	≥5 meters	10	Good (80)	3	Single Trunk	0	0	Yes	Yes	No	No	No	No	N/A	Preserve	Within 186-Ft Buffer	—	6744530.209	1975050.755
28a	<i>Yucca brevifolia</i>	Joshua Tree	3	4	>1 meter but <5 meters	1	Good (80)	1	Clone	1	0	Yes	Yes	No	No	No	No	N/A	Preserve	Within 186-Ft Buffer	—	6744055.837	1974791.420
29	<i>Yucca brevifolia</i>	Joshua Tree	4	10	>1 meter but <5 meters	3	Good (80)	3	Single Trunk	0	2	Yes	Yes	Yes	No	Yes	Yes	N/A	Preserve	Within 186-Ft Buffer	—	6744123.738	1974572.351
30	<i>Yucca brevifolia</i>	Joshua Tree	8	17	≥5 meters	2	Good (80)	1	Clone	2	2	Yes	Yes	Yes	No	Yes	Yes	N/A	Preserve	Within 186-Ft Buffer	—	6744063.733	1974594.980
34	<i>Yucca brevifolia</i>	Joshua Tree	6	15	>1 meter but <5 meters	3	Good (80)	3	Clone	6	6	Yes	Yes	No	No	No	No	N/A	Preserve	Within 186-Ft Buffer	Two clones are dead	6745632.421	1974918.512

Notes: D.B.H. = diameter at breast height; ft. = feet.
¹ Relocated trees have been incorporated into the Project’s Landscape Plan.

Appendix C

Site Photographs



Photograph 1. View of mature Joshua trees.



Photograph 2. Alternate view of the site's Joshua trees.



Photograph 3. View of steep ravine and Joshua tree.



Photograph 4. Alternate view of steep ravine on the site.



Photograph 5. Overview of the site.



Photograph 6. General view of the site's Joshua trees.



Photograph 7. Overview of the site.



Photograph 8. Alternate view of the site.



Photograph 9. View of mature Joshua tree.



Photograph 10. Overview of the site.

INTENTIONALLY LEFT BLANK

Appendix D

Joshua Tree Impacts



SOURCE: Bing Maps 2021

Appendix E

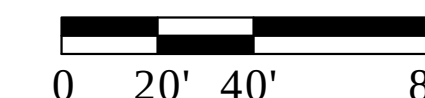
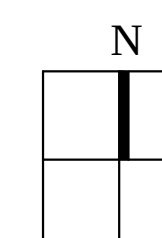
Landscape Plan

LASSEN

MESA LINDA STREET

BUILDING

POPLAR STREET



Poplar 18 Industrial Park

21-121
09.22.21
05.19.22
09.13.22
11.01.22

Hesperia, California



HUNTER LANDSCAPE

711 FEE ANA STREET PLACENTIA, CA 92870
714.986.2400 FAX 714.986.2408

Appendix G

Special-Status Plants Potentially Occurring within the Biological Survey Area

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Asclepias nyctaginifolia</i>	Mojave milkweed	None/None/2B.1	Mojavean desert scrub, Pinyon and juniper woodland/perennial herb/May–June/2,870–5,575	Not expected to occur. Although the BSA is within the species' known elevation range, it contains a minimal amount of suitable desert scrub, and the nearest documented California Natural Diversity Database occurrence is from 1916 and located approximately 5 miles to the south near the summit of the Cajon Pass and could likely be a misidentification (CDFW 2022). Most occurrences are in the Mojave National Preserve (CCH 2022; CDFW 2022). In addition, according to Jepson eFlora (2022), this species occurs on arroyos and dry slopes, which are not present in the BSA.
<i>Astragalus lentiginosus</i> var. <i>antonius</i>	San Antonio milk- vetch	None/None/1B.3	Lower montane coniferous forest, upper montane coniferous forest/perennial herb/ Apr–July/4,920–8,530	Not expected to occur. The BSA is outside of the species' known elevation range and there is no suitable vegetation present.
<i>Botrychium ascendens</i>	upswept moonwort	None/None/2B.3	Lower montane coniferous forest, meadows and seeps; mesic/perennial rhizomatous herb/(June)July–Aug/3,655–9,990	Not expected to occur. Although the BSA is within the known elevation range for this species, it does not contain suitable vegetation communities to support this species.
<i>Botrychium crenulatum</i>	scalloped moonwort	None/None/2B.2	Bogs and fens, lower montane coniferous forest, meadows and seeps, marshes and swamps (freshwater), upper montane coniferous forest/perennial rhizomatous herb/ June–Sep/4,160–10,760	Not expected to occur. The BSA is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Calochortus palmeri</i> var. <i>palmeri</i>	Palmer's mariposa lily	None/None/1B.2	Chaparral, lower montane coniferous forest, meadows and	Not expected to occur. The BSA is outside of the species' known elevation range and

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
			seeps; mesic/perennial bulbiferous herb/Apr–July/2,325–7,840	there is no suitable vegetation present to support this species.
<i>Castilleja lasiorhyncha</i>	San Bernardino Mountains owl's-clover	None/None/1B.2	Chaparral, meadows and seeps, pebble (pavement) plain, riparian woodland, upper montane coniferous forest; mesic/annual herb (hemiparasitic)/ May–Aug/4,265–7,840	Not expected to occur. The BSA is outside of the species' known elevation range and does not contain suitable vegetation to support this species.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	white-bracted spineflower	None/None/1B.2	Coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodland; sandy or gravelly/annual herb/ Apr–June/984–3,935	Absent. This species was not detected during the May 2022 focused survey. The BSA is within the species' known elevation range and suitable desert scrub is present; however, the nearest documented occurrence is approximately 11.7 miles southwest of the BSA along Highway 138 of the Cajon Pass (CDFW 2022). The BSA is just north of the species' geographical range based on occurrences (CCH 2022).
<i>Claytonia peirsonii</i> ssp. <i>peirsonii</i>	Peirson's spring beauty	None/None/1B.2	Subalpine coniferous forest, upper montane coniferous forest; granitic, metamorphic, scree, talus/perennial herb/ (Mar) May–June/4,950–9,005	Not expected to occur. The BSA is outside of the species' known elevation range and there is no suitable vegetation present.
<i>Deinandra mohavensis</i>	Mojave tarplant	None/SE/1B.3	Chaparral, coastal scrub, riparian scrub; mesic/annual herb/(May)June–Oct(Jan)/ 2,095–5,245	Not expected to occur. Although the BSA is within the species' known elevation range, it does not contain suitable vegetation communities, and the nearest documented occurrence is from 1998, approximately 14.5 miles to the north (CDFW 2022).
<i>Diplacus mohavensis</i>	Mojave monkeyflower	None/None/1B.2	Joshua tree woodland, Mojavean desert scrub; sandy or gravelly, often in washes/annual herb/ Apr–June/1,965–3,935	Absent. This species was not detected during the May 2022 focused survey. The BSA is within the species' known elevation range, contains loamy sand soils, and

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
				contains suitable desert scrub shrub vegetation. However, the BSA does not contain suitable gravelly banks of desert washes preferred by this species. The nearest documented occurrence is approximately 12.6 miles north of the BSA along the Oro Grande Wash (CDFW 2022). The BSA is south and west of the species' known geographic range based on occurrence data (CCH 2022).
<i>Eremothera boothii</i> ssp. <i>boothii</i>	Booth's evening-primrose	None/None/2B.3	Joshua tree woodland, pinyon and juniper woodland/annual herb/Apr–Sep/2,670–7,870	Not expected to occur. The BSA is within the species' known elevation range and there is desert scrub habitat present with scattered Joshua trees. There are several documented occurrences along the Mojave River; however, morphology suggests introgression with <i>E. boothii</i> ssp. <i>intermedia</i> , and additional fieldwork is needed (CDFW 2022). Furthermore, based on locational records (Jepson Flora Project 2022) and the Consortium of California Herbaria (CCH 2022), the species is restricted to wash habitat (such as the Mojave River), which is absent from the BSA.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	None/None/1A	Marshes and swamps (coastal salt and freshwater)/perennial rhizomatous herb/Aug–Oct/33–5,000	Not expected to occur. Although the BSA is within the species' known elevation range, it does not contain suitable vegetation to support this species. Furthermore, the BSA is north and east of the species' known geographic range based on occurrence data (CCH 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Heuchera parishii</i>	Parish's alumroot	None/None/1B.3	Alpine boulder and rock field, lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest; rocky, sometimes carbonate/perennial rhizomatous herb/June–Aug/4,920–12,465	Not expected to occur. The BSA is outside of the species' known elevation range and does not contain suitable vegetation or carbonate soils to support this species.
<i>Lilium parryi</i>	lemon lily	None/None/1B.2	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest; mesic/perennial bulbiferous herb/July–Aug/4,000–9,005	Not expected to occur. The BSA is outside of the species' known elevation range and does not contain suitable vegetation to support this species.
<i>Linanthus concinnus</i>	San Gabriel linanthus	None/None/1B.2	Chaparral, lower montane coniferous forest, upper montane coniferous forest; rocky, openings/annual herb/Apr–July/4,985–9,185	Not expected to occur. The BSA is outside of the species' known elevation range and does not contain suitable vegetation to support this species.
<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>	sagebrush loeflingia	None/None/2B.2	Desert dunes, Great Basin scrub, Sonoran desert scrub; sandy/annual herb/Apr–May/2,295–5,295	Absent. This species was not detected during the May 2022 focused survey. Although the BSA is within the known elevation range for this species and does contain suitable vegetation communities, the nearest documented occurrence is approximately 5 miles northwest (CDFW 2022). In addition, according to Jepson eFlora (2022), this species occurs on sand and gravel of hills, mesas, and dunes, which are not present in the BSA.
<i>Lycium parishii</i>	Parish's desert-thorn	None/None/2B.3	Coastal scrub, Sonoran desert scrub/perennial shrub/Mar–Apr/443–3,280	Not expected to occur. The BSA is outside of the species' known elevation range.
<i>Monardella australis</i> ssp. <i>jokerstii</i>	Jokerst's monardella	None/None/1B.1	Chaparral, lower montane coniferous forest; steep scree or talus slopes between breccia,	Not expected to occur. The BSA is outside of the species' known elevation range and

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
			secondary alluvial benches along drainages and washes./perennial rhizomatous herb/ July–Sep/4,425–5,740	does not contain suitable vegetation to support this species.
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	short-joint beavertail	None/None/1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland/perennial stem succulent/Apr–June(Aug)/ 1,390–5,905	Absent. This species was not detected during the May 2022 focused survey. The BSA is within the species' known elevation range and contains suitable vegetation; however, this conspicuous stem succulent would have been observed if present. No <i>Opuntia</i> genera were observed during the May 2022 focused special-status plant survey.
<i>Oreonana vestita</i>	woolly mountain- parsley	None/None/1B.3	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest; gravel or talus/perennial herb/ Mar–Sep/5,295–11,480	Not expected to occur. The BSA is outside of the species' known elevation range and does not contain suitable vegetation to support this species.
<i>Orobancha valida</i> ssp. <i>valida</i>	Rock Creek broomrape	None/None/1B.2	Chaparral, pinyon and juniper woodland; granitic/perennial herb (parasitic)/May–Sep/3,375–6,560	Not expected to occur. Although the BSA is within the species' known elevation range, suitable chaparral and pinyon and juniper woodland are absent, and suitable granitic soils are absent.
<i>Pedimelum</i> <i>castoreum</i>	Beaver Dam breadroot	None/None/1B.2	Joshua tree woodland, Mojavean desert scrub; sandy, washes and roadcuts/perennial herb/ Apr–May/2,000–5,000	Absent. This species was not detected during the May 2022 focused survey. The BSA is within the species' elevation range and contains limited suitable desert scrub vegetation and sandy soils. The nearest documented occurrence is from 1992 and located approximately 10.2 miles southeast (CDFW 2022). The BSA is south and west of the species' known geographic range based on occurrence data (CCH 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Saltugilia latimeri</i>	Latimer's woodland-gilia	None/None/1B.2	Chaparral, Mojavean desert scrub, pinyon and juniper woodland; rocky or sandy, often granitic, sometimes washes/annual herb/ Mar–June/1,310–6,230	Not expected to occur. Although the BSA is within the species' known elevation range and does contain desert scrub and sandy soils, the BSA lacks rocky/granitic soils to support this species. In addition, the BSA is north of the species' known geographic range based on occurrence data (CCH 2022).
<i>Schoenus nigricans</i>	black bog-rush	None/None/2B.2	Marshes and swamps (often alkaline)/perennial herb/ Aug–Sep/492–6,560	Not expected to occur. Although the BSA is within the species' known elevation range, it does not contain suitable vegetation or alkaline soils to support this species.
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	southern mountains skullcap	None/None/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest; mesic/perennial rhizomatous herb/June–Aug/1,390–6,560	Not expected to occur. Although the BSA is within the species' known elevation range, it does not contain suitable vegetation to support this species.
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	None/None/1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic); near ditches, streams, springs/perennial rhizomatous herb/July–Nov(Dec)/7–6,690	Not expected to occur. Although the BSA is within the species' known elevation range, it does not contain suitable vegetation or vernal mesic grasslands to support this species.
<i>Symphyotrichum greatae</i>	Greata's aster	None/None/1B.3	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland; mesic/perennial rhizomatous herb/June–Oct/984–6,590	Not expected to occur. Although the BSA is within the species' known elevation range, it does not contain suitable vegetation to support this species.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range (feet)	Potential to Occur
<i>Yucca brevifolia</i>	western Joshua tree	None/SC/None	Great Basin grassland, Great Basin scrub, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland, Sonoran desert scrub, valley and foothill grassland/perennial leaf succulent/Apr–May/1,310–6,560	Observed. This species was observed within the BSA.

Status Designations

SE: State listed as endangered

SC: State listed candidate species

CRPR (California Rare Plant Rank):

CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere

CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Rank:

1: seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

2: moderately threatened in California (20%–80% of occurrences threatened/moderate degree and immediacy of threat)

3: not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Notes: CRPR = California Rare Plant Rank; BSA = biological survey area.

References

CCH (Consortium of California Herbaria). 2022. CCH2 Portal. Accessed February 2022.
<https://cch2.org/portal/index.php>.

CDFW (California Department of Fish and Wildlife). 2022. RareFind 5, Version 5.2.14. California Natural Diversity Database. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed February 2022.
<https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>.

Jepson Flora Project. 2022. Jepson eFlora. Berkeley, California: University of California. Accessed February 2022 at <http://ucjeps.berkeley.edu/interchange/index.html>.

Appendix H

Special-Status Wildlife Potentially Occurring within the Biological Survey Area

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Amphibians				
<i>Anaxyrus californicus</i>	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering.	Not expected to occur. The BSA does not have aquatic habitat that could support this species.
<i>Rana draytonii</i>	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands.	Not expected to occur. The BSA does not have aquatic habitat that could support this species.
<i>Rana muscosa</i>	mountain yellow-legged frog	FE/SE, WL	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral.	Not expected to occur. The BSA does not have aquatic habitat that could support this species.
Reptiles				
<i>Actinemys marmorata</i>	northwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.	Not expected to occur. The BSA does not have aquatic habitat that could support this species.
<i>Aspidooscelis tigris stejnegeri</i>	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Not expected to occur. The BSA does not contain chaparral, woodland, or riparian habitat that could support this species.
<i>Charina umbratica</i>	southern rubber boa	None/ST	Montane oak-conifer and mixed-conifer forests, montane chaparral, wet meadows; usually in vicinity of streams or wet meadows.	Not expected to occur. The BSA does not contain suitable habitat that could support this species.
<i>Gopherus agassizii</i>	Mojave desert tortoise	FT/ST	Arid and semi-arid habitats in Mojave and Sonoran Deserts, including sandy or gravelly locations along riverbanks, washes, sandy dunes, canyon	Absent. Desert tortoise was not observed during the 2022 focused protocol survey. The BSA contains sandy soils and limited desert scrub vegetation. However, there are no desert

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
			bottoms, desert oases, rocky hillsides, creosote flats, and hillsides.	washes, dunes, or other topographic features preferred by this species. The BSA is also at the most western boundary of the species' range and surrounded by major roads, including Interstate 15 and U.S. Highway 395. The nearest CNDDDB occurrence is from 1990 and located approximately 3.5 miles southeast (CDFW 2022).
<i>Phrynosoma blainvillii</i>	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains, including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper, and annual grassland habitats.	Not expected to occur. Although the BSA area contains sandy soils, there is no suitable vegetation that could support this species. The nearest CNDDDB occurrence is from 2008 and located approximately 4 miles southeast (CDFW 2022).
<i>Thamnophis hammondi</i>	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools.	Not expected to occur. The BSA does not have aquatic habitat that could support this species.
Birds				
<i>Accipiter cooperii</i> (nesting)	Cooper's hawk	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water.	Not expected to occur. The BSA does not contain suitable vegetation that could support this species.
<i>Agelaius tricolor</i> (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture.	Not expected to occur. The BSA does not contain suitable vegetation or aquatic habitat that could support this species.
<i>Aquila chrysaetos</i> (nesting and wintering)	golden eagle	BCC/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats.	Not expected to nest, low potential to forage. The BSA contains semi-open areas with shrub and grassland vegetation. However, there are no large trees or cliffs for this species to use as nesting sites. There are no CNDDDB occurrences within 5 miles of the BSA (CDFW 2022).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	BCC/WL	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter.	Not expected to occur. The BSA does not contain suitable vegetation that could support this species.
<i>Asio otus</i> (nesting)	long-eared owl	None/SSC	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats.	Not expected to occur. The BSA does not contain suitable vegetation that could support this species.
<i>Athene cunicularia</i> (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows.	Moderate potential to occur. The BSA contains flat, open scrub habitat that could support this species. Although an official burrow survey was not conducted, one potentially suitable burrow was noted during the focused protocol desert tortoise survey. The nearest CNDDDB occurrence is from 1989 and located approximately 0.75 miles southwest (CDFW 2022). Several more recent occurrences have been documented within 5 miles north of the BSA.
<i>Buteo swainsoni</i> (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture.	Not expected to occur. The BSA does not contain suitable nesting habitat to support this species and lacks nearby agricultural areas for foraging. It may occur as a transient in the area during migration.
<i>Coccyzus americanus occidentalis</i> (nesting)	western yellow-billed cuckoo	FT, BCC/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories.	Not expected to occur. The BSA does not contain suitable riparian vegetation that could support this species.
<i>Empidonax traillii extimus</i> (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration.	Not expected to occur. The BSA does not contain suitable riparian vegetation that could support this species.
<i>Gymnogyps californianus</i>	California condor	FE/FP, SE	Nests in rock formations, deep caves, and occasionally in cavities in giant	Not expected to occur. The BSA does not contain suitable habitat to support this

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
			sequoia trees (<i>Sequoiadendron giganteus</i>); forages in relatively open habitats where large animal carcasses can be detected.	species. There are no CNDDDB occurrences within a 10-mile radius of the BSA (CDFW 2022).
<i>Haliaeetus leucocephalus</i> (nesting and wintering)	bald eagle	FDL, BCC/FP, SE	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains.	Not expected to occur. The BSA does not contain suitable vegetation, nor is it adjacent to large bodies of water that could support this species. The nearest CNDDDB occurrence is from 1992 and located approximately 8 miles southeast (CDFW 2022).
<i>Icteria virens</i> (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush.	Not expected to occur. The BSA does not contain suitable riparian vegetation that could support this species.
<i>Lanius ludovicianus</i> (nesting)	loggerhead shrike	BCC/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches.	Moderate potential to occur. The BSA contains open habitat that contains tall shrubs (e.g., Joshua tree, California juniper) that can be used for perching and nesting. The nearest CNDDDB occurrence is from 2007 and located approximately 3 miles north (CDFW 2022).
<i>Pandion haliaetus</i> (nesting)	osprey	None/WL	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast.	Not expected to occur. The BSA does not contain suitable vegetation or aquatic habitat that could support this species.
<i>Piranga rubra</i> (nesting)	summer tanager	None/SSC	Nests and forages in mature desert riparian habitats dominated by cottonwoods and willows.	Not expected to occur. The BSA does not contain suitable riparian vegetation that could support this species.
<i>Setophaga petechia</i> (nesting)	yellow warbler	BCC/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats.	Not expected to occur. The BSA does not contain suitable vegetation that could support this species.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Toxostoma lecontei</i>	LeConte's thrasher	BCC/SSC	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree habitats; nests in spiny shrubs or cactus.	Low potential to occur. The BSA contains limited desert scrub and Joshua tree habitat that could support this species. The BSA does contain Mormon tea that could support nesting for this species. The nearest CNDDB occurrence is from 1991 and located approximately 9.5 miles east (CDFW 2022).
<i>Vireo bellii pusillus</i> (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season.	Not expected to occur. The BSA does not contain suitable riparian vegetation that could support this species.
<i>Vireo vicinior</i> (nesting)	gray vireo	BCC/SSC	Nests and forages in pinyon-juniper woodland, oak, and chamise and redshank chaparral.	Not expected to occur. The BSA does not contain suitable vegetation that could support this species.
Fishes				
<i>Rhinichthys osculus</i> ssp. 3	Santa Ana speckled dace	None/SSC	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system.	Not expected to occur. The BSA does not have aquatic habitat that could support this species.
<i>Siphateles bicolor mohavensis</i>	Mohave tui chub	FE/FP, SE	Lacustrine ponds or pools; 4 feet minimum water depth; freshwater flow; mineralized and alkaline environment; habitat for aquatic invertebrate prey and egg attachment substrate; <i>Ruppia maritima</i> preferred for egg attachment and thermal refuge in summer months.	Not expected to occur. The BSA does not have aquatic habitat that could support this species.
Mammals				
<i>Antrozous pallidus</i>	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in human-made structures and trees.	Not expected to roost, low potential to forage. The BSA contains grassland and shrubland vegetation that could support foraging efforts of this species. CNDDB occurrences from 2016 are 9 miles east of the BSA (CDFW 2022).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Chaetodipus fallax pallidus</i>	pallid San Diego pocket mouse	None/SSC	Desert wash, desert scrub, desert succulent scrub, and pinyon-juniper woodland.	Not expected to occur. The BSA does not contain vegetation that could support this species. There are historic CNDDB occurrences from 1921 located 10 miles northeast of the BSA (CDFW 2022).
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, human-made structures, and tunnels.	Not expected to roost or forage. The BSA does not contain suitable vegetation or mesic habitat that could support this species.
<i>Eumops perotis californicus</i>	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels.	Not expected to roost or forage. The BSA does not contain suitable vegetation, cliffs, or tall trees that could support this species.
<i>Glaucomys oregonensis californicus</i>	San Bernardino flying squirrel	None/SSC	Coniferous and deciduous forests, including riparian forests.	Not expected to occur. The BSA does not contain suitable vegetation that could support this species.
<i>Microtus californicus mohavensis</i>	Mojave river vole	None/SSC	Wet, weedy, herbaceous areas along the Mojave River.	Not expected to occur. The BSA does not contain suitable vegetation that could support this species. The BSA is also not located along the Mojave River; the Mojave River is approximately 9 miles east of the BSA.
<i>Ovis canadensis nelsoni</i>	Nelson's bighorn sheep	None/FP	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans.	Not expected to occur. The BSA does not contain suitable topography or vegetation that could support this species.
<i>Spermophilus (Xerospermophilus) mohavensis</i>	Mohave ground squirrel	None/ST	Desert scrub habitats, including those dominated by creosote bush and burrobush, desert sink scrub, and desert saltbush scrub.	Absent. Mohave ground squirrel was not observed during the 2022 focused protocol survey. The BSA contains desert scrub habitat with some creosote bush that could support this species. However, the site does show evidence of previous disturbance and is in

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				close proximity to major roads. The nearest CNDDDB occurrence is from 2005 and located approximately 2.5 miles northwest (CDFW 2022).
<i>Taxidea taxus</i>	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils.	Not expected to occur. The BSA does not contain suitable vegetation to support this species.
<i>Vulpes macrotis arsipus</i>	desert kit fox	None/None ¹	Sparse vegetated scrub habitats such as creosote scrub communities that support abundant rodent populations (Center for Biological Diversity 2013).	Not expected to occur. The BSA does contain sparse vegetated scrub habitats such as rubber rabbitbrush scrub; however, areas surrounding the BSA are conducive to stray dogs and further limit desert kit fox habitat potential in the area.
Invertebrates				
<i>Danaus plexippus</i> pop. 1	monarch	FC/None	Wind-protected tree groves with nectar sources and nearby water sources.	Not expected to occur. The BSA does not include suitable tree groves or nearby water sources to support this species.
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include <i>Plantago erecta</i> , <i>Antirrhinum coulterianum</i> , and <i>Plantago patagonica</i> (Silverado Occurrence Complex).	Not expected to occur. None of the host plants for this species were observed during the 2021 and 2022 biological surveys. Additionally, the BSA does not contain clay soils.

Status Designations**Federal**

FC: Federal candidate for listing

FDL: Federally delisted

FE: Federally listed as endangered

FT: Federally listed as threatened

BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

State

SSC: California Species of Special Concern

FP: California Fully Protected species

WL: California Watch List species

SE: State listed as endangered

ST: State listed as threatened

Notes: BSA = biological study area; CNDDDB = California Natural Diversity Database.

¹ Section 4000 of the California Fish and Game Code defines “kit fox” as a fur-bearing animal.

References

- CDFW (California Department of Fish and Wildlife). 2022. RareFind 5, Version 5.2.14. California Natural Diversity Database. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed February 2022. <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>.
- Center for Biological Diversity. 2013. *Before the California Fish and Game Commission, A Petition to List the Desert Kit Fox (Vulpes macrotis arsipus) as Threatened under the California Endangered Species Act*. March 10, 2013. https://www.biologicaldiversity.org/species/mammals/desert_kit_fox/pdfs/Desert-kit-fox-CESA-petition-3-10-13.pdf.

Appendix I

Burrowing Owl Relocation Plan

Burrowing Owl Relocation Plan

Poplar 18 Project

AUGUST 2022

Prepared for:

POPLAR 18, LLC.

14180 Dallas Parkway, Suite 730

Dallas, Texas 75254

Contact: Dana Whitmer

Prepared by:

DUDEK

605 Third Street

Encinitas, California 92024

Contact: Megan Enright

Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	iii
1 Purpose and Objectives.....	1
1.1 Mitigation Measure BIO-3.....	1
1.2 Tiered Protection Approach.....	2
2 Introduction.....	3
2.1 Project Overview.....	3
2.2 Burrowing Owl Surveys and Mitigation.....	3
2.3 Qualified Biologist.....	4
3 Avoidance and Minimization Measures.....	5
3.1 Pre-Construction Burrowing Owl Surveys.....	5
3.2 Setback Distances.....	5
3.3 Shelter in Place.....	6
3.4 Excavation of Inactive Burrows.....	7
4 Passive Displacement.....	9
4.1 Belowground Artificial Burrows.....	9
4.2 Aboveground Artificial Burrows.....	10
5 Monitoring and Reporting.....	11
5.1 Relocation Monitoring.....	11
5.2 Reporting Requirements.....	11
6 References.....	13

TABLE

1 Burrowing Owl Burrow Buffers.....	6
-------------------------------------	---

FIGURES

1 Regional Map.....	15
2 Project Vicinity.....	17

INTENTIONALLY LEFT BLANK

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CDFW	California Department of Fish and Wildlife
MM	Mitigation Measure
Project	Poplar 18 Project

INTENTIONALLY LEFT BLANK

1 Purpose and Objectives

The following Burrowing Owl Relocation Plan (Relocation Plan) describes the burrowing owl (*Athene cunicularia*) monitoring and reporting requirements during construction of the Poplar 18 Project (Project) as recommended in the Biological Resources Technical Report prepared for the Project by the City of Hesperia Planning Department and Dudek (Dudek 2022). This Relocation Plan was prepared in accordance with Mitigation Measure (MM) BIO-3 included in the Biological Resources Technical Report. The full text of MM-BIO-3 is provided in Section 1.1 for ease of reference.

This Relocation Plan is intended to identify when passive displacement of burrowing owl will be used, the methods that will be implemented to perform passive displacement, and the monitoring and reporting that will be required if passive displacement is performed. More specifically, this Relocation Plan includes descriptions of the following requirements for passive displacement procedures: (1) methods to confirm a burrow is active, (2) scoping methods that would be used to avoid impacts, (3) methods to be used to determine vacancy and excavation timing, (4) methods for burrow excavation, (5) removal of other potential owl burrow surrogates or refugia, (6) reporting methods of the excavation and closure of burrows, (7) monitoring to evaluate success, and (8) reporting methods of long-term burrowing owl deterrence of the impacted site.

1.1 Mitigation Measure BIO-3

MM-BIO-3 **Pre-Construction Surveys for Burrowing Owl and Avoidance.** One pre-construction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the Project site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the 2012 (or current version) Staff Report on Burrowing Owl Mitigation prepared by the California Department of Fish and Wildlife (CDFW).

If burrowing owls are detected, a Burrowing Owl Relocation Plan shall be implemented in consultation with CDFW. As required by the Burrowing Owl Relocation Plan, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (current version). No Project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed.

Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Owls shall be excluded from burrows in the immediate Project area and within a buffer zone by installing one-way doors in burrow entrances. These doors shall be placed at least 48 hours prior to ground-disturbing activities. The Project area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Compensatory mitigation for permanent loss of owl habitat shall be provided following the guidance in the Staff Report on Burrowing Owl Mitigation (current version).

Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow.

1.2 Tiered Protection Approach

The following protection measures may be implemented to avoid and minimize impacts to burrowing owl:

1. **Avoidance** – During the burrowing owl breeding season (i.e., nesting season; February 1 through August 31),¹ active burrows will be avoided by establishing setback distances around active burrows. A monitoring program will be implemented (see Section 3.2, Setback Distances) to determine the effectiveness of the buffer distances and help inform any adaptive management strategies.
2. **Shelter in Place** – If the established buffer is not effective, the buffer will be increased where possible to a point where Project activities cease to cause disturbance. Sheltering with sound and visual barriers made of hay bales or other materials may be used as appropriate to provide necessary protection from disturbance when an established avoidance buffer is determined not to be effective or a buffer distance must be reduced because avoiding construction in the area is not feasible. If a qualified biologist determines that the use of barriers will not cause disturbance to the owl(s) and the setup of the barriers is far enough away so the setup or the presence of the barrier does not cause disruption to the owl(s), this will be the primary protective measure that will be used because it is the ideal strategy to minimize disturbance and keep existing burrows intact.
3. **Passive Displacement** – The exclusion of burrowing owls from occupied burrows within the areas of disturbance using one-way doors will be used during the non-breeding season (September 1 through January 31) when shelter-in-place is not feasible. Passive displacement will only be implemented where the owls or their burrows are in physical danger by construction.

Further details on implementation of the first two approaches are provided in Chapter 3, Avoidance and Minimization Measures, of this Relocation Plan. Details on the passive displacement approach are provided in Chapter 4, Passive Displacement, of this Relocation Plan. Although the focus of this Relocation Plan is on the passive displacement approach, the intent of this tiered approach is to create an adaptive management process for protecting burrowing owls by allowing the flexibility to make improvements based on site conditions at the time of construction. The adaptive management strategy will allow for adjustments to mitigation and monitoring techniques, provided the results are beneficial to the species. In addition, this Relocation Plan should be adjusted to include any improved techniques or methods that may become available during its implementation.

¹ The Staff Report on Burrowing Owl Mitigation (CDFG 2012) defines breeding (nesting) season to include pairing, egg-laying and incubation, and nestling and fledgling stages from February 1 through August 31. However, breeding activities may vary with latitude and climatic conditions.

2 Introduction

2.1 Project Overview

The approximately 22.9-acre Project site is located in the western portion of the City of Hesperia within San Bernardino County (Figure 1, Regional Map; Figure 2, Project Vicinity). The Project site is located in the southwest quadrant of Interstate 15 and Main Street. More specifically, the site is south of Main Street, west of Cataba Road and Mesa Linda Street, north of Interstate 15 and Poplar Street, and east of U.S. Highway 395 and Lassen Road. The Project site is currently vacant land that is surrounded by varying levels of development and disturbance.

The Project would involve construction of a 414,700-square-foot industrial/warehouse building and associated improvements. The Project would also include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape areas. Additionally, the Project would include improvements along Mesa Linda Street, Lassen Street, and Poplar Street, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project frontage's landscape setback area and within the landscape areas found around the proposed industrial/warehouse building and throughout the Project site.

2.2 Burrowing Owl Surveys and Mitigation

Biological resource surveys of the Project site and surrounding area were conducted in November 2021. During these surveys, burrowing owl was not observed on the Project site or in the Off-Site Improvement Area; however, suitable habitat exists on site, and the species could eventually occupy the Project site or Off-Site Improvement Area prior to construction. Pursuant to the California Fish and Game Code and the Migratory Bird Treaty Act, a pre-construction survey in compliance with the Staff Report on Burrowing Owl Mitigation, State of California Natural Resource Agency, Department of Fish and Game (2012 Staff Report) (CDFG 2012) would be necessary to reevaluate the locations of potential burrowing owl burrows located within the Project site so take of owls or active owl nests can be avoided. Consistent with MM-BIO-3, a pre-construction survey for burrowing owl will be conducted in areas supporting potentially suitable habitat and within 14 days prior to the start of construction activities, and a second survey will be completed within 24 hours of the start of site preparation or grading activities.

The Project would result in the loss of 16 acres of suitable habitat for burrowing owl. As required by MM-BIO-3, mitigation for direct impacts to western Joshua trees (*Yucca brevifolia*) will be fulfilled through conservation of western Joshua tree through purchase of credits at a California Department of Fish and Wildlife (CDFW) approved mitigation bank or other conservation mechanism approved by the City of Hesperia and CDFW. Conservation efforts for western Joshua tree associated with the Western Joshua Tree Mitigation Fund will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site. Mitigation for impacts to western Joshua tree will also mitigate for impacts to loss of suitable habitat for burrowing owl.

If passive displacement of burrowing owl is implemented, at least two artificial or natural surrogate burrows will be built, enhanced, or identified for every entrance to the burrow that will be collapsed (see Chapter 4). If artificial burrows need to be installed, they will be established according to the recommendations in the 2012 Staff Report prior to excluding burrowing owls.

2.3 Qualified Biologist

In accordance with the 2012 Staff Report (CDFG 2012), a qualified biologist meets the following minimum qualifications:

4. Familiarity with the species and its local ecology
5. Experience conducting habitat assessments and non-breeding and breeding season surveys, or experience with these surveys conducted under the direction of an experienced surveyor
6. Familiarity with the appropriate state and federal statuses related to burrowing owls, scientific research, and conservation
7. Experience with analyzing impacts of development on burrowing owls and their habitat.

In accordance with the 2012 Staff Report, a qualified biologist will perform the burrowing owl surveys, as outlined in MM-BIO-3. Occupied burrows will not be disturbed during the nesting season. Occupied burrows will not be disturbed during the non-nesting season until a qualified biologist verifies that either nesting has not begun, or juveniles from the occupied burrows are foraging independently and are capable of independent survival.

3 Avoidance and Minimization Measures

3.1 Pre-Construction Burrowing Owl Surveys

In accordance with MM-BIO-3, a qualified biologist (see Section 2.3) will conduct surveys of both permanent and temporary impact areas, as well as within a 150-meter buffer, no more than 14 days prior to the start of the construction activities and again within 24 hours of the start of site preparation or grading. The surveys will identify active wintering or breeding burrowing owls within these areas.

The survey methods are detailed in the 2012 Staff Report and will consist of walking parallel transects 7 to 20 meters apart over the entire survey area and noting all burrowing owls present and any potential burrows with burrowing owl sign. The results of the surveys will be submitted to CDFW.

If burrowing owls are detected during pre-construction surveys, the qualified biologist or monitoring biologist will coordinate with the contractor to avoid and minimize impacts to burrowing owl by implementing the measures described below.

3.2 Setback Distances

Based on the results of the pre-construction surveys, levels of construction disturbance, stage of nesting/breeding season, and applicable mitigation measures outlined in the 2012 Staff Report, setback distances will be determined and implemented surrounding the occupied burrowing owl burrows. Ground-disturbing activities will be restricted within these distances to avoid and minimize potential impacts to burrowing owl.

To determine an appropriate and effective setback distance, the site-specific determination methods described in the 2012 Staff Report will be used to decide if the suggested buffer distances are appropriate. The setback distances will also be determined based on any shelter-in-place actions taken (see Section 3.3). The qualified biologist will use the following information to determine the appropriate buffer distances:

- Time of year, activity of the burrow, and the level of disturbance that will occur (summarized in the 2012 Staff Report and Table 1)
- Topography
- The individual burrowing owl's sensitivities and ability to habituate to stimuli
- Shelter-in-place and barrier activities occurring (see Section 3.3)
- Existing vegetation
- Near-by land use and tolerance level of the burrowing owl to surrounding activities
- The level of disturbance associated with specific work activities
- Biological monitor presence

Table 1. Burrowing Owl Burrow Buffers

Resource	Time of Year	Level of Disturbance		
		Low	Medium	High
Nesting sites	April 1–August 15	656 feet	1,640 feet	1,640 feet
Nesting sites	August 16–October 15	656 feet	656 feet	1,640 feet
Any occupied burrow	October 16–March 31	164 feet	328 feet	1,640 feet

Source: CDFG 2012

A monitoring program will be implemented when any setback distance is applied to active burrows to ensure that the distance is an effective buffer. Effective buffers minimize direct impacts by providing space between the bird and the construction activity. In addition, effective buffers minimize indirect impacts by decreasing sound and visual disturbance to the burrowing owl. A monitoring biologist will be present during all initial activities adjacent to burrowing owl buffers to monitor the birds' behavior. In any case where a burrowing owl shows signs of stress or disturbance due to construction activities, all activities in the immediate vicinity will be halted and the buffer distance and construction activities will be reevaluated. In accordance with MM-BIO-3, no Project activities will be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer will remain in place until it is determined that any nesting activity has ended and/or occupied burrows have been vacated.

3.3 Shelter in Place

A shelter-in-place strategy may be implemented to minimize potential impacts to burrowing owls where appropriate and feasible. This strategy involves screening burrows by installing hay bales, plywood, and/or other fencing material to create a visual and auditory barrier between construction activities and the burrow. Biological monitors will need to determine if a specific site, especially the site's topography, is appropriate for the use of these techniques, and whether these techniques will be effective at reducing disturbance. Where appropriate, setback buffers can be reduced by screening burrows as a way to reduce indirect impacts.

During the breeding season, hay bales can be stacked three bales high and 50 feet wide. During the non-breeding season, hay bales can be stacked two bales high and 50 feet wide. All hay bales used on the Project site will be certified as weed-free. Perches near the burrow will remain within the sheltered area of the bales; the bales will not be closer than 2 or 3 feet from the occupied burrow and will be placed as far from the active burrow as possible, outside of the nearest work area. During and following installation of the shelter, biological monitors will be present for all ground-disturbing activities within the area between the 2012 Staff Report guideline buffer (Table 1) and the edge of the reduced buffer.

Biological monitors will be present to evaluate and make adjustments to the buffer and/or shelter to ensure impacts to burrowing owls are minimized and the birds are not showing signs of stress or disturbance. When determining an appropriate setback distance, the qualified biologist will take into consideration any data collected on the individual sensitivities of the burrowing owls present at the Project site. This data will be used as a baseline to compare the behavior of burrowing owls within no-disturbance buffers that are smaller than the 2012 Staff Report guideline distances. Biological monitors will have the authority to stop construction or sheltering activities that are disturbing sensitive species and make changes to the shelters and buffers in accordance with these guidelines to increase protection of burrowing owl.

Documentation of the installation of a shelter will include where and when the shelter was installed, how long it will be required, anticipated level of construction activity, pictures of the shelter, pictures of installation, a description of the installation, and a description of site conditions. Site conditions to be included are surrounding vegetation, topography of the area, animals present at the burrow, and line-of-sight conditions between the burrow and construction activities. This information and a status of the shelters in place will be described in the monthly reports (Section 5.2, Reporting Requirements).

3.4 Excavation of Inactive Burrows

Excavation of inactive burrows, confirmed inactive based on wildlife camera monitoring, will help deter burrowing owls from occupying construction areas. Pre-construction surveys (described above) will be conducted within the Project site to determine if burrows are actively being used. If burrows are suitably sized, game cameras will be installed at the entrance for 3 days to confirm lack of presence. Inactive burrows will be excavated and refilled by a qualified biologist. To prevent injury to wildlife that might be inside the burrow, all excavation of inactive burrows will be performed using hand tools, escape routes will be installed (flexible plastic pipe), and a mirror or camera will be used to scope during the excavation of any burrow that was previously classified as active or potentially active. The excavation of inactive burrows will occur prior to clearing or grading activities.

INTENTIONALLY LEFT BLANK

4 Passive Displacement

If an active burrow is identified in an area where there is potential for it or the tunnel structure to be destroyed or irreversibly affected by construction, and the owl would be in danger and shelter in place, setback distances, and avoidance will not be effective or possible, passive displacement will be implemented. Passive displacement will only occur outside of the breeding season (September 1 through January 31) after a qualified biologist verifies that juveniles from the burrow are foraging independently and capable of independent survival, or the owls have not begun nesting. If exclusion will occur immediately (within 1 week) after the end of the breeding season (August 31), daily monitoring will be conducted for 1 week to confirm that young have fledged prior to exclusion. Similar to the excavation of inactive burrows, a mirror or camera will be used to scope all previously active burrows to ensure burrows are not occupied by eggs or young.

Burrowing owls will be excluded from currently occupied burrows by installation of a one-way door in the original burrow and in all legally accessible surrounding potentially active burrows within 160 feet, which will remain in place at least 48 hours before excavation. The one-way doors will be monitored for exiting or trapped animals. Once a qualified biologist can determine by site surveillance that the old burrows are vacant, with no sign of fresh use by wildlife, including tracks, scat, or recent excavation, the burrows will be excavated according to the guidelines described above. Each burrow will be refilled with dirt and/or rocks to prevent reoccupation of the burrows.

Prior to burrow collapse, the qualified biologist will be required to obtain confirmation that the burrows are empty of wildlife, that the installation of one-way doors occurred 48 hours in advance of burrow excavation, and that the removal of other potential burrow surrogates or refugia occurred on the Project site, and confirm the location of artificial or natural relocation burrows. Prior to passive displacement being implemented, at least two artificial or natural surrogate burrows will be built, enhanced, or identified for every entrance that will be collapsed. Ideally, exclusion and burrow closure would be employed only where there are adjacent natural burrows and non-impacted, sufficient habitat for burrowing owls to occupy with permanent protection mechanisms in place. However, if artificial burrows need to be installed, they will be established according to the recommendations in the 2012 Staff Report and can be either aboveground or belowground. Additional details on each type of artificial burrow are provided below.

4.1 Belowground Artificial Burrows

A backhoe or similar equipment will be used to excavate a trench for the entrance and exit openings, access-way, and nesting chamber. The bottom of the nest box will be 4 feet below the ground surface. Hardware cloth or cement board will be installed below the nest box to prevent digging predator access. An access tunnel will extend for a minimum of 12 feet from the nest and will be made of 4-inch flexible perforated irrigation hose to prevent flooding. The first 6 feet of hose near the nest box will be level with the box, and the last 6 feet will angle up at least 30 degrees to the ground level. A rigid 6-inch pipe will be used as a protective sleeve over the irrigation hose to prevent predation. Each opening will also have an apron of dirt spread by hand to mimic the original burrow. White-painted stakes will be placed around the burrow openings to mark its location and attract burrowing owls. These stakes will be visible from within the opening and not be placed behind the opening, as predators may perch on these.

4.2 Aboveground Artificial Burrows

The artificial nest box and entrance tubes will be placed flat on the ground surface when constructing an aboveground burrow. Soil will be applied, first by hand to stabilize the structure followed by larger equipment, to build a 5-foot-high mound on top of the nest. Perches consisting of wooden T-stakes can be placed near the burrow entrance for both aboveground and belowground burrows to potentially reduce the flushing distance of a disturbed owl. Both types of artificial burrows will also include rock armoring or concrete block armoring to protect tunnels and nest chambers from predators, and will not impact existing burrows.

5 Monitoring and Reporting

5.1 Relocation Monitoring

In accordance with the 2012 Staff Report, monitoring will occur before, during, and after exclusion of burrowing owls to ensure take is avoided. In accordance with MM-BIO-3, if exclusion occurs, a qualified biologist will conduct daily monitoring for 1 week to confirm owls have vacated the burrows. Biologists will examine the collapsed burrow and survey for owl-related impacts and new burrows in the surrounding area. If the artificial burrows are found to be unusable during any monitoring visit, repairs and maintenance to restore function to the burrow or the installation of a new burrow at the same location will be required. The results of these monitoring efforts and an evaluation of the success of the relocation efforts will be included in the monthly compliance reports, along with any needed remedial measures to avoid take.

5.2 Reporting Requirements

Pre-Construction Clearance Survey Reports

A report will be submitted to CDFW documenting the results of the pre-construction surveys. The report will describe the methods and results of the clearance surveys, and will serve as notification as to whether owl relocation is necessary.

Monthly Reports

If avoidance or passive relocation is implemented, monthly reports will be prepared for submittal to CDFW. The reports will summarize the construction activities that occurred with the potential to impact burrowing owl, any injuries or fatalities of burrowing owl, the effectiveness and practicality of the avoidance and minimization measures implemented, and recommendations for modifying the protection measures. If passive relocation of burrowing owls is performed, the monthly reports will also include the following: the total number and locations of burrows collapsed, a map of those locations, the total number and locations of artificial or natural surrogate burrows installed or enhanced (including a map), photographs of the excavation and closure of the burrows, photographs of artificial or natural surrogate burrows, the number and activity of the owls observed leaving the burrows to be excavated, the methods used to continually make the Project site inhospitable to burrowing owls and fossorial mammals, and the monitoring results of passive relocation and mitigation areas.

Final Compliance Report

A final compliance report will be submitted to CDFW summarizing the effectiveness of the mitigation measures and the level of burrowing owl take associated with the Project.

INTENTIONALLY LEFT BLANK

6 References

- CBOC (California Burrowing Owl Consortium). 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*.
http://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html.
- CDFG (California Department of Fish and Game). 2012. *Staff Report on Burrowing Owl Mitigation*. State of California, Natural Resources Agency. March 7, 2012.
- Dudek. 2022. *Biological Resources Technical Report for the Poplar 18 Project*. August 2022.

INTENTIONALLY LEFT BLANK

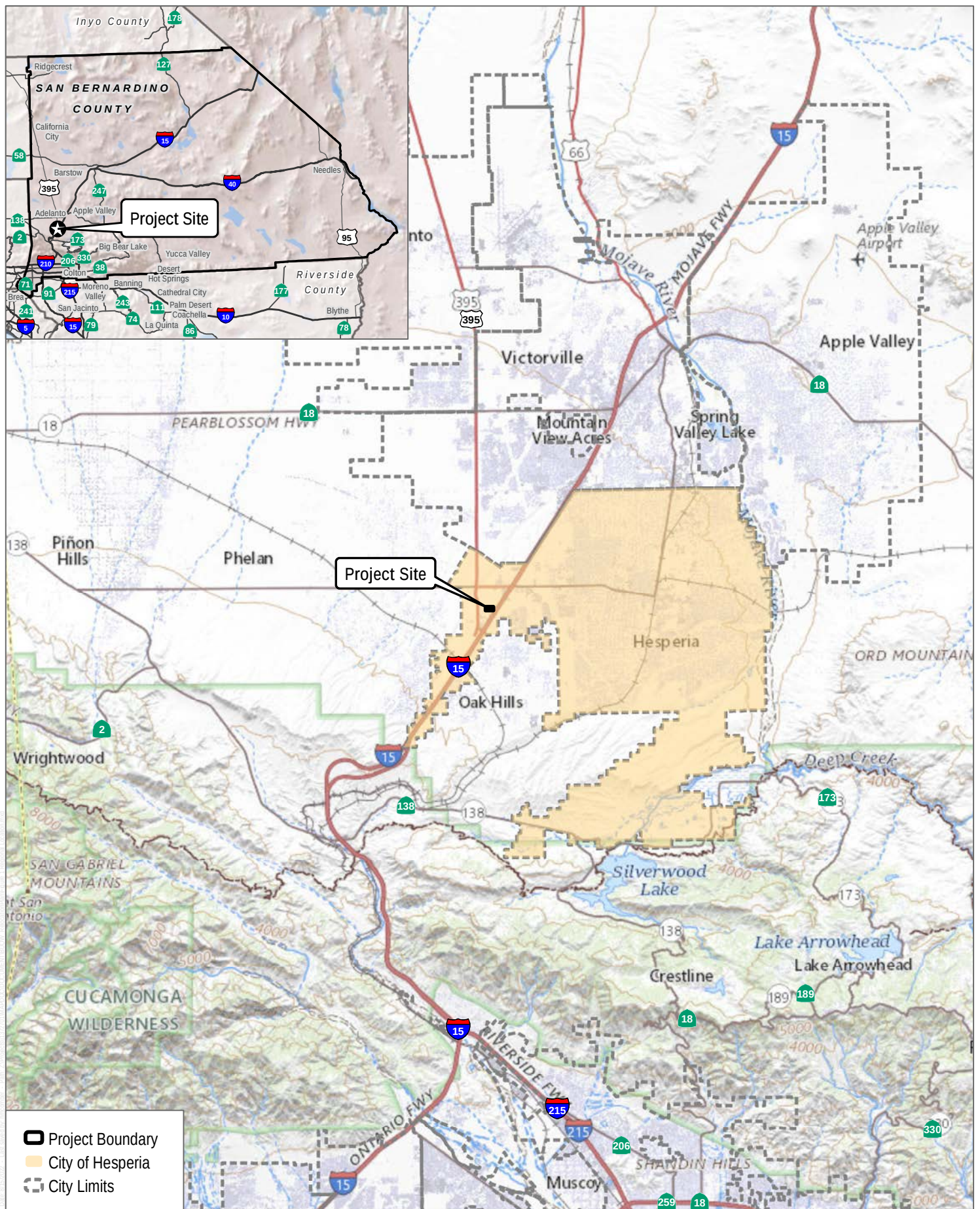
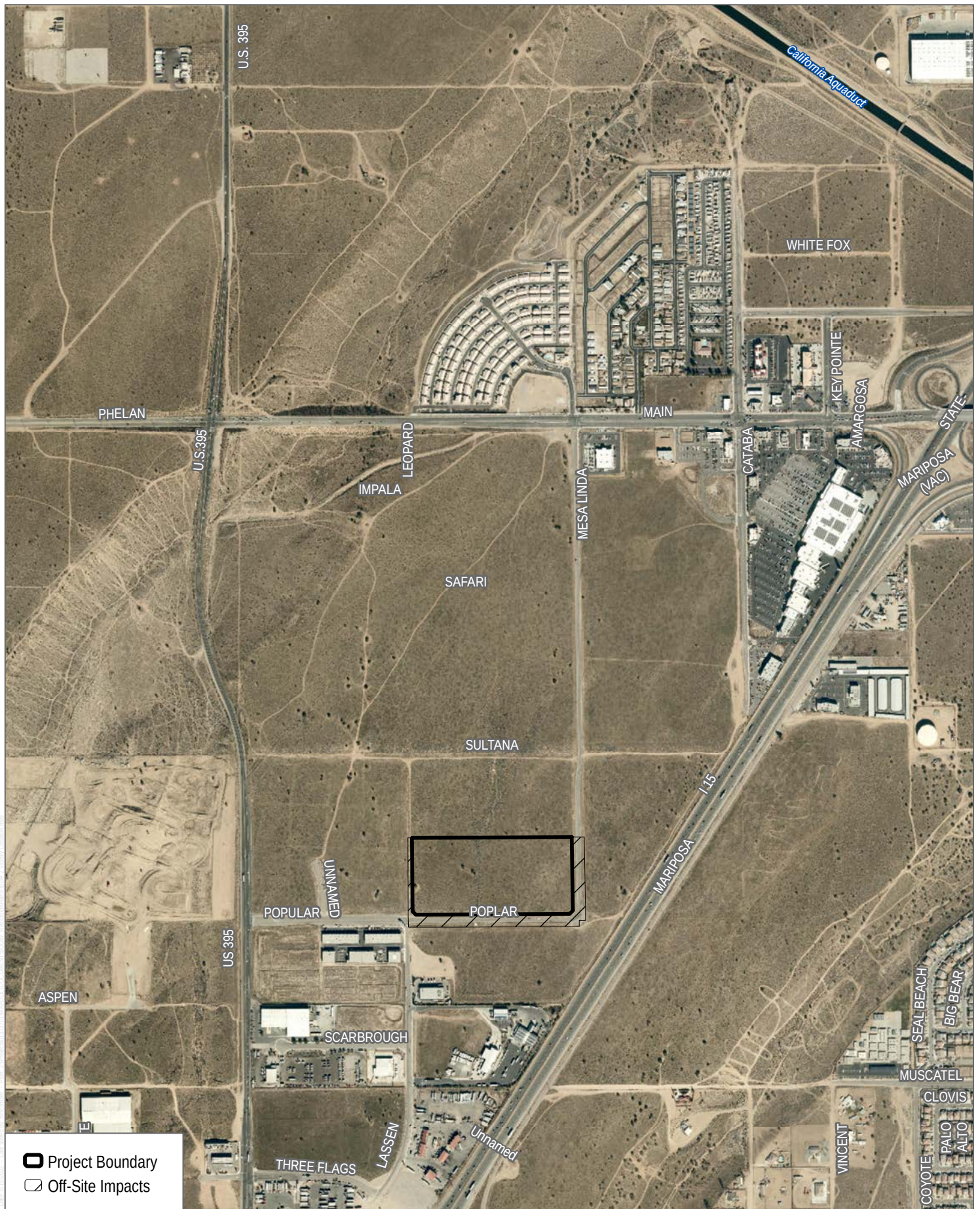


FIGURE 1

Regional Map

Burrowing Owl Relocation Plan for the Poplar 18 Project

INTENTIONALLY LEFT BLANK



SOURCE: Bing Maps; County of San Bernadino 2017

FIGURE 2

Project Vicinity

Burrowing Owl Relocation Plan for the Poplar 18 Project

INTENTIONALLY LEFT BLANK

Appendix D

Cultural Resources Assessment Report

August 5, 2022

13727

Mr. Mark S. Milakovich
President, Covington Realty Advisors, LLC
Partner, Covington Group, Inc.
14180 Dallas Parkway, Suite 730
Dallas, Texas 75254

Subject: Draft Cultural Resources Assessment for the Poplar 18 Project, City of Hesperia, San Bernardino County, California

Dear Mr. Mark S. Milakovich:

This letter report documents the cultural resources assessment conducted by Dudek for the Poplar 18 Project (Project), located within the City of Hesperia, San Bernardino County, California. The present study documents the results of a California Historical Resources Information System (CHRIS) records search conducted at the South Central Coastal Information Center (SCCIC), review historical maps and aerial photographs, review of a geotechnical report prepared for the Project site, an archaeological pedestrian survey, an analysis of the sensitivity of the Project site to contain cultural resources, as well as management recommendations. The City of Hesperia (City) is the lead agency responsible for compliance with California Environmental Quality Act (CEQA).

Project Location

The approximately 17.87-acre Project site is located in the western part of the City, which is situated in the Victor Valley/High Desert region in western San Bernardino County. Specifically, the Project site falls on public land survey system Section 22 of Township 4 North, Range 5 West on the *Baldy Mesa*, CA 7.5-minute United States Geological Survey (USGS) Quadrangle (Appendix A: Figure 1, Project Location). The Project site is located south of Main Street, west of Cataba Road and Mesa Linda Street, north of Interstate 15 (I-15) and Poplar Street, and east of U.S. Route 395 (US 395) and Lassen Road (Appendix A: Figure 2, Project Site). The Project site is located on two parcels consisting of Assessor's Parcel Numbers (APNs) 3064-581-04-0000 and 3064-581-05-0000.

Project Description

The Project would include construction of two industrial/warehouse building and associated improvements on 17.87 acres of vacant land. The Project would provide 414,700 square feet of industrial/warehouse space and include associated improvements, such as loading docks, tractor-trailer stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area. The Project would include improvements along Mesa Linda Street, Lassen Street, and Poplar Street, including frontage landscaping and pedestrian improvements. A variety of trees, shrubs, plants, and land covers would be planted within the Project's frontage landscape setback area,

including along Poplar Street, Lassen Road, and Mesa Linda Street, as well as within the landscape areas found around the proposed industrial/warehouse buildings and throughout the Project site.

Access to the Project site would be provided by four driveways:

- Lassen Road North Driveway – 45 feet wide, full access (passenger cars and trucks) driveway with stop sign
- Lassen Road South Driveway – 30 feet wide, full access (passenger cars only) driveway with stop sign
- Mesa Linda Street North Driveway - 45 feet wide, full access (passenger cars and trucks) driveway with stop sign
- Mesa Linda Street South Driveway – 30 feet wide, full access (passenger cars only) driveway with stop sign

Paved passenger vehicle parking areas would be provided within areas west, northeast, and east of the building, while tractor-trailer stalls and loading docks would be located north of the building. In total, the Project would provide approximately 54 loading dock positions, approximately 54 tractor-trailer stalls, and approximately 182 passenger vehicle parking spaces (including accessible and EV charging stalls).

Given the vacant, undeveloped nature of the Project site, both wet and dry utilities, including domestic water, sanitary sewer, and electricity, would need to be extended onto the Project site as follows:

- Within the immediate vicinity of the Project site, existing water lines include water lines within Poplar Street and Mesa Linda Street.
- Within the immediate vicinity of the Project site, existing sewer lines include a gravity line starting east of Highway 395 in line with Sultana Street (to the north of the Project site) and another also going from east to west along Poplar Street.

Additionally, a new engineered stormwater drainage system would be constructed on the Project site to collect and treat on-site stormwater. Post-development, stormwater flows would be captured on site and treated within a series of aboveground and underground infiltration facilities. At-grade stormwater detention basins would be located in the northwest and northeast corners of the Project site. Stormwater flows would be conveyed via sheet flows away from buildings and where possible, through below-grade, landscaped areas prior to entering the nearest catch basin and subsequently being conveyed to the infiltration and retention facilities. The landscaped areas would act as the first filter for detaining suspended solids in stormwater flows. The detention basins would be planted with native grasses and erosion control vegetation along their side banks. The new stormwater drainage system would connect to the existing 36-inch-diameter storm drain located approximately 350 feet south of the intersection of Main Street and Cataba Road via the following:

- Construction of a new storm drain from the northeastern corner of the project site to the intersection of Sultana Street and Mesa Linda Street. This line would then run north to Main Street, where it would run east and connect with the existing municipal storm drain line within Main Street that discharges into Oro Grande Wash.

In addition to the proposed construction and improvement activities discussed above, upgrades would be required with respect to electric power, natural gas, and telecommunication facilities (i.e., cable television services). These utilities would be part of a dry utility package that would be installed on site from their locations immediately fronting the Project site to provide service to the Project.

Based on a review of the grading plans and recommendations of the geotechnical report prepared for the Project site, the minimum depth of ground disturbance for the Project site is between 2 to 4 feet below the existing ground surface for proposed foundation bearing grade, existing and proposed pad grade, including the removal of existing vegetation such as native grasses, shrubs, and trees. Ground disturbing activities associated with utilities is assumed to be no deeper than 5 feet below the existing ground surface. It is also assumed that a maximum depth of 20 feet below the existing ground surface is anticipated for the installation of the two detention basins within the northwest and northeast corners of the Project site. All proposed ground disturbing work would occur within native alluvium.

Environmental Setting

The currently vacant and undeveloped Project site is situated within the geomorphic province of the Mojave Desert, which is bound to the northwest and south by the Transverse Ranges including the northern peninsular Tehachapi Mountains and the southern San Gabriel Mountains and San Bernardino Mountains. More specifically, the Project site is within Victor Valley in the western Mojave Desert. Water sources near the Project site include the Mojave River approximately 8.5-miles to the east, the Oro Grande Wash, a tributary of the Mojave River, approximately 0.25-mile to the west, and the California Aqueduct 1 mile to the north. The Project site is relatively flat with elevation ranges between approximately 3,548 and 3,611 feet above mean sea level (amsl) and a local topographic gradient of an approximate 2% decrease towards the northeast (Google 2021). There are no substantial topographical features in the Project site. However, smaller ephemeral desert washes that drain to the Mojave River are present within the Project site.

Land uses surrounding the Project site primarily consist of vacant land, along with some scattered residential, commercial, light industrial, and utility uses. Specific land uses located in the immediate vicinity of the Project site include vacant land and scattered commercial, light industrial, and residential uses to the north; commercial uses and the I-15 to the east; vacant land and the I-15 to the south; and vacant land, US 395, and scattered light industrial and commercial uses to the west.

Ground surface cover consists of moderate native brush and shrub growth, with occasional Juniper and Joshua trees located throughout the site. Both sites are subject to disturbance as a result of illegal dumping and trespassing. These unpermitted activities have led to areas of exposed bare soils (where trails have formed) and several debris piles.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2021a), one soil type has been identified in the Project site: Hesperia Loamy Fine Sand, 2 to 5% slopes. The Hesperia soil series official soil description is summarized as follows (USDA 2021b).

Hesperia Series: The Hesperia series consists of very deep, well drained soils that formed in alluvium derived primarily from granite and related rocks. Hesperia soils are on alluvial fans, valley plains, and stream terraces, and have slopes of 0 to 9%. A typical Hesperia pedon extends from 0 to 77 inches below ground surface (bgs).

The Project site is noted to be covered by older alluvium. A review of the United States Geological Society (USGS) mineral resources (USGS 2021) online spatial data for geology indicates that native soils within the Project site are comprised of Older Quaternary alluvium and marine deposits from the Pleistocene epoch. The terminal Pleistocene-era alluvial formations do have the potential to support the presence of buried archaeological resources. These soils are associated with the period of prehistoric human use that have potential to preserve cultural material in context, depending on area-specific topographical setting.

Regulatory Context

Work for this Project was conducted in compliance with the California Environmental Quality Act (CEQA). The regulatory framework as it pertains to cultural resources under CEQA is detailed below.

Under the provisions of CEQA, including the CEQA Statutes (PRC Sections 21083.2 and 21084.1), the CEQA Guidelines (14 CCR 15064.5), and California Public Resources Code (PRC) Section 5024.1 (14 CCR 4850 et seq.), properties expected to be directly or indirectly affected by a Project must be evaluated for California Register of Historical Resources (CRHR) eligibility (PRC Section 5024.1).

The purpose of the CRHR is to maintain listings of the state's historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change. The term historical resources includes a resource listed in or determined to be eligible for listing in the CRHR; a resource included in a local register of historical resources; and any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a]). The criteria for listing properties in the CRHR were developed in accordance with previously established criteria developed for listing in the National Register of Historic Places. The California Office of Historic Preservation regards "any physical evidence of human activities over 45 years old" as meriting recordation and evaluation (OHP 1995:2).

State

The California Register of Historical Resources

A cultural resource is considered "historically significant" under CEQA if the resource meets one or more of the criteria for listing on the CRHR. The CRHR was designed to be used by state and local agencies, private groups, and citizens to identify existing cultural resources within the state and to indicate which of those resources should be protected, to the extent prudent and feasible, from substantial adverse change. The following criteria have been established for the CRHR. A resource is considered significant if it:

1. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. is associated with the lives of persons important in our past;

3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, historical resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such integrity is evaluated in regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Under CEQA, if an archeological site is not a historical resource but meets the definition of a “unique archeological resource” as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as follows:

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
 - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
 - Has a special and particular quality, such as being the oldest of its type or the best available example of its type
 - Is directly associated with a scientifically recognized important prehistoric or historic event or person

Resources that neither meet any of these criteria for listing in the CRHR nor qualify as a “unique archaeological resource” under CEQA (PRC Section 21083.2) are viewed as not significant. Under CEQA, “A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects” (PRC Section 21083.2[h]).

Impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to historical resources from a Project are thus considered significant if the project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource, which contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

California Environmental Quality Act

As described further, the following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC Section 21083.2(g) defines “unique archaeological resource.”
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines “historical resources.” In addition, CEQA Guidelines Section 15064.5(b) defines the phrase “substantial adverse change in the significance of an historical resource;” it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines “tribal cultural resources.”
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.

- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause “a substantial adverse change in the significance of an historical resource” (PRC Section 21084.1; CEQA Guidelines Section 15064.5(b)). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(q)), it is an “historical resource” and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A “substantial adverse change in the significance of an historical resource” reflecting a significant effect under CEQA means “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (CEQA Guidelines Section 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project does any of the following:

- (1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- (2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- (3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA (CEQA Guidelines Section 15064.5(b)(2)).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any “historical resources,” then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource’s historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2(a)–(c)).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2(g)).

Impacts on nonunique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4)). However, if a nonunique archaeological resource qualifies as a TCR (PRC Sections 21074(c) and 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (Section 7050.5(b)). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact NAHC within 24 hours (Section 7050.5(c)). NAHC will notify the “most likely descendant.” With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains, and items associated with Native Americans.

Local

City of Hesperia General Plan Update (2010)

The City of Hesperia General Plan contains the following goals and policies that address cultural resources and are applicable to the Project (City of Hesperia 2010):

Conservation Element: Historical, Paleontological, and Cultural Resources

Goal: CN-5. The City shall establish policies and procedures in compliance with state and Federal laws and regulations to identify and properly protect found historical, cultural and paleontological artifacts and resources.

- Policy: CN-5.1. Encourage the preservation of historical, paleontological and cultural resources.
- Policy CN-5.2. In those areas where surveys and records indicate historical, cultural or paleontological resources may be found, appropriate surveys and record searches shall be undertaken to determine the presence of such resources, if any.
- Policy CN-5.3. All historical, paleontological and cultural resources discovered shall be inventoried and evaluated according to CEQA regulations and the California Office of Historic Preservation.
- Policy CN-5.4. The City shall coordinate with the Archeological Information Center at the San Bernardino County Museum in reviewing potential records and in preserving such artifacts as may be found.
- Policy CN-5.5. Through its CEQA and other environmental procedures, the City shall notify appropriate Native American representatives of possible development and shall comply with all State and Federal requirements concerning the monitoring and preservation of Native American artifacts and places.

Background Research

SCCIC Records Search

Due to COVID-19 restrictions, the SCCIC notified researchers that the response time for records searches of the CHRIS database had been significantly delayed and that only data for San Bernardino County that had already been digitized would be provided. Therefore, as part of the cultural resources study prepared for the Project, Dudek referenced a CHRIS records search that was previously completed on February 5, 2021 for another project immediately adjacent to the present Project site. This records search included any previously recorded cultural resources and investigations within a 0.5-mile radius of the Project site as well as their digitized collections of mapped prehistoric and historic archaeological resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the project site, the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. Dudek reviewed the SCCIC records to determine whether the implementation of the Project would have the potential to impact any known and unknown cultural resources. The confidential records search results are provided in Confidential Appendix B.

Previously Conducted Cultural Resource Studies

Results of the CHRIS records search indicate that fifty-two (52) previous cultural resources studies have been conducted within 1-mile of the Project site. These studies were conducted between 1973 and 2016. Of these investigations, five (5) studies, SB-01025, SB-01026, SB-01027, SB-02476, and SB-08205, address in total approximately one-third of the Project site. Four (4) of these reports, SB-01025, SB-01026, SB-01027, and SB-02476, consist of large-scale studies related to water district improvements that do not directly assess the Project site. Table 1 provides a complete list of all 52 previous cultural resources studies within 1-mile of the Project site.

Table 1. Previous Technical Studies Within 1-Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-00191	Smith, Gerald A.	1973	Archaeological, Historical and Paleontological Site Survey for County Service Area No. 70 Improvement Zone "J", Assessment of Impact and Recommendations	Outside
SB-00986	Reynolds, Robert E.	1980	Baldy Mesa Water Lines, Cultural Resources Assessment	Outside
SB-01025	Harris, Ruth	1973	Archaeological, Historical, and Paleontological Site Survey for County Service Area No. 70 Improvement Zone "J", Assessments of Impact and Recommendations	Addresses a portion of the Project site
SB-01026	Harris, Ruth	1974	Archaeological, Historical, and Paleontological Site Survey for County Service Area No. 70 Improvement Zone "J", Assessments of Impact and Recommendations	Addresses a portion of the Project site
SB-01027	Reynolds, Robert E.	1980	Cultural Resources Assessment: Baldy Mesa Water Lines, County Service Area 70, Improvement Zone J, San Bernardino County, California	Addresses a portion of the Project site
SB-02202	McKenna, Jeanette A.	1990	A Phase I Archaeological Investigation of Proposed Water Pipeline Routes and reservoir/Pumping Locations, in the Baldy Mesa/Phelan Area, San Bernardino County, California	Outside
SB-02229	Shinn, Juanita R.	1991	Archaeological Assessment of 10 Acre Parcel for Creative Boundaries	Outside
SB-02238	Knell, Edward J.	1991	Cultural Resources Reconnaissance of Twenty One Acres Near Hesperia, San Bernardino County, California	Outside
SB-02395	White, Robert S.	1991	An Archaeological Assessment of Tentative Tract 14596, a 235.33-Acre Parcel Located in Hesperia, San Bernardino County	Outside
**SB-02476	McKenna, Jeanette A.	1991	A Phase I Linear Survey: Cultural Resources Investigations for the Hesperia Improvement District, Hesperia, San Bernardino County, California	Addresses a portion of the Project site
SB-02507	Sundberg, Frederick A. and Nancy Whitney-Desautels	1992	Archaeological and Paleontological Survey for a Three Mile Segment of Phelan Road, San Bernardino County, California	Outside

Table 1. Previous Technical Studies Within 1-Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-02674	Singer, Clay A., John E. Atwood, and Barbie S. Laney	1992	Cultural Resources Survey and Impact Assessment for APN 404-281-36 in the Baldy Mesa Area of San Bernardino County, California	Outside
SB-02730	McKenna, Jeanette A.	1993	Cultural Resources Investigations of the Tracy Smith Property, APN 404-092-53 (TPM 14387), San Bernardino County, California	Outside
SB-02732	Parr, Robert E.	1992	An Archaeological Assessment of Tentative Parcel Map #14242 Baldy Mesa, San Bernardino County, CA	Outside
SB-02803	Love, Bruce	1993	Main St./I-15 Interchange, Hesperia	Outside
SB-03110	Brock, James and Christine L. D'Iorio	1996	Historic Property Survey and Historic Architectural Evaluation Report for the Widening of Phelan Road from Baldy Mesa Road to State Hwy 395, San Bernardino County, California	Outside
SB-03366	Brechibiel, Brant	1998	Cultural Resource Records Search and Survey Report for a PMBS Services Telecommunications Facility: CM 239-01 in the City of Hesperia, California	Outside
SB-03448	Alexandrowicz, John Stephen	2000	A Historical Resources Identification Investigation for the Little Sisters Truck Wash, City of Hesperia	Outside
SB-04036	Cerreto, Ricard and Christy Malan	2004	Cultural Resource Assessment for Parcel 3, APN: 3064-591-17, City of Hesperia, San Bernardino County, California	Outside
SB-04191	McKenna, Jeanette A.	2004	An Intensive Archaeological Survey of the Frontier Homes Property, Tract No. 16744 in the City of Hesperia, San Bernardino County, California	Outside
SB-04281	Cerreto, Richard, Christy Malan, and Katherine Ward	2004	Cultural Resources Assessment for APN: 3064-481-12, the City of Hesperia, San Bernardino County, CA	Outside
SB-04282	Fulton, Phil	2004	Cultural Resources Assessment: Cingular Wireless Facility No. SB 333-01, Hesperia, San Bernardino County, California	Outside
SB-04283	Budinger, Fred E.	2002	A Cultural Resources Phase I Archaeological Survey of the Parcel of the 138 Acre Hesperia Master Plan Parcel, City of Hesperia, San Bernardino County, California	Outside
SB-04284	Alexandrowicz, John Stephen	2001	Historic Archaeology at John E. Dufton's Homestead	Outside

Table 1. Previous Technical Studies Within 1-Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-04285	Green, Julia K.	2004	Cultural Resources Inventory and Evaluation: Timbisha Shoshone Hotel and Casino, San Bernardino County, California	Outside
SB-04286	Love, Bruce	1999	08-SBD Hesperia Park and Ride Facility at the Intersection of US 395 and Joshua St Near the City of Hesperia	Outside
SB-04289	White, Robert S. and Laura S. White	2003	A Cultural Resources Assessment of the San Bernardino County Special Districts CSA 70 Zone J Casita Ave Water Pipeline Project Near Hesperia, San Bernardino Co	Outside
SB-04290	Hammond, Stephen and David Bricker	1997	The Realignment of US Highway 395 and Main ST in the City of Hesperia, San Bernardino County, California	Outside
SB-04309	McKenna, Jeanette A.	2000	Results of a Phase I Cultural Resources Investigation of the Nick Adams Property (APN: 3039-321-03), San Bernardino County, California	Outside
SB-04580	Hatheway, Roger	2005	A Phase I Historical and Archaeological Survey of the Caliente Industrial Park Property, Assessor Parcel # 3039-321-08-0000, City of Hesperia, California.	Outside
SB-04582	Duff, Gabrielle and Manuel R. Palacios-Fest	2005	Archaeological and Paleontological Survey of the Ludwig Property, Hesperia, San Bernardino County, California.	Outside
SB-04796	Brunzell, David	2005	Cultural Resource Assessment Vista Del Valle City of Victorville San Bernardino County, California	Outside
SB-04975	Wetherbee, Matthew	2005	Historical/Archaeological Resources Survey Report: Baldy Mesa Water District Arsenic Treatment Project, Cities of Victorville and Hesperia, San Bernardino County, California.	Outside
SB-05107	Chandler, Evelyn N, Cotterman, Cary D, and Mason, Roger D	2002	Cultural Resources Survey of the Proposed California Charter Academy Hesperia, San Bernardino County, California	Outside
SB-05216	McKenna, Jeanette A.	2006	Results of a Phase 1 Cultural resources Investigation for the Proposed Wal-Mart Supercenter Approximately 38 Acres in the City of Hesperia, San Bernardino County, California	Outside
SB-05452	McKenna, Jeanette A.	2007	Results of a Phase I Cultural Resources Investigation for Approximately 20 Acres of Land (APN 3039-321-10) In the City of Hesperia, San Bernardino County, California	Outside

Table 1. Previous Technical Studies Within 1-Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-05698	Hogan, Michael	2007	Historical/Archaeological Resources Survey Report: US Highway 395 Realignment EIR, Victorville Area, San Bernardino County, California.	Outside
SB-05818	Budinger, Fred E.	2007	An Archaeological Survey of 10-Acres (APN 3064-601-01) for the Proposed Holiday Inn Hesperia Project to located Southeast of the Intersection of Main Street and Mesa Linda Street in the City of Hesperia, San Bernardino County, California 92392	Outside
SB-06162	Bonner, Wayne and Aislin-Kay, Marnie	2008	Cultural Resource Records Search and Site Visit Results for Royal Street Communications California, LLC Candidate LA3329A (Outpost Road), 8391 Outpost Road, Oak Hills, San Bernardino County, California	Outside
SB-06164	Sander, Jay	2007	Cultural Resources Inventory of APN 3064-561-12 Hesperia, San Bernardino County, California	Outside
SB-06333	Horne, Melinda C.	2005	Cultural Resources Survey for the Mojave Water Agency Water Banking Project	Outside
SB-06510	White, Laura S.	2005	A Cultural Resources Assessment of TT 16751, A 21.96-Acre Parcel Located Adjacent to Sultana Street, East of Escondido Avenue, City of Hesperia, San Bernardino County	Outside
SB-06600	Tang, Bai, Smallwood, Josh, John J. Eddy, Harry M. Quinn, Terri Jacquemain, Daniel Ballester, and Laura Hensley Shaker	2008	Extended Phase I Historical/Archaeological Resources Study: Northeast Recycled Water Expansion Projects, In and Near the Cities of Rancho Cucamonga and Fontana, San Bernardino County, California	Outside
SB-06602	Wlodarski, Robert J.	2009	Cultural Resources Record Search and Archaeological Survey Results for the proposed Royal Street Communications, California, LLC, Site LAee28A (Vacant Lot TMO-Pine Colo) located at 9980 Lassen Street, Hesperia, San Bernardino County, California 92345	Outside
SB-06652	ESA	2010	Preliminary Archaeological Survey Report for 98 Linear Miles of the east Branch Extension of the California Aqueduct for the DWR East Branch Enlargement Project Los Angeles and San Bernardino Counties (California)	Outside

Table 1. Previous Technical Studies Within 1-Mile of the Project Site

SCCIC Report Number	Authors	Year	Title	Proximity to Project Site
SB-07156	Tang, Bai “Tom,” Daniel Ballester, and Nina Gallardo	2011	Historical/Archaeological Resources Survey Report: Water Supply System Improvements Projects, Fiscal Years 2010/2011 – 2014/2015, Victorville Water District, San Bernardino County, California.	Outside
SB-07493	Dahdul, Miriam, Daniel Ballester, John D. Goodman II, and Nina Gallardo	2013	Historical/Archaeological Resources Survey Report: Westside Terraces Project, Assessor’s Parcel No’s 3064-441-01 to -03, City of Hesperia, San Bernardino County, California.	Outside
SB-07971	McDougall, Dennis	2007	Cultural Resources Survey of Approximately 522.7 Acres Within the Oro Grande Wash North - Recharge Basins Project Area for the Mojave Water Agency Water Banking Project	Outside
SB-08019	Hogan, Michael	2016	Archaeological Survey Report Park and Ride Facility Expansion Project City of Hesperia, San Bernardino County, California	Outside
SB-08179	Hogan, Michael	2015	Archaeological/Paleontological Monitoring Program, Tractor Supply Company Retail Facility Project, 12543 Main Street, City of Hesperia, San Bernardino County	Outside
**SB-08205	McKenna, Jeanette A.	2015	A Phase I Cultural Resources Investigation of the Proposed Summit Leadership Academy, High Desert Campus, City of Hesperia, San Bernardino Co., California	Adjacent
SB-08232	Tang, Bai, Jesse Yorck, Daniel Ballester, and Nina Gallardo	2016	Historical/Archaeological Resources Survey Report Country Inn and Suites Project	Outside

**Reports have not been digitized and are therefore unavailable due to current SCCIC Covid-19 Protocols

Previously Recorded Cultural Resources

The CHRIS records search identified an additional thirty-five (35) previously recorded cultural resources within the 1-mile records search radius. These resources consist of eight (8) built environment resources, twenty-four (24) historic-period archaeological resources, and three (3) prehistoric archaeological resources. The built environment resources consist of six (6) unpaved roads and two (2) paved roads. The historic-period archaeological resources consist of eight (8) household refuse scatters, eight (8) household refuse dumps, one (1) metal can scatter, one (1) homestead site, and six (6) isolates consisting of bottle glass shards and/or metal cans. The prehistoric archaeological resources consist of one (1) low-density lithic scatter and two (2) isolated tested or battered cobbles. The prehistoric archaeological resources are generally distributed to the north, west, and south of the Project site along the eastern bank of the Oro Grande Wash. The nearest prehistoric resource

to the Project site is located approximately 170 meters (560 feet) south of the Project site and consists of an isolated tested cobble.

The CHRIS records search identified two (2) previously recorded cultural resources within the Project site: P-36-004179/CA-SBR-004179H and P-36-010288/CA-SBR-010288H. One (1) of these resources, P-36-004179/CA-SBR-004179H is a historic-period unpaved road, and one (1) resource, P-36-010288/CA-SBR-010288H, consists of a late nineteenth century homestead. A discussion of these two previously recorded cultural resources is provided below and Table 2, provides a summary of all 35 previously recorded cultural resources within 1-mile of the Project site.

P-36-004179 [CA-SBR-04179H]

Resource P-36-004179/CA-SBR-004179H is a historic-period unpaved road that runs generally north south for approximately 7-miles (11.3 kilometers). An approximate 130-feet (40 meter) segment of the road traverses the northwestern corner of the present Project site. Reynolds formerly recorded P-36-004179/CA-SBR-004179H in 1980 as the historic-period roadway known as the Toll Road-Lanes Crossing that connected Brown's Toll Road with the Salt Lake Trail. Portions of the road were revisited in the subsequent years, and the site record was updated with varying results. Ballester revisited a segment of the road in 2007 and stated that the road appeared modern and "retains no identifiable characteristics to suggest that it is a historic-era road." Additional updates from Anderson in 2009 and Valask in 2010 state that segments of P-36-004179/CA-SBR-004179H recorded within their study areas were unable to be relocated.

P-36-010288 [CA-SBR-010288H]

Resource P-36-010288/CA-SBR-010288H is a historic-period homestead site that measures approximately 2,620 feet by 2,620 feet (800 by 800 meters) at an elevation of 3,630 feet amsl. The site includes the entirety of the present Project site and surrounding area. Alexandrowicz initially recorded the site in 2000 as a late nineteenth to early twentieth century homestead consisting of structural debris and household refuse scatters. Site dimensions were determined by artifact distribution and measured approximately 209 feet by 140 feet. Alexandrowicz surmised that at least some of refuse scatter may be considered road toss associated with the previously recorded resource Toll Road-Lanes Crossing (P-36-004179/CA-SBR-004179H). Important to note is that the artifact scatter Alexandrowicz recorded is outside of the current Project site. It wasn't until McKenna expanded the site boundary in 2015 that the boundary of P-36-010288/CA-SBR-010288H overlapped the current Project site.

In 2015, McKenna identified a site consisting of three historic-period refuse scatters, a dirt road alignment, and nine isolated metal cans located in the undeveloped lot northwest of the current Project site. McKenna noted that the temporally diagnostic artifacts within the assemblage date from the late nineteenth century through the early twentieth century.

While evaluating the site for CRHR eligibility, McKenna conducted research into archival property ownership records and identified three periods of ownership: Dufton dating to pre-1913, Goatman from 1913-1918, and Pratt from 1919 to the 1930s. With this information, McKenna redefined the boundary of P-36-010288/CA-SBR-010288H to include the entire 160-acre property limits of the John E. Dufton Homestead. The updated site boundary subsumed the portion of the site previously recorded by Alexandrowicz (2000) and the portion of the current Project site.

Important to note is that while the boundary of P-36-010288/CA-SBR-010288H overlaps the current Project site, McKenna surveyed less than 10 acres of the 160-acre property, none of which was within the current Project site.

McKenna determined that none of the recorded artifacts or features were determined to be unique, nor did they represent long-term occupation. Therefore, McKenna concluded that the resources are not considered significant as defined by CEQA, nor are they associated with significant events, nor with significant persons in history. McKenna determined that P-36-010288/CA-SBR-010288H is not eligible for listing in the CRHR and that no additional cultural resources considerations are required for the resource.

Table 2. Previously Recorded Cultural Resources Within a 1-Mile of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
004179	004179H	Built Environment: Road	Historic route known as the Canal Lane Historic Road.	7R: Not evaluated	1980 (R. Reynolds); 1980 (R. Reynolds); 2007 (D. Ballester); 2007 (D. Ballester); 2009 (ESA); 2010 (M. Valask)	Overlaps
004251	004251H	Built Environment: Road	Historic road known as the Baldy Mesa Pole Line; poles have since been removed leaving only the access road intact.	6Z: Ineligible for NRHP, CRHR, or Local	1980 (R. Reynolds); 1991 (J. Petersen); 1993 (K. Becker); 2009 (K. Anderson); 2010 (J. Coleman); 2011 (J. Trampier); 2018 (C. Bennett)	936m (3070 ft) east of the Project site
004266	004266	Archaeological site: Prehistoric	Prehistoric site consisting of low-density lithic scatter, core, fire-affected rock, and two secondary flakes.	7R: Not evaluated	1980 (R. Reynolds); 1993 (K. Becker)	1032m (3385 ft) southwest of the Project site
004267	004267H	Built Environment: Road	Historic road known as the Oro Grande Wash/Oak Hill Cutoff Road. Most recent record of this site claims it has been destroyed and no evidence of the original road remains.	7R: Not evaluated	1980 (R.Reynolds); 1993 (K. Becker); 2007 (D. Ballester); 2007 (M. Linder)	815m (2675 ft) north of the Project site

Table 2. Previously Recorded Cultural Resources Within a 1-Mile of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
004268	004268H	Built Environment: Road	Historic road known as the Oro Grande Wash/White Road Cutoff. Most recent record of this site claims it has been destroyed and no evidence of the original road remains.	6Z: Ineligible for NRHP, CRHR, or Local	1980 (R. Reynolds); 1993 (K. Becker); 1993 (J. McKenna); 1995 (J. Brock); 2007 (D. Ballester)	985m (3230 ft) north of the Project site
004275	004275H	Built Environment: Road	Historic road known as Houghton's Crossing Toll Road.	6Z: Ineligible for NRHP, CRHR, or Local	1980 (R. Reynolds); 1991 (Knell); 1993 (K. Becker); 2002 (Cotterman)	600m (1968 ft) east of the Project site
007545	007545H	Built Environment: Road	Historic highway known as State Route 395.	6Z: Ineligible for NRHP, CRHR, or Local	1993 (T. Wahoff and L. Peterson); 1996 (D. Bricker); 1997 (D. Bricker); 2000 (J. Underwood and S. Rosel); 2007 (D. Ballester); 2009 (K. Anderson); 2010 (M. Valasik); 2010 (S. Jow); 2013 (L. Honey); 2013 (D. Martinez); 2014 (J. Hall and C. Morgan)	455m (1495 ft) northwest of the Project site
007680	007680H	Archaeological site: Historic- period	Historic refuse dump consisting of nails, glass, ceramics, metal fragments, and vehicle parts form a Model A Ford.	7R: Not evaluated	1993 (J. McKenna and Reeves)	1440m (4725 ft) southwest of the Project site
007755	007755H	Archaeological site: Historic- period	Historic site consisting of glass fragments, ironstone bowl fragments, cans, Pepsi glass bottle, and a glass bottle.	7R: Not evaluated	1993 (K. Becker)	1344m (4410 ft) northwest of the Project site

Table 2. Previously Recorded Cultural Resources Within a 1-Mile of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
007756	007756H	Archaeological site: Historic-period	Historic trash scatter consisting of glass bottles, glass fragments, umbrella parts, tin cans, metal fragments, and ironstone dish fragments.	7R: Not evaluated	1993 (K. Becker)	1320m (4430 ft) northwest of the Project site
007757	007757H	Archaeological site: Historic-period	Historic trash scatter consisting of a variety of can and glass artifacts.	7R: Not evaluated	1993 (K. Becker)	1152m (3780 ft) northwest of the Project site
007758	007758H	Built Environment: Road	Historic segments of paved road.	7R: Not evaluated	1993 (K. Becker)	528m (1732 ft) northwest of the Project site
008077	008077H	Archaeological site: Historic-period	Historic trash scatter consisting of various cans, glass fragments, ceramic fragments, asphalt fragments, vehicle parts, and various modern debris.	7R: Not evaluated	1995 (Brock and James)	1296m (4252 ft) northwest of the Project site
008082	008082H	Built Environment: Road	Historic road known as Phelan Road.	6Z: Ineligible for NRHP, CRHR, or Local	1995 (Brock and James); 2007 (D. Ballester)	1008m (3307 ft) north of the Project site
010287	010287H	Archaeological site: Historic-period	Historic site consisting of dirt path, a temporary homestead site and various isolated refuse objects including tin cans, and metal hinges.	7R: Not evaluated	2000 (J. Alexandrowicz)	195m (630 ft) south of the Project site
010288	010288H	Archaeological site: Historic-period	Historic property known as the John E. Dufton Homestead.	6Z: Ineligible for NRHP, CRHR, or Local	2000 (J. Alexandrowicz); 2015 (J. McKenna)	Overlaps and surrounding area

Table 2. Previously Recorded Cultural Resources Within a 1-Mile of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
010920	010920H	Archaeological site: Historic- period	Historic trash dump consisting of tin cans, metal fragments, glass fragments, lumber, and ceramic fragments.	6Z: Ineligible for NRHP, CRHR, or Local	2002 (C. Cotterman)	600m (1968 ft) east of the Project site
010921	010921H	Archaeological site: Historic- period	Historic refuse deposit consisting of metal artifacts, tin cans, glass bottle fragments, and ceramic fragments.	6Z: Ineligible for NRHP, CRHR, or Local	2002 (C. Cotterman)	744m (2440 ft) southeast of the Project site
012056	012056H	Archaeological site: Historic- period	Historic site consisting of structural remains and low-density trash scatter including paint cans, food cans, glass fragments, couch springs, wire screen, and architectural material.	7R: Not evaluated	2005 (G. Duff)	600m (1968 ft) northeast of the Project site
012339	012217H	Archaeological site: Historic- period	Historic high- density trash scatter consisting of ceramic fragments, glass bottle fragments, and various cans.	7R: Not evaluated	2005 (S. Norris)	504m (1654 ft) northwest of the Project site
012340	012218H	Archaeological site: Historic- period	Historic refuse deposit consisting of a ceramic plate, ceramic fragments, and various cans.	7R: Not evaluated	2005 (S. Norris)	430m (1415 ft) north of the Project site
012341	012219H	Archaeological site: Historic- period	Historic refuse deposit consisting of glass bottle fragments, porcelain fragments, various cans, and a brick.	7R: Not evaluated	2005 (S. Norris)	552m (1810 ft) northwest of the Project site

Table 2. Previously Recorded Cultural Resources Within a 1-Mile of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
012342	012220H	Archaeological site: Historic- period	Historic refuse deposit consisting of porcelain fragments, clear glass fragments, and various cans.	7R: Not evaluated	2005 (S. Norris)	385m (1260 ft) northwest of the Project site
012343	012221H	Archaeological site: Historic- period	Historic low-density trash scatter consisting of a horseshoe, kerosene lamp burner, bullet cartridge, glass fragments, porcelain lids, and various cans.	7R: Not evaluated	2005 (K. Becker)	288m (995 ft) north of the Project site
012344	012222H	Built Environment: Road	Historic road 6 to 8 feet wide and heavily disturbed due to recreational use of off-road vehicles.	7R: Not evaluated	2005 (V. Austerman and L. Lee)	865m (2835 ft) northwest of the Project site
012345	012223H	Built Environment: Road	Historic unpaved dirt road.	7R: Not evaluated	2005 (V. Austerman and L. Lee)	550m (1810 ft) northwest of the Project site
012346	012224H	Built Environment: Road	Historic unpaved north to south running dirt road.	7R: Not evaluated	2005 (V. Austerman and L. Lee)	335m (1100 ft) northwest of the Project site
012347	—	Archaeological isolate: Prehistoric	Prehistoric isolate described as a tested quartzite cobble with 3 flake scars.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (K. Becker, T. Diaz, and M. Knypstra)	720m (2360 ft) northwest of the Project site
013356	012556H	Archaeological site: Historic- period	Historic refuse dump of 6 fragments of sun- altered manganese glass, 13 ceramic shards, and various metal cans.	7R: Not evaluated	2007 (D. Ballester)	985m (3230 ft) north of the Project site

Table 2. Previously Recorded Cultural Resources Within a 1-Mile of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
020263	—	Archaeological isolate: Prehistoric	Prehistoric isolate described as a tested obsidian nodule with two or three flake scars.	6Z: Ineligible for NRHP, CRHR, or Local	2004 (Cerreto and Cunningham)	195m (630 ft) south of the Project site
020473	—	Archaeological isolate: Historic-period	Historic isolate described as a glass bottle with inverted base.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (G. Duff)	1152m (3780 ft) northeast of the Project site
020556	—	Archaeological isolate: Historic-period	Historic isolate described as an aqua glass shard.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (K. Pollock, P. Stanton, L. Lee, and K. Sewell)	1320m (4430 ft) northwest of the Project site
020557	—	Archaeological isolate: Historic-period	Historic isolate described as two hole-in-cap meat cans.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (K. Pollock, P. Stanton, L. Lee, and K. Sewell)	1392m (4567 ft) northwest of the Project site
020558	—	Archaeological isolate: Historic-period	Historic isolate described as a hole-in-cap can.	6Z: Ineligible for NRHP, CRHR, or Local	2005 (K. Pollock, P. Stanton, L. Lee, and K. Sewell)	1440m (4725 ft) northwest of the Project site
026211	016620H	Archaeological site: Historic-period	Historic refuse scatter consisting of ceramic fragments, metal artifacts, red brick, and amethyst glass fragments.	7R: Not evaluated	2013 (D. Ballester)	1056m (3465 ft) north of the Project site
026212	016621H	Archaeological site: Historic-period	Historic refuse scatter consisting of hole-in-cap cans, lard buckets, and beef cans.	7R: Not evaluated	2013 (D. Ballester)	1320m (4330 ft) north of the Project site
026213	016622H	Archaeological site: Historic-period	Historic trash dump consisting of various cans, bottle caps, glass bottle fragments, and assorted domestic items.	7R: Not evaluated	2013 (D. Ballester)	1128m (3700 ft) north of the Project site
033090	—	Archaeological isolate: Historic-period	Historic isolate described as three amethyst glass fragments and one sardine can.	6Z: Ineligible for NRHP, CRHR, or Local	2018 (R. Goodwin, M. Jenkins, and A. Garcia)	1560m (5118 ft) northwest of the Project site

Table 2. Previously Recorded Cultural Resources Within a 1-Mile of the Project Site

Primary (P-36-)	Trinomial (CA-SBR-)	Resource Age and Type	Resource Description	NRHP/CRHR Eligibility	Recording Events	Proximity to Project Site
033091	—	Archaeological isolate: Historic-period	Historic isolate described as a condensed milk can and steel church-key beverage can.	6Z: Ineligible for NRHP, CRHR, or Local	2018 (R. Goodwin, M. Jenkins, and A. Garcia)	1512m (4960 ft) northwest of the Project site

Review of Historical Topographic Maps and Aerial Photographs

Dudek consulted historical topographic maps and aerial photographs through the Nationwide Environmental Title Research, LLC (NETR) to better understand any natural or human-made changes to the Project site and surrounding properties over time.

Historical Topographic Maps

USGS topographic maps for the Project site are available for the following years: 1902, 1906, 1912, 1923, 1936, 1942, 1945, 1957, 1963, 1969, 1980, 1985, 1988, 1999, 2012, 2015, and 2018 (NETR 2021a). The first USGS topographic map showing the Project site is 1902 and shows the Project site as undeveloped with US 395, I-15, and Phelan Road in the surrounding areas. The following topographic maps show no significant changes to the Project site or surrounding area until 1957. The 1957 topographic map shows an increase in structures within the surrounding area, the Project site is still undeveloped. The topographic maps from 1963 through 1999 show no significant changes to the Project site or surrounding areas. The 2012 topographic map depicts Mesa Linda Road, serving as the Project site's eastern boundary, Poplar Street serving as the Project site's southern boundary, and an unnamed road serving as the Project site's western boundary. The 2015 topographic map no longer shows the un-named road. The most recent topographic map from 2018 depicts the unnamed road serving as the Project site's western boundary. According to the topographic maps, the Project site has remained un-developed since 1902.

Historical Aerial Photographs

Historical aerial photographs of the Project site are available for the following years: 1938, 1952, 1968, 1994, 2002, 2005, 2009, 2010, 2012, 2014, and 2016 (NETR 2021b). The 1938 aerial photograph shows the Project site as undeveloped with the I-15 Freeway and US Highway 395 in the vicinity. The 1952 and 1968 aerial photographs show no significant changes to the Project site. The aerial photograph from 1994 shows the Project site bound to the east by Mesa Linda Road, to the south by Poplar Street, and to the west by an unnamed dirt road. The remainder of the aerial photographs show no significant changes to the Project site. Overall, the aerial photographs show that the Project site has remained vacant and undeveloped since at least 1938 while the surrounding area steadily increased in development.

Geotechnical Report Review

Southern California Geotechnical, Inc. (SoCalGeo) conducted a geotechnical study for the proposed project site in April of 2022. *Geotechnical Investigation Proposed I-15 Business Park Building 3 NWC Mesa Linda Street and Poplar Street Hesperia, California for Covington Realty Advisors, LLC.* (SoCalGeo 2022), documents the subsurface geological conditions within the 17.87-acre proposed Project site. The report details the results of seven (7) subsurface exploratory borings performed by a hollow-stem auger drill rig. These borings were placed at accessible locations throughout the proposed Project site. All of the borings encountered native alluvium extending from the surface to the maximum depths explored (between 15 to 30 feet below ground surface [bgs]). Native soil characteristics typically consisted of 0 to 5.5 feet of loose to medium dense silty fine to coarse sands, loose fine to coarse sandy silts, and loose silty fine sands to fine sandy silts and 30+ feet of medium dense to very dense silty fine to coarse sands, fine to medium sands, and fine to coarse sandy silts with varying gravel, clay, and cobbles.

Results of the geotechnical reports indicate that should cultural deposits exist within the current Project site, they may be encountered within the native younger and older alluvium soils that extend from surface elevation to a maximum depth of 30+ feet bgs. Cultural deposits typically exist within A soil horizon (top soil) and B soil horizon (subsoil) that locations not exposed to recent alluvial deposits usually extend to an approximate depth of 6 feet bgs. However, in areas where environmental conditions include alluvial activity, the depth where cultural material can be found has the potential of being considerably deeper.

Field Survey

Methods

Dudek Lead Archaeologist, Linda Kry, and Dudek cross-trained Associate Paleontologist, Kira Archipov, conducted a pedestrian survey of the Project site on October 19, 2021 using standard archaeological procedures and techniques. The intensive-level survey methods consisted of a pedestrian survey conducted in parallel transects, spaced no more than 10 meters apart (approximately 30 feet), traversing east to west. The ground surface was inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, groundstone tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of structures and/or buildings (e.g., standing exterior walls, post holes, foundations), and historical artifacts (e.g., metal, glass, ceramics, building materials). In reference to metal cans, these resources were only considered if they were observed to be within discrete deposits or determined to be from a primary depositional location. Ground disturbances such as burrows, cut banks, trails and drainages were also visually inspected for exposed subsurface materials. Additionally, the locations of the two (2) previously recorded overlapping resources, P-36-004179 and P-36-010288, were revisited in order to document the current site conditions. Site updates were recorded on Department of Parks and Recreation (DPR) 523 forms and included within Confidential Appendix C. No artifacts were collected during the survey.

All fieldwork was documented using field notes and an Apple Generation 7 iPad (iPad) equipped with ESRI Collector and Avenza PDF Maps software with close-scale georeferenced field maps of the Project site, and aerial photographs. Location-specific photographs were taken using the iPad's 12-mega-pixel resolution camera. Cultural resources identified during this inventory within the Project site were to be recorded on DPR forms, using

the Instructions for Recording Historical Resources (Office of Historic Preservation 1995). All field notes, photographs, and records related to the current study are on file at Dudek's Pasadena, California office. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory.

Results

The Project site is composed of an open field with various unimproved dirt roads, low-lying dried vegetation, and the occasional taller tree. The intensive-level pedestrian survey provided 100% coverage of the Project site. Ground surface visibility ranged from good to excellent (70-100%) throughout the Project site. In areas of moderate ground coverage, surface scrapes were occasionally implemented, when necessary, to enhance detection of archaeological materials that may have been obscured on the surface.

There is evidence of disturbance throughout the Project site. Modern debris was noted throughout the Project site and includes large items such as furniture, electronics, vehicle parts, tires, and clothing. The amount of modern refuse encountered during the survey suggests that the Project site is used for illegal dumping. Portions of the Project site, especially adjacent to Poplar Street and Mesa Linda Street, have been subject to previous grading. Numerous informal dirt roads caused by off-road vehicle use traverse the Project site. No new cultural resources were identified within the Project site as a result of the pedestrian survey.

All soils appear consistent with the United States Department of Agriculture's description of Hesperia loamy fine sand (USDA 2021)

Dudek revisited the location of the two previously recorded cultural resources within the Project site that were identified during the CHRIS records search. The following paragraphs provide a summary of findings.

P-36-004179 [CA-SBR-04179H]

As mapped, a portion of resource P-36-004179/CA-SBR-004179H, a historic period dirt road informally called "Toll Road-Lanes Crossing", intersects the northwest corner of the present Project site. The approximately 48.47-foot segment of the road that is purported to intersect the Project site was not able to be identified during the pedestrian survey. According to the DPR prepared for P-36-004179/CA-SBR-004179H, multiple sources found no evidence of the road within their respective study areas. The mapped location of P-36-004179/CA-SBR-004179H within the current Project site was found to be overgrown with vegetation, and no evidence of the historic-period road remained. This suggests that either the unpaved road was ephemeral and succumbed to environmental conditions that erased any evidence of the road, or that the resource was mapped incorrectly in the original recording. Dudek documented this finding on a DPR 523 Update Form, which will be submitted to the SCCIC. See Confidential Appendix C, DPR Forms, for the P-36-004179/CA-SBR-004179H update. No further cultural resources considerations are required for this resource.

P-36-010288 [CA-SBR-010288H]

As mapped, resource P-36-010288/CA-SBR-010288H includes the entirety of the Project site as well as surrounding properties to the north, south and west. According to the DPR form prepared for P-36-010288/CA-SBR-010288H, the mapped boundary of the resource consists of the entire 160- acre homestead of John E. Dufton, though only a small portion of the total property boundary has been previously surveyed. The previously surveyed

areas are outside of the current Project site, and therefore, any artifacts or features identified within areas outside of the current Project site were not revisited as a result of this investigation.

The current Project surveyed approximately 17.87 acres of the John E. Dufton homestead that were not previously surveyed. No artifacts, features, or structural remnants of the homestead were identified within the current Project site. Additionally, McKenna (2005) determined that the resource was not a significant resource as defined by CEQA and not eligible for listing on the CRHR, and therefore, no further cultural resources considerations are required for this feature during this current Project or any future projects.

Sensitivity Analysis

The cultural resources study revealed that the potential for unrecorded archaeological resources to exist within the Project site is considered low based on the following factors: 1) the CHRIS records search identified two previously recorded historic-period archaeological resources within the Project site, none of which will be impacted by implementation of the Project; 2) the pedestrian survey provided 100% coverage of the Project site, and no cultural resources were identified as a result of the survey; 3) though a portion of the Project site is included within a historic-period homestead property (P-36-010288/CA-SBR-010288H), a review of historic topographic maps and aerial photographs indicate that the specific area within the archaeological site where the Project is proposed was never occupied and has remained vacant and relatively undisturbed since at least 1902; 4) the approximately 48.47-foot segment of historic road (P-36-004179/CA-SBR-004179H) within the current Project site was found to be disturbed by vegetation, recreational use of the site, including off-road vehicular traffic, and bioturbation; no evidence of the historic-period road remained; 5) the homestead site (P-36-010288/CA-SBR-010288H) was previously evaluated and determined ineligible for listing on the CRHR, and therefore, future construction would not cause a significant impact to this resource; and 6) though three previously recorded prehistoric cultural resources (i.e., a low-density lithic scatter and two isolated cores) have been identified within 1-mile of the Project site, these resources were located near to the flood zone of the Oro Grande Wash, suggesting that these resources may have been transported to the respective locations from their primary deposition and that their presence may not accurately represent the prehistoric sensitivity of the immediate vicinity.

Given these factors, the Project site is considered low sensitivity for the presence of prehistoric or historic cultural resources. Although the overall potential for archaeological resources to exist within the Project site is considered low, it is still possible that unknown intact archaeological resources could be encountered subsurface during ground disturbing activities within native soils. Specifically, and in consideration of the findings of the geotechnical report prepared for the Project site (SoCalGeo 2022), the potential remains for intact archaeological deposits to be encountered within native younger and older alluvium within the Project site from surface elevation to a maximum depth of 30+ feet bgs. As such, the following management recommendations are provided to ensure that impacts to unanticipated archaeological resources and human remains would be less than significant.

Management Recommendations

Dudek recommends the following measures to ensure proper treatment of any unknown cultural resources that may be encountered as a result of Project construction. These measures would ensure the proper treatment of any cultural

resources and human remains encountered during ground disturbing activities. With the proper implementation of the prescribed recommendations, the potential impact to cultural resources is considered to be less than significant.

Inadvertent Discovery of Archaeological Resources

Workers Environmental Awareness Program Training. All construction personnel and monitors who are not trained archaeologists should be briefed regarding unanticipated discoveries prior to the start of construction activities. A basic presentation should be prepared and presented by a qualified archaeologist to inform all personnel working on the Project about the archaeological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker should also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the on-call archaeologist and if appropriate, Tribal representative. Necessity of training attendance should be stated on all construction plans.

Retention of a Qualified Archaeologist. In consideration of the general sensitivity of the proposed Project site for cultural resources, a qualified archaeologist should be retained to conduct spot monitoring as well as on-call to respond to and address any inadvertent discoveries identified for the duration of construction activities. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, should oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits. The archaeologist should be responsible for maintaining monitoring logs. Following the completion of construction, the qualified archaeologist should provide an archaeological monitoring report to the lead agency and the SCCIC with the results of the cultural monitoring program.

Inadvertent Discovery Treatment and Protocol. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the Project, all construction work occurring within 100 feet of the find should immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted. If the discovery is Native American in nature, consultation with and/or monitoring by a Tribal representative may be necessary.

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the MLD from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The MLD would then determine, in consultation with the property owner, the disposition of the human remains.

TO: MR. MARK S. MILAKOVICH
SUBJECT: DRAFT CULTURAL RESOURCES ASSESSMENT FOR THE POPLAR 18 PROJECT, CITY OF HESPERIA, SAN
BERNARDINO COUNTY, CALIFORNIA

Should you have any questions relating to this report and the preliminary findings and recommendations, please do not hesitate to contact Linda Kry at lkry@dudek.com or Heather McDaniel McDevitt at hmcdevitt@dudek.com.

Sincerely,



Linda Kry, B.A., RA
Archaeologist



Heather McDaniel McDevitt, M.A., RPA
Archaeologist

Att.: *Appendix A: Figures*
Appendix B. (Confidential) SCCIC Records Search Information
Appendix C. (Confidential) DPR for P-36-004179/CA-SBR-004179H Update

cc: *Kira Archipov, Patrick Cruz, Ronelle Candia, Carey Fernandes, Dudek*

References

City of Hesperia. 2010. *Hesperia General Plan Update*. <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

NETR (Nationwide Environmental Title Research). 2021a. Historical Topographic maps of Project Site, dating from 1897, 1900, 1903, 1906, 1908, 1911, 1912, 1917, 1927, 1929, 1932, 1933, 1939, 1942, 1947, 1955, 1960, 1962, 1963, 1965, 1969, 1973, 1975, 1982, 2012, 2015, and 2018. Accessed October 2021. <https://www.historicaerials.com/viewer>.

NETR. 2021b. Historical Aerial Photographs of Project Site, dating from 1938, 1946, 1948, 1953, 1959, 1964, 1965, 1966, 1972, 1980, 1994, 1999, 2000, 2002, 2005, 2009, 2010, 2012, 2014, 2016, and 2018. Accessed October 2021. <https://www.historicaerials.com/viewer>.

OHP (Office of Historic Preservation). 1995. Instructions for Recording Historical Resources. Available online October 2021. Website: http://ohp.parks.ca.gov/?page_id=1069.

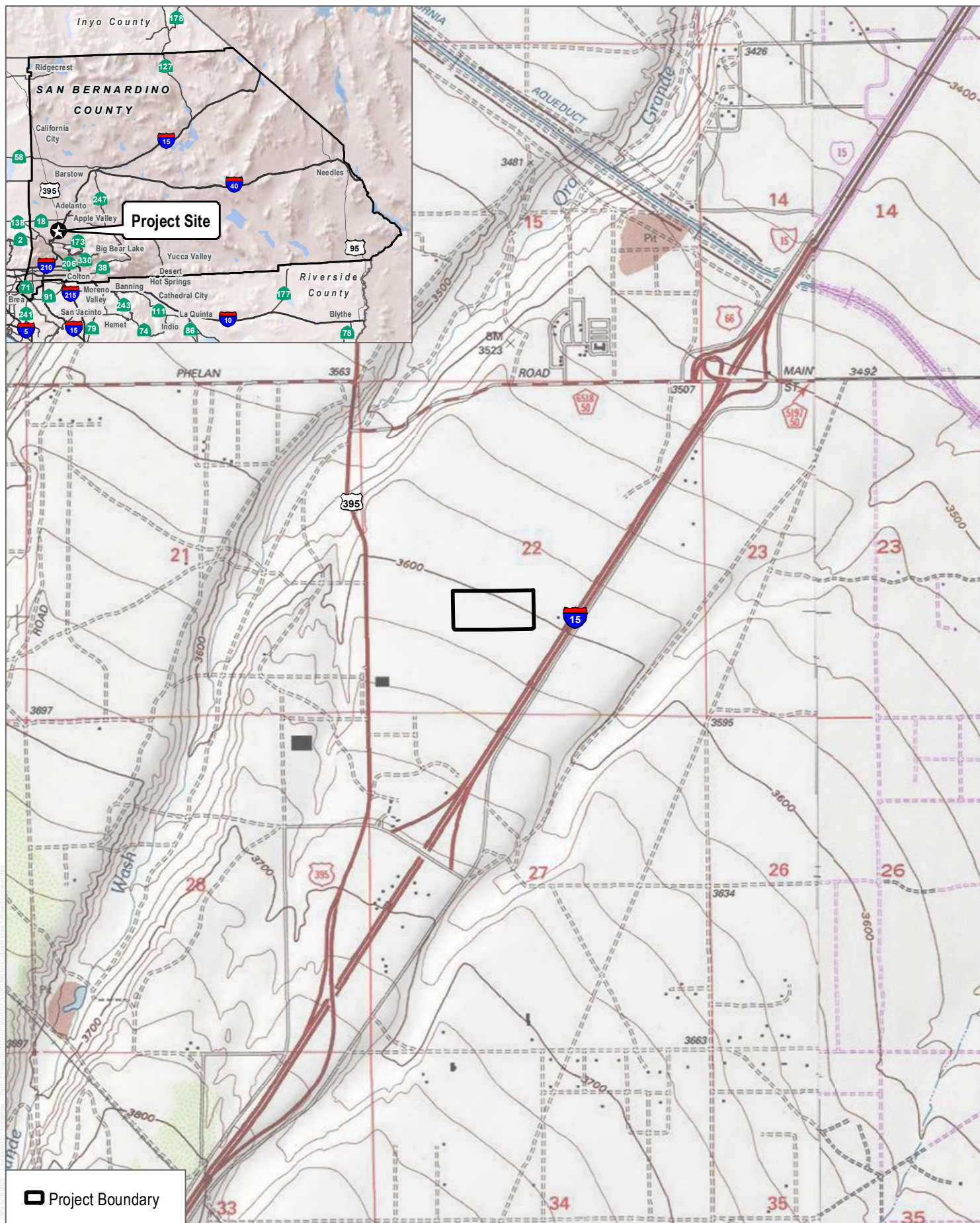
Shepard, Richard. 2004. *Preliminary Cultural Resources Assessment: Mission Blvd Corridor Improvements, City of Montclair, San Bernardino County. 6PP*. On File at the South Central Coast Information Center, California State University Fullerton. Accessed October 2021.

SoCalGeo (Southern California Geotechnical, Inc.). 2022. Geotechnical Investigation Proposed I-15 Business Park Building 3 NWC Mesa Linda Street and Poplar Street Hesperia, California for Covington Realty Advisors, LLC. Prepared for Covington Development Group, Inc. Newport Beach, California.

USDA (United States Department of Agriculture). 2021. Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>, Accessed October 2021.

Appendix A

Figures



SOURCE: USA Topo Maps 7.5 Minute Series Baldy Mesa Quadrangle

FIGURE 1

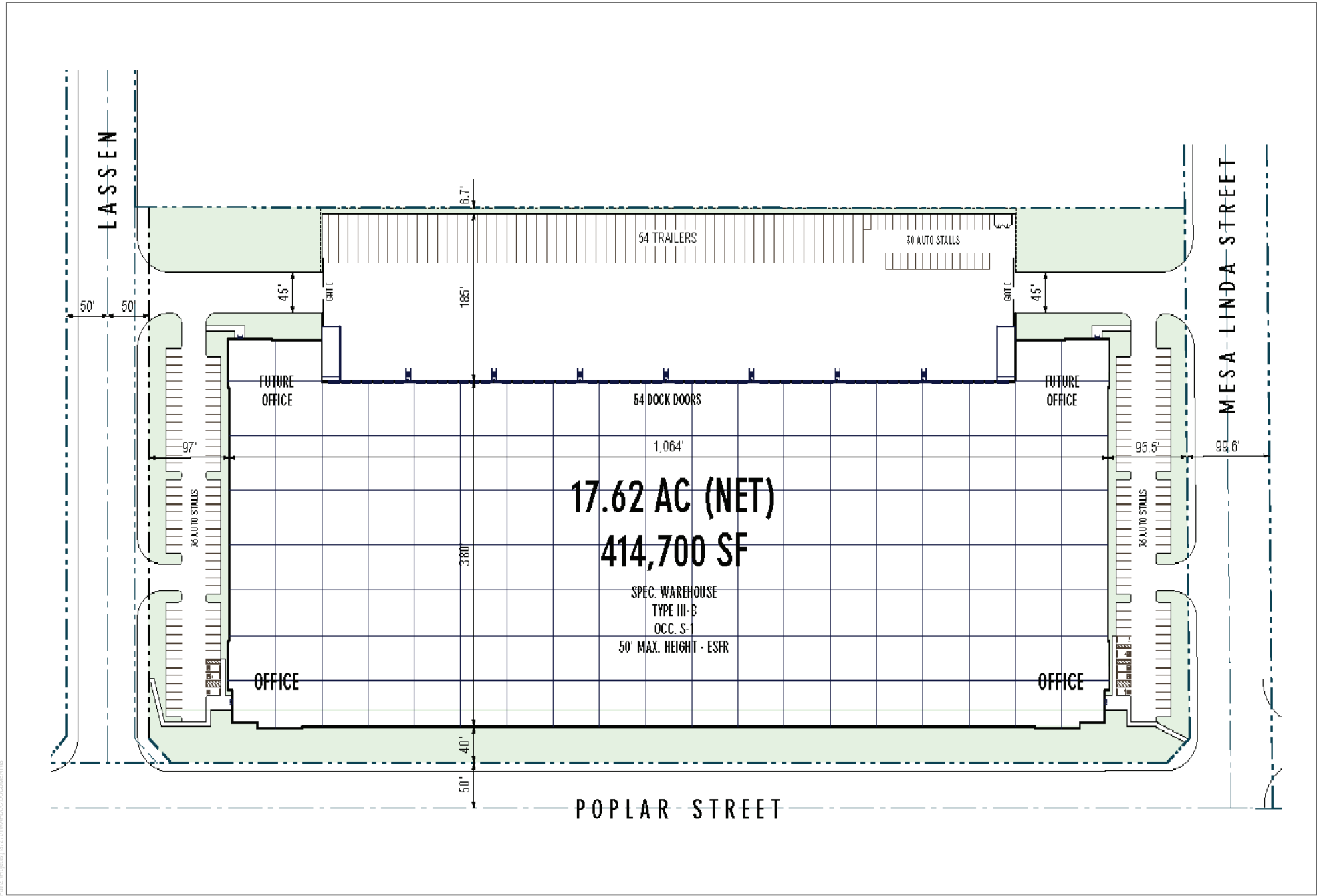
Project Location

Poplar 18 Industrial Park Project



FIGURE 2
Project Area

Poplar 18 Industrial Park Project



SOURCE: RGA Office of Architectural Design 2021

Appendix B

CONFIDENTIAL SCCIC Records Search Results

Appendix C

CONFIDENTIAL DPR Forms

Appendix E

Geotechnical Reports

**GEOTECHNICAL INVESTIGATION
POPLAR 18 INDUSTRIAL PARK**

NWC Mesa Linda Street and Poplar Street
Hesperia, California

for

Covington Realty Advisors, LLC



SOUTHERN
CALIFORNIA
GEOTECHNICAL

A California Corporation

April 7, 2022

Covington Development Group, Inc.
3 Corporate Plaza, Suite 230
Newport Beach, California 92660



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

Attention: Mr. Michael Di Sano
Sr. Director - Entitlements

Project No.: **22G134-1R**

Subject: **Geotechnical Investigation**
Poplar 18 Industrial Park
NWC Mesa Linda Street and Poplar Street
Hesperia, California

Mr. Di Sano:

In accordance with your request, we have conducted a geotechnical investigation at the subject site. We are pleased to present this report summarizing the conclusions and recommendations developed from our investigation.

We sincerely appreciate the opportunity to be of service on this project. We look forward to providing additional consulting services during the course of the project. If we may be of further assistance in any manner, please contact our office.

Respectfully Submitted,

SOUTHERN CALIFORNIA GEOTECHNICAL, INC.

Daniel W. Nielsen, GE 3166
Senior Engineer



Robert G. Trazo, M.Sc., GE 2655
Principal Engineer



Distribution: (1) Addressee

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY	1
2.0 SCOPE OF SERVICES	3
3.0 SITE AND PROJECT DESCRIPTION	4
3.1 Site Conditions	4
3.2 Proposed Development	4
4.0 SUBSURFACE EXPLORATION	5
4.1 Scope of Exploration/Sampling Methods	5
4.2 Geotechnical Conditions	5
5.0 LABORATORY TESTING	7
6.0 CONCLUSIONS AND RECOMMENDATIONS	9
6.1 Seismic Design Considerations	9
6.2 Geotechnical Design Considerations	11
6.3 Site Grading Recommendations	13
6.4 Construction Considerations	16
6.5 Foundation Design and Construction	16
6.6 Floor Slab Design and Construction	18
6.7 Retaining Wall Design and Construction	19
6.8 Pavement Design Parameters	21
7.0 GENERAL COMMENTS	23
APPENDICES	
A Plate 1: Site Location Map Plate 2: Boring Location Plan	
B Boring Logs	
C Laboratory Test Results	
D Grading Guide Specifications	
E Seismic Design Parameters	

1.0 EXECUTIVE SUMMARY

Presented below is a brief summary of the conclusions and recommendations of this investigation. Since this summary is not all inclusive, it should be read in complete context with the entire report.

Site Preparation Recommendations

- Site stripping will be necessary to remove the native grass and shrub growth which is present throughout the majority of the site. Trees and their associated root masses should be removed in their entirety. All vegetation and any organic topsoil should be removed during site stripping.
- The soils encountered at the boring locations consist of native alluvium. The near surface generally soils possess variable densities and strengths, and the results of laboratory testing indicate that some of the near-surface soils possess a minor to moderate potential for hydrocollapse when inundated with water. Based on these considerations, remedial grading is recommended to be performed within the proposed building area to provide more consistent support characteristics throughout the proposed building area and mitigate the hydrocollapse potential of the near surface soils.
- Remedial grading is recommended to be performed within the proposed building pad area. The existing soils within the proposed building area should be overexcavated to a depth of 4 feet below existing grades and to a depth of 3 feet below proposed pad grades. The proposed foundation influence zones should be overexcavated to a depth of at least 2 feet below proposed foundation bearing grade. The overexcavation should also extend to a sufficient depth to remove any variability in the soils.
- After overexcavation has been completed, the resulting subgrade soils should be evaluated by the geotechnical engineer to identify any additional soils that should be overexcavated. The resulting soils should be scarified and moisture conditioned to achieve a moisture content of 0 to 4 percent above optimum moisture, to a depth of at least 12 inches. The overexcavation subgrade soils should then be recompacted under the observation of the geotechnical engineer. The previously excavated soils may then be replaced as compacted structural fill.
- The new pavement and flatwork subgrade soils are recommended to be scarified to a depth of 12± inches, thoroughly moisture conditioned and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density.

Building Foundation Recommendations

- Spread footing foundations, supported in newly placed structural fill soils.
- Maximum, net allowable soil bearing pressure: 3,000 lbs/ft².
- Reinforcement consisting of at least two (2) No. 5 rebars (1 top and 1 bottom) in strip footings. Additional reinforcement may be necessary for structural considerations.

Building Floor Slab Recommendations

- Conventional Slab on Grade, at least 6 inches thick
- Modulus of Subgrade Reaction: $k = 150 \text{ psi/in}$
- Reinforcement is not considered to be necessary for geotechnical considerations.

- The actual thickness and reinforcement of the floor slab should be determined by the structural engineer, based on the imposed slab loading.

Pavements

ASPHALT PAVEMENTS (R=40)					
Materials	Thickness (inches)				
	Auto Parking and Auto Drive Lanes (TI = 4.0 to 5.0)	Truck Traffic			
		TI = 6.0	TI = 7.0	TI = 8.0	TI = 9.0
Asphalt Concrete	3	3½	4	5	5½
Aggregate Base	4	6	7	8	10
Compacted Subgrade	12	12	12	12	12

PORTLAND CEMENT CONCRETE PAVEMENTS (R=40)				
Materials	Thickness (inches)			
	Autos and Light Truck Traffic (TI = 6.0)	Truck Traffic		
		TI = 7.0	TI = 8.0	TI = 9.0
PCC	5	5½	6½	8
Compacted Subgrade (95% minimum compaction)	12	12	12	12

2.0 SCOPE OF SERVICES

The scope of services performed for this project was in accordance with our Proposal No. 22P126, dated January 24, 2022. The scope of services included a visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to provide criteria for preparing the design of the building foundations, building floor slab, and parking lot pavements along with site preparation recommendations and construction considerations for the proposed development. The evaluation of the environmental aspects of this site was beyond the scope of services for this geotechnical investigation.

3.0 SITE AND PROJECT DESCRIPTION

3.1 Site Conditions

The subject site is located at the northwest corner of Poplar Street and Mesa Linda Street in Hesperia, California. The site is bounded to the north by vacant land, to the west by the proposed alignment of Lassen Road, to the south by Poplar Street and to the east by Mesa Linda Street. The general location of the site is illustrated on the Site Location Map, included as Plate 1 of this report.

The site consists of a rectangular-shaped parcel, 17.87± acres in size which is vacant and undeveloped. Ground surface cover consists of exposed soils with moderate native brush and shrub growth, and the site is sparsely populated with Joshua trees. Occasional scattered trash debris are present throughout the site. A small drainage course, about 1 to 3± feet in depth, is present in the center of the site, trending in the north-south direction.

Numerous dirt roads are present in various locations throughout the site, generally trending east-west. A dirt road trending north-south is also present along the east property line of the site.

Detailed topographic information was not available at the time of this report. Based on visual observations made at the time of the subsurface investigation and from elevation data obtained from Google Earth, the overall site topography generally slopes downward to the northeast at a gradient less than 2± percent. The highest elevation on the site is located in the southwestern area of the site, and the minimum site elevation is located in the northeastern region of the site. There was estimated to be an elevation differential of about 22± feet across the site.

3.2 Proposed Development

A conceptual site plan, prepared by RGA Office of Architectural Design (RGA), indicates that the site will be developed with one (1) new warehouse identified as Building 1. The building will be located in the central area of the site and will be 414,700± ft² in size. The building will be constructed with dock-high doors along most of the north building wall. The building will be surrounded by asphaltic concrete pavements in the automobile parking and drive areas and Portland cement concrete pavements in the truck court area. Several landscape planters and concrete flatwork will be included throughout the site.

Detailed structural information has not been provided. It is assumed that the new building will be a single-story structure of tilt-up concrete construction. Based on the assumed construction, maximum column and wall loads are expected to be on the order of 100 kips and 4 to 7 kips per linear foot, respectively.

No significant amounts of below-grade construction, such as basements or crawl spaces, are expected to be included in the proposed development. Based on the assumed topography, cuts and fills of 8 to 12± feet will be necessary to achieve the proposed site grades.

4.0 SUBSURFACE EXPLORATION

4.1 Scope of Exploration/Sampling Methods

The subsurface exploration performed for this project consisted of seven (7) borings (identified as Boring Nos. B-1 through B-7) advanced to depths of 15 to 30± feet below the existing site grades. All of the borings were logged during drilling by a member of our staff.

The borings were advanced with hollow-stem augers, by a conventional truck-mounted drilling rig. Representative bulk and relatively undisturbed soil samples were taken during drilling. Relatively undisturbed samples were taken with a split barrel "California Sampler" containing a series of one-inch-long, 2.416± inch diameter brass rings. This sampling method is described in ASTM Test Method D-3550. Samples were also taken using a 1.4±-inch inside diameter split spoon sampler, in general accordance with ASTM D-1586. Both of these samplers are driven into the ground with successive blows of a 140-pound weight falling 30 inches. The blow counts obtained during driving are recorded for further analysis. Bulk samples were collected in plastic bags to retain their original moisture content. The relatively undisturbed ring samples were placed in molded plastic sleeves that were then sealed and transported to our laboratory.

The approximate locations of the borings are indicated on the Boring Location Plan, included as Plate 2 in Appendix A of this report. The Boring Logs, which illustrate the conditions encountered at the boring locations, as well as the results of some of the laboratory testing, are included in Appendix B.

4.2 Geotechnical Conditions

Younger Alluvium

All of the borings encountered native younger alluvial soils at the ground surface, extending to depths ranging from 2½ to 5½± feet below existing site grades. These soils generally consist of loose to medium dense silty fine to coarse sands, loose fine to coarse sandy silts, and loose silty fine sands to fine sandy silts.

Older Alluvium

Native older alluvium was encountered beneath the younger alluvium at all of the boring locations, extending to at least the maximum explored depth of 30± feet below existing site grades. The older alluvial soils consist of medium dense to very dense silty fine to coarse sands, fine to medium sands, and fine to coarse sandy silts with varying quantities of fine to coarse gravel, traces of clay, and occasional cobbles. Calcareous veining and iron oxide staining were encountered in many of the recovered samples. Additionally, many samples of the older alluvial soils were weakly cemented, unlike the overlying younger alluvial soils, which were not observed to be significantly cemented.

Groundwater

Free water was not encountered during the drilling of any of the borings. Based on the lack of any water within the borings and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of $30\pm$ feet at the time of the subsurface exploration.

As part of our research, we also reviewed recent groundwater data available for wells within the vicinity of the site. Recent water level data was obtained from the California Department of Water Resources website, <http://www.water.ca.gov/waterdatalibrary/>. The nearest monitoring well with available records in this database is located approximately $4,400\pm$ feet northwest of the site. Water level readings within this monitoring well indicate a groundwater level of $600\pm$ feet below the ground surface in October 2020.

5.0 LABORATORY TESTING

The soil samples recovered from the subsurface exploration were returned to our laboratory for further testing to determine selected physical and engineering properties of the soils. The tests are briefly discussed below. It should be noted that the test results are specific to the actual samples tested, and variations could be expected at other locations and depths.

Classification

All recovered soil samples were classified using the Unified Soil Classification System (USCS), in accordance with ASTM D-2488. Field identifications were then supplemented with additional visual classifications and/or by laboratory testing. The USCS classifications are shown on the Boring Logs and are periodically referenced throughout this report.

Density and Moisture Content

The density has been determined for selected relatively undisturbed ring samples. These densities were determined in general accordance with the method presented in ASTM D-2937. The results are recorded as dry unit weight in pounds per cubic foot. The moisture contents are determined in accordance with ASTM D-2216, and are expressed as a percentage of the dry weight. These test results are presented on the Boring Logs.

Consolidation

Selected soil samples have been tested to determine their consolidation potential, in accordance with ASTM D-2435. The testing apparatus is designed to accept either natural or remolded samples in a one-inch-high ring, approximately 2.416 inches in diameter. Each sample is then loaded incrementally in a geometric progression and the resulting deflection is recorded at selected time intervals. Porous stones are in contact with the top and bottom of the sample to permit the addition or release of pore water. The samples are typically inundated with water at an intermediate load to determine their potential for collapse or heave. The results of the consolidation testing are plotted on Plates C-1 through C-4 in Appendix C of this report.

Maximum Dry Density and Optimum Moisture Content

A representative bulk sample of the near surface soils has been tested to determine its maximum dry density and optimum moisture content. The results have been obtained using the Modified Proctor procedure, per ASTM D-1557 and are presented on Plate C-5 in Appendix C of this report. This test is generally used to compare the in-situ densities of undisturbed field samples, and for later compaction testing. Additional testing of other soil types or soil mixes may be necessary at a later date.

Expansion Index

The expansion potential of the on-site soils was determined in general accordance with ASTM D-4829. The testing apparatus is designed to accept a 4-inch diameter, 1-in high, remolded sample. The sample is initially remolded to 50 ± 1 percent saturation and then loaded with a surcharge

equivalent to 144 pounds per square foot. The sample is then inundated with water and allowed to swell against the surcharge. The resultant swell or consolidation is recorded after a 24-hour period. The results of the EI testing are as follows:

<u>Sample Identification</u>	<u>Expansion Index</u>	<u>Expansive Potential</u>
B-1 @ 0 to 5 feet	7	Very Low

Soluble Sulfates

Representative samples of the near-surface soils were submitted to a subcontracted analytical laboratory for determination of soluble sulfate content. Soluble sulfates are naturally present in soils, and if the concentration is high enough, can result in degradation of concrete which comes into contact with these soils. The result of the soluble sulfate testing is presented below, and is discussed further in a subsequent section of this report.

<u>Sample Identification</u>	<u>Soluble Sulfates (%)</u>	<u>Sulfate Classification</u>
B-1 @ 0 to 5 feet	0.0124	Not Applicable (S0)
B-6 @ 0 to 5 feet	0.0116	Not Applicable (S0)

Corrosivity Testing

Representative bulk samples of the near-surface soils were submitted to a subcontracted corrosion engineering laboratory to determine if the near-surface soils possess corrosive characteristics with respect to common construction materials. The corrosivity testing included a determination of the electrical resistivity, pH, and chloride and nitrate concentrations of the soils, as well as other tests. The results of some of these tests are presented below.

<u>Sample Identification</u>	<u>Saturated Resistivity (ohm-cm)</u>	<u>pH</u>	<u>Chlorides (mg/kg)</u>	<u>Nitrates (mg/kg)</u>
B-1 @ 0 to 5 feet	16,750	7.7	54.2	14.9
B-6 @ 0 to 5 feet	17,420	7.9	52.2	10.4

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our review, field exploration, laboratory testing and geotechnical analysis, the proposed development is considered feasible from a geotechnical standpoint. The recommendations contained in this report should be taken into the design, construction, and grading considerations.

The recommendations are contingent upon all grading and foundation construction activities being monitored by the geotechnical engineer of record. The recommendations are provided with the assumption that an adequate program of client consultation, construction monitoring, and testing will be performed during the final design and construction phases to verify compliance with these recommendations. Maintaining Southern California Geotechnical, Inc., (SCG) as the geotechnical consultant from the beginning to the end of the project will provide continuity of services. The geotechnical engineering firm providing testing and observation services shall assume the responsibility of Geotechnical Engineer of Record.

The Grading Guide Specifications, included as Appendix D, should be considered part of this report, and should be incorporated into the project specifications. The contractor and/or owner of the development should bring to the attention of the geotechnical engineer any conditions that differ from those stated in this report, or which may be detrimental for the development.

6.1 Seismic Design Considerations

The subject site is located in an area which is subject to strong ground motions due to earthquakes. The performance of a site-specific seismic hazards analysis was beyond the scope of this investigation. However, numerous faults capable of producing significant ground motions are located near the subject site. Due to economic considerations, it is not generally considered reasonable to design a structure that is not susceptible to earthquake damage. Therefore, significant damage to the structure may be unavoidable during large earthquakes. The proposed structure should, however, be designed to resist structural collapse and thereby provide reasonable protection from serious injury, catastrophic property damage and loss of life.

Faulting and Seismicity

Research of available maps indicates that the subject site is not located within an Alquist-Priolo Earthquake Fault Zone. Furthermore, SCG did not identify any evidence of faulting during the geotechnical investigation. Therefore, the possibility of significant fault rupture on the site is considered to be low.

The potential for other geologic hazards such as seismically induced settlement, lateral spreading, tsunamis, inundation, seiches, flooding, and subsidence affecting the site is considered low.

Seismic Design Parameters

The 2019 California Building Code (CBC) provides procedures for earthquake resistant structural design that include considerations for on-site soil conditions, occupancy, and the configuration of the structure including the structural system and height. The seismic design parameters presented below are based on the soil profile and the proximity of known faults with respect to the subject site. Based on standards in place at the time of this report, the proposed development is expected to be designed in accordance with the requirements of the 2019 edition of the California Building Code (CBC), which was adopted on January 1, 2020.

The 2019 CBC Seismic Design Parameters have been generated using the SEAOC/OSHPD Seismic Design Maps Tool, a web-based software application available at the website www.seismicmaps.org. This software application calculates seismic design parameters in accordance with several building code reference documents, including ASCE 7-16, upon which the 2019 CBC is based. The application utilizes a database of risk-targeted maximum considered earthquake (MCE_R) site accelerations at 0.01-degree intervals for each of the code documents. The tables below were created using data obtained from the application. The output generated from this program is included as Plate E-1 in Appendix E of this report.

The 2019 CBC requires that a site-specific ground motion study be performed in accordance with Section 11.4.8 of ASCE 7-16 for Site Class D sites with a mapped S_1 value greater than 0.2. However, Section 11.4.8 of ASCE 7-16 also indicates an exception to the requirement for a site-specific ground motion hazard analysis for certain structures on Site Class D sites. The commentary for Section 11 of ASCE 7-16 (Page 534 of Section C11 of ASCE 7-16) indicates that "In general, this exception effectively limits the requirements for site-specific hazard analysis to very tall and or flexible structures at Site Class D sites." **Based on our understanding of the proposed development, the seismic design parameters presented below were calculated assuming that the exception in Section 11.4.8 applies to the proposed structure at this site. However, the structural engineer should verify that this exception is applicable to the proposed structure.** Based on the exception, the spectral response accelerations presented below were calculated using the site coefficients (F_a and F_v) from Tables 1613.2.3(1) and 1613.2.3(2) presented in Section 16.4.4 of the 2019 CBC.

2019 CBC SEISMIC DESIGN PARAMETERS

Parameter		Value
Mapped MCE _R Acceleration at 0.2 sec Period	S_s	1.500
Mapped MCE _R Acceleration at 1.0 sec Period	S_1	0.600
Site Class	---	D
Site Modified Spectral Acceleration at 0.2 sec Period	S_{MS}	1.500
Site Modified Spectral Acceleration at 1.0 sec Period	S_{M1}	1.020
Design Spectral Acceleration at 0.2 sec Period	S_{DS}	1.000
Design Spectral Acceleration at 1.0 sec Period	S_{D1}	0.680

It should be noted that the site coefficient F_v and the parameters S_{M1} and S_{D1} were not included in the SEAOC/OSHPD Seismic Design Maps Tool output for the 2019 CBC. We calculated these

parameters-based on Table 1613.2.3(2) in Section 16.4.4 of the 2019 CBC using the value of S_1 obtained from the Seismic Design Maps Tool, assuming that a site-specific ground motion hazards analysis is not required for the proposed building at this site.

Liquefaction

Liquefaction is the loss of the strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and grain size characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking. The depth within which the occurrence of liquefaction may impact surface improvements is generally identified as the upper 50 feet below the existing ground surface. Liquefaction potential is greater in saturated, loose, poorly graded fine sands with a mean (d_{50}) grain size in the range of 0.075 to 0.2 mm (Seed and Idriss, 1971). Clayey (cohesive) soils or soils which possess clay particles ($d < 0.005\text{mm}$) in excess of 20 percent (Seed and Idriss, 1982) are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table.

The California Geological Survey (CGS) has not yet conducted detailed seismic hazards mapping in the area of the subject site. The general liquefaction susceptibility of the site was determined by research of the San Bernardino County Land Use Plan, General Plan, Geologic Hazard Overlays. Map FH05 for the Baldy Mesa 7.5-Minute Quadrangle indicates that the subject site is not located within an area of liquefaction susceptibility. Based on the mapping performed by the county of San Bernardino and the lack of a historic high groundwater table within the upper 50± feet, liquefaction is not considered to be a design concern for this project.

6.2 Geotechnical Design Considerations

General

The near-surface soils encountered at the boring locations consist of native younger and older alluvial soils, possessing variable densities and strengths. The results of laboratory testing indicate that some of the near-surface soils possess a minor to moderate potential for hydrocollapse when inundated with water. Based on their variable strengths and densities and their potential for collapse, the near surface soils, in their present condition, are not considered suitable for the support of the new foundations and floor slab. Remedial grading is recommended within the area of the proposed building, in order to remove and replace a portion of the near surface soils as compacted structural fill.

Settlement

Laboratory testing indicates that some samples of soils taken from the near-surface native alluvial soils possess a minor collapse potential when exposed to moisture infiltration. The proposed remedial grading will remove the near-surface collapsible native soils from within the proposed building area. Therefore, following completion of the recommended grading, post-construction settlements are expected to be within tolerable limits.

Expansion

Laboratory testing performed on a representative sample of the near surface soils indicates that these materials possess a very low expansion potential ($EI = 7$). Therefore, no design considerations related to expansive soils are considered warranted for this site. It is recommended that additional expansion index testing be conducted at the completion of rough grading to verify the expansion potential of the as-graded building pad.

Soluble Sulfates

The results of the soluble sulfate testing indicate that the selected samples of the on-site soils correspond to Class S0 with respect to the American Concrete Institute (ACI) Publication 318-14 Building Code Requirements for Structural Concrete and Commentary, Section 4.3. Therefore, specialized concrete mix designs are not considered to be necessary, with regard to sulfate protection purposes. It is, however, recommended that additional soluble sulfate testing be conducted at the completion of rough grading to verify the soluble sulfate concentrations of the soils which are present at pad grade within the building area.

Corrosion Potential

The results of laboratory testing indicate that the bulk samples of the near-surface soils taken at two of the boring locations possess saturated resistivities of 16,750 and 17,420 ohm-cm, and pH values of 7.7 and 7.9. These test results have been evaluated in accordance with guidelines published by the Ductile Iron Pipe Research Association (DIPRA). The DIPRA guidelines consist of a point system by which characteristics of the soils are used to quantify the corrosivity characteristics of the site. Sulfides, and redox potential are factors that are also used in the evaluation procedure. We have evaluated the corrosivity characteristics of the on-site soils using resistivity, pH, and moisture content. Based on these factors, and utilizing the DIPRA procedure, the on-site soils are not considered to be corrosive to ductile iron pipe and other metallic improvements. However, SCG does not practice in the area of corrosion engineering, so the client may also wish to contact a corrosion engineer to provide a more thorough evaluation.

Relatively low concentrations of chlorides, 52.2 to 54.2 mg/kg, were detected in the samples submitted for corrosivity testing. In general, soils possessing chloride concentrations in excess of 500 parts per million (ppm) are considered to be corrosive with respect to steel reinforcement within reinforced concrete. Based on the relatively low chloride concentration in the tested sample, the site is considered to have a C1 chloride exposure in accordance with the American Concrete Institute (ACI) Publication 318 Building Code Requirements for Structural Concrete and Commentary. Therefore, a specialized concrete mix design for protection against chloride exposure is not considered warranted.

Nitrates present in soil can be corrosive to copper tubing at concentrations greater than 50 mg/kg. The tested samples possess nitrate concentrations of 10.4 and 14.9 mg/kg. Based on these test results, the on-site soils are not considered to be corrosive to copper pipe. Since SCG does not practice in the area of corrosion engineering the client could contact a corrosion engineer for a more thorough evaluation.

Shrinkage/Subsidence

Removal and recompaction of the near-surface native alluvial soils is estimated to result in an average shrinkage of 0 to 8± percent, based on the results of density testing and the assumption that the onsite soils will be compacted to about 92 percent of the ASTM D-1557 maximum dry density. It should be noted that the shrinkage estimate is based on the results of dry density testing performed on small-diameter samples of the existing soils taken at the boring locations. If a more accurate and precise shrinkage estimate is desired, SCG can perform a shrinkage study involving several excavated test-pits where in-place densities are determined using in-situ testing methods instead of laboratory density testing on small-diameter samples. Please contact SCG for details and a cost estimate regarding a shrinkage study, if desired.

Minor ground subsidence is expected to occur in the soils below the zone of removal, due to settlement and machinery working. The subsidence is estimated to be 0.1± feet. This estimate may be used for grading in areas that are underlain by native alluvial soils.

These estimates are based on previous experience and the subsurface conditions encountered at the boring locations. The actual amount of subsidence is expected to be variable and will be dependent on the type of machinery used, repetitions of use, and dynamic effects, all of which are difficult to assess precisely.

Grading and Foundation Plan Review

No grading or foundation plans were available at the time of this report. It is therefore recommended that we be provided with copies of the preliminary plans, when they become available, for review with regard to the conclusions, recommendations, and assumptions contained within this report.

6.3 Site Grading Recommendations

The grading recommendations presented below are based on the subsurface conditions encountered at the boring locations and our understanding of the proposed development. We recommend that all grading activities be completed in accordance with the Grading Guide Specifications included as Appendix D of this report, unless superseded by site-specific recommendations presented below.

Site Stripping

Vegetation including grasses, shrubs, and weeds on the site should be stripped and disposed of off-site. Stripping should include any organic soils and any root masses from trees. The actual extent of site stripping should be determined in the field by the geotechnical engineer, based on the organic content and stability of the materials encountered.

Treatment of Existing Soils: Building Pad

Remedial grading should be performed within the proposed building area in order to remove a portion of the near-surface native alluvial soils. Based on conditions encountered at the boring locations, the existing soils within the proposed building area are recommended to be

overexcavated to a depth of at least 4 feet below existing grade and to a depth of at least 3 feet below proposed building pad subgrade elevation, whichever is greater.

Additional overexcavation should be performed within the influence zones of the new foundations, to provide for a new layer of compacted structural fill extending to a depth of 2 feet below proposed foundation bearing grade.

The overexcavation area should extend at least 5 feet beyond the building foundations and perimeters. If the proposed structure incorporates any exterior columns (such as for a canopy or overhang) the area of overexcavation should also encompass these areas.

Following completion of the overexcavation, the subgrade soils within the building area should be evaluated by the geotechnical engineer to verify their suitability to serve as the structural fill subgrade, as well as to support the foundation loads of the new structure. This evaluation should include proofrolling and probing to identify any soft, loose, or otherwise unstable soils that must be removed. Some localized areas of deeper excavation may be required if loose, porous, or low-density native soils are encountered at the base of the overexcavation.

After a suitable overexcavation subgrade has been achieved, the exposed soils should be scarified to a depth of at least 12 inches, moisture conditioned to achieve a moisture content of 0 to 4 percent above optimum moisture content. The moisture conditioning of the overexcavation subgrade soils should be verified by the geotechnical engineer. The subgrade soils should then be recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. The previously excavated soils may then be replaced as compacted structural fill.

Treatment of Existing Soils: Retaining Walls and Site Walls

The existing soils within the areas of any proposed retaining walls and non-retaining site walls should be overexcavated to a depth of 2 feet below foundation bearing grade and replaced as compacted structural fill, as discussed above for the proposed building pad. Any undocumented fill soils within any of these foundation areas should be removed in their entirety. The overexcavation areas should extend at least 5 feet beyond the foundation perimeters, and to an extent equal to the depth of fill below the new foundations. Any erection pads used to construct the walls are considered to be part of the foundation system with respect to these remedial grading recommendations. The overexcavation subgrade soils should be evaluated by the geotechnical engineer prior to scarifying, moisture conditioning, and recompacting the upper 12 inches of exposed subgrade soils. The previously excavated soils may then be replaced as compacted structural fill.

Treatment of Existing Soils: Parking and Drive Areas

Based on economic considerations, overexcavation of the existing variable strength alluvium soils in the new parking and drive areas is not considered warranted, with the exception of areas where lower strength or unstable soils are identified by the geotechnical engineer during grading.

Subgrade preparation in the new parking and drive areas should initially consist of removal of all soils disturbed during stripping and demolition operations. The geotechnical engineer should then evaluate the subgrade to identify any areas of additional unsuitable soils. The subgrade soils should then be scarified to a depth of 12± inches, moisture conditioned to 0 to 4 percent above

optimum, and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. Based on the presence of variable strength alluvial soils throughout the site, it is expected that some isolated areas of additional overexcavation may be required to remove zones of lower strength, unsuitable soils.

The grading recommendations presented above for the proposed parking and drive areas assume that the owner and/or developer can tolerate minor amounts of settlement within the proposed parking areas. The grading recommendations presented above do not completely mitigate the extent of existing fill soils and loose native soils in the parking areas. As such, settlement and associated pavement distress could occur. Typically, repair of such distressed areas involves significantly lower costs than completely mitigating these soils at the time of construction. If the owner cannot tolerate the risk of such settlements, the parking and drive areas should be overexcavated to a depth of 2 feet below proposed pavement subgrade elevation, with the resulting soils replaced as compacted structural fill.

Fill Placement

- Fill soils should be placed in thin ($6\pm$ inches), near-horizontal lifts, moisture conditioned to within 0 to 4 percent above the optimum moisture content, and compacted.
- On-site soils may be used for fill provided they are cleaned of any debris to the satisfaction of the geotechnical engineer.
- All grading and fill placement activities should be completed in accordance with the requirements of the 2019 CBC and the grading code of the city of Hesperia.
- All fill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density.
- Compaction tests should be performed periodically by the geotechnical engineer as random verification of compaction and moisture content. These tests are intended to aid the contractor. Since the tests are taken at discrete locations and depths, they may not be indicative of the entire fill and therefore should not relieve the contractor of his responsibility to meet the job specifications.

Imported Structural Fill

All imported structural fill should consist of very low expansive ($EI < 20$), well graded soils possessing at least 10 percent fines (that portion of the sample passing the No. 200 sieve). Additional specifications for structural fill are presented in the Grading Guide Specifications, included as Appendix D.

Utility Trench Backfill

In general, all utility trench backfill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. It is recommended that materials in excess of 3 inches in size not be used for utility trench backfill. Compacted trench backfill should conform to the requirements of the local grading code, and more restrictive requirements may be indicated by city of Hesperia. All utility trench backfills should be witnessed by the geotechnical engineer. The trench backfill soils should be compaction tested where possible; probed and visually evaluated elsewhere.

Utility trenches which parallel a footing, and extending below a 1h:1v plane projected from the outside edge of the footing should be backfilled with structural fill soils, compacted to at least 90 percent of the ASTM D-1557 standard. Pea gravel backfill should not be used for these trenches.

6.4 Construction Considerations

Moisture Sensitive Subgrade Soils

Occasional samples of the near-surface soils consist predominately of well-graded sands, silty sands and occasional sandy silts. These soils may become unstable if exposed to significant moisture infiltration or disturbance by construction traffic. If grading occurs during a period of relatively wet weather, an increase in subgrade instability in localized areas should also be expected. The site should, therefore, be graded to prevent ponding of surface water and to prevent water from running into excavations.

Excavation Considerations

The near surface soils are predominately granular in composition. These materials will likely be subject to caving within shallow excavations. Where caving occurs within shallow excavations, flattened excavation slopes may be sufficient to provide excavation stability. On a preliminary basis, the inclination of temporary slopes should not exceed 2h:1v. Maintaining adequate moisture content within the near-surface soils will improve excavation stability. All excavation activities on this site should be conducted in accordance with Cal-OSHA regulations.

Groundwater

Based on the conditions encountered at the boring locations, the static groundwater table at this site is considered to exist at a depth greater than 30± feet. Therefore, groundwater is not expected to impact the grading or foundation construction activities.

6.5 Foundation Design and Construction

Based on the preceding grading recommendations, it is assumed that the new building pad will be underlain by structural fill soils used to replace the upper portion of the existing variable strength, potentially collapsible alluvial soils. These new structural fill soils are expected to extend to depths of at least 2 feet below proposed foundation bearing grade. Based on this subsurface profile, the proposed structure may be supported on conventional shallow foundations.

Foundation Design Parameters

New square and rectangular footings may be designed as follows:

- Maximum, net allowable soil bearing pressure: 3,000 lbs/ft².
- Minimum wall/column footing width: 14 inches/24 inches.

- Minimum longitudinal steel reinforcement within strip footings: Two (2) No. 5 rebars (1 top and 1 bottom).
- Minimum foundation embedment: 12 inches into suitable structural fill soils, and at least 18 inches below adjacent exterior grade. Interior column footings may be placed immediately beneath the floor slab.
- It is recommended that the perimeter building foundations be continuous across all exterior doorways. Any flatwork adjacent to the exterior doors should be doweled into the perimeter foundations in a manner determined by the structural engineer.

The allowable bearing pressure presented above may be increased by one-third when considering short duration wind or seismic loads. The minimum steel reinforcement recommended above is based on geotechnical considerations; additional reinforcement may be necessary for structural considerations. The actual design of the foundations should be determined by the structural engineer.

Foundation Construction

The foundation subgrade soils should be evaluated at the time of overexcavation, as discussed in Section 6.3 of this report. It is further recommended that the foundation subgrade soils be evaluated by the geotechnical engineer immediately prior to steel or concrete placement. Soils suitable for direct foundation support should consist of newly placed structural fill, compacted to at least 90 percent of the ASTM D-1557 maximum dry density. Any unsuitable materials should be removed to a depth of suitable bearing compacted structural fill, with the resulting excavations backfilled with compacted fill soils. As an alternative, lean concrete slurry (500 to 1,500 psi) may be used to backfill such isolated overexcavations.

The foundation subgrade soils should also be properly moisture conditioned to 0 to 4 percent above the Modified Proctor optimum, to a depth of at least 12 inches below bearing grade. Since it is typically not feasible to increase the moisture content of the floor slab and foundation subgrade soils once rough grading has been completed, care should be taken to maintain the moisture content of the building pad subgrade soils throughout the construction process.

Estimated Foundation Settlements

Post-construction total and differential settlements of shallow foundations designed and constructed in accordance with the previously presented recommendations are estimated to be less than 1.0 and 0.5 inches, respectively. Differential movements are expected to occur over a 50-foot span, thereby resulting in an angular distortion of less than 0.002 inches per inch.

Lateral Load Resistance

Lateral load resistance will be developed by a combination of friction acting at the base of foundations and slabs and the passive earth pressure developed by footings below grade. The following friction and passive pressure may be used to resist lateral forces:

- Passive Earth Pressure: 300 lbs/ft³
- Friction Coefficient: 0.30

These are allowable values, and include a factor of safety. When combining friction and passive resistance, the passive pressure component should be reduced by one-third. These values assume that footings will be poured directly against compacted structural fill. The maximum allowable passive pressure is 2,500 lbs/ft².

6.6 Floor Slab Design and Construction

Subgrades which will support new floor slab should be prepared in accordance with the recommendations contained in the ***Site Grading Recommendations*** section of this report. Based on the anticipated grading which will occur at this site, the floor of the new structure may be constructed as a conventional slab-on-grade supported on newly placed structural fill soils. These fill soils are expected to extend to a depth of at least 3 feet below finished pad grade. Based on geotechnical considerations, the floor slabs may be designed as follows:

- Minimum slab thickness: 6 inches.
- Modulus of Subgrade Reaction: $k = 150 \text{ psi/in}$
- Minimum slab reinforcement: Reinforcement is not required for geotechnical conditions. The actual floor slab reinforcement should be determined by the structural engineer, based upon the imposed loading.
- Slab underlayment: If moisture sensitive floor coverings will be used the minimum slab underlayment should consist of a moisture vapor barrier constructed below the entire area where such moisture sensitive floor coverings are anticipated. The moisture vapor barrier should meet or exceed the Class A rating as defined by ASTM E 1745-97 and have a permeance rating less than 0.01 perms as described in ASTM E 96-95 and ASTM E 154-88. A polyolefin material such as a 15 mil. Stego® Wrap Vapor Barrier or equivalent will meet these specifications. The moisture vapor barrier should be properly constructed in accordance with all applicable manufacturer specifications. The need for sand and/or the amount of sand above the moisture vapor barrier should be specified by the structural engineer or concrete contractor. The selection of sand above the barrier is not a geotechnical engineering issue and hence outside our purview.
- Moisture condition the floor slab subgrade soils to 0 to 4 percent above the Modified Proctor optimum moisture content, to a depth of 12 inches. The moisture content of the floor slab subgrade soils should be verified by the geotechnical engineer within 24 hours prior to concrete placement.
- Proper concrete curing techniques should be utilized to reduce the potential for slab curling or the formation of excessive shrinkage cracks.

The actual design of the floor slab should be completed by the structural engineer to verify adequate thickness and reinforcement.

6.7 Retaining Wall Design and Construction

Small retaining walls are expected to be necessary in the area of the new truck loading docks and may also be required to facilitate the new site grades. The parameters recommended for use in the design of these walls are presented below.

Retaining Wall Design Parameters

Based on the soil conditions encountered at the boring locations, the following parameters may be used in the design of new retaining walls for this site. We have provided parameters assuming the use of on-site soils for retaining wall backfill. The near-surface soils generally consist of well-graded sands and silty sands. Based on their classifications the on-site soils are expected to possess an internal angle of friction of at least 32 degrees when compacted to 90 percent of the ASTM D-1557 maximum dry density.

If desired, SCG could provide design parameters for an alternative select backfill material behind the retaining walls. The use of select backfill material could result in lower lateral earth pressures. In order to use the design parameters for the imported select fill, this material must be placed within the entire active failure wedge. This wedge is defined as extending from the heel of the retaining wall upwards at an angle of approximately 60° from horizontal. If select backfill material behind the retaining wall is desired, SCG should be contacted for supplementary recommendations.

RETAINING WALL DESIGN PARAMETERS

Design Parameter		Soil Type
		On-Site Sands and Silty Sands
Internal Friction Angle (ϕ)		32°
Unit Weight		132 lbs/ft ³
Equivalent Fluid Pressure:	Active Condition (level backfill)	41 lbs/ft ³
	Active Condition (2h:1v backfill)	62 lbs/ft ³
	At-Rest Condition (level backfill)	62 lbs/ft ³

The walls should be designed using a soil-footing coefficient of friction of 0.30 and an equivalent passive pressure of 300 lbs/ft³. The structural engineer should incorporate appropriate factors of safety in the design of the retaining walls.

The active earth pressure may be used for the design of retaining walls that do not directly support structures or support soils that in turn support structures and which will be allowed to deflect. The at-rest earth pressure should be used for walls that will not be allowed to deflect such as those which will support foundation bearing soils, or which will support foundation loads directly.

Where the soils on the toe side of the retaining wall are not covered by a "hard" surface such as a structure or pavement, the upper 1 foot of soil should be neglected when calculating passive resistance due to the potential for the material to become disturbed or degraded during the life of the structure.

Retaining Wall Foundation Design

The retaining wall foundations should be supported within newly placed structural fill. Foundations to support new retaining walls should be designed in accordance with the general Foundation Design Parameters presented in a previous section of this report.

Seismic Lateral Earth Pressures

In accordance with the 2019 CBC, any retaining walls more than 6 feet in height must be designed for seismic lateral earth pressures. If walls 6 feet or more are required for this site, the geotechnical engineer should be contacted for supplementary seismic lateral earth pressure recommendations.

Backfill Material

On-site soils may be used to backfill the retaining walls. However, all backfill material placed within 3 feet of the back-wall face should have a particle size no greater than 3 inches. The retaining wall backfill materials should be well graded.

It is recommended that a properly installed prefabricated drainage composite such as the MiraDRAIN 6000XL (or approved equivalent), which is specifically designed for use behind retaining walls, be placed against the face on the back side of the retaining walls. This material should extend from the top of the retaining wall footing to within 1 foot of the ground surface on the back side of the retaining wall. A 12-inch-thick layer of a low permeability soil should be placed over the backfill to reduce surface water migration to the underlying soils.

All retaining wall backfill should be placed and compacted under engineering-controlled conditions in the necessary layer thicknesses to ensure an in-place density between 90 and 93 percent of the maximum dry density as determined by the Modified Proctor test (ASTM D1557-91). Care should be taken to avoid over-compaction of the soils behind the retaining walls, and the use of heavy compaction equipment should be avoided.

Subsurface Drainage

As previously indicated, the retaining wall design parameters are based upon drained backfill conditions. Consequently, some form of permanent drainage system will be necessary in conjunction with the appropriate backfill material. Subsurface drainage may consist of either:

- A weep hole drainage system typically consisting of a series of 4-inch diameter holes in the wall situated slightly above the ground surface elevation on the exposed side of the wall and at an approximate 8-foot on-center spacing. The weep holes should include a 2 cubic foot pocket of open graded gravel, surrounded by an approved geotextile fabric, at each weep hole location.

- A 4-inch diameter perforated pipe surrounded by 2 cubic feet of gravel per linear foot of drain placed behind the wall, above the retaining wall footing. The gravel layer should be wrapped in a suitable geotextile fabric to reduce the potential for migration of fines. The footing drain should be extended to daylight or tied into a storm drainage system.

6.8 Pavement Design Parameters

Site preparation in the pavement area should be completed as previously recommended in the ***Site Grading Recommendations*** section of this report. The subsequent pavement recommendations assume proper drainage and construction monitoring, and are based on either PCA or CALTRANS design parameters for a twenty (20) year design period. However, these designs also assume a routine pavement maintenance program to obtain the anticipated 20-year pavement service life.

Pavement Subgrades

It is anticipated that the new pavements will be primarily supported on a layer of compacted structural fill, consisting of scarified, thoroughly moisture conditioned and recompacted existing soils. The on-site soils generally consist of silty sands and sandy silts. Based on their classification, these materials are expected to possess good to excellent pavement support characteristics, with R-values in the range of 40 to 50. Since R-value testing was not included in the scope of services for this project, the subsequent pavement design is based upon an assumed R-value of 40. Any fill material imported to the site should have support characteristics equal to or greater than that of the on-site soils and be placed and compacted under engineering-controlled conditions. It is recommended that R-value testing be performed after completion of rough grading. Depending upon the results of the R-value testing, it may be feasible to use thinner pavement sections in some areas of the site.

Asphaltic Concrete

Presented below are the recommended thicknesses for new flexible pavement structures consisting of asphaltic concrete over a granular base. The pavement designs are based on the traffic indices (TI's) indicated. The client and/or civil engineer should verify that these TI's are representative of the anticipated traffic volumes. If the client and/or civil engineer determine that the expected traffic volume will exceed the applicable traffic index, we should be contacted for supplementary recommendations. The design traffic indices equate to the following approximate daily traffic volumes over a 20-year design life, assuming six operational traffic days per week.

Traffic Index	No. of Heavy Trucks per Day
4.0	0
5.0	1
6.0	3
7.0	11
8.0	35
9.0	93

For the purpose of the traffic volumes indicated above, a truck is defined as a 5-axle tractor trailer unit with one 8-kip axle and two 32-kip tandem axles. All of the traffic indices allow for 1,000 automobiles per day.

ASPHALT PAVEMENTS (R=40)					
Materials	Thickness (inches)				
	Auto Parking and Auto Drive Lanes (TI = 4.0 to 5.0)	Truck Traffic			
		TI = 6.0	TI = 7.0	TI = 8.0	TI = 9.0
Asphalt Concrete	3	3½	4	5	5½
Aggregate Base	4	6	7	8	10
Compacted Subgrade	12	12	12	12	12

The aggregate base course should be compacted to at least 95 percent of the ASTM D-1557 maximum dry density. The asphaltic concrete should be compacted to at least 95 percent of the Marshall maximum density, as determined by ASTM D-2726. The aggregate base course may consist of crushed aggregate base (CAB) or crushed miscellaneous base (CMB), which is a recycled gravel, asphalt and concrete material. The gradation, R-Value, Sand Equivalent, and Percentage Wear of the CAB or CMB should comply with appropriate specifications contained in the current edition of the "Greenbook" Standard Specifications for Public Works Construction.

Portland Cement Concrete

The preparation of the subgrade soils within concrete pavement areas should be performed as previously described for proposed asphalt pavement areas. The minimum recommended thicknesses for the Portland Cement Concrete pavement sections are as follows:

PORTLAND CEMENT CONCRETE PAVEMENTS (R=40)				
Materials	Thickness (inches)			
	Autos and Light Truck Traffic (TI = 6.0)	Truck Traffic		
		TI = 7.0	TI = 8.0	TI = 9.0
PCC	5	5½	6½	8
Compacted Subgrade (95% minimum compaction)	12	12	12	12

The concrete should have a 28-day compressive strength of at least 3,000 psi. Any reinforcement within the PCC pavements should be determined by the project structural engineer. The maximum joint spacing within all of the PCC pavements is recommended to be equal to or less than 30 times the pavement thickness.

7.0 GENERAL COMMENTS

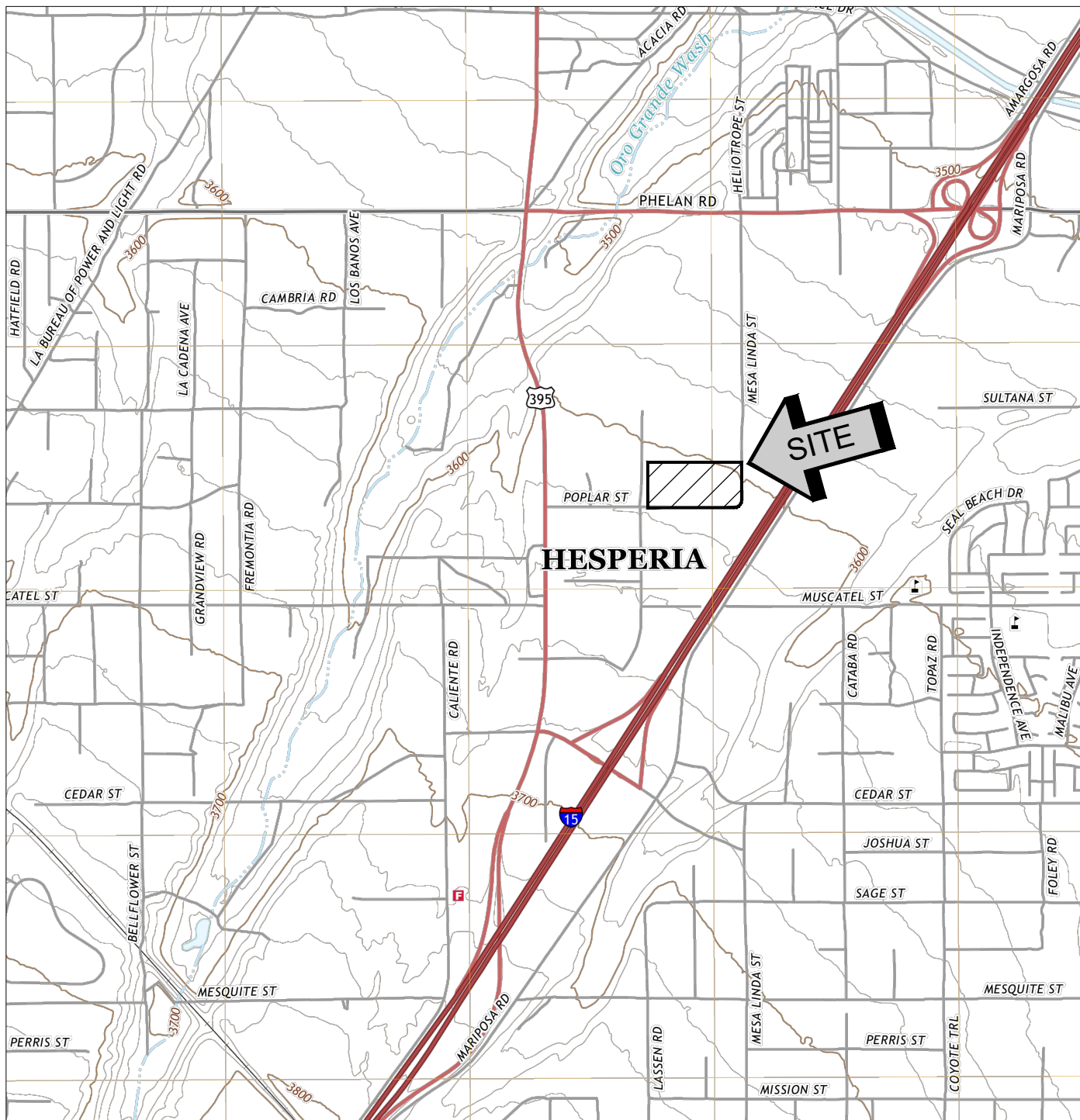
This report has been prepared as an instrument of service for use by the client, in order to aid in the evaluation of this property and to assist the architects and engineers in the design and preparation of the project plans and specifications. This report may be provided to the contractor(s) and other design consultants to disclose information relative to the project. However, this report is not intended to be utilized as a specification in and of itself, without appropriate interpretation by the project architect, civil engineer, and/or structural engineer. The reproduction and distribution of this report must be authorized by the client and Southern California Geotechnical, Inc. Furthermore, any reliance on this report by an unauthorized third party is at such party's sole risk, and we accept no responsibility for damage or loss which may occur. The client(s)' reliance upon this report is subject to the Engineering Services Agreement, incorporated into our proposal for this project.

The analysis of this site was based on a subsurface profile interpolated from limited discrete soil samples. While the materials encountered in the project area are considered to be representative of the total area, some variations should be expected between boring locations and sample depths. If the conditions encountered during construction vary significantly from those detailed herein, we should be contacted immediately to determine if the conditions alter the recommendations contained herein.

This report has been based on assumed or provided characteristics of the proposed development. It is recommended that the owner, client, architect, structural engineer, and civil engineer carefully review these assumptions to ensure that they are consistent with the characteristics of the proposed development. If discrepancies exist, they should be brought to our attention to verify that they do not affect the conclusions and recommendations contained herein. We also recommend that the project plans and specifications be submitted to our office for review to verify that our recommendations have been correctly interpreted.

The analysis, conclusions, and recommendations contained within this report have been promulgated in accordance with generally accepted professional geotechnical engineering practice. No other warranty is implied or expressed.

APPENDIX A



SOURCE: USGS TOPOGRAPHIC MAP OF THE
BALD MESA QUADRANGLE, RIVERSIDE COUNTY,
CALIFORNIA, 2021.



SITE LOCATION MAP

PROPOSED I-15 BUSINESS PARK-BUILDING 3

HESPERIA, CALIFORNIA

SCALE: 1" = 2000'

DRAWN: MD

CHKD: DN

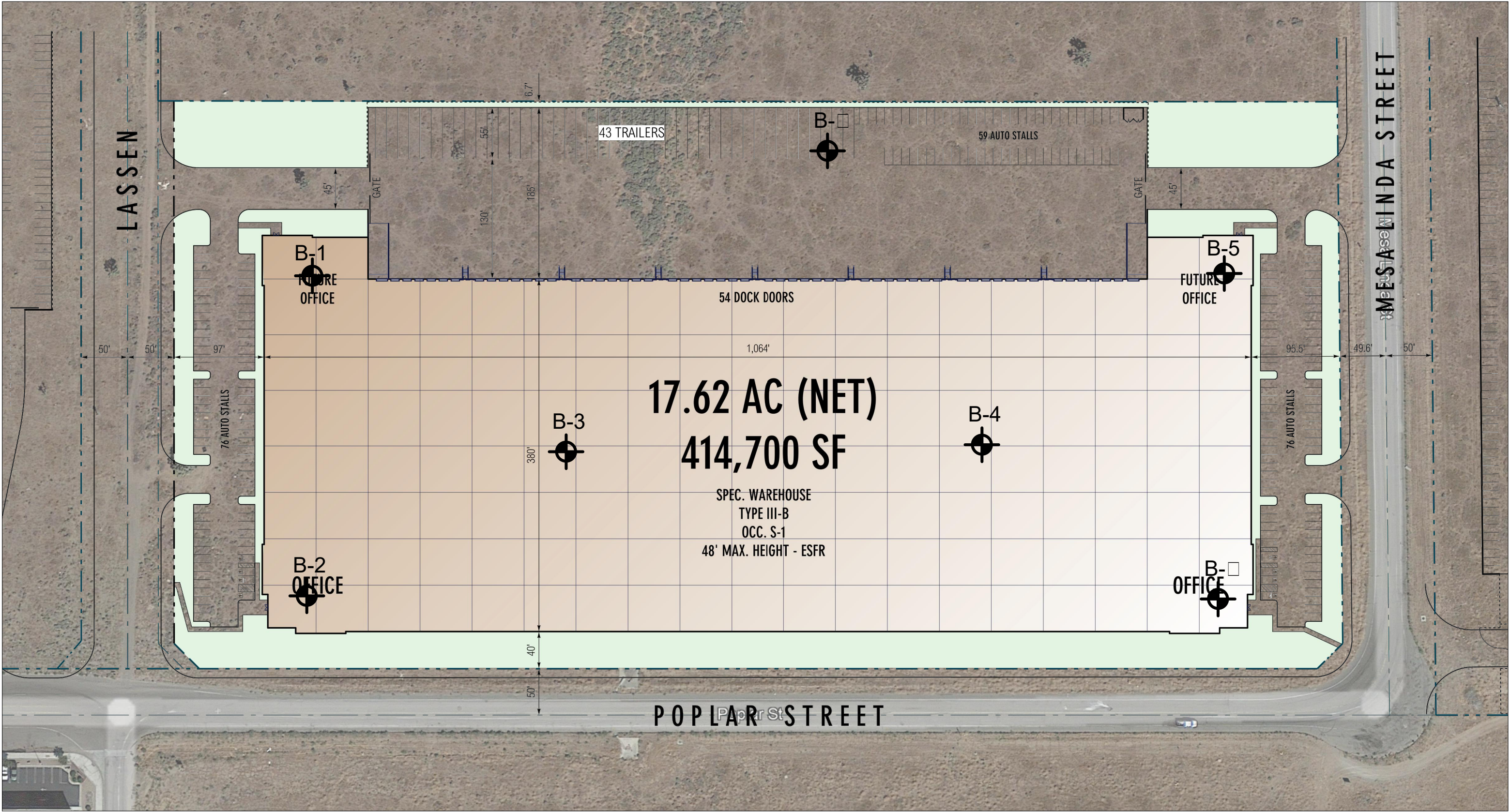
SCG PROJECT

22G134-1

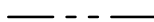
PLATE 1



SOUTHERN
CALIFORNIA
GEOTECHNICAL



GEOTECHNICAL LEGEND

-  APPROXIMATE BORING LOCATION
-  SITE BOUNDARY

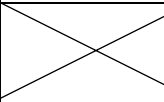


NOTE: CONCEPTUAL SITE PLAN PREPARED BY RGA ARCHITECTS.
AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH.

BORING LOCATION PLAN	
PROPOSED I-15 BUSINESS PARK-BUILDING 3	
HESPERIA, CALIFORNIA	
SCALE: 1" = 100'	
DRAWN: MD	
CHKD: DN	
SCG PROJECT 22G134-1	
PLATE 2	SOUTHERN CALIFORNIA GEOTECHNICAL

APPENDIX B

BORING LOG LEGEND

SAMPLE TYPE	GRAPHICAL SYMBOL	SAMPLE DESCRIPTION
AUGER		SAMPLE COLLECTED FROM AUGER CUTTINGS, NO FIELD MEASUREMENT OF SOIL STRENGTH. (DISTURBED)
CORE		ROCK CORE SAMPLE: TYPICALLY TAKEN WITH A DIAMOND-TIPPED CORE BARREL. TYPICALLY USED ONLY IN HIGHLY CONSOLIDATED BEDROCK.
GRAB		SOIL SAMPLE TAKEN WITH NO SPECIALIZED EQUIPMENT, SUCH AS FROM A STOCKPILE OR THE GROUND SURFACE. (DISTURBED)
CS		CALIFORNIA SAMPLER: 2-1/2 INCH I.D. SPLIT BARREL SAMPLER, LINED WITH 1-INCH HIGH BRASS RINGS. DRIVEN WITH SPT HAMMER. (RELATIVELY UNDISTURBED)
NSR		NO RECOVERY: THE SAMPLING ATTEMPT DID NOT RESULT IN RECOVERY OF ANY SIGNIFICANT SOIL OR ROCK MATERIAL.
SPT		STANDARD PENETRATION TEST: SAMPLER IS A 1.4 INCH INSIDE DIAMETER SPLIT BARREL, DRIVEN 18 INCHES WITH THE SPT HAMMER. (DISTURBED)
SH		SHELBY TUBE: TAKEN WITH A THIN WALL SAMPLE TUBE, PUSHED INTO THE SOIL AND THEN EXTRACTED. (UNDISTURBED)
VANE		VANE SHEAR TEST: SOIL STRENGTH OBTAINED USING A 4 BLADED SHEAR DEVICE. TYPICALLY USED IN SOFT CLAYS-NO SAMPLE RECOVERED.

COLUMN DESCRIPTIONS

DEPTH:

Distance in feet below the ground surface.

SAMPLE:

Sample Type as depicted above.

BLOW COUNT:

Number of blows required to advance the sampler 12 inches using a 140 lb hammer with a 30-inch drop. 50/3" indicates penetration refusal (>50 blows) at 3 inches. WH indicates that the weight of the hammer was sufficient to push the sampler 6 inches or more.

POCKET PEN.:

Approximate shear strength of a cohesive soil sample as measured by pocket penetrometer.

GRAPHIC LOG:

Graphic Soil Symbol as depicted on the following page.

DRY DENSITY:

Dry density of an undisturbed or relatively undisturbed sample in lbs/ft³.

MOISTURE CONTENT:

Moisture content of a soil sample, expressed as a percentage of the dry weight.

LIQUID LIMIT:

The moisture content above which a soil behaves as a liquid.

PLASTIC LIMIT:

The moisture content above which a soil behaves as a plastic.

PASSING #200 SIEVE:

The percentage of the sample finer than the #200 standard sieve.

UNCONFINED SHEAR:

The shear strength of a cohesive soil sample, as measured in the unconfined state.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS



JOB NO.: 22G134-1				DRILLING DATE: 2/15/22				WATER DEPTH: Dry				
PROJECT: Poplar 18 Industrial Park				DRILLING METHOD: Hollow Stem Auger				CAVE DEPTH: 28 feet				
LOCATION: Hesperia, California				LOGGED BY: Ryan Bremer				READING TAKEN: At Completion				
FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: MSL												
		17			YOUNGER ALLUVIUM: Brown Silty fine to coarse Sand, trace fine Gravel, medium dense-damp	115	4					EI = 7 @ 0-5'
		22			OLDER ALLUVIUM: Light Brown Silty fine to coarse Sand to fine to coarse Sandy Silt, trace fine Gravel, trace Clay, weakly cemented, medium dense-dry to damp	108	3					
5		44				115	3					
		37				102	3					
10		27				110	3					
		29				3						
15												
		21			Light Brown fine to coarse Sandy Silt, little Calcareous veining, medium dense-damp		6					
20												
		32			Light Brown Silty fine to coarse Sand, little Calcareous veining, dense-damp		4					
25												
		25			Light Brown fine to coarse Sand, little Silt, medium dense-damp		5					
30												
Boring Terminated at 30'												

TBL 22G134-1.GPJ, SOCALGEO.GDT 4/8/22



JOB NO.: 22G134-1	DRILLING DATE: 2/15/22	WATER DEPTH: Dry
PROJECT: Poplar 18 Industrial Park	DRILLING METHOD: Hollow Stem Auger	CAVE DEPTH: 21 feet
LOCATION: Hesperia, California	LOGGED BY: Ryan Bremer	READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: MSL												
5		9			YOUNGER ALLUVIUM: Light Brown Silty fine Sand to fine Sandy Silt, trace medium to coarse Sand, trace fine Gravel, loose-dry		2					
		16			Light Brown Silty fine to coarse Sand, medium dense-dry		2					
		19			OLDER ALLUVIUM: Light Brown Silty fine to coarse Sand, trace Calcareous veining, medium dense-dry		2					
		37			@ 8½ feet, dense, damp		3					
												
15		21			Brown fine to coarse Sand, trace to little Silt, medium dense-dry to damp		2					
		26			@ 18½ feet, little Silt		2					
		29					4					
25												
Boring Terminated at 25'												

TBL 22G134-1.GPJ, SOCALGEO.GDT 4/8/22



JOB NO.: 22G134-1		DRILLING DATE: 2/15/22		WATER DEPTH: Dry								
PROJECT: Poplar 18 Industrial Park		DRILLING METHOD: Hollow Stem Auger		CAVE DEPTH: 14 feet								
LOCATION: Hesperia, California		LOGGED BY: Ryan Bremer		READING TAKEN: At Completion								
FIELD RESULTS		DESCRIPTION		LABORATORY RESULTS				COMMENTS				
DEPTH (FEET)	SAMPLE			BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DRY DENSITY (PCF)		MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)
		SURFACE ELEVATION: MSL										
5		12			YOUNGER ALLUVIUM: Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel, medium dense-dry		2					
		21			OLDER ALLUVIUM: Light Brown Silty fine to medium Sand, trace fine Gravel, weakly cemented, dry to damp		3					
		23					4					
		30			@ 8½ feet, little coarse Sand, dense		3					
10												
15		19			Brown fine to coarse Sand, trace to little Silt, medium dense-dry		2					
Boring Terminated at 15'												

BTBL 22G134-1.GPJ SOCALGEO.GDT 4/8/22



JOB NO.: 22G134-1
PROJECT: Poplar 18 Industrial Park
LOCATION: Hesperia, California

DRILLING DATE: 2/15/22
DRILLING METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: 14 feet
READING TAKEN: At Completion

FIELD RESULTS					GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	DRY DENSITY (PCF)			MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)		
SURFACE ELEVATION: MSL													
5		32			YOUNGER ALLUVIUM: Brown Silty fine to coarse Sand, trace fine Gravel, medium dense-dry	113	2						
		56			OLDER ALLUVIUM: Light Brown Silty fine to coarse Sand, trace Calcareous veining, trace fine Gravel, medium dense-damp	113	3						
		53			Light Brown fine to coarse Sandy Silt to Silty fine to coarse Sand, weakly cemented, dense-dry to damp	118	3						
		40			@ 7 feet, medium dense	106	2						
		32			Light Brown Silty fine to coarse Sand, medium dense-dry	118	2						
		20			Brown Silty fine to coarse Sand, trace fine to coarse Gravel, medium dense-dry		2						
15					Boring Terminated at 15'								

TBL 22G134-1.GPJ SOCALGEO.GDT 4/8/22



JOB NO.: 22G134-1	DRILLING DATE: 2/15/22	WATER DEPTH: Dry
PROJECT: Poplar 18 Industrial Park	DRILLING METHOD: Hollow Stem Auger	CAVE DEPTH: 16 feet
LOCATION: Hesperia, California	LOGGED BY: Ryan Bremer	READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: MSL												
5		7			<u>YOUNGER ALLUVIUM:</u> Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel, loose to medium dense-dry to damp		4					
		12					2					
		37			<u>OLDER ALLUVIUM:</u> Brown Silty fine to coarse Sand, trace fine Gravel, medium dense to dense-dry to damp		3					
		11					6					
		18			Brown fine to coarse Sand, trace Silt, medium dense-dry to damp		3					
15												
20		25			Brown Silty fine to coarse Sand, trace Clay, medium dense-damp		6					
					Boring Terminated at 20'							

TBL 22G134-1.GPJ SOCALGEO.GDT 4/8/22



JOB NO.: 22G134-1				DRILLING DATE: 2/15/22				WATER DEPTH: Dry				
PROJECT: Poplar 18 Industrial Park				DRILLING METHOD: Hollow Stem Auger				CAVE DEPTH: 25 feet				
LOCATION: Hesperia, California				LOGGED BY: Ryan Bremer				READING TAKEN: At Completion				
FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
					SURFACE ELEVATION: MSL							
		27			YOUNGER ALLUVIUM: Light Brown fine to coarse Sandy Silt, trace fine Root fibers, trace fine Gravel, loose to medium dense-dry to damp	118	3					El = 1 @ 0-5'
		14				116	2					
5		27			OLDER ALLUVIUM: Light Brown Silty fine to coarse Sand, trace fine Gravel, medium dense-dry to damp	113	2					
		30				117	3					
10		41			Brown fine to coarse Sand, trace fine to coarse Gravel, trace Silt, medium dense-dry to damp	93	2					
		27					5					
15												
		23			@ 18½ feet, trace to little Silt		4					
20												
		16			Light Brown fine Sandy Silt, with 3-inch Silty Clay lense, trace Iron Oxide staining, trace medium Sand, medium dense-moist		10					
25												
		15			Light Brown fine to coarse Sand, trace Silt, trace Iron Oxide staining, medium dense-damp		3					
30												
					Boring Terminated at 30'							

TBL 22G134-1.GPJ, SOCALGEO.GDT 4/8/22



JOB NO.: 22G134-1
PROJECT: Poplar 18 Industrial Park
LOCATION: Hesperia, California

DRILLING DATE: 2/15/22
DRILLING METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

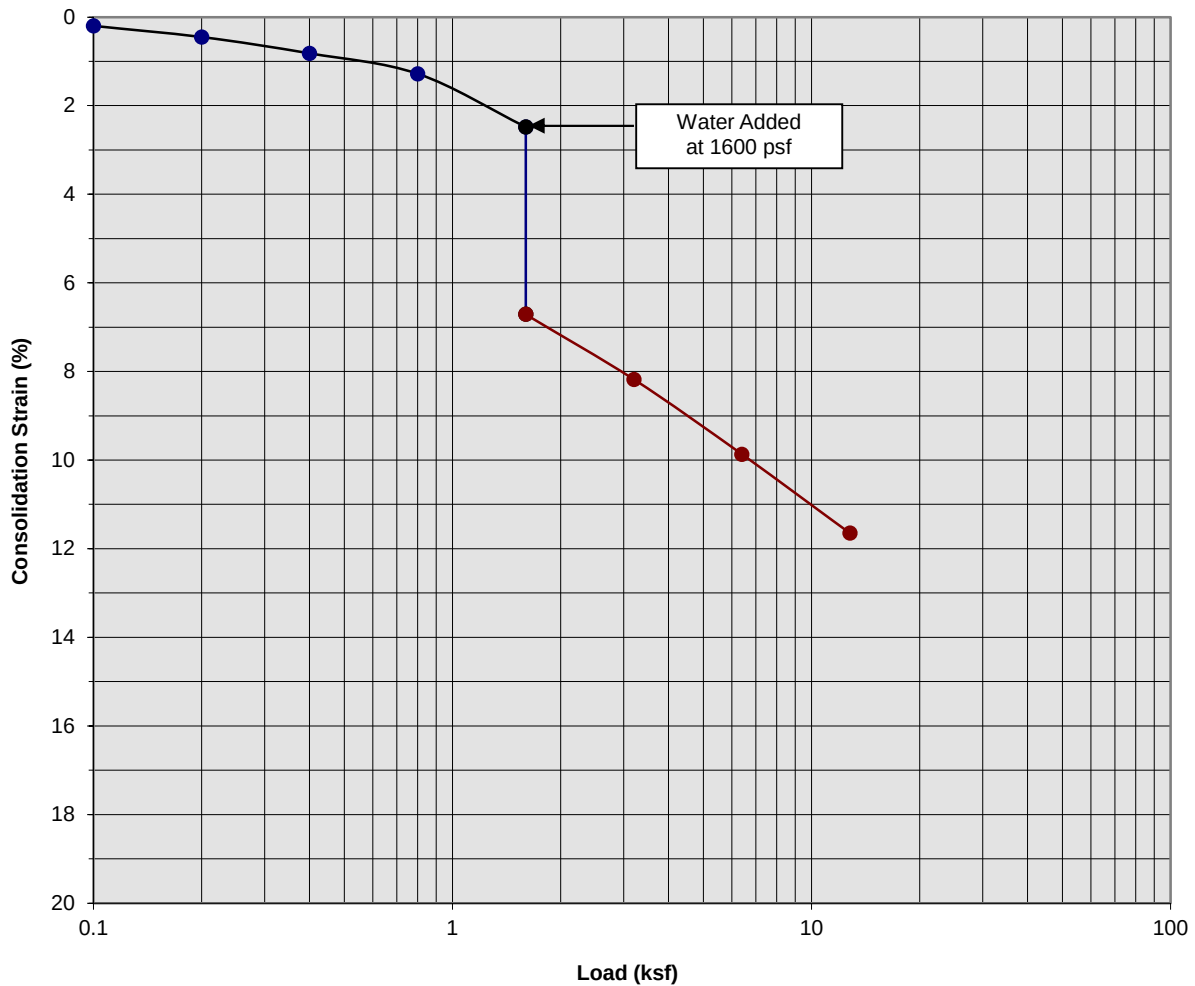
WATER DEPTH: Dry
CAVE DEPTH: 18 feet
READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: MSL												
5 												

TBL 22G134-1.GPJ SOCALGEO.GDT 4/8/22

APPENDIX

Consolidation/Collapse Test Results



Classification: Light Brown Silty fine to coarse Sand to fine to coarse Sandy Silt

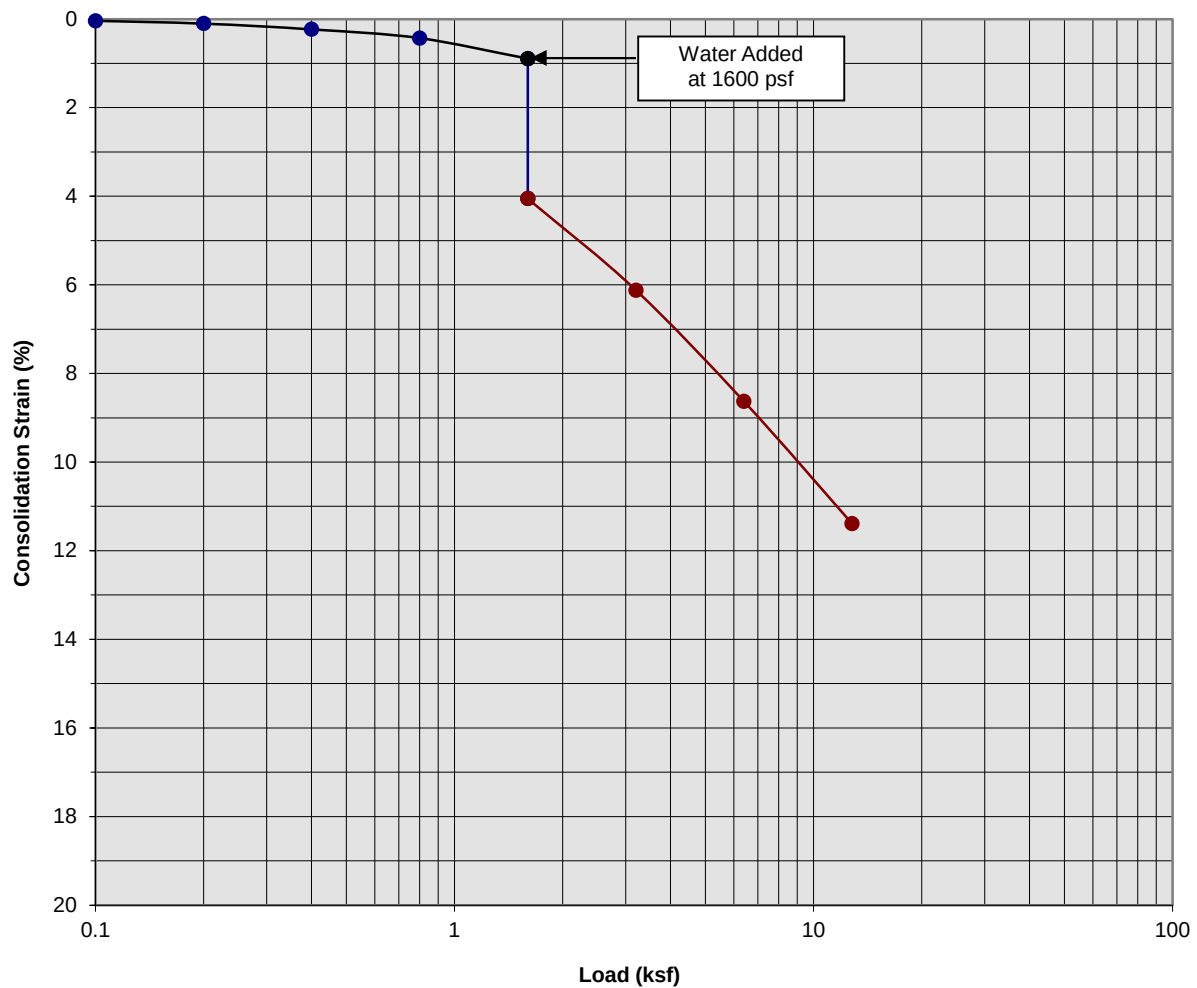
Boring Number:	B-1	Initial Moisture Content (%)	3
Sample Number:	---	Final Moisture Content (%)	12
Depth (ft)	3 to 4	Initial Dry Density (pcf)	107.6
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	121.2
Specimen Thickness (in)	1.0	Percent Collapse (%)	4.23

Poplar 18 Industrial Park
Hesperia, California
Project No. 22G134-1
PLATE C- 1



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

Consolidation/Collapse Test Results



Classification: Light Brown Silty fine to coarse Sand to fine to coarse Sandy Silt

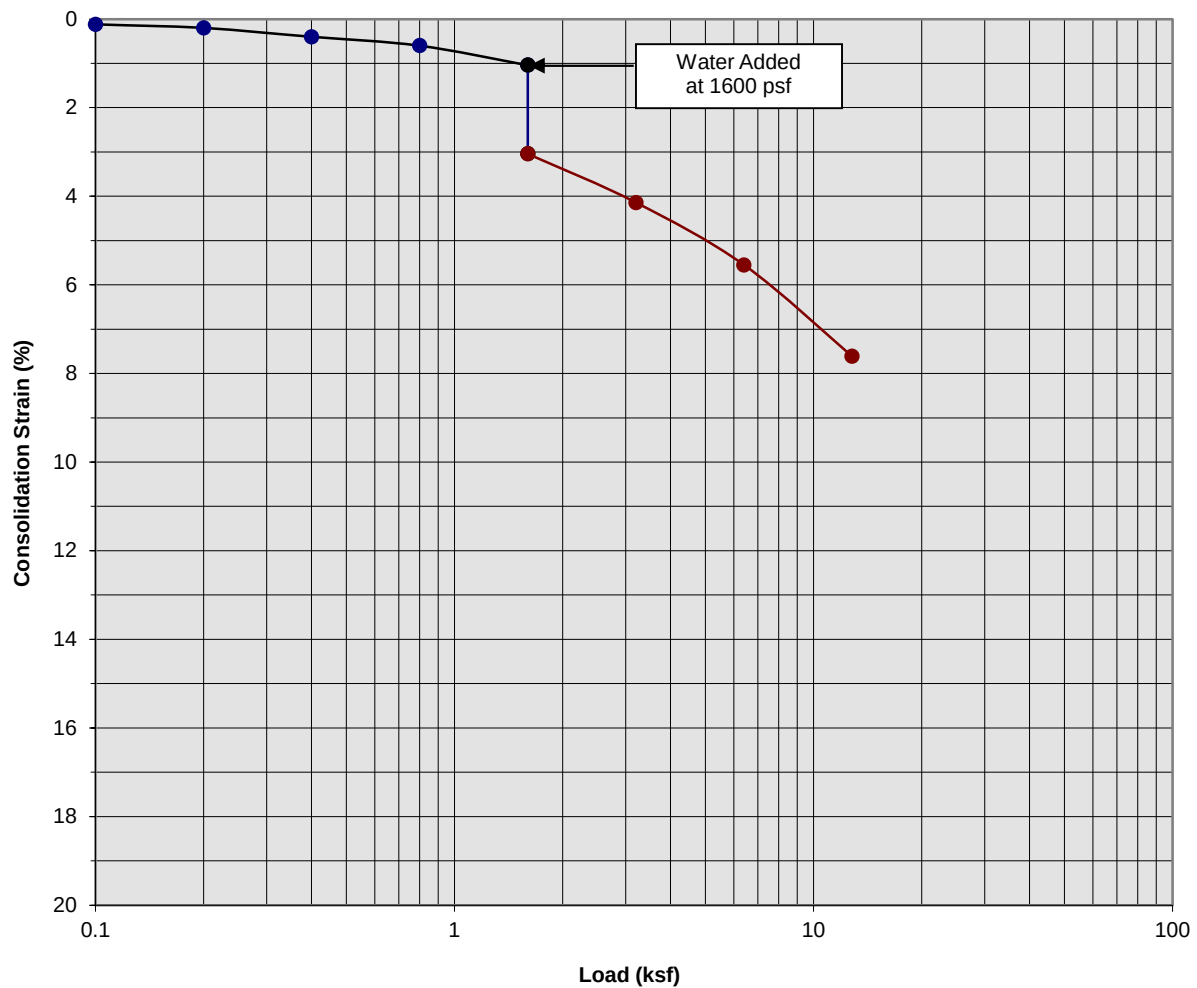
Boring Number:	B-1	Initial Moisture Content (%)	3
Sample Number:	---	Final Moisture Content (%)	11
Depth (ft)	5 to 6	Initial Dry Density (pcf)	114.1
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	128.8
Specimen Thickness (in)	1.0	Percent Collapse (%)	3.16

Poplar 18 Industrial Park
Hesperia, California
Project No. 22G134-1
PLATE C- 2



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

Consolidation/Collapse Test Results



Classification: Light Brown Silty fine to coarse Sand to fine to coarse Sandy Silt

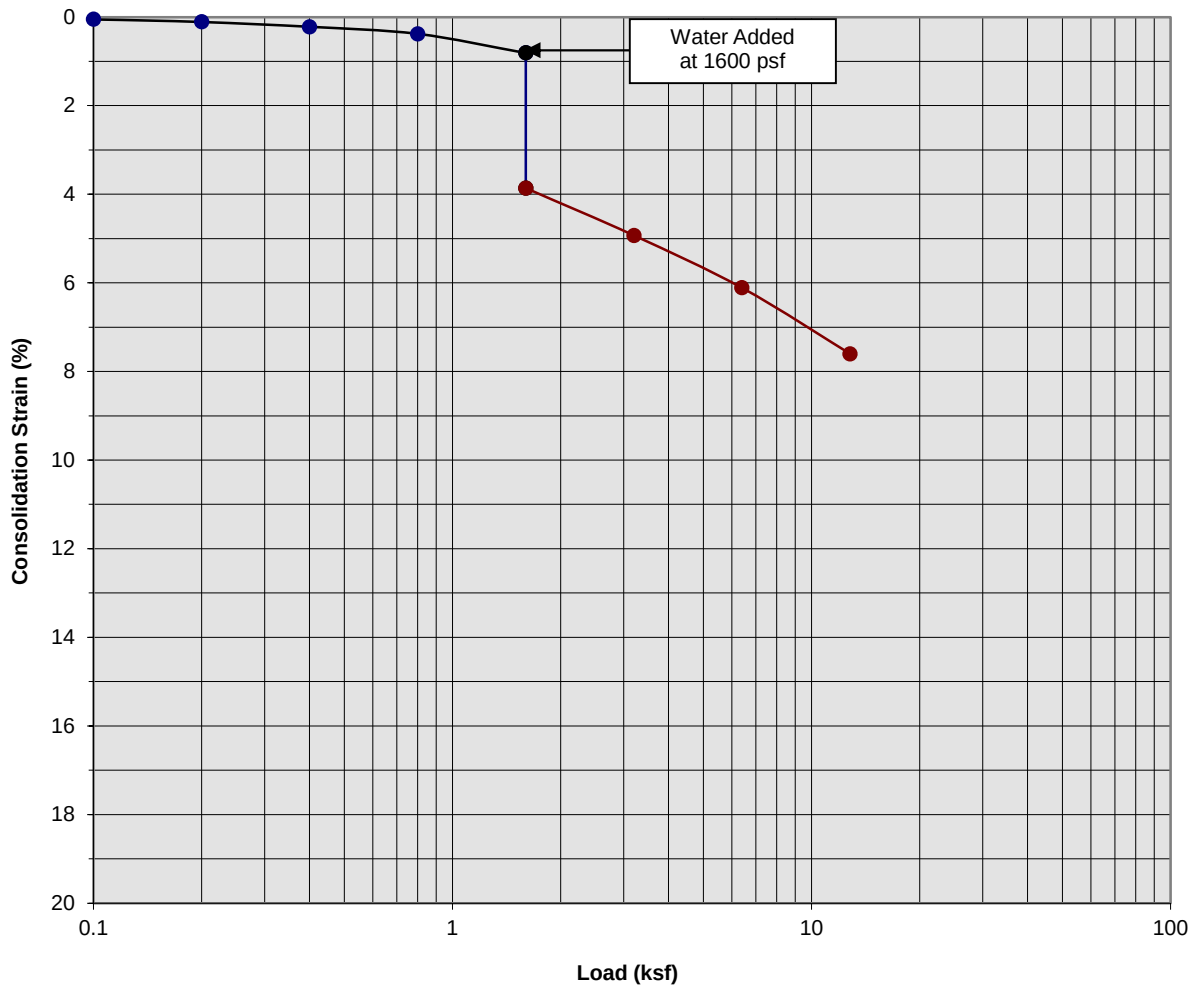
Boring Number:	B-1	Initial Moisture Content (%)	4
Sample Number:	---	Final Moisture Content (%)	11
Depth (ft)	7 to 8	Initial Dry Density (pcf)	101.0
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	109.6
Specimen Thickness (in)	1.0	Percent Collapse (%)	2.00

Poplar 18 Industrial Park
Hesperia, California
Project No. 22G134-1
PLATE C- 3



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

Consolidation/Collapse Test Results



Classification: Light Brown Silty fine to coarse Sand to fine to coarse Sandy Silt

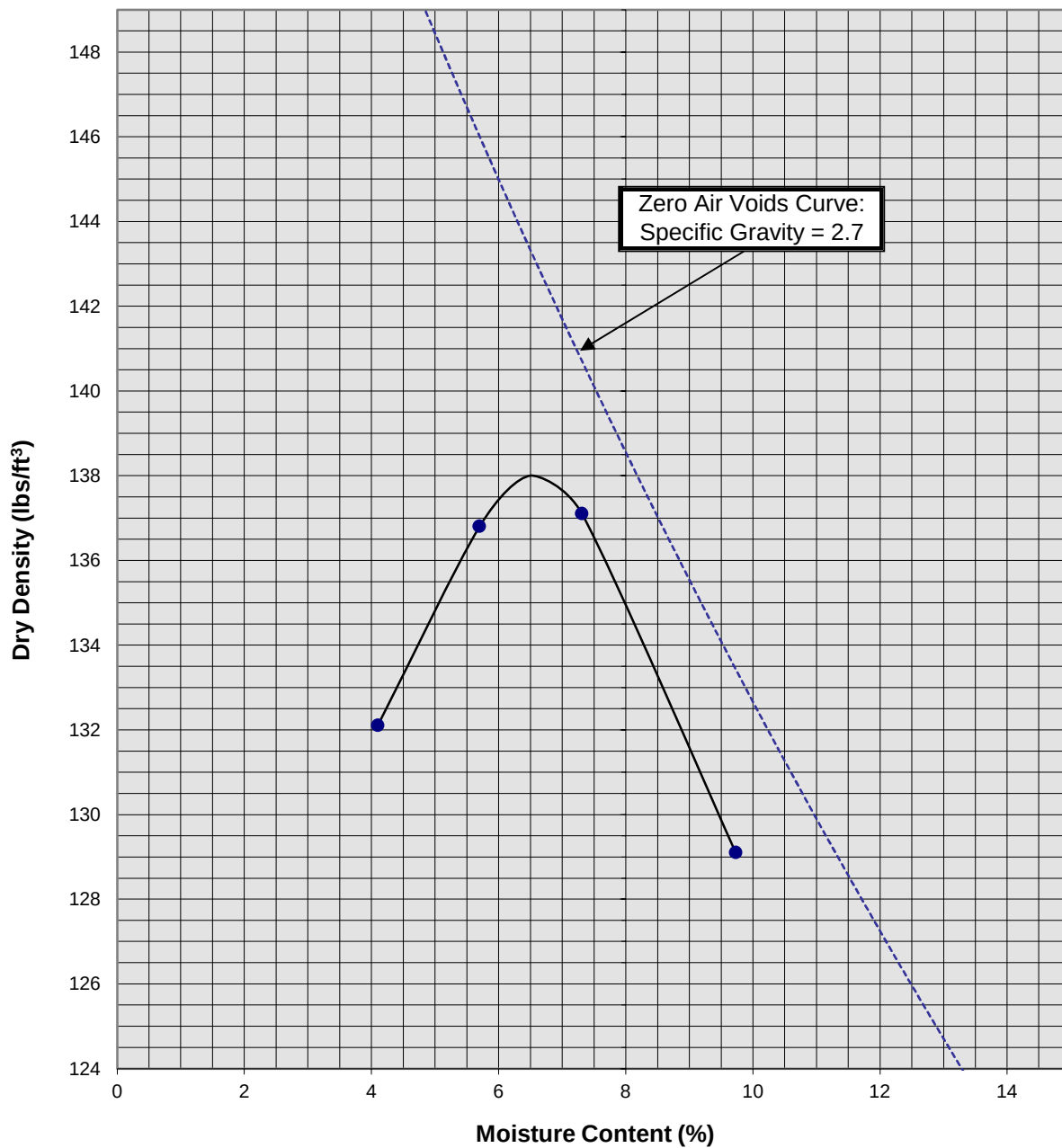
Boring Number:	B-1	Initial Moisture Content (%)	3
Sample Number:	---	Final Moisture Content (%)	15
Depth (ft)	9 to 10	Initial Dry Density (pcf)	110.4
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	119.8
Specimen Thickness (in)	1.0	Percent Collapse (%)	3.05

Poplar 18 Industrial Park
Hesperia, California
Project No. 22G134-1
PLATE C- 4



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

Moisture/Density Relationship ASTM D-1557



Soil ID Number	B-4 @ 0-5'
Optimum Moisture (%)	6
Maximum Dry Density (pcf)	138
Soil Classification	Light Brown Silty fine to coarse Sand, trace fine Gravel

Poplar 18 Industrial Park
Hesperia, California
Project No. 22G134-1
PLATE C-5



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

APPENDIX

GRADING GUIDE SPECIFICATIONS

These grading guide specifications are intended to provide typical procedures for grading operations. They are intended to supplement the recommendations contained in the geotechnical investigation report for this project. Should the recommendations in the geotechnical investigation report conflict with the grading guide specifications, the more site specific recommendations in the geotechnical investigation report will govern.

General

- The Earthwork Contractor is responsible for the satisfactory completion of all earthwork in accordance with the plans and geotechnical reports, and in accordance with city, county, and applicable building codes.
- The Geotechnical Engineer is the representative of the Owner/Builder for the purpose of implementing the report recommendations and guidelines. These duties are not intended to relieve the Earthwork Contractor of any responsibility to perform in a workman-like manner, nor is the Geotechnical Engineer to direct the grading equipment or personnel employed by the Contractor.
- The Earthwork Contractor is required to notify the Geotechnical Engineer of the anticipated work and schedule so that testing and inspections can be provided. If necessary, work may be stopped and redone if personnel have not been scheduled in advance.
- The Earthwork Contractor is required to have suitable and sufficient equipment on the job-site to process, moisture condition, mix and compact the amount of fill being placed to the approved compaction. In addition, suitable support equipment should be available to conform with recommendations and guidelines in this report.
- Canyon cleanouts, overexcavation areas, processed ground to receive fill, key excavations, subdrains and benches should be observed by the Geotechnical Engineer prior to placement of any fill. It is the Earthwork Contractor's responsibility to notify the Geotechnical Engineer of areas that are ready for inspection.
- Excavation, filling, and subgrade preparation should be performed in a manner and sequence that will provide drainage at all times and proper control of erosion. Precipitation, springs, and seepage water encountered shall be pumped or drained to provide a suitable working surface. The Geotechnical Engineer must be informed of springs or water seepage encountered during grading or foundation construction for possible revision to the recommended construction procedures and/or installation of subdrains.

Site Preparation

- The Earthwork Contractor is responsible for all clearing, grubbing, stripping and site preparation for the project in accordance with the recommendations of the Geotechnical Engineer.
- If any materials or areas are encountered by the Earthwork Contractor which are suspected of having toxic or environmentally sensitive contamination, the Geotechnical Engineer and Owner/Builder should be notified immediately.

- Major vegetation should be stripped and disposed of off-site. This includes trees, brush, heavy grasses and any materials considered unsuitable by the Geotechnical Engineer.
- Underground structures such as basements, cesspools or septic disposal systems, mining shafts, tunnels, wells and pipelines should be removed under the inspection of the Geotechnical Engineer and recommendations provided by the Geotechnical Engineer and/or city, county or state agencies. If such structures are known or found, the Geotechnical Engineer should be notified as soon as possible so that recommendations can be formulated.
- Any topsoil, slopewash, colluvium, alluvium and rock materials which are considered unsuitable by the Geotechnical Engineer should be removed prior to fill placement.
- Remaining voids created during site clearing caused by removal of trees, foundations basements, irrigation facilities, etc., should be excavated and filled with compacted fill.
- Subsequent to clearing and removals, areas to receive fill should be scarified to a depth of 10 to 12 inches, moisture conditioned and compacted
- The moisture condition of the processed ground should be at or slightly above the optimum moisture content as determined by the Geotechnical Engineer. Depending upon field conditions, this may require air drying or watering together with mixing and/or discing.

Compacted Fills

- Soil materials imported to or excavated on the property may be utilized in the fill, provided each material has been determined to be suitable in the opinion of the Geotechnical Engineer. Unless otherwise approved by the Geotechnical Engineer, all fill materials shall be free of deleterious, organic, or frozen matter, shall contain no chemicals that may result in the material being classified as "contaminated," and shall be very low to non-expansive with a maximum expansion index (EI) of 50. The top 12 inches of the compacted fill should have a maximum particle size of 3 inches, and all underlying compacted fill material a maximum 6-inch particle size, except as noted below.
- All soils should be evaluated and tested by the Geotechnical Engineer. Materials with high expansion potential, low strength, poor gradation or containing organic materials may require removal from the site or selective placement and/or mixing to the satisfaction of the Geotechnical Engineer.
- Rock fragments or rocks less than 6 inches in their largest dimensions, or as otherwise determined by the Geotechnical Engineer, may be used in compacted fill, provided the distribution and placement is satisfactory in the opinion of the Geotechnical Engineer.
- Rock fragments or rocks greater than 12 inches should be taken off-site or placed in accordance with recommendations and in areas designated as suitable by the Geotechnical Engineer. These materials should be placed in accordance with Plate D-8 of these Grading Guide Specifications and in accordance with the following recommendations:
 - Rocks 12 inches or more in diameter should be placed in rows at least 15 feet apart, 15 feet from the edge of the fill, and 10 feet or more below subgrade. Spaces should be left between each rock fragment to provide for placement and compaction of soil around the fragments.
 - Fill materials consisting of soil meeting the minimum moisture content requirements and free of oversize material should be placed between and over the rows of rock or

concrete. Ample water and compactive effort should be applied to the fill materials as they are placed in order that all of the voids between each of the fragments are filled and compacted to the specified density.

- Subsequent rows of rocks should be placed such that they are not directly above a row placed in the previous lift of fill. A minimum 5-foot offset between rows is recommended.
- To facilitate future trenching, oversized material should not be placed within the range of foundation excavations, future utilities or other underground construction unless specifically approved by the soil engineer and the developer/owner representative.
- Fill materials approved by the Geotechnical Engineer should be placed in areas previously prepared to receive fill and in evenly placed, near horizontal layers at about 6 to 8 inches in loose thickness, or as otherwise determined by the Geotechnical Engineer for the project.
- Each layer should be moisture conditioned to optimum moisture content, or slightly above, as directed by the Geotechnical Engineer. After proper mixing and/or drying, to evenly distribute the moisture, the layers should be compacted to at least 90 percent of the maximum dry density in compliance with ASTM D-1557-78 unless otherwise indicated.
- Density and moisture content testing should be performed by the Geotechnical Engineer at random intervals and locations as determined by the Geotechnical Engineer. These tests are intended as an aid to the Earthwork Contractor, so he can evaluate his workmanship, equipment effectiveness and site conditions. The Earthwork Contractor is responsible for compaction as required by the Geotechnical Report(s) and governmental agencies.
- Fill areas unused for a period of time may require moisture conditioning, processing and recompaction prior to the start of additional filling. The Earthwork Contractor should notify the Geotechnical Engineer of his intent so that an evaluation can be made.
- Fill placed on ground sloping at a 5-to-1 inclination (horizontal-to-vertical) or steeper should be benched into bedrock or other suitable materials, as directed by the Geotechnical Engineer. Typical details of benching are illustrated on Plates D-2, D-4, and D-5.
- Cut/fill transition lots should have the cut portion overexcavated to a depth of at least 3 feet and rebuilt with fill (see Plate D-1), as determined by the Geotechnical Engineer.
- All cut lots should be inspected by the Geotechnical Engineer for fracturing and other bedrock conditions. If necessary, the pads should be overexcavated to a depth of 3 feet and rebuilt with a uniform, more cohesive soil type to impede moisture penetration.
- Cut portions of pad areas above buttresses or stabilizations should be overexcavated to a depth of 3 feet and rebuilt with uniform, more cohesive compacted fill to impede moisture penetration.
- Non-structural fill adjacent to structural fill should typically be placed in unison to provide lateral support. Backfill along walls must be placed and compacted with care to ensure that excessive unbalanced lateral pressures do not develop. The type of fill material placed adjacent to below grade walls must be properly tested and approved by the Geotechnical Engineer with consideration of the lateral earth pressure used in the design.

Foundations

- The foundation influence zone is defined as extending one foot horizontally from the outside edge of a footing, and proceeding downward at a $\frac{1}{2}$ horizontal to 1 vertical (0.5:1) inclination.
- Where overexcavation beneath a footing subgrade is necessary, it should be conducted so as to encompass the entire foundation influence zone, as described above.
- Compacted fill adjacent to exterior footings should extend at least 12 inches above foundation bearing grade. Compacted fill within the interior of structures should extend to the floor subgrade elevation.

Fill Slopes

- The placement and compaction of fill described above applies to all fill slopes. Slope compaction should be accomplished by overfilling the slope, adequately compacting the fill in even layers, including the overfilled zone and cutting the slope back to expose the compacted core
- Slope compaction may also be achieved by backrolling the slope adequately every 2 to 4 vertical feet during the filling process as well as requiring the earth moving and compaction equipment to work close to the top of the slope. Upon completion of slope construction, the slope face should be compacted with a sheepsfoot connected to a sideboom and then grid rolled. This method of slope compaction should only be used if approved by the Geotechnical Engineer.
- Sandy soils lacking in adequate cohesion may be unstable for a finished slope condition and therefore should not be placed within 15 horizontal feet of the slope face.
- All fill slopes should be keyed into bedrock or other suitable material. Fill keys should be at least 15 feet wide and inclined at 2 percent into the slope. For slopes higher than 30 feet, the fill key width should be equal to one-half the height of the slope (see Plate D-5).
- All fill keys should be cleared of loose slough material prior to geotechnical inspection and should be approved by the Geotechnical Engineer and governmental agencies prior to filling.
- The cut portion of fill over cut slopes should be made first and inspected by the Geotechnical Engineer for possible stabilization requirements. The fill portion should be adequately keyed through all surficial soils and into bedrock or suitable material. Soils should be removed from the transition zone between the cut and fill portions (see Plate D-2).

Cut Slopes

- All cut slopes should be inspected by the Geotechnical Engineer to determine the need for stabilization. The Earthwork Contractor should notify the Geotechnical Engineer when slope cutting is in progress at intervals of 10 vertical feet. Failure to notify may result in a delay in recommendations.
- Cut slopes exposing loose, cohesionless sands should be reported to the Geotechnical Engineer for possible stabilization recommendations.
- All stabilization excavations should be cleared of loose slough material prior to geotechnical inspection. Stakes should be provided by the Civil Engineer to verify the location and dimensions of the key. A typical stabilization fill detail is shown on Plate D-5.

- Stabilization key excavations should be provided with subdrains. Typical subdrain details are shown on Plates D-6.

Subdrains

- Subdrains may be required in canyons and swales where fill placement is proposed. Typical subdrain details for canyons are shown on Plate D-3. Subdrains should be installed after approval of removals and before filling, as determined by the Soils Engineer.
- Plastic pipe may be used for subdrains provided it is Schedule 40 or SDR 35 or equivalent. Pipe should be protected against breakage, typically by placement in a square-cut (backhoe) trench or as recommended by the manufacturer.
- Filter material for subdrains should conform to CALTRANS Specification 68-1.025 or as approved by the Geotechnical Engineer for the specific site conditions. Clean $\frac{3}{4}$ -inch crushed rock may be used provided it is wrapped in an acceptable filter cloth and approved by the Geotechnical Engineer. Pipe diameters should be 6 inches for runs up to 500 feet and 8 inches for the downstream continuations of longer runs. Four-inch diameter pipe may be used in buttress and stabilization fills.

NATURAL GRADE

UNSUITABLE MATERIAL

5' MIN.

3' MIN.*

COMPACTED FILL

OVEREXCAVATE AND RECOMPACT

COMPETENT MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER

COMPACTED FILL

UNSATURATED MATERIAL

5' MIN.

NATURAL GRADE

OVEREXCAVATE AND RECOMPACT

3' MIN.*

COMPETENT MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER

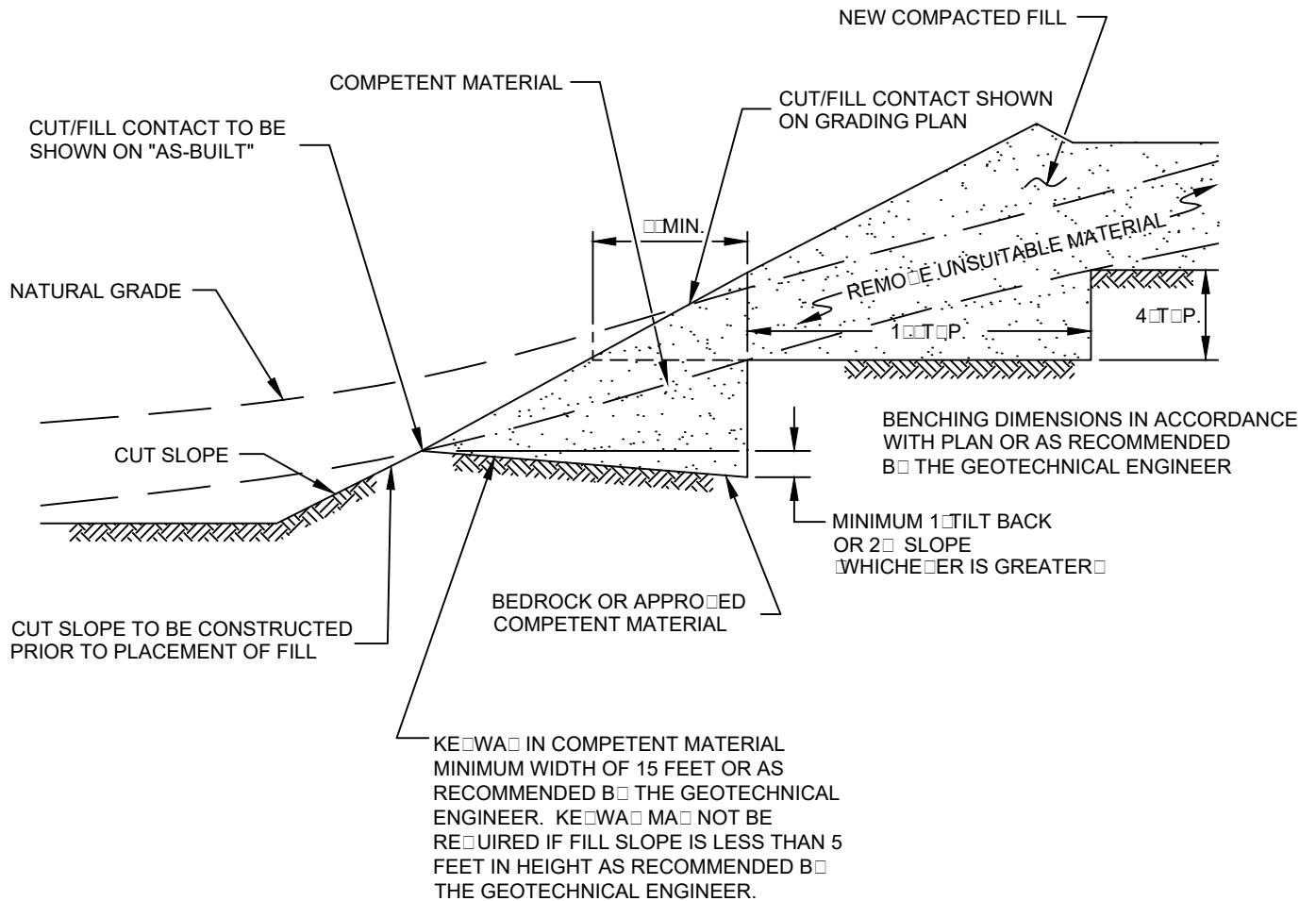
DEEPER OVEREXCAVATION MAY BE RECOMMENDED BY THE SOIL ENGINEER IN STEEP TRANSITIONS

DEEPER OVEREXCAVATION MAY BE
RECOMMENDED BY THE SOIL ENGINEER
IN STEEP TRANSITIONS

GRADING GUIDE SPECIFICATIONS



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**



FILL ABOVE CUT SLOPE DETAIL
GRADING GUIDE SPECIFICATIONS

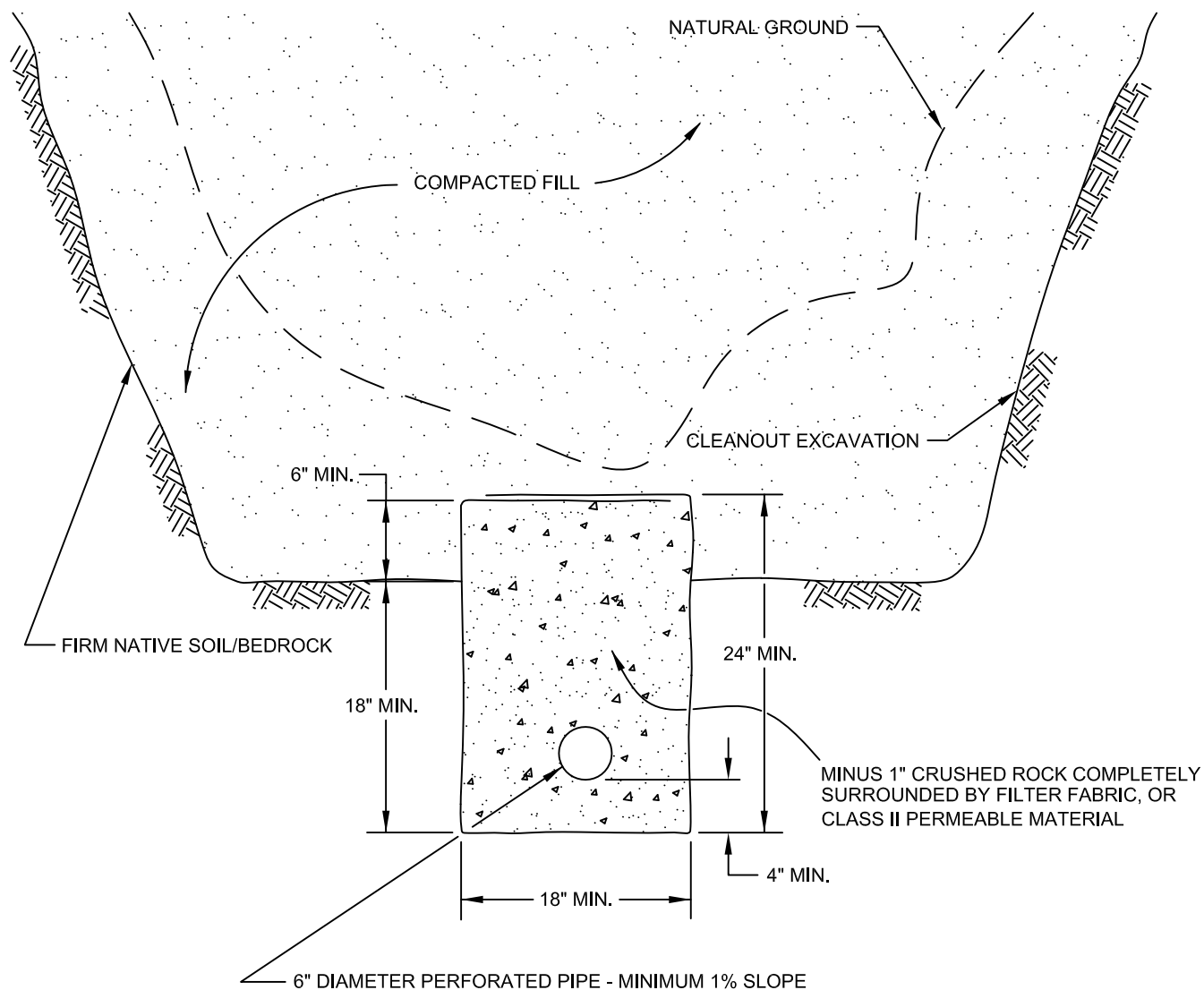
NOT TO SCALE

DRAWN: JAS
 CHKD: GKM

PLATE D-2



**SOUTHERN
 CALIFORNIA
 GEOTECHNICAL**



PIPE MATERIAL
ADS (CORRUGATED POLETHYLENE)
TRANSITE UNDERDRAIN
PVC OR ABS: SDR 35
SDR 21

DEPTH OF FILL OVER SUBDRAIN
8
20
35
100

**SCHEMATIC ONLY
NOT TO SCALE**

CANYON SUBDRAIN DETAIL GRADING GUIDE SPECIFICATIONS

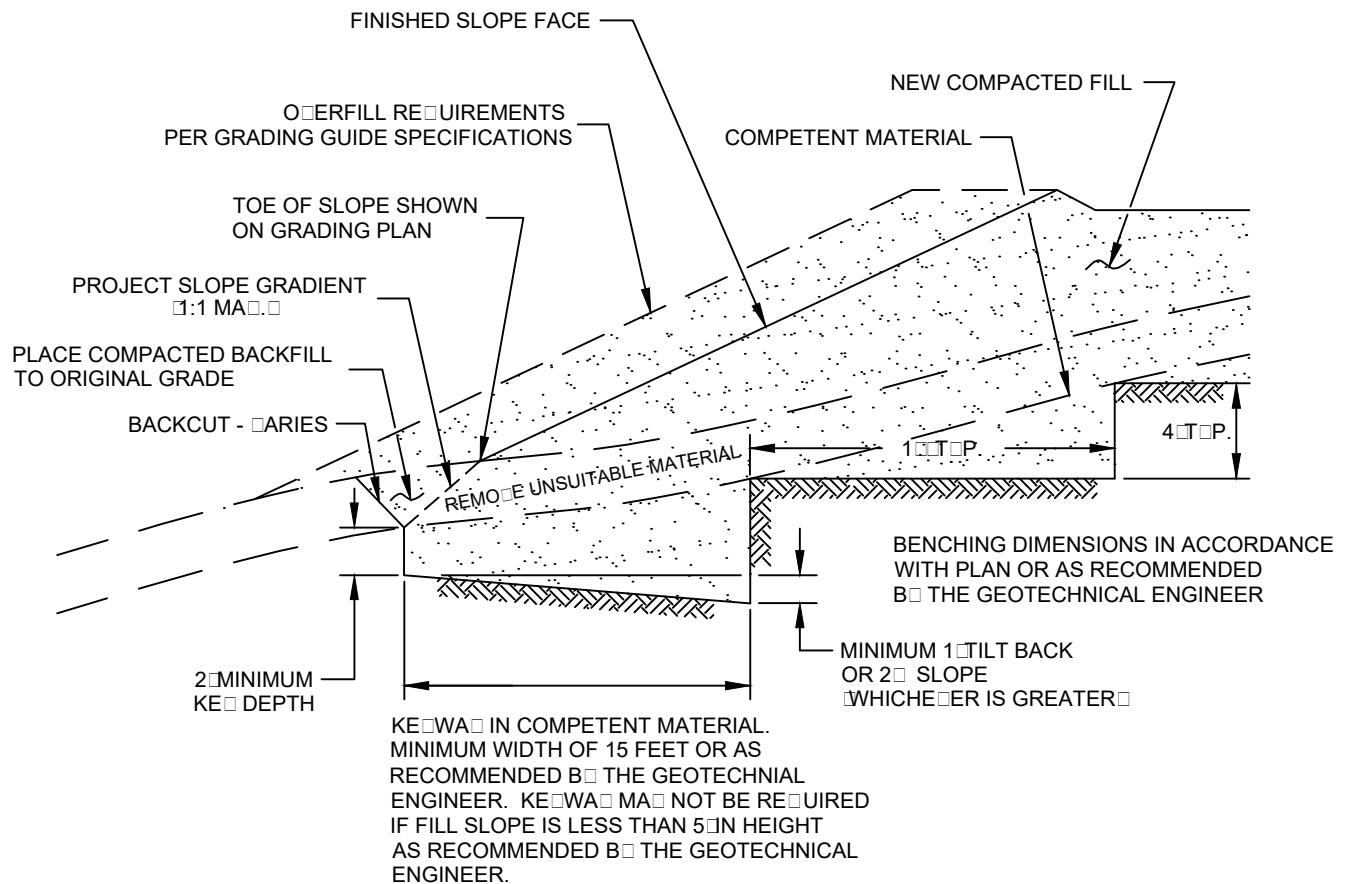
NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-3



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**



NOTE:
BENCHING SHALL BE REQUIRED
WHEN NATURAL SLOPES ARE
EQUAL TO OR STEEPER THAN 5:1
OR WHEN RECOMMENDED BY
THE GEOTECHNICAL ENGINEER.

FILL ABOVE NATURAL SLOPE DETAIL GRADING GUIDE SPECIFICATIONS

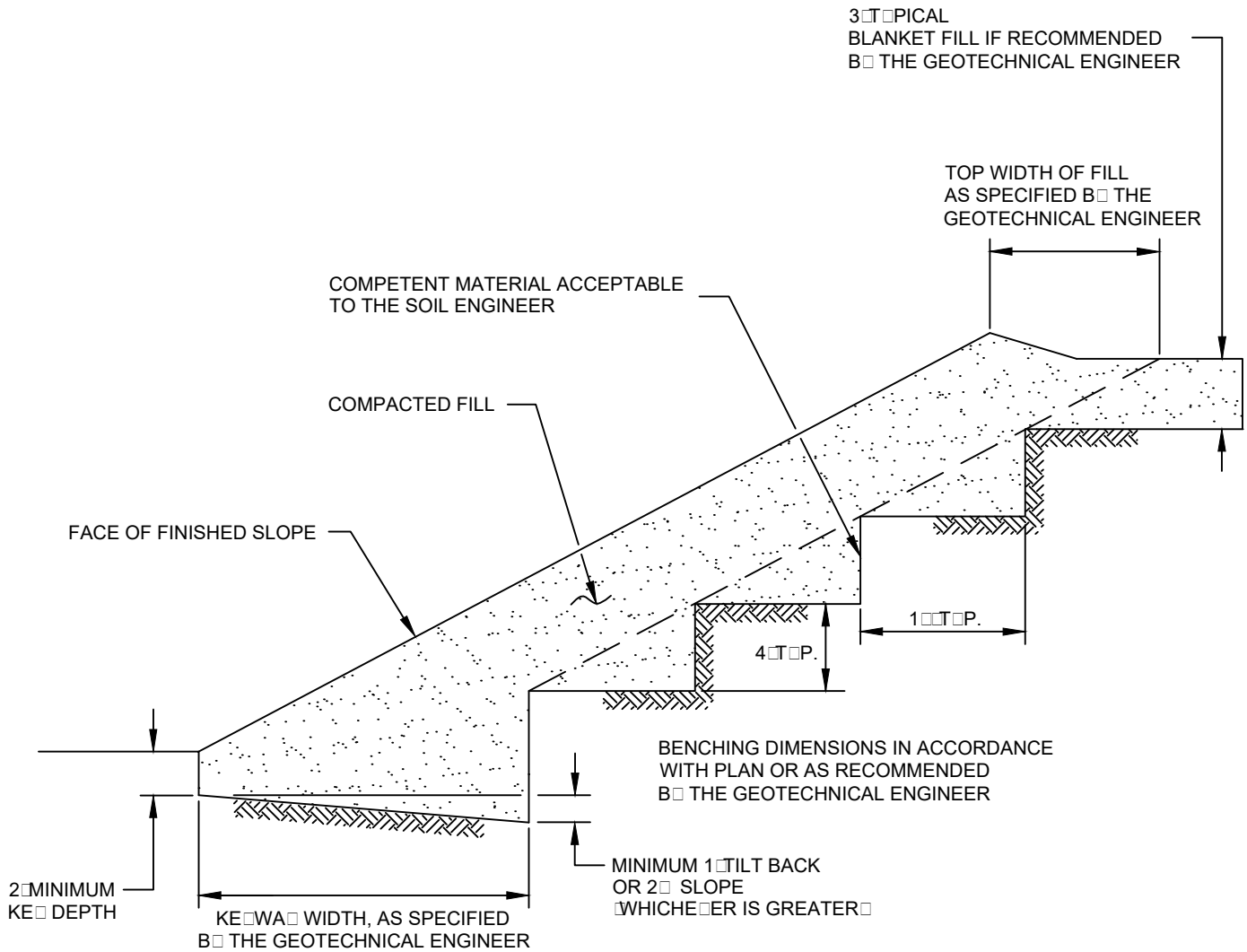
NOT TO SCALE

DRAWN: JAS
CHKD: GKM

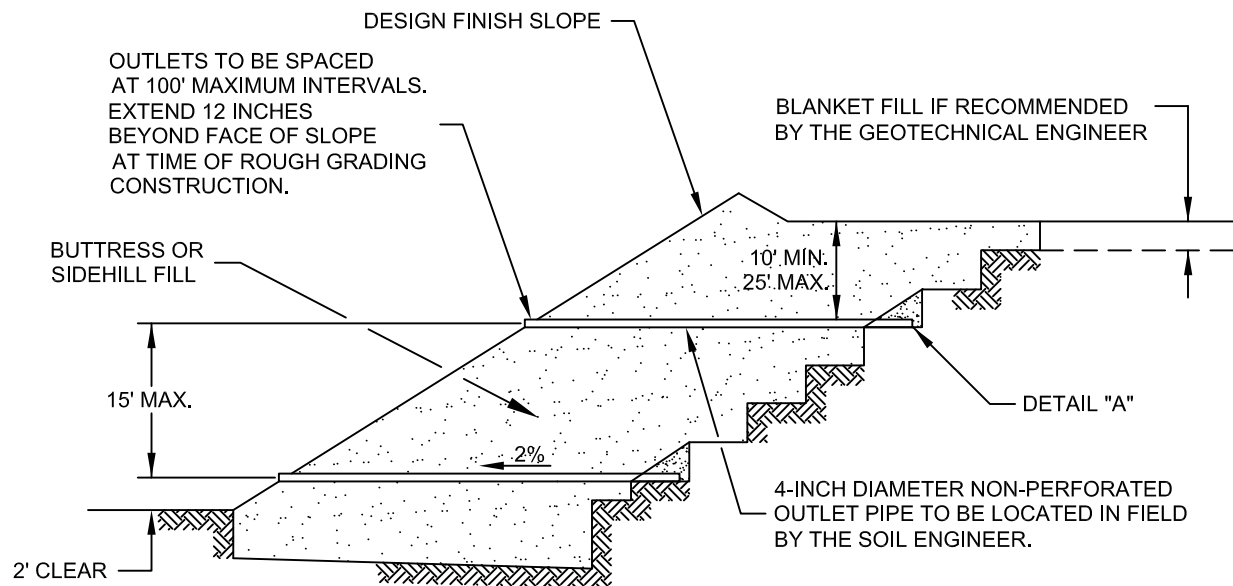
PLATE D-4



SOUTHERN
CALIFORNIA
GEOTECHNICAL



STABILIZATION FILL DETAIL	
GRADING GUIDE SPECIFICATIONS	
NOT TO SCALE	
DRAWN: JAS CHKD: GKM	
	
SOUTHERN CALIFORNIA GEOTECHNICAL	
PLATE D-5	



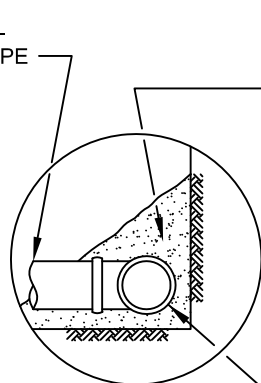
"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT: (CONFORMS TO EMA STD. PLAN 323)

SIEVE SIZE	PERCENTAGE PASSING
1"	100
3/4"	90-100
3/8"	40-100
NO. 4	25-40
NO. 8	18-33
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

"GRAVEL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT:

SIEVE SIZE	MAXIMUM PERCENTAGE PASSING
1 1/2"	100
NO. 4	50
NO. 200	8
SAND EQUIVALENT = MINIMUM OF 50	

OUTLET PIPE TO BE CONNECTED TO SUBDRAIN PIPE WITH TEE OR ELBOW



DETAIL "A"

FILTER MATERIAL - MINIMUM OF FIVE CUBIC FEET PER FOOT OF PIPE. SEE ABOVE FOR FILTER MATERIAL SPECIFICATION.

ALTERNATIVE: IN LIEU OF FILTER MATERIAL FIVE CUBIC FEET OF GRAVEL PER FOOT OF PIPE MAY BE ENCASED IN FILTER FABRIC. SEE ABOVE FOR GRAVEL SPECIFICATION.

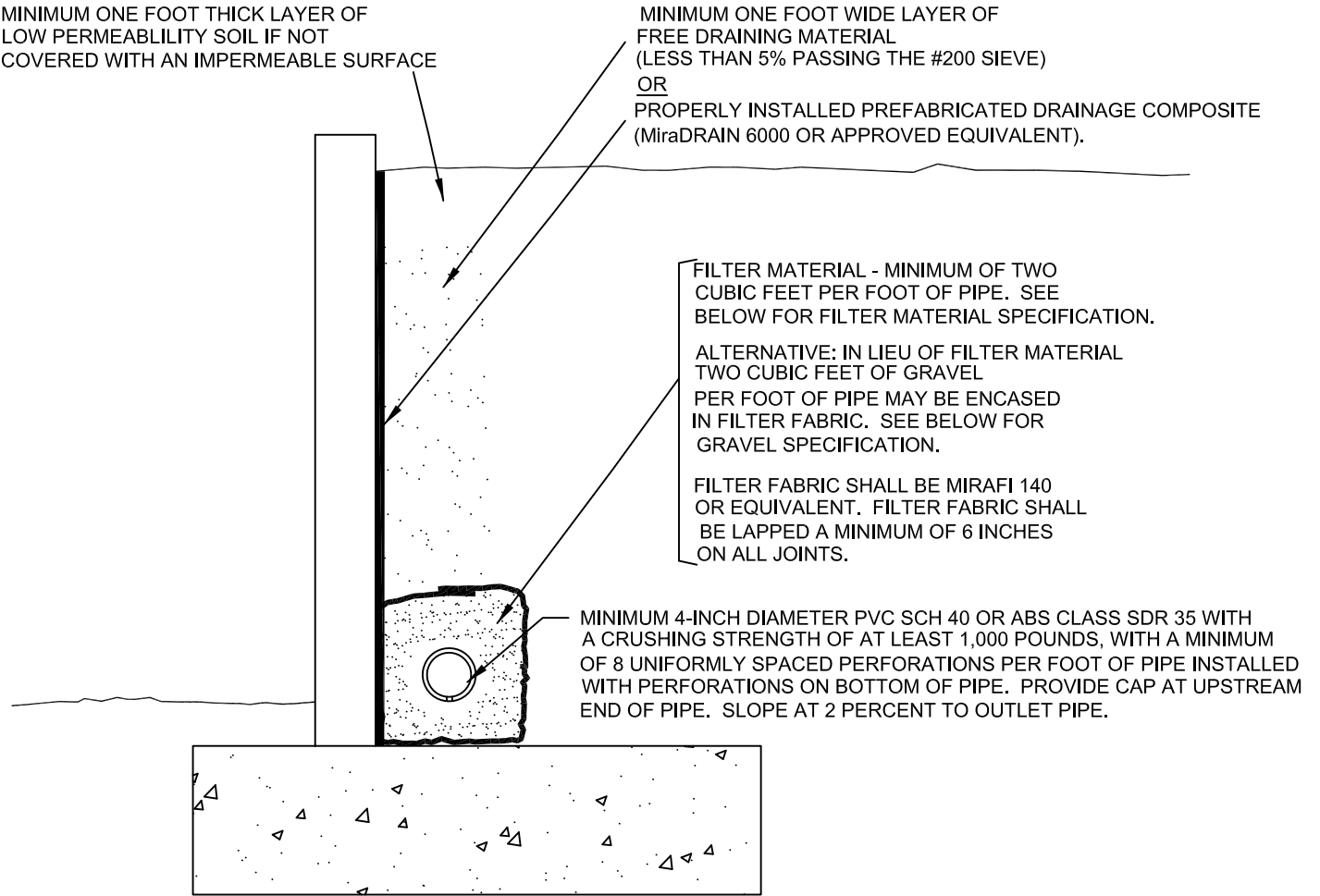
FILTER FABRIC SHALL BE MIRAFI 140 OR EQUIVALENT. FILTER FABRIC SHALL BE LAPPED A MINIMUM OF 12 INCHES ON ALL JOINTS.

MINIMUM 4-INCH DIAMETER PVC SCH 40 OR ABS CLASS SDR 35 WITH A CRUSHING STRENGTH OF AT LEAST 1,000 POUNDS, WITH A MINIMUM OF 8 UNIFORMLY SPACED PERFORATIONS PER FOOT OF PIPE INSTALLED WITH PERFORATIONS ON BOTTOM OF PIPE. PROVIDE CAP AT UPSTREAM END OF PIPE. SLOPE AT 2 PERCENT TO OUTLET PIPE.

NOTES:

1. TRENCH FOR OUTLET PIPES TO BE BACKFILLED WITH ON-SITE SOIL.

SLOPE FILL SUBDRAINS	
GRADING GUIDE SPECIFICATIONS	
NOT TO SCALE	 SOUTHERN CALIFORNIA GEOTECHNICAL
DRAWN: JAS CHKD: GKM	
PLATE D-6	



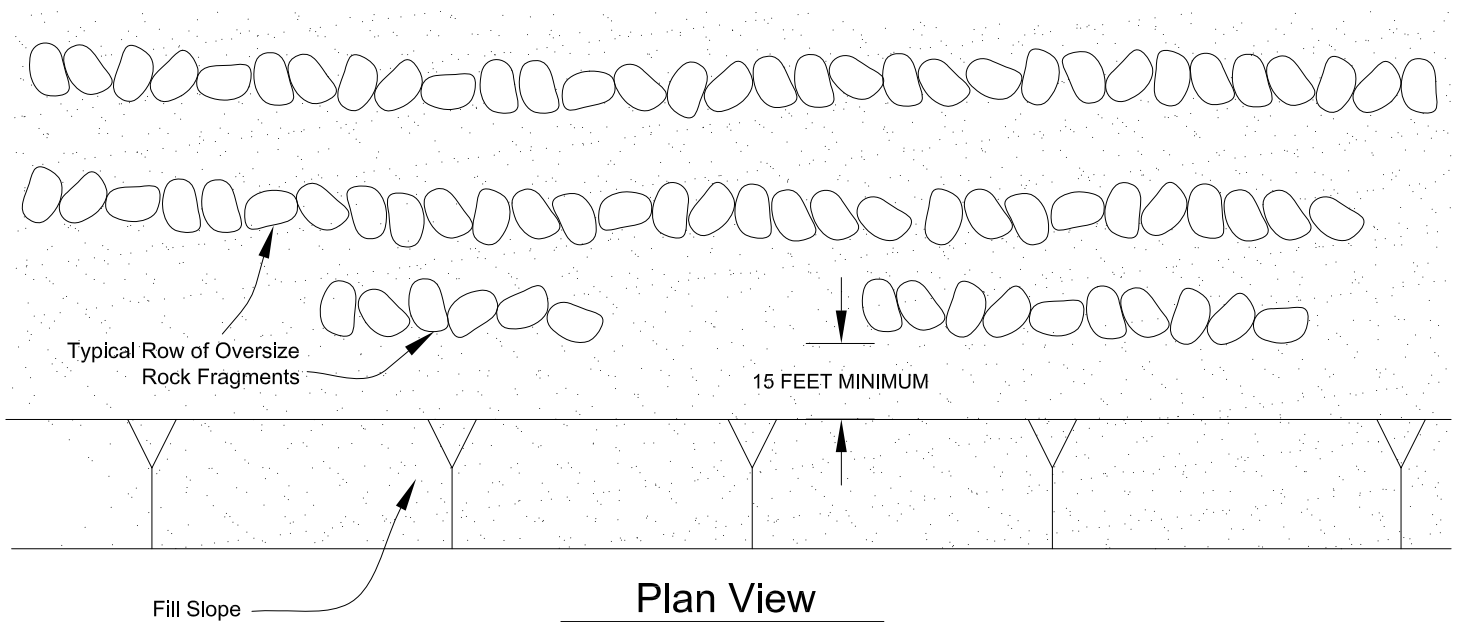
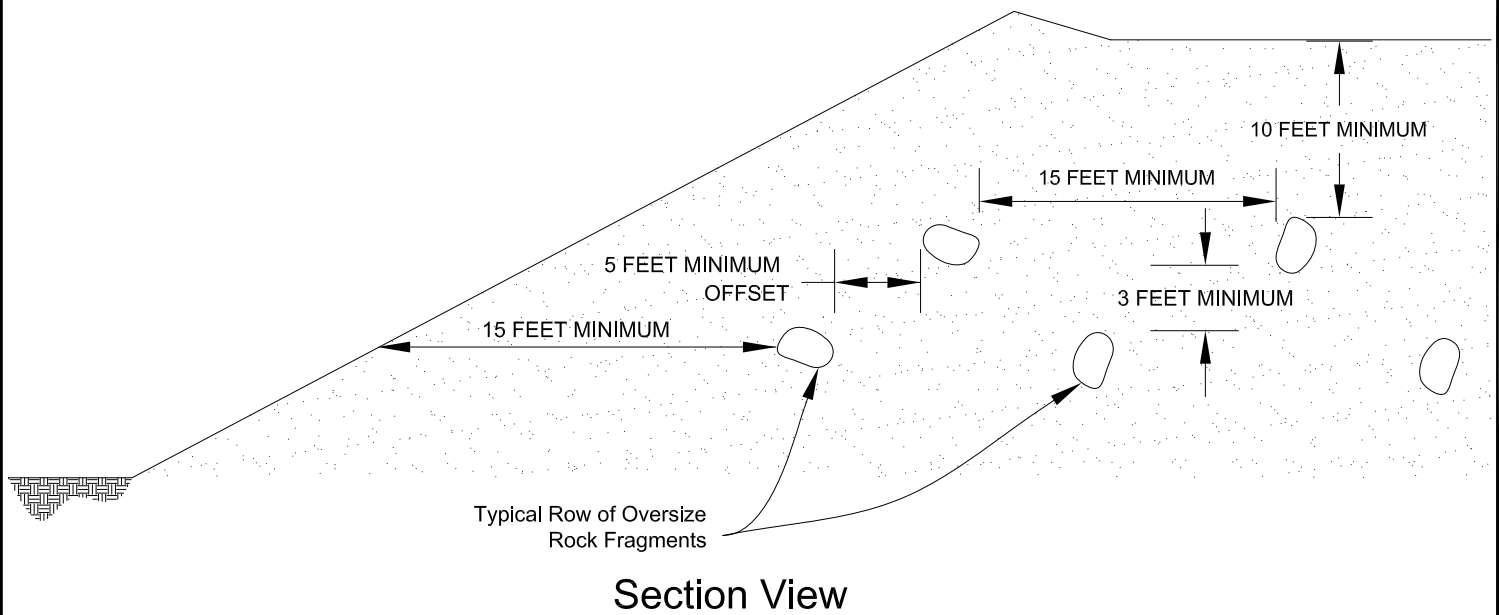
"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION
OR APPROVED EQUIVALENT: (CONFORMS TO EMA STD. PLAN 323)

SIEVE SIZE	PERCENTAGE PASSING
1"	100
3/4"	90-100
3/8"	40-100
NO. 4	25-40
NO. 8	18-33
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

"GRAVEL" TO MEET FOLLOWING SPECIFICATION OR
APPROVED EQUIVALENT:

SIEVE SIZE	MAXIMUM PERCENTAGE PASSING
1 1/2"	100
NO. 4	50
NO. 200	8
SAND EQUIVALENT = MINIMUM OF 50	

RETAINING WALL BACKDRAINS	
GRADING GUIDE SPECIFICATIONS	
NOT TO SCALE	
DRAWN: JAS	
CHKD: GKM	
PLATE D-7	
SOUTHERN CALIFORNIA GEOTECHNICAL	



PLACEMENT OF OVERSIZED MATERIAL
GRADING GUIDE SPECIFICATIONS

NOT TO SCALE

DRAWN: PM
 CHKD: GKM

PLATE D-8

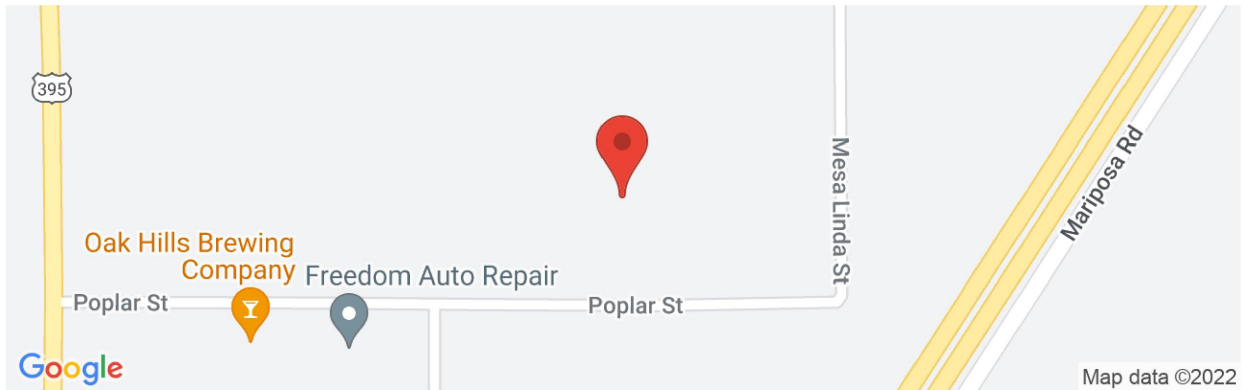


**SOUTHERN
 CALIFORNIA
 GEOTECHNICAL**

APPENDIX



Latitude, Longitude: 34.416786, -117.392851



Date	3/14/2022, 11:17:51 AM
Design Code Reference Document	ASCE7-16
Risk Category	III
Site Class	D - Stiff Soil

Type	Value	Description
S_S	1.5	MCE_R ground motion. (for 0.2 second period)
S_1	0.6	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.5	Site-modified spectral acceleration value
S_{M1}	null -See Section 11.4.8	Site-modified spectral acceleration value
S_{DS}	1	Numeric seismic design value at 0.2 second SA
S_{D1}	null -See Section 11.4.8	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	null -See Section 11.4.8	Seismic design category
F_a	1	Site amplification factor at 0.2 second
F_v	null -See Section 11.4.8	Site amplification factor at 1.0 second
PGA	0.505	MCE_G peak ground acceleration
F_{PGA}	1.1	Site amplification factor at PGA
PGA_M	0.556	Site modified peak ground acceleration
T_L	12	Long-period transition period in seconds
S_{sRT}	1.591	Probabilistic risk-targeted ground motion. (0.2 second)
S_{sUH}	1.717	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
S_{sD}	1.5	Factored deterministic acceleration value. (0.2 second)
S_{1RT}	0.62	Probabilistic risk-targeted ground motion. (1.0 second)
S_{1UH}	0.684	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S_{1D}	0.6	Factored deterministic acceleration value. (1.0 second)
$PGAd$	0.505	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	0.927	Mapped value of the risk coefficient at short periods
C_{R1}	0.905	Mapped value of the risk coefficient at a period of 1 s

SOURCE: SEAOC/OSHPD Seismic Design Maps Tool
<<https://seismicmaps.org/>>



SEISMIC DESIGN PARAMETERS - 2019 CBC

PROPOSED I-15 BUSINESS PARK-BUILDING 3

HESPERIA, CALIFORNIA

DRAWN: MD
CHKD: DN
SCG PROJECT
22G134-1
PLATE E-1



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**

Appendix F

Phase I Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT



PERFORMED ON:

17.87 ACRE TRACT (UNDEVELOPED)

TRACTS 3 & 4 POPLAR & MESA LINDA STREETS
HESPERIA, SAN BERNARDINO COUNTY, CA 92344
CCG PROJECT #: CCG-4757

PREPARED FOR:

COVINGTON INVESTMENTS, LLC

14180 DALLAS PARKWAY, SUITE 730
DALLAS, TX 75254

PREPARED BY:

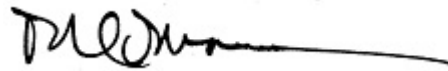
CONSOLIDATED CONSULTING GROUP, LLC

6215 COLLEYVILLE BOULEVARD
COLLEYVILLE, TEXAS 76034
(817) 424-9085 / (817) 488-1853 FAX
WWW.CONSOLIDATEDCONSULTING.COM

ISSUE DATE: OCTOBER 28, 2020



TONYA GOLDEN
PROJECT MANAGER



RICHARD A. MOSMAN
PROJECT DIRECTOR

TABLE OF CONTENTS

1.0 INTRODUCTION.....	4
1.1 EXECUTIVE SUMMARY.....	4
1.2 PURPOSE	7
1.3 SCOPE OF WORK	7
1.4 INVESTIGATION REQUIREMENTS NOT SATISFIED.....	9
2.0 USER PROVIDED INFORMATION	10
2.1 TITLE RECORDS	10
2.2 ENVIRONMENTAL LIENS / ACTIVITY AND USE LIMITATIONS.....	10
2.3 SPECIALIZED KNOWLEDGE	10
2.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION	10
2.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES.....	10
2.6 IDENTIFICATION OF THE KEY SITE MANAGER	10
3.0 SITE DESCRIPTION	11
3.1 SITE NAME AND ADDRESS	11
3.2 LEGAL DESCRIPTION.....	11
3.3 SITE AND VICINITY GENERAL CHARACTERISTICS	11
3.4 SITE DESCRIPTION	11
3.5 CURRENT USES OF THE SITE	12
3.6 OWNERS AND OCCUPANTS OF THE SITE.....	13
3.7 RECORDED LAND TITLE RECORDS.....	13
4.0 RECORDS REVIEW.....	14
4.1 PHYSICAL SETTING SOURCES	14
4.2 HISTORICAL USE INFORMATION	18
4.3 PROPERTIES AND AREAS SURROUNDING THE SITE	22
4.4 ENVIRONMENTAL RECORDS REVIEWS AND INTERVIEWS.....	24
5.0 SITE RECONNAISSANCE AND INVESTIGATION.....	28
5.1 GENERAL SITE CHARACTERISTICS.....	28
5.2 POTENTIAL ENVIRONMENTAL HAZARDS	31
5.3 INTERVIEWS	35
5.4 ADDITIONAL SERVICES	37
6.0 CONSULTANT INFORMATION	39
6.1 PROJECT PERSONNEL	39
6.2 REPORT CERTIFICATION	39
6.3 CERTIFICATION/LICENSING.....	39
6.4 REPORT RELIANCE	39

7.0 APPENDICES 40

7.1 SITE BACKGROUND ATTACHMENTS

- 7.1.1 Photographs*
- 7.1.2 Site Drawing*
- 7.1.3 Aerial Photographs*
- 7.1.4 Topographical Map*
- 7.1.5 Fire Insurance Maps*
- 7.1.6 City Directories*
- 7.1.7 Other Maps & Data*
- 7.1.8 Title Search Records*
- 7.1.9 References*

7.2 GOVERNMENTAL AGENCY RECORDS ATTACHMENTS

- 7.2.1 General Public Records*
- 7.2.2 Mapped Database Report*
- 7.2.3 Regulatory Agency Records*

7.3 INTERVIEW RECORD ATTACHMENTS – RECORDS OF COMMUNICATION

7.4 SITE RECONNAISSANCE & INVESTIGATION

- 7.4.1 Reporting/Notification Forms*
- 7.4.2 Permits*
- 7.4.3 Asbestos Survey Results*
- 7.4.4 Lead-Based Paint Survey Results*
- 7.4.5 Radon Survey Results*
- 7.4.6 Lead in Drinking Water Survey Results*
- 7.4.7 UST Test*
- 7.4.8 Correction Action Plans*
- 7.4.9 Reference Documents*
- 7.4.10 Other Information (prior ESAs)*

7.5 CERTIFICATIONS

- 7.5.1 Certification/Qualifications*
- 7.5.2 Sampling/Testing Certifications*

1.0 INTRODUCTION

1.1 Executive Summary

Subject Property Name: 17.87 Acre Tract (Undeveloped)

Address: Tracts 3 & 4 Poplar & Mesa Linda Streets
Hesperia, San Bernardino County, CA 92344

Site Location Intersection: Northwest of the intersection of Poplar Street and Mesa Linda Street

Site Acreage: 17.87 Acres - Tract 3 (9.06 Acres), Tract 4 (8.81 Acres) - According to the San Bernardino County Assessor's Office

Current Property Use: The subject property is currently undeveloped.

Number of Buildings/Stories: N/A

Number of Tenant Spaces: N/A

Approximate Square Footage: N/A

Current Occupancy: N/A

Construction Year: N/A

Historic Property Use: Undeveloped land since at least 1938.

Consolidated Consulting Group, LLC (CCG) has performed a Phase I Environmental Site Assessment (ESA) in general conformance with the scope and limitations of ASTM Practice E-1527-13, on the 17.87 Acre Tract (Undeveloped) property located at Tracts 3 & 4 Poplar & Mesa Linda Streets, in Hesperia, San Bernardino County, CA 92344 (herein referred to as the “subject property”). Any exceptions to, or deletions from, this practice are described in Section 1.4 “Investigation Requirements Not Satisfied”.

*A historical recognized environmental condition (HREC) is defined under ASTM E1527-13 as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.” **This assessment has revealed no evidence of HRECs in connection with the subject property.***

*A controlled recognized environmental condition (CREC) is defined under ASTM E1527-13 as “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.” **This assessment has revealed no evidence of CRECs in connection with the subject property.***

*A recognized environmental condition (REC) is defined under ASTM E1527-13 as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” **This assessment has revealed no evidence of RECs in connection with the subject property.***

*A business environmental risk (BER) is defined under ATSM E1527-13 as “a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.” **This assessment has revealed no evidence of BERs in connection with the subject property.***

*A de minimis condition is defined under ASTM E1527-13 as “a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.” **This assessment has revealed the following evidence of de minimis conditions in connection with the subject property:***

- CCG did not observe any evidence of current or historic landfills on the subject property. However, several debris piles / dump sites and scattered windblown debris were observed on the subject property. Observed debris generally consisted of municipal waste (paper, plastic, etc.) and construction debris (lumber, concrete, asphalt / gravel, roofing materials, etc.). However, multiple scrap truck tires and several empty retail sized containers of automotive fluids (motor oil, antifreeze, etc.) were also observed. No staining or other obvious evidence of a release was observed in these areas. However, CCG considers the observed debris (including scrap tires and empty automotive fluid containers) to represent a de minimis condition in connection with the subject property.

Recommendation: CCG recommends that the observed debris / wastes be removed from the subject property, and properly disposed of in accordance with all applicable local, state and federal guidelines. If during future development activities visually impacted soils are identified, impacted soils should be

excavated, removed and properly disposed of. Confirmatory soil samples should be collected during excavation to ensure that the extent of impacted soils has been removed.

This assessment has revealed the following evidence of Noteworthy Issues in connection with the subject property:

- Federally-listed threatened and endangered species and their habitats are protected under the Endangered Species Act of 1973, as amended. Individuals of state-listed species are protected under state law, although their habitats are not currently given regulatory protection. A review of endangered species on or in the vicinity of the subject property is beyond the scope of this investigation. However, according to the California Department of Fish & Wildlife there are multiple rare, threatened or endangered species listed for San Bernardino County.

Recommendation: If future development will disturb the undeveloped portions of the subject property, an evaluation for Threatened or Endangered Species may be required.

CCG makes no recommendation for further investigation of the subject property at this time.

1.2 Purpose

The purpose of this investigation is to conduct a Phase I Environmental Site Assessment (ESA), in general conformance with ASTM 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process on a parcel of commercial real estate (subject property) with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601). This assessment is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability: that is, the practice that constitutes “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined at 42 U.S.C. §9601 (35) (B).

The purpose of a Phase I ESA is to evaluate environmental issues which may have a financial or liability impact on the owners of a parcel of property. The goal of this process is to identify the presence or likely presence of any hazardous substances or petroleum products on the property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

CCG understands this assessment of the subject property was performed as part of a pending financial transaction.

1.3 Scope of Work

Consolidated Consulting Group, LLC was retained to perform a Phase I Environmental Site Assessment on the subject property in general conformance with ASTM 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment.

The following scope of services summarizes the activities performed by Consolidated Consulting Group, LLC:

- ◆ Survey the subject property and observe the adjacent and surrounding properties for the purposes of identifying land use and activities that may potentially affect the environmental integrity of the subject property.
- ◆ Interview available present and past owners and occupants of the subject property to identify current/historic subject property uses.
- ◆ Review available historic information for the subject property from first developed use to present.
- ◆ Interview accessible local, city, parish and state personnel to solicit pertinent environmental information regarding the subject property.
- ◆ Review available federal, state and local regulatory database information as prescribed in ASTM 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.
- ◆ Provide findings, conclusions and recommendations to the Client as a result of the information gathered.

ASTM 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process does not specifically call for the Phase I ESA report to address business environmental risks (BERs) or additional services. Business environmental risk is defined in the standard as *“a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations, some of which are identified in Section 13 (of the standard)”*. In order to better serve the Client, CCG has included a consideration of business environmental risks in the relevant section of this report and the additional services listed in Section 5.4 “Additional Services” as a part of this investigation.

In preparing this report, Consolidated Consulting Group, LLC has relied upon and presumed accurate, certain information (or the absence thereof) about the subject property and adjacent properties provided by governmental officials and agencies, the Client and others identified herein. The accuracy of the results of the regulatory agency database searches are constrained and limited by the level of care and professional skill exercised by the subcontractors retained by Consolidated Consulting Group, LLC to perform these tasks. Except as otherwise stated in this report, Consolidated Consulting Group, LLC has not attempted to verify the accuracy or completeness of such information.

The conclusions and recommendations contained in this report/assessment are based upon professional opinions with regard to the subject matter. These opinions have been formulated in accordance with currently accepted industry standards and practices. The data reported and the findings, observations, and conclusions expressed in the report contain all of the limitations inherent in the methodologies referred to in ASTM 1527-13. Because of these limitations, the findings, observations, and conclusions expressed by CCG in this report are not, and should not be considered, an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulations. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported. Furthermore, the results of this Phase I Environmental Site Assessment as reported herein are in no way intended to represent a guarantee that the subject property is free from the presence of past, present, or future contamination from hazardous substances; rather, it only represents that a reasonable inquiry has been conducted to ascertain the likelihood of such contamination under current applicable law.

Consolidated Consulting Group, LLC derived the data in this report primarily from visual inspections, examination of records in the public domain and interviews with individuals knowledgeable with the Site history. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the subject property, analysis of the data and reevaluation of the findings, observations, conclusions and recommendations expressed in this report. Conclusions and recommendations are based solely upon conditions in existence at the subject property at the time of the investigation.

1.4 Investigation Requirements Not Satisfied

This Phase I ESA substantially complies with ASTM 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, except for the following exceptions and/or limiting conditions.

- CCG was unescorted during the site inspection.
- CCG provided an interview questionnaire to the *User* of this report regarding issues of environmental concern relating to the subject property. At the time of writing, the interview questionnaire had not been returned to CCG. However, it is the Environmental Professional's opinion that sufficient information regarding the current and historic use of the subject property was obtained through other sources that the lack of the interview questionnaire will not alter the conclusions of this report.
- ASTM E 1527-13 "Standard for Environmental Site Assessments" suggests historical usage for a property be determined back to 1940 or the property's first developed use, whichever is earliest. CCG reviewed Aerial Photographs back to 1938 and Topographic Maps back to 1956, but was unable to research the site history at 5-year intervals. No additional historical sources that were deemed reasonably ascertainable and likely to be sufficiently useful were identified at the time of the assessment. However, it is the Environmental Professional's opinion that this limitation would not alter the conclusions of this report.
- CCG contacted the San Bernardino County / City of Hesperia Fire Department, Environmental Health Department and Building Inspection Department for information regarding hazardous material spills, permits for water wells, grease traps, septic systems, ASTs/USTs and general information regarding environmental issues/complaints associated with the subject property. At the time of writing, a response from these departments has not been received. Any pertinent information will be forwarded to the Client upon receipt. However, it is the Environmental Professional's opinion that this limitation would not alter the conclusions of this report.

There were no other unmet requirements of the ASTM 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

It is the Environmental Professional's opinion that these limitations, data gaps and/or data failures would not alter the conclusions of this report. No other exceptions, limitations, data gaps and/or data failures were encountered during the course of this investigation.

2.0 USER PROVIDED INFORMATION

The purpose of this section is to summarize and evaluate information provided by the *User* that may assist in the identification of recognized environmental conditions and business environmental risks in connection with the subject property.

2.1 Title Records

Title records can be reviewed to identify potential environmentally suspect historic owners of the subject property.

The *User* did not provide CCG with any title records for review.

2.2 Environmental Liens / Activity and Use Limitations

Reasonably ascertainable recorded land title records and lien records that are filed under federal, tribal, state, or local law can be reviewed to identify environmental liens or activity and use limitations (AULs), if any, that are currently recorded against the subject property.

The *User* did not inform CCG of any environmental liens, AULs, institutional controls or engineering control restrictions imposed on the subject property.

2.3 Specialized Knowledge

If the *User* is aware of any specialized knowledge or experience that is material to recognized environmental conditions or business environmental risk in connection with the subject property, it is the *User's* responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional. The *User* should do so before the environmental professional conducts the site reconnaissance.

The *User* did not inform CCG of any specialized knowledge or experience that is material to recognized environmental conditions or business environmental risk in connection with the subject property.

2.4 Commonly Known or Reasonably Ascertainable Information

If the *User* is aware of any commonly known or reasonably ascertainable information within the local community about the subject property that is material to recognized environmental conditions or business environmental risk in connection with the subject property, it is the *User's* responsibility to communicate such information to the environmental professional. The *User* should do so before the environmental professional conducts the site reconnaissance.

The *User* did not inform CCG of any commonly known or reasonably ascertainable information within the local community about the subject property that is material to recognized environmental conditions or business environmental risk in connection with the subject property.

2.5 Valuation Reduction for Environmental Issues

If the *User* is aware that the sales price or valuation of the subject property has been reduced due to identified or potential environmental issues relating to the subject property, it is the *User's* responsibility to communicate such information to the environmental professional. The *User* should do so before the environmental professional conducts the site reconnaissance.

The *User* did not inform CCG of any valuation reductions for the subject property based on environmental issues.

2.6 Identification of the Key Site Manager

The key site manager of the subject property was not provided.

3.0 SITE DESCRIPTION

3.1 Site Name and Address

Subject Property Name: 17.87 Acre Tract (Undeveloped)
Street Address: Tracts 3 & 4 Poplar & Mesa Linda Streets
City: Hesperia (inside the Corporate City Limits)
County: San Bernardino County
State: CA
Zip Code: 92344

3.2 Legal Description

Central Appraisal District: Tract 3 - 3064-581-04-0000 & Tract 4 - 3064-581-05-0000
(CAD) Account No:
Current Owner: JG Investment Trust
Abbreviated Legal Description: Please refer to Section 7.2.1 “General Public Records” for the legal description of the subject property.
Number of Parcels: Two

3.3 Site and Vicinity General Characteristics

Site Location Intersection: Northwest of the intersection of Poplar Street and Mesa Linda Street
Site Access: Poplar Street on the south and Mesa Linda Street on the east
Site Acreage: 17.87 Acres - Tract 3 (9.06 Acres), Tract 4 (8.81 Acres) acres - According to the San Bernardino County Assessor’s Office
Development of Surrounding Areas: Please refer to Section 4.3 “Properties and Areas Surrounding the Site” for information regarding the development of the surrounding areas.

3.4 Site Description

General Information

Number of Buildings/stories: N/A
Number of Tenant Spaces: N/A
Net Rentable Square Footage: N/A
Gross Square Footage: N/A
Construction Year: N/A
Amenities: N/A

Structural/Finish-out

Exterior Façade: N/A
Roof Type: N/A
Interior Wall Coverings: N/A
Ceiling Type: N/A
Floor Coverings: N/A
Interior Lighting: N/A

Mechanical Systems

HVAC Type: Please refer to Section 5.0 “Site Reconnaissance and Investigation” for a discussion of the HVAC Systems.
Hot Water Source: Please refer to Section 5.0 “Site Reconnaissance and Investigation” for a discussion of the Hot Water Source.

Site Paving/Landscaping

Paving: ☐ Concrete ☐ Asphalt
☐ Pavers ☐ Gravel
☒ Other: Dirt

Landscaping: ☐ Grass Turf ☒ Native Grasses
☒ Shrubs ☐ Heavily Wooded
☐ Decorative Trees ☐ Agricultural Fields
☐ Mature Trees ☐ Other:

Please refer to Section 5.2.8 “Landfills” for additional information regarding the debris / dumping observed throughout the subject property.

Utility Providers

Please refer to Section 5.0 “Site Reconnaissance and Investigation” for a discussion of the individual utility providers.

Special Utility Structures

Please refer to Section 5.0 “Site Reconnaissance and Investigation” for a discussion of special utility structures on the subject property.

3.5 Current Uses of the Site

Current Property Use: ☐ Retail/Commercial ☐ Multi-family Residential
☐ Office/Commercial ☐ Agricultural Land
☐ Flex Warehouse ☐ Vacant Land
☐ Industrial ☒ Undeveloped Land

☐ Automotive/Gas Station ☐ Other:

Current Occupancy: N/A

Comments: No environmental concerns regarding the current owners or occupants of the subject property were identified during the course of this investigation.

3.6 Owners and Occupants of the Site

Current Owner: JG Investment Trust

Current Tenants: The subject property is currently undeveloped.

Comments: With the exception of the debris / dumping observed throughout the property, no environmental concerns regarding the current use of the subject property were identified during the course of this investigation. Please refer to Section 5.2.8 "Landfills" for additional information.

3.7 Recorded Land Title Records

Please refer to Section 2.2 "Environmental Liens / Activity and Use Limitations" for additional information.

4.0 RECORDS REVIEW

The purpose of this section is to summarize and evaluate information from general public and government environmental records with regard to the physical setting, historical use, current use and environmental listings for the subject property and surroundings. Copies of all maps, public records and non-copyright protected documents are appended to this report in Section 7.0 “Appendices”.

4.1 Physical Setting Sources

4.1.1 Topography

Topo Quad:	Baldy Mesa, CA
Topo Date:	1956, 1968, 1980, 1988, 1996 & 2018
Subject Property Elevation:	Approximately 3,600 feet above Mean Sea Level
On-site Slope:	Relatively flat
Slope based on topo contours:	Northwest
Comments:	Based on a review of topographic conditions, the adjacent properties to the southeast appear to be located topographically upgradient of the subject property. A copy of the most recent USGS topographic map is included in Appendix 7.1.4 “Topographical Maps”.

4.1.2 Nearest Surface Water

Nearest Surface Water Name:	Oro Grande Wash
Distance / Direction:	Approximately 0.31-miles northwest
Comments:	None

4.1.3 Wetlands & Jurisdictional Waters

On-site Suspect Wetlands or Jurisdictional Waters Observed:	None Observed
Adjacent Suspect Wetlands or Jurisdictional Waters Observed:	None Observed
Documented Wetlands Identified:	None Observed
Source:	Baldy Mesa, CA Topographic Map, dated 1956, 1968, 1980, 1988, 1996 & 2018 U.S. Fish & Wildlife Service, Geospatial Wetlands Digital Data website
Comments:	Based on CCG’s desktop review of soil information, FEMA Flood Zone Maps, NWI maps, topographic maps and observations made during site reconnaissance, no potential wetland indicators were identified.

4.1.4 Floodplain

FEMA Community Panel 06071C6475H
Date: 8/20/2008
Flood Zone X
Description: Areas of minimal flood hazard
Comments: None

4.1.5 Soils

Source: United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) website (<http://websoilsurvey.nrcs.usda.gov>)
Soil Type: 134 – Hesperia loamy fine sand, 2 to 5 percent slopes
Soil Description: Please refer to the National Resource Conservation Services (NRCS) Soil Map included in Appendix 7.1.7 “Other Maps & Data” for additional information.

4.1.6 Geology

Source: Groundwater Atlas of the United States – Segment 1
Description: The structural deformation that produced the system of basins and ranges generally began in Tertiary time with block faulting along steeply dipping normal faults. Crustal extension produced horst and graben blocks in some places and tilted blocks in others. The downthrown parts of the blocks became basins; the upthrown parts became mountain ranges. Vertical displacement across the fault zones exceeded 10,000 feet in some areas. Many of the resulting basins are asymmetrical because the grabens are not centered in the valleys. As the mountain blocks were uplifted and eroded, sediment was carried by streams into the basins, and alluvial fans were formed. The fans coalesced to produce broad surfaces that sloped gently to the center of the basins, where finegrained sediments were deposited in lakes and playas. Coarsegrained sediments tended to be deposited near the steeper margins of basins. Fault movement resulting from continuing deformation offset some of these older sediments. Deformation and sedimentation occurred at different rates through the area; as a result, the thickness, areal extent, and grain size of the basin fill are highly varied.

Basin fill primarily consists of unconsolidated to moderately consolidated, well- to poorly sorted beds of gravel, sand, silt, and clay deposited on alluvial fans, pediments, flood plains, and playas. More cemented or compact sediments in the older basin fill and finer grained sediments near the center of the basin are less permeable than the coarser grained sediments near the margins of the basins. Evaporites, such as gypsum, anhydrite (calcium sulfate), and halite (rock salt) are present in the deeper fine-grained sediments of the central parts of some basins. Extrusive volcanic rocks also are interspersed with basin fill in some

basins; volcanic rocks overlie basin fill in a few areas. The thickness of the basin fill is not well known in some basins but ranges from about 1,000 to 5,000 feet in many basins and may exceed 10,000 in a few deep basins in Utah and south-central Arizona.

4.1.7 Hydrology

Source:

Groundwater Atlas of the United States – Segment 1

Description:

The Basin and Range aquifers are located in an area that comprises most of Nevada and the southern California desert. The water-yielding materials in this area are in valleys and basins, and consist primarily of unconsolidated alluvial-fan deposits, although locally flood plain and lacustrine (lake) beach deposits may yield water to wells. Also, the consolidated volcanic and carbonate rocks that underlie the unconsolidated alluvium are a source of water if the consolidated rocks are sufficiently fractured or have solution openings. Many of these valleys and basins are internally drained; that is, water from precipitation that falls within the basin recharges the aquifer and ultimately discharges to the land surface and evaporates within the basin. Ground water is generally under unconfined, or water-table, conditions at the margins of the basins, but as the unconsolidated deposits become finer grained toward the centers of the basins, the water becomes confined. Rarely, basins might be hydraulically connected in the subsurface by fractures or solution openings in the underlying bedrock. These multiple-basin systems end in a terminal discharge area, or sink, from which water leaves the flow system by evaporation. Also, several basins or valleys may develop surface-water drainage that hydraulically connects the basins, and ground water flows between the basins, mostly through the unconsolidated alluvial stream/flood plain sediments

4.1.8 Depth to Groundwater

Site Specific Depth to
Groundwater:

Unknown

General Depth of Regional
Groundwater:

Based on a review of surface water features and topographic conditions in the subject property area, perched tables are anticipated to be encountered at depths >100 feet below ground surface.

4.1.9 Groundwater Utilization

On-site Water Wells:

None Observed or Reported

Comments:

According to the subject property management, groundwater is not currently utilized on the subject property.

4.1.10 Groundwater Direction

Site Specific: Unknown

Regional: Northwest

Comments: In order to determine actual groundwater flow beneath a site it is necessary to install a network of at least three permanent groundwater monitoring wells and perform a relative elevation survey. However, general groundwater flow can be inferred based on the natural slope of the land surface in the area of the subject property.

4.1.11 Oil and Gas Exploration/Distribution

Current On-site/Adjacent Oil or Gas Exploration: None Observed

Historic On-site/Adjacent Oil or Gas Exploration: None Identified

Current On-site/Adjacent Pipeline: None Observed

Historic On-site/Adjacent Pipeline: None Identified

Source: Site reconnaissance, U.S. DOT National Pipeline Mapping System Website, historical USGS Baldy Mesa, CA topographical maps and historical aerial photographs

Comments: None

4.2 Historical Use Information

4.2.1 Prior Uses of the Subject Property

Historic Sources Researched: Historic aerial photographs, topographic maps and interviews with City/County officials and other individuals familiar with the history of the subject property

Earliest Date Researched: 1938 - Aerial Photograph

Historic Use of the Subject Property & Date Range: Undeveloped land since at least 1938.

Development Date of Current Improvements: N/A

Environmental Concerns Associated with Historic Use of the subject property:

☐ Historic Industrial Use	☐ Historic Agricultural Use
☐ Historic Dry Cleaner	☐ Historic Sand/Gravel Mining
☐ Historic Gas Station	☐ Other:
☒ No Environmental Concerns Associated with Historic Use of the Subject Property	

Comments: None

Historic Data Gaps: Yes - See below

Historic Data Failure: No

Comments: ASTM E 1527-13 "Standard for Environmental Site Assessments" suggests historical usage for a property be determined back to 1940 or the property's first developed use, whichever is earliest. CCG reviewed Aerial Photographs back to 1938 and Topographic Maps back to 1956, but was unable to research the site history at 5-year intervals. No additional historical sources that were deemed reasonably ascertainable and likely to be sufficiently useful were identified at the time of the assessment. However, it is the Environmental Professional's opinion that this limitation would not alter the conclusions of this report.

4.2.2 Summary of Prior Phase I ESA, Environmental Checklists & Helpful Documents

CCG requested information from the User, Property Owner and Property Manager regarding the following documents/reports:

- Prior environmental compliance audit reports
- Environmental permits (i.e. solid waste disposal permits, hazardous waste disposal permits, waste water permits, NPDES permits, underground injection permits)
- Registrations for underground and above-ground storage tanks
- Safety data sheets
- Community Right to Know plans
- Safety Plans, preparedness and prevention plans; spill prevention, countermeasure and control plans; etc.
- Hydrogeologic reports
- Notice of violations
- Environmental liens

- Hazardous waste generator notices or reports
- Geotechnical studies
- Risk assessments
- Recorded activity and use limitations
- Any prior, current or pending proceedings involving the subject property relevant to hazardous substances or petroleum products

None of the requested documents were provided.

4.2.3 Aerial Photographs

Source: Nationwide Environmental Title Research, Inc. (NETR)

Years Reviewed: 1938, 1952, 1968, 1994, 2002, 2009 & 2016

On-Site Concerns Identified: ☐ Yes ☒ No

Off-Site Concerns Identified: ☐ Yes ☒ No

Comments: Copies of the aerial photographs reviewed for this assessment are included in Appendix 7.1.3 "Aerial Photographs".

Aerial Photographs Reviewed in Prior Report: ☐ Yes ☐ No ☒ Not Applicable
☐ Generally consistent with CCG's findings

4.2.4 Fire Insurance Maps

Fire Insurance Maps can be reviewed for information regarding historic property use. Historical use information was obtained using ASTM approved standard historical sources which did not include the review of Fire Insurance Maps.

Source: No Coverage Available

Years Reviewed: No Coverage Available

On-Site Concerns Identified: ☐ Yes ☐ No ☒ Not Applicable

Off-Site Concerns Identified: ☐ Yes ☐ No ☒ Not Applicable

Comments: Not Applicable

Fire Insurance Maps Reviewed in Prior Report: ☐ Yes ☐ No ☒ Not Applicable
☐ Generally consistent with CCG's findings

4.2.5 City Directories

Source: No Coverage Available

City Directory Type: No Coverage Available

Years Reviewed: No Coverage Available

Address Listings Reviewed: No Coverage Available

On-Site Concerns Identified: ☐ Yes ☐ No ☒ Not Applicable

Off-Site Concerns Identified: ☐ Yes ☐ No ☒ Not Applicable

Comments: Not Applicable

City Directories Reviewed in Prior Report: ☐ Yes ☐ No ☒ Not Applicable
☐ Generally consistent with CCG's findings

4.2.6 Other Maps

Historical USGS topographic maps can be reviewed to identify improvements and other historical conditions for the subject property and surrounding sites.

Source: United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map for Baldy Mesa, CA

Map Date(s): 1956, 1968, 1980, 1988, 1996 & 2018

On-Site Concerns Identified: ☐ Yes ☒ No

Off-Site Concerns Identified: ☐ Yes ☒ No

Comments: A copy of the most recent USGS topographic map is included in Appendix 7.1.4 "Topographical Maps".

Other Maps Reviewed in Prior Report: ☐ Yes ☐ No ☒ Not Applicable
☐ Generally consistent with CCG's findings

4.2.7 Title Records / Property Tax Files

Title records and property tax files can be reviewed to identify potential environmentally suspect historic owners of the subject property, as well as AULs filed against the subject property.

Documents Reviewed: Please refer to Sections 2.1 "Title Records" and 2.2 "Environmental Liens / Activity and Use Limitations" for additional information.

4.2.8 Zoning/Land Use Records

Source: Not Applicable

Description: Not Applicable

Comments: Zoning and land use records can be reviewed for information regarding historic zoning designations and land uses for the subject property. Historical use information was obtained using ASTM approved standard historical sources which did not include the review of historical zoning and land use records.

4.2.9 Other Historical Sources

Source: Not Applicable

Description: Not Applicable

Comments: No other sources were reviewed to determine the historic use of the subject property.

4.2.10 Personal Interviews

Source: See Below

Description: See Below

Comments: CCG interviewed multiple individuals regarding the historic use of the subject property. Please refer to Section 5.3 "Interviews" for information regarding personal interviews performed as a part of this investigation.

4.3 Properties and Areas Surrounding the Site

4.3.1 Current Use of Adjacent Properties

CURRENT ADJACENT PROPERTIES	
North:	Vacant undeveloped land followed by Sultana Street (dirt road)
East:	Mesa Linda Street followed by undeveloped land
South:	Poplar Street followed by undeveloped land and a retail strip shopping center / flex warehouses (southwest)
West:	Three Flags Avenue/Lassen Road (dirt road) followed by undeveloped land

Comments: Please refer to Section 4.4.1 “Mapped Database Records Search – Off-Site Facilities of Potential Concern” for additional information regarding several tenants of the adjacent south retail strip center / flex warehouse park.

A site plan of the subject property was prepared by CCG personnel and is included in Appendix 7.1, “Site Background Attachments”.

4.3.2 Past Use of Adjacent Properties

PAST ADJACENT PROPERTIES		
North:	1938 – 1968:	Undeveloped land
	1994 - Present:	Undeveloped land followed by a dirt road (Sultana Street)
East:	1938 – 1968:	Undeveloped land
	1994 - Present:	Mesa Linda Street followed by undeveloped land
South:	1938 – 1968:	Undeveloped land
	1994 – 2002:	Poplar Street followed by undeveloped land
	2009 - Present:	Poplar Street followed by undeveloped land and retail strip shopping/flex warehouses (southwest)
West:	1938 – 1968:	Undeveloped land
	1994 - Present:	Dirt road (Three Flags Avenue/Lassen Road) followed by undeveloped land

Comments: Please refer to Section 4.4.1 “Mapped Database Records Search – Off-Site Facilities of Potential Concern” for additional information regarding several tenants of the adjacent south retail strip center / flex warehouse park.

No other environmental concerns were identified associated with the past adjacent properties.

4.3.3 Current Uses of Surrounding Areas

Development in the area surrounding the subject property consists primarily of:

- | | |
|--|---|
| ☒ Undeveloped land | ☒ Retail/Commercial development |
| ☒ Vacant land | ☐ Commercial office development |
| ☐ Agricultural land | ☐ Medical office development |
| ☐ Single-family residences | ☒ Warehouse/flex space facilities |

☐ Multi-family residences

☐ Light industrial facilities

☐ School(s)

☐ Other:

Comments: No environmental concerns were identified associated with the current use of the surrounding areas.

4.3.4 Past Uses of Surrounding Areas

Past development in the areas surrounding the subject property consisted primarily of:

☒ Undeveloped land

☐ Retail/Commercial development

☐ Vacant land

☐ Commercial office development

☐ Agricultural land

☐ Medical office development

☐ Single-family residences

☐ Warehouse/flex space facilities

☐ Multi-family residences

☐ Light industrial facilities

☐ School(s)

☐ Other:

Comments: No environmental concerns were identified associated with the past use of the surrounding areas.

4.4 Environmental Records Reviews and Interviews

4.4.1 Mapped Database Records Search

CCG's regulatory search for the subject property included a review of U.S. EPA and State of CA databases. The information was compiled through a Regulatory Database Report prepared by Environmental Risk Information Services (ERIS). The database searches were performed for various radii, in accordance with ASTM standards. Descriptions of the State and Federal databases reviewed are contained in the Regulatory Database Report which is included in Appendix 7.2 "Governmental Agency Records Attachments".

CCG has not attempted to verify the accuracy or completeness of all the information provided. Any data search information, which potentially impacts the environmental integrity of the subject property, is investigated further if necessary. The following table summarizes the number of sites on the respective databases as identified by the Regulatory Database Report.

REGULATORY DATABASE SUMMARY TABLE		
Databases Reviewed	Minimum Search Area	Sites Within Search Area
FEDERAL DATABASES		
Federal NPL list	1-mile radius	-
Federal PNPL list	1-mile radius	-
Federal DNPL list	1-mile radius	-
Federal SEMS list	½-mile radius	-
Federal SEMS ARCHIVE list	½-mile radius	-
Federal ODI list	½-mile radius	-
Federal IODI list	½-mile radius	-
Federal CERCLIS list	½-mile radius	-
Federal CERCLIS NFRAP list	½-mile radius	-
Federal CERCLIS LIENS list	Subject Property	-
Federal RCRA CORRACTS facilities list	1-mile radius	-
Federal RCRA TSD facilities list	½-mile radius	-
Federal RCRA LQG/SQG/CESQG generators list	¼-mile radius	-
Federal RCRA NON-GEN list	¼-mile radius	4
Federal ENG/INST controls list	½-mile radius	-
Federal ERNS list	Subject Property	-
Federal BROWNFIELDS list	½-mile radius	-
Federal FEMA UST list	¼-mile radius	-
Federal REFN list	¼-mile radius	-
Federal BULK TERMINAL list	¼-mile radius	-
Federal SEMS LIEN list	Subject Property	-
Federal SUPERFUND ROD list	1-mile radius	-
STATE DATABASES		
State RESPONSE list	1-mile radius	-
State ENVIROSTOR list	1-mile radius	3
State SWF/LF list	½-mile radius	-
State CLI list	½-mile radius	-
State IHW list	¼-mile radius	-
State IHW CORR ACTION list	¼-mile radius	-
State LUST list	½-mile radius	1
State UST/AST/PST list	¼-mile radius	1
State DTNK list	¼-mile radius	-
State AUL list	½-mile radius	-
State VCP site	½-mile radius	-
State IOP list	½-mile radius	-
State BROWNFIELDS list	½-mile radius	-
State MSD list	½-mile radius	-
ADDITIONAL ENVIRONMENTAL RECORDS		
Various	Various	16

Orphan Sites

Two (2) “orphan” (location unknown/unplottable) sites were identified on the Regulatory Database Report. Based on CCG’s review of the orphan list, review of local maps and observations made during the reconnaissance of the subject property and surrounding areas, the orphan facilities/listings do not appear to be located in the general vicinity of the subject property.

Regulatory Database Listings for the Subject Property

The Regulatory Database Report did not identify any federal or state regulatory listings for the subject property.

Off-Site Facilities of Potential Concern

The following table summarizes nearby facilities of potential concern based on CCG’s review of the Regulatory Database Report:

REGULATORY DATABASE SUMMARY TABLE				
<i>Facility Name & Address</i>	<i>Distance (miles), Direction, Gradient</i>	<i>Applicable Databases</i>	<i>Current Status</i>	<i>Concern?</i>
Desert Dynamics Off Road 12221 Poplar Street, Building B-10	Adjacent* Southwest Cross to upgradient	CUPA	CUPA – Indexing database maintained by the San Bernardino County Fire Department on behalf of California EPA. Facility listed as a “Hazmat Handler, 0-10 Employees”. Permit issued on October 31, 2010. No reported violations or releases.	No, based on current regulatory status (no reported violations / releases)
The Litzenberger Company 12221 Poplar Street, Suite 14	Adjacent* Southwest Cross to upgradient	CUPA	CUPA – Indexing database maintained by the San Bernardino County Fire Department on behalf of California EPA. Facility listed as a “Hazmat Handler, 0-10 Employees”. Permit issued on February 28, 2013. No reported violations or releases.	No, based on current regulatory status (no reported violations / releases)
3M Oak Hills 12221 Poplar Street, Unit D-20	Adjacent* Southwest Cross to upgradient	CUPA CERS HAZ	CUPA – Indexing database maintained by the San Bernardino County Fire Department on behalf of California EPA. Facility listed as a “Hazmat Handler, 11-30 Chemicals”. Permit issued on November 30, 2020. No reported violations or releases. CERS HAZ – Several recordkeeping violations reported in 2016 and 2019. All violations reportedly returned to compliance.	No, based on current regulatory status (no reported releases / recordkeeping violations only)
Superior Pool Products, LLC 12221 Poplar Street, Building E	Adjacent* Southwest Cross to upgradient	CERS HAZ	CERS HAZ – No reported violations or release.	No, based on current regulatory status (no reported violations / releases)

* Field Verified

Based upon the mitigating factors stated above, CCG does not consider the above referenced facilities to be an environmental concern at this time.

Other Listed Facilities

No other properties that were identified on the Regulatory Database Report within the ASTM-designated search radii are considered by CCG to pose a potential risk of impacting the subject property based on their regulatory information, distance and/or topographic direction from the subject property.

Vapor Encroachment Condition (VEC)

No RECs, CRECs or HRECs were identified in connection with the subject property. Based on a review of the regulatory database report, no facilities were identified which CCG considers a VEC concern to the subject property.

4.4.2 Additional Regulatory Agency Information

City/County Department of Health/Environmental Division

Information Requested: Any information regarding hazardous material spills, permits for water wells, grease traps, septic systems, ASTs/USTs and general information regarding environmental issues/complaints associated with the subject property.

Response: At the time of writing, a response from the department has not been received. Any pertinent information will be forwarded to the Client upon receipt.

Fire Department

Information Requested: Any information regarding records of ASTs/USTs or hazardous material spills associated with the subject property.

Response: At the time of writing, a response from the department has not been received. Any pertinent information will be forwarded to the Client upon receipt.

Planning and Zoning Department

Information Requested: Information regarding the current and historic zoning designations for the subject property.

Current Zoning Designation: CIBP - Commercial Industrial Business Park

Historic Zoning Designation: No information regarding historic zoning designations was provided.

Building Permit/Inspection Department

Information Requested: Any information regarding demolition permits, the construction/remodel year of the subject property and records of permits for ASTs/USTs.

Response: At the time of writing, a response from the department has not been received. Any pertinent information will be forwarded to the Client upon receipt.

Local/Regional Pollution Control Agency

Information Reviewed: CCG reviewed various State and Federal Databases for information regarding hazardous material spills or identified contamination associated with the subject property.

Response: The subject property is not listed on any of the state or federal databases searched in conjunction with this Phase I ESA.

Appraisal District

Information Reviewed: No information regarding environmental liens or activity and use limitations (i.e. deed restrictions or institutional/engineering controls) was identified based upon a review of the County Assessor's Office information. Please refer to Section 2.2 "Environmental Liens/Activity and Use Limitations" for additional information regarding environmental liens and activity and use limitations for the subject property.

5.0 SITE RECONNAISSANCE AND INVESTIGATION

The site inspection was conducted in accordance with the methodologies referred to in ASTM 1527-13 Section 9 (Site Reconnaissance) and the Client Scope of Work. Visual observations of the exterior of the subject property and all improvements were made during the site inspection. When necessary, large tracts of undeveloped/unimproved areas were inspected by walking or driving a grid pattern. Accessible common areas, maintenance, mechanical and repair areas and a representative sampling of occupant spaces were also inspected.

Site Inspector:	Dan Weis
Inspection Date:	10/14/2020
Inspection Time:	8:00 AM
Site Escort:	CCG was unescorted during the site inspection.
Units Inspected:	CCG inspected the subject property by walking and/or driving the perimeter of the subject property and any unimproved dirt roads. The interior of the subject property was inspected by walking a grid pattern.
Weather Conditions:	The weather conditions during the site inspection were clear with air temperatures in the 80s (degrees Fahrenheit).
Limitations to Site Inspection:	The following limitations to the site inspection were encountered during the course of this investigation. • CCG was unescorted during the site inspection. No other limitations to the site inspection methodology were encountered during the course of this assessment.
Comments:	It is the Environmental Professional's opinion that these limitations would not alter the conclusions of this report.

5.1 General Site Characteristics

5.1.1 Solid Waste Disposal

Collection Points:	None Observed
Disposal Contractor:	N/A
Comments:	Please refer to Section 5.2.8 "Landfills" for additional information regarding the debris / dumping observed throughout the subject property.

5.1.2 Sanitary Sewage Discharge and Disposal

Floor Drains:	None Observed
Trench Drains:	None Observed
Grease Traps:	None Observed
Oil Water Separators:	None Observed
Sand Traps:	None Observed
Septic Systems:	None Observed

Utility Provider: N/A

Comments: CCG did not observe any evidence of hazardous chemical/waste or petroleum product releases or disposal activities, such as significant surface stains in the area of the on-site sanitary sewer features.

5.1.3 Surface Water Drainage and Natural Surface Water Features

Surface flow to adjacent properties & streets: Yes

On-site Storm Drains: None Observed

Dry-wells: None Observed

Drainage Ditches: Yes - See below

Retention Pond: None Observed

Detention Pond: None Observed

Natural Surface Water Features (ponds, streams, lagoons, etc.): Yes - See below

Storm Water Utility Provider: City of Hesperia

Comments: A natural drainage swale is visible on aerial photographs since 1938. The swale is located on the west central portion (slightly west of the centerline between the tracts) of the property roughly between the two lots. Review of topographic maps and wetland maps did not identify any natural surface water features in the area of the drainage swale. In addition, two concrete drainage culverts were observed in the central portion of the south property boundary adjacent to Poplar Street.

CCG did not observe any evidence of hazardous chemical/waste or petroleum product releases or disposal activities, such as significant surface stains in the area of the on-site surface water drainage features. CCG does not consider the presence of the drainage swale an environmental concern.

5.1.4 Heating and Cooling Systems

HVAC Type: N/A

Hot Water Source: N/A

Comments: The subject property is currently undeveloped.

5.1.5 Water Wells, Cisterns and Springs

On-site Water Wells: None Observed

On-site Monitoring Wells: None Observed

On-site Cisterns: None Observed

On-site Springs: None Observed
Comments: None

5.1.6 Potable Water

On-site Domestic Water Source: None Observed
Comments: None

5.1.7 Wastewater

Sanitary Wastewater Discharges: None Observed
Process Wastewater Discharges: None Observed
Other Wastewater Discharges: None Observed
Comments: None

5.1.8 Additional Property Impacts

Comments: With the exception of those discussed throughout the body of this report, no other conditions of concern were identified on the subject property.

5.2 Potential Environmental Hazards

5.2.1 Hazardous Substances & Petroleum Products Used or Stored on the Subject Property

CCG did not observe any hazardous chemicals or petroleum products stored on the subject property.

5.2.1.1 Labeled Containers and Drums

Comments: Other than the materials discussed in Section 5.2.8 “Landfills”, CCG did not observe any containers or drums labeled as containing hazardous materials and/or petroleum products stored on the subject property.

5.2.1.2 Unlabeled Containers and Drums

Comments: CCG did not observe any unlabeled containers or drums on the subject property.

5.2.1.3 Disposal Locations of Regulated / Hazardous Wastes

Comments: CCG did not observe any regulated/hazardous waste disposal locations on the subject property. According to management, there is no regulated/hazardous waste disposal on the subject property.

5.2.2 Evidence of Releases or Disposal of Hazardous Substances & Petroleum Products

Comments: CCG did not observe any evidence of hazardous chemical or petroleum product releases or disposal activities, such as significant surface stains or distressed vegetation.

5.2.3 Polychlorinated Biphenyls (PCBs)

PCBs often are found in electrical equipment such as transformers, ballasts in fluorescent lighting, circuit breakers and switchgears, and hydraulic fluids. PCBs contain toxic compounds that attach to human fat tissue and may act as possible carcinogens if ingested.

Transformers Present On-site: ☐ Yes ☒ No

Transformer Locations On-site: N/A

Transformer Type: N/A

Evidence of leaks or spills: N/A

Transformer Owner: N/A

Comments: None

Fluorescent Lighting Present On-site: ☐ Yes ☒ No

Fluorescent Lighting Locations On-site: N/A

Comments: N/A

Hydraulic Elevators Present None Observed

On-site:

Elevator Locations On-site: N/A

Comments: None

Hydraulic Lifts Present On-site: None Observed

Hydraulic Lift Locations On-site: N/A

Comments: None

Other PCB Equipment: No other potential PCB-containing equipment, such as hydraulic lifts/systems, was identified on the subject property.

5.2.4 Asbestos-Containing Materials

Comments: In accordance with the Client scope of work and given current property use (undeveloped land), asbestos sampling was not conducted as a part of this investigation.

5.2.5 Radon

EPA Radon Zone: Zone 2

Radon Zone Definition: Areas that have an average predicted indoor radon screening potential of between 2.0 and 4.0 pCi/L (picocuries per liter of air) for radon gas. The EPA and Surgeon General strongly recommend taking action when radon test results are 4.0 pCi/L or greater.

Comments: In accordance with the Client scope of work and given current property use (undeveloped land), radon sampling was not conducted as a part of this investigation.

5.2.6 Lead-Based Paint

Comments: In accordance with the Client scope of work and based on current property use (undeveloped land), lead-based paint sampling was not conducted as a part of this investigation.

5.2.7 Lead in Drinking Water

Comments: In accordance with the Client scope of work and based on current property use (undeveloped land), lead in drinking water sampling was not conducted as a part of this investigation.

5.2.8 Landfills

Comments: CCG did not observe any evidence of current or historic landfills on the subject property. However, several debris piles / dump sites and scattered windblown debris were observed on the subject property. Observed debris generally consisted of municipal waste (paper, plastic, etc.) and

construction debris (lumber, concrete, asphalt / gravel, roofing materials, etc.). However, multiple scrap truck tires and several empty retail sized containers of automotive fluids (motor oil, antifreeze, etc.) were also observed. No staining or other obvious evidence of a release was observed in these areas. However, CCG considers the observed debris (including scrap tires and empty automotive fluid containers) to represent a de minimis condition in connection with the subject property.

5.2.9 Pits, Sumps, Dry Wells and Catch Basins

Comments: CCG did not observe any evidence of pits, sumps or catch basins on the subject property.

5.2.10 On-Site Aboveground and Underground Storage Tanks

Current On-site ASTs: None Observed

Historic On-site ASTs: None Identified

Current On-site USTs: None Observed

Historic On-site USTs: None Identified

Comments: No evidence of current or historic aboveground or underground storage tanks was observed on the subject property. According to the subject property manager, there are no USTs/ASTs located on the subject property. Furthermore, the subject property manager was unaware of the presence of historic/former USTs/ASTs located on the subject property.

5.2.11 Radiological Hazards

Comments: CCG did not observe any evidence of radiological hazards associated with the subject property.

5.2.12 Suspect Microbial Growth (SMG)

Visual Evidence of SMG: N/A

Visual Evidence of Water Damage: N/A

Visual Evidence of Roof, Sidewall or Window Leaks: N/A

Visual Evidence of HVAC/Plumbing Leaks: N/A

Property Management Reports of Current or Past SMG: N/A

High Humidity Levels Inside Building: N/A

Comments: In accordance with the Scope of Work and based on current property use (undeveloped land), mold sampling was not conducted at the subject

property.

5.2.13 Additional Hazard Observations

5.2.13.1 Electro-Magnetic Fields (EMFs)

Comments: No high voltage electrical transmission lines are located on or adjacent to the subject property, therefore EMFs are not considered an environmental concern to the subject property.

5.2.13.2 Urea Formaldehyde

Comments: In accordance with the Scope of Work and based on current property use (undeveloped land), destructive testing for urea formaldehyde insulation was not performed.

5.2.13.3 Other Concerns

Comments: With the exception of those noted in previous sections, no additional hazards were observed.

5.3 Interviews

5.3.1 User

Individual Interviewed: Mr. Brandon Gallup - Covington Group, LLC

Relationship to Subject Property: *User of the report*

Interview Form Completed: ☐ Yes ☒ No

Interview Results: N/A

Comments: At the time of writing, the interview questionnaire had not been returned to CCG. It is the Environmental Professional's opinion that sufficient information regarding the current and historic use of the subject property was obtained through other sources and that completion of the interview questionnaire is not necessary to form an opinion regarding REC's, CREC's, HREC's or business environmental risks relating to the subject property.

5.3.2 Property Owner Representative

Individual Interviewed: None Identified

Relationship to Subject Property: Property Owner Representative/Key Site Manager

Interview Form Completed: ☐ Yes ☒ No

Interview Results: N/A – No specific individual interviewed

Comments: It is the Environmental Professional's opinion that sufficient information regarding the current and historic use of the subject property was obtained through other sources and that completion of the interview questionnaire is not necessary to form an opinion regarding REC's, CREC's, HREC's or business environmental risks relating to the subject property.

5.3.3 Key Site Manager

Individual Interviewed: None Identified

Relationship to Subject Property: Property Owner Representative/Key Site Manager

Interview Form Completed: ☐ Yes ☒ No

Interview Results: N/A – No specific individual interviewed

Comments: It is the Environmental Professional's opinion that sufficient information regarding the current and historic use of the subject property was obtained through other sources and that completion of the interview questionnaire is not necessary to form an opinion regarding REC's, CREC's, HREC's or business environmental risks relating to the subject property.

5.3.4 Occupants

Individual Interviewed: N/A

Relationship to Subject: N/A

Property:

Interview Form Completed: N/A

Interview Results: N/A

Comments: The subject property is currently undeveloped.

5.3.5 Past Owners, Operators and Occupants

Individual Interviewed: N/A

Relationship to Subject
Property: N/A

Interview Form Completed: N/A

Interview Results: N/A

Comments: No past owners, operators or occupants of the subject property were interviewed during the course of this investigation. It is the Environmental Professional's opinion that sufficient information regarding the current and historic use of the subject property was obtained through other sources that interviews of these individuals were not necessary to form an opinion regarding RECs, CRECs, HRECs or business environmental risks relating to the subject property.

5.3.6 Adjacent Property Owners, Operators and Occupants

Individual Interviewed: N/A

Relationship to Subject
Property: N/A

Interview Form Completed: N/A

Interview Results: N/A

Comments: No adjacent property owners, operators or occupants were interviewed regarding the subject property during the course of this investigation. It is the Environmental Professional's opinion that sufficient information regarding the current and historic use of the subject property was obtained through other sources and that interviews of these individuals were not necessary to form an opinion regarding RECs, CRECs, HRECs or business environmental risks relating to the subject property.

5.3.7 State and/or Local Government Officials

Comments: CCG interviewed multiple state and local governmental agencies for information regarding the subject property. These agencies included:

- City/County Environmental Protection Division
- City/County Fire Marshal
- City/County Planning Department
- Local/Regional Pollution Control Agency

- County Central Appraisal District
- Local/Regional Water Quality Agency

Please refer to Section 4.4.2 “Additional Regulatory Agency Information” and Appendix 7.3 “Interview Record Attachments” regarding information obtained as a result of these interviews.

5.4 Additional Services

According to ASTM E1527-2013 Standard Practice for Environmental Site Assessments, *“There may be environmental issues or conditions at a property that parties may wish to assess in connection with commercial real estate that are outside the scope of this practice (the non-scope considerations). As noted by the legal analysis in Appendix X1 of this practice, some substances may be present on a property in quantities and under conditions that may lead to contamination of the property or of nearby properties but are not included in CERCLA’s definition of hazardous substances (42 USC 9601(14)) or do not otherwise present potential CERCLA liability...”*

These “non-scope considerations” may pose a business environmental risk to the property and are classified as “Additional Services”. Other than those previously discussed in the body of this report, the following are several additional non-scope considerations identified by ASTM *“...No implication is intended as to the relative importance of inquiry into such non-scope considerations and this list of non-scope considerations is not intended to be all inclusive”*.

5.4.1 Regulatory Compliance

Comments: A regulatory compliance review is beyond the scope of this investigation. However, based on CCG’s general observations during the site reconnaissance, no areas of gross non-compliance were observed.

5.4.2 Cultural and Historic Designations

Comments: A review of cultural and/or historical designations for the subject property is beyond the scope of this investigation. However, based upon the location of the subject property and the lack of on-site improvements, it is unlikely regulations regarding cultural and/or historical property designations would represent a concern to current operations or future development of the subject property.

5.4.3 Coastal Development Zone

Comments: Based upon the location of the subject property, it is unlikely regulations regarding coastal development zones would represent a concern to current operations or future development of the subject property.

5.4.4 Endangered Species

Comments: Federally-listed threatened and endangered species and their habitats are protected under the Endangered Species Act of 1973, as amended. Individuals of state-listed species are protected under state law, although their habitats are not currently given regulatory protection. A review of

endangered species on or in the vicinity of the subject property is beyond the scope of this investigation. However, according to the California Department of Fish & Wildlife there are multiple rare, threatened or endangered species listed for San Bernardino County.

5.4.5 Indoor Air Quality

Comments: A review of indoor air quality on or in the vicinity of the subject property is beyond the scope of this investigation.

5.4.6 Biological Agents

Comments: An evaluation of biological agents on the subject property is beyond the scope of this investigation. However, based on CCG's general observations during the site reconnaissance, no specific concerns regarding biological agents were observed.

5.4.7 Compliance with Activity & Use Limitations

Comments: Parties who wish to qualify for one of the CERCLA "Land Owner Liability Protections" (LLPs) must comply with activity and use limitations (AULs), including land use restrictions that were relied upon in connection with a response action for a subject property. The *User* did not inform CCG of any AULs, imposed on the subject property. Please refer to Section 2.2 "Environmental Liens / Activity and Use Limitations" for additional information.

6.0 CONSULTANT INFORMATION

6.1 Project Personnel

The following individuals performed this ESA, including inspectors, research assistants, project managers, senior reviewers, etc.:

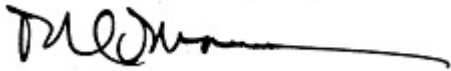
Dan Weis, Site Inspector
Tonya Golden, Project Manager
Richard A. Mosman, Environmental Professional

This Phase I ESA was prepared by Tonya Golden, Project Manager, and was conducted under the direct supervision of Richard A. Mosman, an environmental professional, who has reviewed and approved the Report. In addition, the methods and procedures employed in the development of the Report conform to minimum industry standards.

6.2 Report Certification

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Richard A. Mosman
Environmental Professional

6.3 Certification/Licensing

The Contractor and all subcontractors are properly licensed and/or certified to do the work described herein where required.

6.4 Report Reliance

This Phase I Environmental Site Assessment was conducted in general accordance with ASTM Standard Practices for Environmental Site Assessments (E-1527-13) for the exclusive benefit of Ardent Financial & Centennial Bank, an Arkansas State-Chartered bank, and its successors and/or assigns as their interest may appear c/o Covington Investments, LLC its successors and/or assigns. It is based, in part, upon documents, writings, and information owned, possessed, or secured by Consolidated Consulting Group, LLC. Neither this report, nor any information contained herein shall be used or relied upon for any purpose by any other person or entity without the express written permission of Consolidated Consulting Group, LLC.

7.0 APPENDICES

7.1 Site Background Attachments

Category	Attached	Not Applicable
7.1.1 Photographs	X	
7.1.2 Site Drawing	X	
7.1.3 Aerial Photographs	X	
7.1.4 Topographic Map	X	
7.1.5 Fire Insurance Maps		X
7.1.6 City Directories		X
7.1.7 Other Maps & Data	X	
7.1.8 Title Search Records		X
7.1.9 References	X	



View of subject property signage



View of representative undeveloped land



View of northern property line looking west



View of eastern property line looking north



View of southern property line looking east



View of western property line looking north



View of representative dumping
(construction debris / rubble)



View of representative dumping
(municipal debris)



View of representative dumping
(municipal debris / tires)



View of representative hydrant



View of representative survey marker



View of representative drain conduit on southern property line



Adjacent North: Undeveloped land



Adjacent East: Mesa Linda Street followed by undeveloped land



Adjacent South: Poplar Street followed by undeveloped land



Adjacent South: Poplar Street followed by retail strip shopping center / flex warehouses



Adjacent West: Three Flags Avenue (Lassen Road) followed by undeveloped land



Project Name: Lots 3 & 4 - 17.87 Acres
Undeveloped Land
Address: NW of the Intersection of Poplar
Street & Mesa Linda Street
Hesperia, CA 92344
Project #: CCG-4757
Date: October 2020

Legend:

N

Drawing Not
to Scale

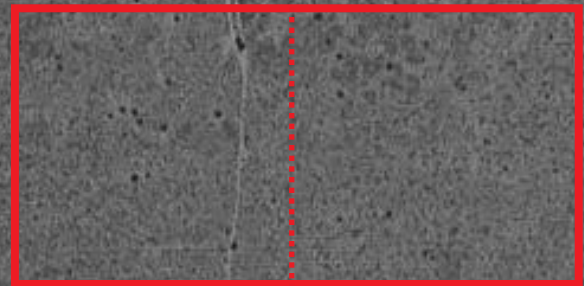


CONSOLIDATED CONSULTING GROUP
ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

SITE PLAN



Site



Project Name: 17.87 Acre Tract
Address: Tracts 3 & 4 Poplar Street
Hesperia, CA 92344
Project #: CCG-4757
Date: August 2020

Photo Date: 1938
Source: NETR
Scale: 1"=325'

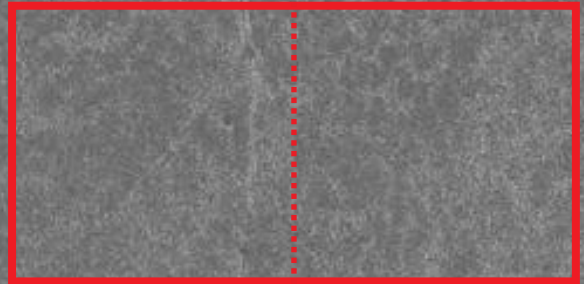


CONSOLIDATED CONSULTING GROUP
ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

**AERIAL
PHOTOGRAPH**



Site



Project Name: 17.87 Acre Tract
Address: Tracts 3 & 4 Poplar Street
Hesperia, CA 92344
Project #: CCG-4757
Date: August 2020

Photo Date: 1952
Source: NETR
Scale: 1"=325'

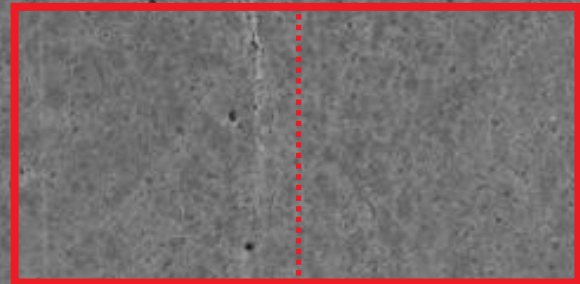


CONSOLIDATED CONSULTING GROUP
ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

**AERIAL
PHOTOGRAPH**



Site



Project Name: 17.87 Acre Tract
Address: Tracts 3 & 4 Poplar Street
Hesperia, CA 92344
Project #: CCG-4757
Date: August 2020

Photo Date: 1968
Source: NETR
Scale: 1"=325'



CONSOLIDATED CONSULTING GROUP
ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

**AERIAL
PHOTOGRAPH**



Project Name: 17.87 Acre Tract		Photo Date: 1994	
Address:	Tracts 3 & 4 Poplar Street Hesperia, CA 92344		
Project #:	CCG-4757		
Date:	August 2020		
		Source: NETR	
		Scale: 1"=325'	



CONSOLIDATED CONSULTING GROUP
ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

**AERIAL
PHOTOGRAPH**



Project Name: 17.87 Acre Tract
Address: Tracts 3 & 4 Poplar Street
Hesperia, CA 92344
Project #: CCG-4757
Date: August 2020

Photo Date: 2002
Source: NETR
Scale: 1"=325'



CONSOLIDATED CONSULTING GROUP
ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

**AERIAL
PHOTOGRAPH**



Project Name: 17.87 Acre Tract
Address: Tracts 3 & 4 Poplar Street
Hesperia, CA 92344
Project #: CCG-4757
Date: August 2020

Photo Date: 2009
Source: NETR
Scale: 1"=325'



CONSOLIDATED CONSULTING GROUP
ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

**AERIAL
PHOTOGRAPH**



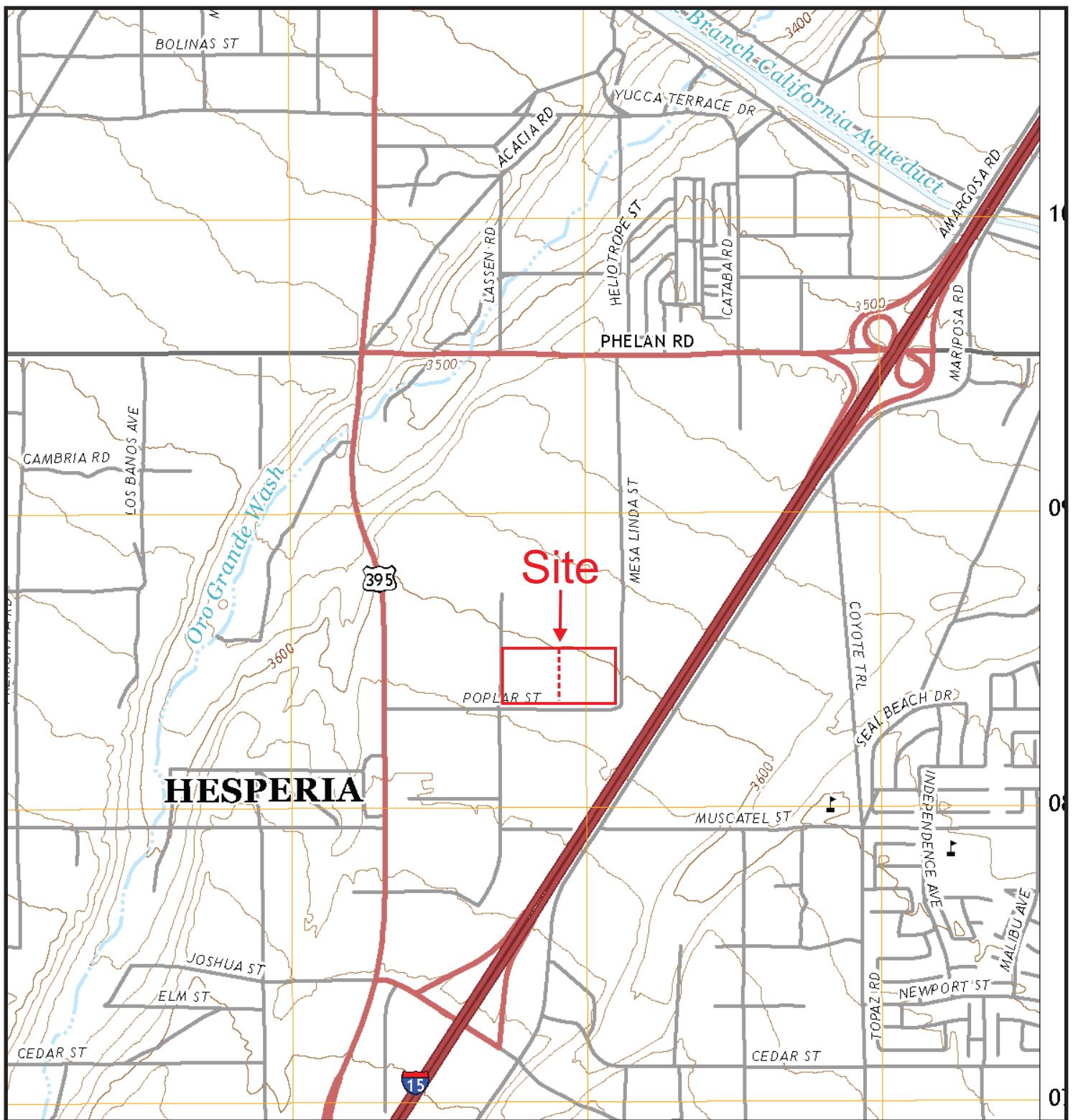
Project Name: 17.87 Acre Tract
Address: Tracts 3 & 4 Poplar Street
 Hesperia, CA 92344
Project #: CCG-4757
Date: August 2020

Photo Date: 2016
Source: NETR
Scale: 1"=325'



CONSOLIDATED CONSULTING GROUP
 ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

**AERIAL
 PHOTOGRAPH**



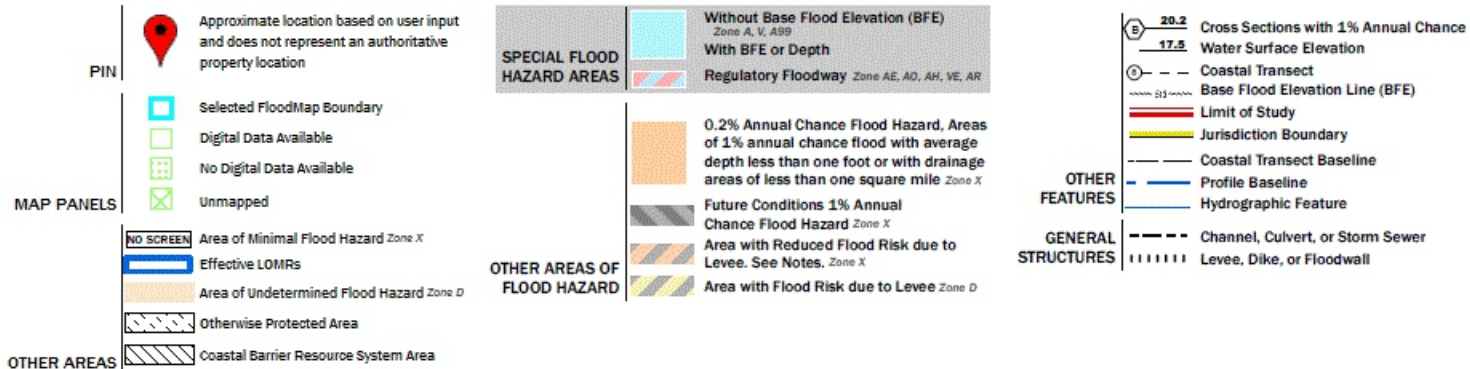
Project Name: Lots 3 & 4 - 17.87 Acres
Address: Undeveloped Land
 NW of the Intersection of Poplar
 Street & Mesa Linda Street
 Hesperia, CA 92344
Project #: CCG-4756
Date: October 2020

Map Name: Baldy Mesa, CA
Map Date: 2018



CONSOLIDATED CONSULTING GROUP
 ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
WWW.CONSOLIDATEDCONSULTING.COM

USGS
TOPOGRAPHIC
MAP



CONSOLIDATED CONSULTING GROUP
 ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING
 WWW.CONSOLIDATEDCONSULTING.COM

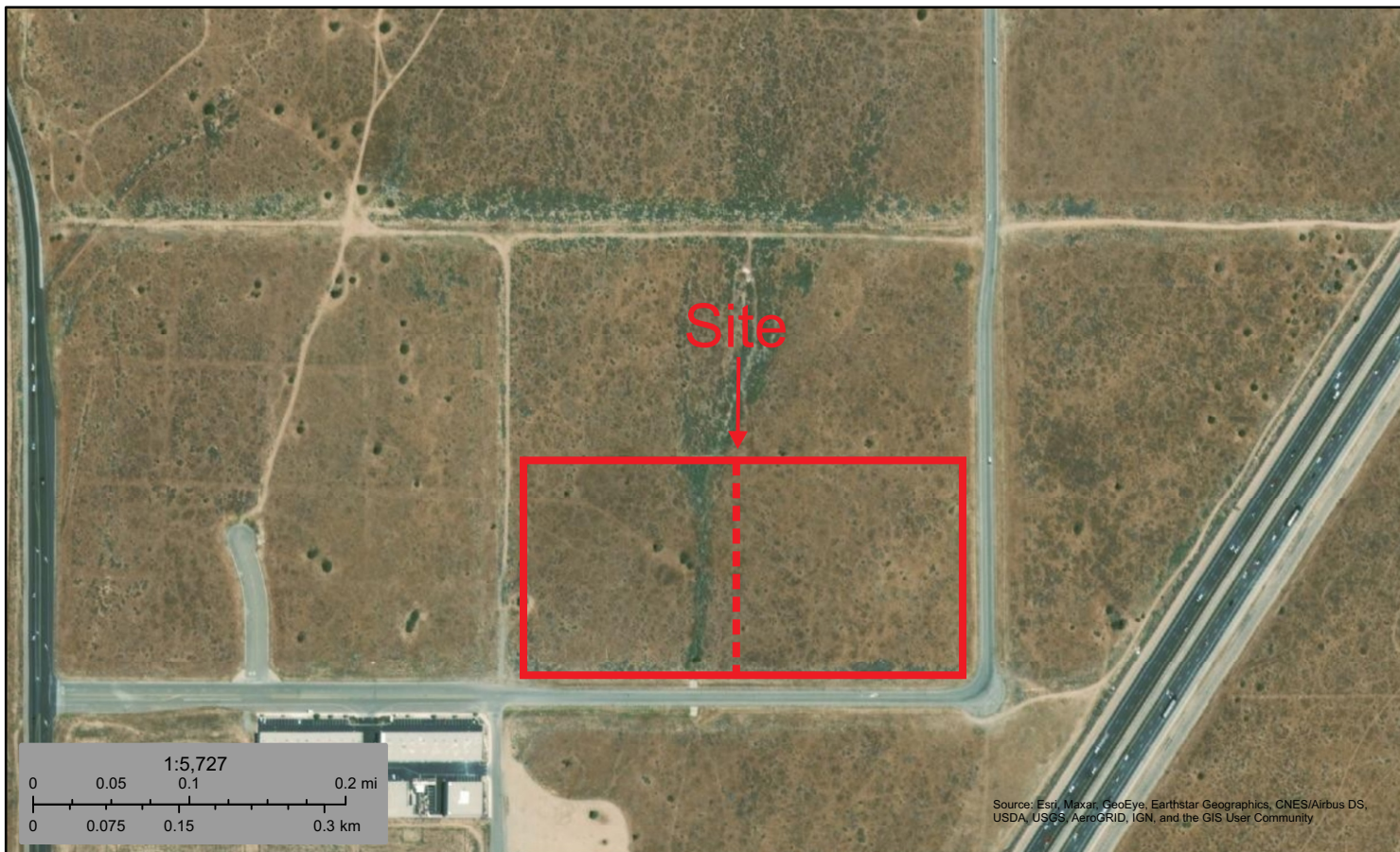
Project Name: Lots 3 & 4 - 17.87 Acres
Address: Undeveloped Land
 NW of the Intersection of Poplar
 Street & Mesa Linda Street
 Hesperia, CA 92344
Project #: CCG-4756
Date: October 2020

FLOOD MAP



U.S. Fish and Wildlife Service

National Wetlands Inventory



October 16, 2020

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
	Freshwater Pond		Riverine		

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



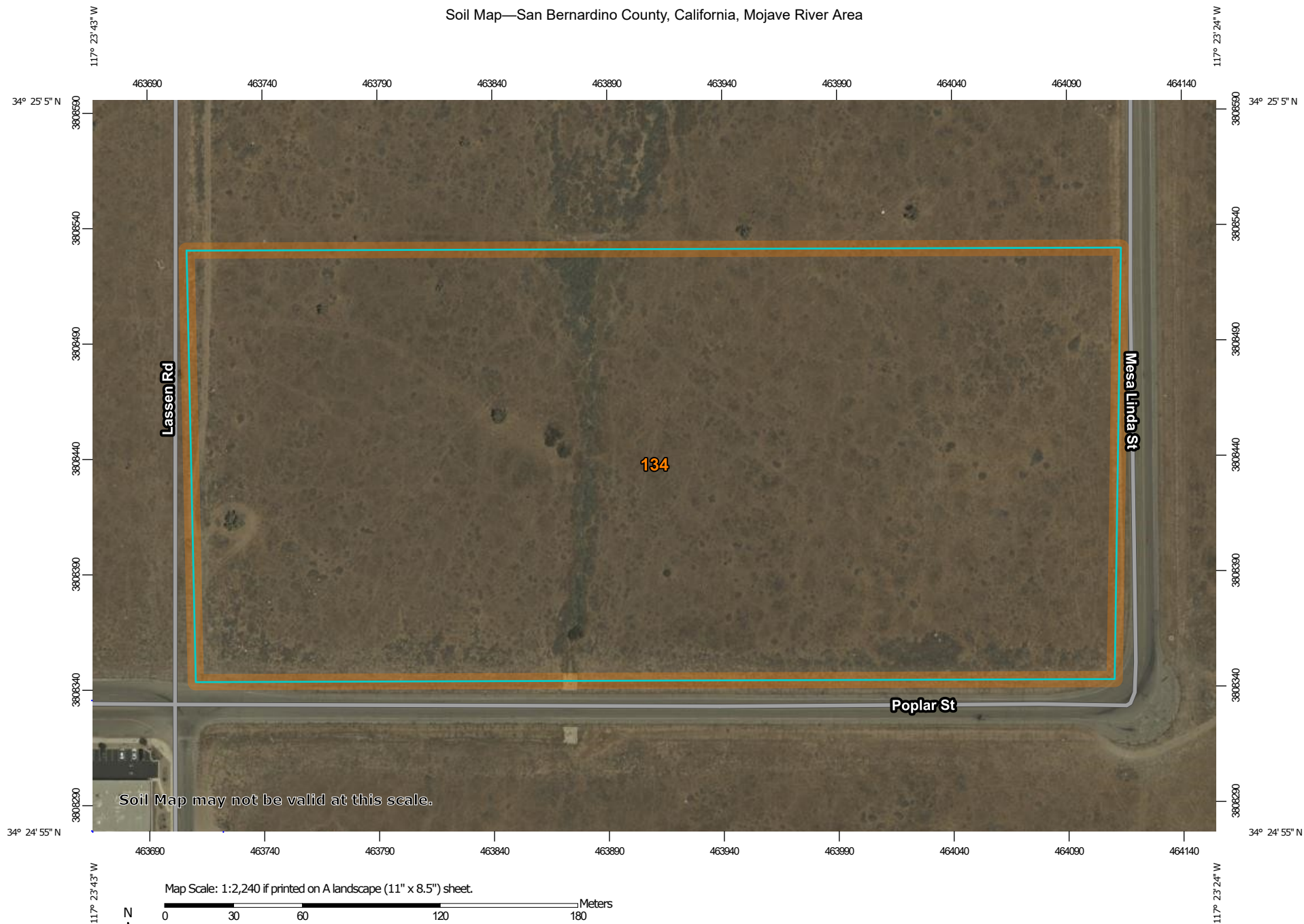
CONSOLIDATED CONSULTING GROUP
ENVIRONMENTAL, BUILDING & LAND SURVEY CONSULTING

WWW.CONSOLIDATEDCONSULTING.COM

Project Name: Lots 3 & 4 - 17.87 Acres
Address: Undeveloped Land
NW of the Intersection of Poplar
Street & Mesa Linda Street
Hesperia, CA 92344
Project #: CCG-4756
Date: October 2020

**WETLANDS
MAP**

Soil Map—San Bernardino County, California, Mojave River Area



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area

Survey Area Data: Version 12, May 27, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2019—Jul 8, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
134	HESPERIA LOAMY FINE SAND, 2 TO 5 PERCENT SLOPES	18.7	100.0%
Totals for Area of Interest		18.7	100.0%

San Bernardino County, California, Mojave River Area

134—HESPERIA LOAMY FINE SAND, 2 TO 5 PERCENT SLOPES

Map Unit Setting

National map unit symbol: hks7

Elevation: 200 to 4,000 feet

Mean annual precipitation: 6 to 9 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 150 to 250 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Hesperia and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hesperia

Setting

Landform: Fan aprons

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from granite sources

Typical profile

H1 - 0 to 6 inches: loamy fine sand

H2 - 6 to 60 inches: sandy loam, coarse sandy loam

H2 - 6 to 60 inches:

Properties and qualities

Slope: 2 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High
(1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water capacity: High (about 11.3 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: A

Ecological site: R030XE006CA - COARSE LOAMY
Hydric soil rating: No

Minor Components

Cajon

Percent of map unit: 5 percent
Hydric soil rating: No

Wrightwood

Percent of map unit: 5 percent
Hydric soil rating: No

Bull trail

Percent of map unit: 3 percent
Hydric soil rating: No

Unnamed soils

Percent of map unit: 2 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: San Bernardino County, California, Mojave River Area
Survey Area Data: Version 12, May 27, 2020

REFERENCES:

American Society for Testing and Materials, Standard Practice for Phase I Environmental Site Assessments, Phase I Environmental Site Assessment Process (ASTM 1527-13)

American Society for Testing and Materials, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transaction (ASTM E2600-15).

City/County/State Offices including:

- City/County Environmental Protection Division
- City/County Fire Marshal
- City/County Planning Department
- Local/Regional Pollution Control Agency
- County Central Appraisal District
- Local/Regional Water Quality Agency

Environmental Risk Information Services (ERIS), Database Report, Report Number: 20300900105, Report dated October 12, 2020

Federal Emergency Management Agency, Flood Insurance Rate Map, San Bernardino County, CA and Incorporated Areas, Community Panel Map Number 06071C6475H, Map Revised: 8/20/2008

Groundwater Atlas of the United States – Segment 1

Nationwide Environmental Title Research, Inc. (NETR), Aerial Photograph Package, Prints dated; 1938, 1952, 1968, 1994, 2002, 2009 & 2016

United States Department of Agriculture, Natural Resource Conservation Service, Soil Survey of San Bernardino County, CA from website <http://websoilsurvey.nrcs.usda.gov/app>,

United States Department of the Interior, U.S. Geological Survey, 7.5-Minute Series Topographic Quadrangle Map (Baldy Mesa, CA), dated 1956, 1968, 1980, 1988, 1996 & 2018.

United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration, National Pipeline Mapping System website (<http://www.npms.phmsa.dot.gov/>)

United States Fish & Wildlife Service, National Wetlands Inventory, Geospatial Wetlands Digital Data. (<http://www.fws.gov/wetlands/Data/index.html>)

7.2 Governmental Agency Records Attachments

Category	Attached	Not Applicable
7.2.1 General Public Records	X	
7.2.2 Mapped Database Report	X	
7.2.3 Regulatory Agency Records		X



LOCATION

Property Address	No Address Available CA 92344	
Subdivision		
Carrier Route		
County	San Bernardino County, CA	
Map Code	4475D7	

GENERAL PARCEL INFORMATION

APN/Tax ID	3064-581-04-0000
Alt. APN	
Account Number	
Tax Area	20-097
2010 Census Trct/Blk	100.17/1
Assessor Roll Year	2020

PROPERTY SUMMARY

Property Type	Commercial
Land Use	Commercial Vacant Land
Improvement Type	
Square Feet	
# of Buildings	0
CURRENT OWNER	
Name	J G Investment Tr 01/22/97
Mailing Address	24291 Three Springs Rd Hemet, CA 92545-2208
Owner Occupied	No
Owner Right Vesting	Trust

SALES HISTORY THROUGH 09/25/2020

Settlement Date	Date Recorded	Amount	Buyer/Owners	Seller	Instrument	No. Parcels Book/Page Or Document#
6/16/2007	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Grant Deed	2008-0088270
6/16/2007	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Correction Deed	2008-0088269
2/22/2007	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Grant Deed	2008-0088268
6/11/2006	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Grant Deed	2008-0088267
8/4/2005	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Grant Deed	2008-0088266
6/7/2004	7/9/2004	\$849,000	Jg Investment Trust & Oleetho 3 Inc	Applecal Partners Ltd & Calforty Ltd	Grant Deed	2004-0490904
3/22/1999	6/7/2004	\$379,500	Applecal Partners Ltd & Calforty Ltd	Mesa Poplar Properties	Grant Deed	2004-0400214
			J G Investment Tr 01/22/97			20080088269

TAX ASSESSMENT

Tax Assessment	2020	Change (%)	2019	Change (%)	2018
Assessed Land	\$1,082,105.00	\$21,218.00 (2.0%)	\$1,060,887.00	\$20,802.00 (2.0%)	\$1,040,085.00
Assessed Improvements					
Total Assessment	\$1,082,105.00	\$21,218.00 (2.0%)	\$1,060,887.00	\$20,802.00 (2.0%)	\$1,040,085.00
Exempt Reason					
% Improved	0%				

TAXES

Tax Year	City Taxes	County Taxes	Total Taxes
2019			\$12,608.16
2018			\$12,361.53
2017			\$12,137.08
2016			\$11,875.69
2015			\$11,720.42
2014			\$11,554.17
2013			\$11,504.01

MORTGAGE HISTORY

Date Recorded	Loan Amount	Borrower	Lender	Book/Page or Document#
07/09/2004	\$849,000	Jg Investment Trust Oleetho 3 Inc	Applecal Partners Ltd	2004-0490905

FORECLOSURE HISTORY

No foreclosures were found for this parcel.

PROPERTY CHARACTERISTICS: BUILDING

No Buildings were found for this parcel.

PROPERTY CHARACTERISTICS: EXTRA FEATURES

No extra features were found for this parcel.

PROPERTY CHARACTERISTICS: LOT

Land Use	Commercial Vacant Land	Lot Dimensions	628X628
Block/Lot		Lot Square Feet	394,384
Latitude/Longitude	34.416780°/-117.393720°	Acreage	9.05

PROPERTY CHARACTERISTICS: UTILITIES/AREA

Gas Source		Road Type	
Electric Source		Topography	Level Grade
Water Source	Municipal	District Trend	
Sewer Source	Municipal	Special School District 1	
Zoning Code		Special School District 2	
Owner Type			

LEGAL DESCRIPTION

Subdivision		Plat Book/Page	
Block/Lot		Tax Area	20-097
Tract Number			
Description	Parcel Map 14447 Parcel 3 Book 172 Page 5		

FEMA FLOOD ZONES

Zone Code	Flood Risk	BFE	Description	FIRM Panel ID	FIRM Panel Eff. Date
X	Minimal		Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.	as060733-06071C6475H	08/28/2008

LISTING ARCHIVE

MLS #	Status	Status Change Date	List Date	List Price	Closing Date	Closing Price	Listing Agent	Listing Broker	Buyer Agent	Buyer Broker
SW20208944	For Sale	10/05/2020	10/05/2020	\$3,500,000			Jeannette Grismer	Century 21 McDaniel & Assoc.		
CC328043	Expired	12/31/2013	07/01/2013	\$2,200,000			Jeannette Grismer	Homestar Real Estate Services		

Property Information Management System

**San Bernardino County
Office of the Assessor**



PIMS PACKAGE REPORT FOR PARCEL 3064-581-05-0000

**Property Information**

Property Address (Main Situs) Protected per CA. Govt. Code
Sect. 6254.21
Protected per CA. Govt. Code
Sect. 6254.21

Owner and Mailing Address J G INVESTMENT TRUST
01/22/97 ETAL
C/O JEFF GRISMER
Protected per CA. Govt. Code
Sect. 6254.21
Protected per CA. Govt. Code
Sect. 6254.21

Effective Date 04/02/2008

Parcel 3064581050000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type COMMERCIAL

District HESPERIA

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR
USE

Current Owners

Name J G INVESTMENT TRUST 01/22/97

R/I TENANCY IN COMMON

% Int 40.3700000

Type OTHER OWNER

Acquisition Date 02/22/2007

Document Date 02/28/2008

Inactive Date NONE

Document Numbers

20080088273

Name J G INVESTMENT TRUST 01/22/97

R/I TENANCY IN COMMON

% Int 0.9700000

Type OTHER OWNER

Acquisition Date 06/16/2007

Document Date 02/28/2008

Inactive Date NONE

Document Numbers

20080088275



Name J G INVESTMENT TRUST 01/22/97

Document Numbers

R/I TENANCY IN COMMON

20080088272

% Int 8.5000000

Type OTHER OWNER

Acquisition Date 06/11/2006

Document Date 02/28/2008

Inactive Date NONE

Name J G INVESTMENT TRUST 01/22/97

Document Numbers

R/I TENANCY IN COMMON

20080088271

% Int 9.8000000

Type OTHER OWNER

Acquisition Date 08/04/2005

Document Date 02/28/2008

Inactive Date NONE

Name J G INVESTMENT TRUST 01/22/97

Document Numbers

R/I TENANCY IN COMMON

20040490906

% Int 40.3600000

20080088274

Type BILLED OWNER

Acquisition Date 07/09/2004

Document Date 07/09/2004

Inactive Date NONE

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
14447	3064581050000		172	5

Legal Description

PARCEL MAP 14447 PARCEL 4 BOOK 172 PAGE 5

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found





Prior Roll History

Year: 2020

TRA 20097	Land Value	1,229,952
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,229,952
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,229,952

Year: 2019

TRA 20097	Land Value	1,205,835
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,205,835
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,205,835



Year: 2018

TRA 20097	Land Value	1,182,191
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,182,191
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,182,191

Year: 2017

TRA 20097	Land Value	1,159,011
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,159,011
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,159,011



Year: 2016

TRA 20097	Land Value	1,136,285
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,136,285
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,136,285

Year: 2015

TRA 20097	Land Value	1,119,217
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,119,217
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,119,217



Year: 2014

TRA 20097	Land Value	1,097,293
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,097,293
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,097,293

Year: 2013

TRA 20097	Land Value	1,092,334
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,092,334
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,092,334



Year: 2012

TRA 20097	Land Value	1,070,916
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,070,916
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,070,916

Year: 2011

TRA 20097	Land Value	1,049,918
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,049,918
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,049,918



Year: 2010

TRA 20097	Land Value	1,042,071
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,042,071
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,042,071

Year: 2009

TRA 20097	Land Value	1,044,547
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,044,547
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,044,547



Year: 2008

TRA 20097	Land Value	1,024,066
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,024,066
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,024,066

Year: 2007

TRA 20097	Land Value	1,003,986
Supplement NO	Improvement Value	0
Correction Date 04/03/2008	Improvement Penalty	0
Correction Code 525N	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner OLEETHO-3 INC	Total Value	1,003,986
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,003,986



Year: 2006

TRA 20097	Land Value	984,300
Supplement NO	Improvement Value	0
Correction Date 04/03/2008	Improvement Penalty	0
Correction Code 525N	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner OLEETHO-3 INC	Total Value	984,300
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	984,300

Year: 2005

TRA 20097	Land Value	965,000
Supplement NO	Improvement Value	0
Correction Date 04/03/2008	Improvement Penalty	0
Correction Code 525N	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TRUST 01/22/97	Total Penalties	0
Joint Owner OLEETHO-3 INC	Total Value	965,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	965,000



Year: 2004

TRA 20097	Land Value	506,827
Supplement YES	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	506,827
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	506,827

Year: 2003

TRA 20097	Land Value	287,000
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	287,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	287,000



Year: 2002

TRA 20097	Land Value	192,000
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	192,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	192,000

Year: 2001

TRA 20097	Land Value	192,000
Supplement NO	Improvement Value	0
Correction Date 09/26/2001	Improvement Penalty	0
Correction Code 572D	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	192,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	192,000



Year: 2000

TRA 20097	Land Value	300,000
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	300,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	300,000

Year: 1999

TRA 20097	Land Value	300,000
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	300,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	300,000



Year: 1998

TRA 20097	Land Value	303,549
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	303,549
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	303,549

Year: 1997

TRA 20097	Land Value	297,597
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	297,597
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	297,597



Year: 1996

TRA 20097	Land Value	291,762
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581050000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	291,762
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	291,762

**Parcel History**

Event Date	06/16/2007	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	06/16/2007	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	02/22/2007	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	06/11/2006	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	08/04/2005	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	07/09/2004	Multi Parcel List
Event Group/Type	TRANSFER - 100% PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	12/31/2003	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	
Event Date	12/31/2002	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	



Event Date	12/31/2001	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	
Event Date	12/31/2000	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	
Event Date	12/31/1999	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	
Event Date	03/22/1995	Multi Parcel List
Event Group/Type	TRANSFER - WORKED IN OLD SYSTEM (100% OR PARTIAL)	
Multi Parcel	No	
Event Date	03/22/1995	Multi Parcel List
Event Group/Type	TRA EVENT - ADDED FROM PREVIOUS PARCEL	
Multi Parcel	No	
Event Date	03/22/1995	Multi Parcel List
Event Group/Type	CREATE - WORKED IN OLD SYSTEM (REPAR)	3064581050000 NEW-CRE 0405084240000 OLD-CRE
Multi Parcel	Yes	

**Ownership History****Owner Name: J G INVESTMENT TRUST 01/22/97**

	Document Numbers
R/I TENANCY IN COMMON	
% Int 0.9700000	20080088275
Type OTHER OWNER	
Acquisition Date 06/16/2007	
Document Date 02/28/2008	
Inactive Date NONE	

Owner Name: J G INVESTMENT TRUST 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 40.3700000	20080088273
Type OTHER OWNER	
Acquisition Date 02/22/2007	
Document Date 02/28/2008	
Inactive Date NONE	

Owner Name: J G INVESTMENT TRUST 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 8.5000000	20080088272
Type OTHER OWNER	
Acquisition Date 06/11/2006	
Document Date 02/28/2008	
Inactive Date NONE	

Owner Name: J G INVESTMENT TRUST 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 9.8000000	20080088271
Type OTHER OWNER	
Acquisition Date 08/04/2005	
Document Date 02/28/2008	
Inactive Date NONE	



Owner Name: J G INVESTMENT TRUST 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 40.3600000	20040490906
Type BILLED OWNER	20080088274
Acquisition Date 07/09/2004	
Document Date 07/09/2004	
Inactive Date NONE	

Owner Name: (ERROR) J G INVESTMENT TRUST 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 18.7600000	20080088274
Type OTHER OWNER	
Acquisition Date 06/16/2007	
Document Date 02/28/2008	
Inactive Date 06/15/2007	

Owner Name: OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 0.9700000	20080088274
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 06/15/2007	

Owner Name: OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 0.9700000	20080088273
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 06/15/2007	



Owner Name: OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 41.3400000	20080088272
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 02/21/2007	

Owner Name: (ERR)J G INTERNANTIONAL TRUST 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 8.5000000	20080088272
Type OTHER OWNER	
Acquisition Date 06/11/2006	
Document Date 02/28/2008	
Inactive Date 06/10/2006	

Owner Name: OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 49.8400000	20080088271
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 06/10/2006	

Owner Name: (ERR0 J G INTERNANTIONAL TRUST 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 9.8000000	20080088271
Type OTHER OWNER	
Acquisition Date 08/04/2005	
Document Date 02/28/2008	
Inactive Date 08/03/2005	

**Owner Name: OLEETHO-3 INC**

	Document Numbers
R/I TENANCY IN COMMON	
% Int 59.6400000	20040490906
Type JOINT MAIL OWNER	20080088274
Acquisition Date 07/09/2004	
Document Date 07/09/2004	
Inactive Date 08/03/2005	

Owner Name: (ERR) J G INTERNANTIONAL TRUST 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 21.6000000	20040490906
Type BILLED OWNER	20080088274
Acquisition Date 07/09/2004	
Document Date 07/09/2004	
Inactive Date 07/08/2004	

Owner Name: MESA POPLAR PROPERTIES

	Document Numbers
R/I SOLE OWNER	
% Int 100.0000000	9508782100000
Type BILLED OWNER	
Acquisition Date NONE	
Document Date 03/22/1995	
Inactive Date 07/08/2004	



Supplement History

Supplement Date: 07/09/2004

Roll Type REGULAR SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 2004	New Land	965,000
Revised IND	New Imprv	0
Corrected Date 04/03/2008	Old Land	506,827
Correction Code 525N	Old Imprv	0
Legal Status SECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 11/23/2004	Supp HOX	0
Extract Date 01/08/2005	Special Exem	0
Months Prorated 11	Impr Penalty	0
Corr Status COR	Prior Supps	0
Original Parcel 3064581050000	Construction in Progress	0
	Net Value	458,173

Billed Owner J G INVESTMENT TRUST 01/22/97

Joint Owner OLEETHO-3 INC

Supplement Date: 07/09/2004

Roll Type REGULAR SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 2004	New Land	965,000
Revised IND Y	New Imprv	0
Corrected Date	Old Land	506,827
Correction Code	Old Imprv	0
Legal Status SECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 11/23/2004	Supp HOX	0
Extract Date 01/08/2005	Special Exem	0
Months Prorated 11	Impr Penalty	0
Corr Status	Prior Supps	0
Original Parcel 3064581050000	Construction in Progress	0
	Net Value	458,173

Billed Owner (ERR) J G INTERNANTIONAL TRUST 01/22/97

Joint Owner OLEETHO-3 INC



Supplement Date: 03/22/1995

Roll Type REGULAR SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 1995	New Land	429,000
Revised IND	New Imprv	0
Corrected Date	Old Land	432,776
Correction Code	Old Imprv	0
Legal Status SECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 09/27/1995	Supp HOX	0
Extract Date 01/07/1996	Special Exem	0
Months Prorated 12	Impr Penalty	0
Corr Status	Prior Supps	0
Original Parcel 3064581050000	Construction in Progress	0
	Net Value	(3,776)
Billed Owner MESA POPLAR PROPERTIES		
Joint Owner		

Supplement Date: 03/22/1995

Roll Type INTERIM SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 1995	New Land	429,000
Revised IND	New Imprv	0
Corrected Date	Old Land	432,776
Correction Code	Old Imprv	0
Legal Status SECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 09/27/1995	Supp HOX	0
Extract Date 01/07/1996	Special Exem	0
Months Prorated 3	Impr Penalty	0
Corr Status	Prior Supps	0
Original Parcel 3064581050000	Construction in Progress	0
	Net Value	(3,776)
Billed Owner MESA POPLAR PROPERTIES		
Joint Owner		





LOCATION

Property Address	No Address Available CA 92344
Subdivision	
Carrier Route	
County	San Bernardino County, CA
Map Code	4475D7

GENERAL PARCEL INFORMATION

APN/Tax ID	3064-581-05-0000
Alt. APN	
Account Number	
Tax Area	20-097
2010 Census Trct/Blk	100.17/1
Assessor Roll Year	2020

PROPERTY SUMMARY

Property Type	Commercial
Land Use	Commercial Vacant Land
Improvement Type	
Square Feet	
# of Buildings	0

CURRENT OWNER

Name	J G Investment Trust 01/22/97 C/O Jeff Grismer
Mailing Address	24291 Three Springs Rd Hemet, CA 92545-2208
Owner Occupied	No
Owner Right Vesting	Trust

SALES HISTORY THROUGH 09/25/2020

Settlement Date	Date Recorded	Amount	Buyer/Owners	Seller	Instrument	No. Parcels Book/Page Or Document#
6/16/2007	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Grant Deed	2008-0088275
6/16/2007	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Correction Deed	2008-0088274
2/22/2007	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Grant Deed	2008-0088273
6/11/2006	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Grant Deed	2008-0088272
8/4/2005	2/28/2008		J G Investment Trust	Oleetho 3 Inc	Grant Deed	2008-0088271
6/7/2004	7/9/2004	\$849,000	Jg Investment Trust & Oleetho 3 Inc	Mesa Poplar Properties	Grant Deed	2004-0490906
			J G Investment Trust 01/22/97 & C/O Jeff Grisme			20080088274

TAX ASSESSMENT

Tax Assessment	2020	Change (%)	2019	Change (%)	2018
Assessed Land	\$1,229,952.00	\$24,117.00 (2.0%)	\$1,205,835.00	\$23,644.00 (2.0%)	\$1,182,191.00
Assessed Improvements					
Total Assessment	\$1,229,952.00	\$24,117.00 (2.0%)	\$1,205,835.00	\$23,644.00 (2.0%)	\$1,182,191.00
Exempt Reason					
% Improved	0%				

TAXES

Tax Year	City Taxes	County Taxes	Total Taxes
2019			\$14,326.66
2018			\$14,046.34
2017			\$13,791.22
2016			\$13,494.13
2015			\$13,317.62
2014			\$13,128.68
2013			\$13,071.66

MORTGAGE HISTORY

Date Recorded	Loan Amount	Borrower	Lender	Book/Page or Document#
07/09/2004	\$965,000	Jg Investment Trust Oleetho 3 Inc	Mesa Poplar Properties	2004-0490907

FORECLOSURE HISTORY

No foreclosures were found for this parcel.

PROPERTY CHARACTERISTICS: BUILDING

No Buildings were found for this parcel.

PROPERTY CHARACTERISTICS: EXTRA FEATURES

No extra features were found for this parcel.

PROPERTY CHARACTERISTICS: LOT

Land Use	Commercial Vacant Land	Lot Dimensions	619X619
Block/Lot		Lot Square Feet	383,161
Latitude/Longitude	34.416778°/-117.391612°	Acreage	8.8

PROPERTY CHARACTERISTICS: UTILITIES/AREA

Gas Source		Road Type	
Electric Source		Topography	Level Grade
Water Source	Municipal	District Trend	
Sewer Source	Municipal	Special School District 1	
Zoning Code		Special School District 2	
Owner Type			

LEGAL DESCRIPTION

Subdivision		Plat Book/Page	
Block/Lot		Tax Area	20-097
Tract Number			
Description	Parcel Map 14447 Parcel 4 Book 172 Page 5		

FEMA FLOOD ZONES

Zone Code	Flood Risk	BFE	Description	FIRM Panel ID	FIRM Panel Eff. Date
X	Minimal		Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.	as060733-06071C6475H	08/28/2008

LISTING ARCHIVE

No Listings found for this parcel.

Property Information Management System

**San Bernardino County
Office of the Assessor**



PIMS PACKAGE REPORT FOR PARCEL 3064-581-04-0000



Property Information

Property Address (Main Situs) Protected per CA. Govt. Code
Sect. 6254.21
Protected per CA. Govt. Code
Sect. 6254.21

Owner and Mailing Address J G INVESTMENT TR 01/22/97
ETAL
J G INVESTMENT TR 01/22/97
Protected per CA. Govt. Code
Sect. 6254.21
Protected per CA. Govt. Code
Sect. 6254.21

Effective Date 04/02/2008

Parcel 3064581040000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type COMMERCIAL

District HESPERIA

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR
USE

Current Owners

Name J G INVESTMENT TR 01/22/97

R/I TENANCY IN COMMON

% Int 40.3600000

Type BILLED OWNER

Acquisition Date 07/09/2004

Document Date 07/09/2004

Inactive Date NONE

Document Numbers

20040490904

20080088269

Name J G INVESTMENT TR 01/22/97

R/I TENANCY IN COMMON

% Int 9.8000000

Type OTHER OWNER

Acquisition Date 08/04/2005

Document Date 02/28/2008

Inactive Date NONE

Document Numbers

20080088266



Name J G INVESTMENT TR 01/22/97

Document Numbers

R/I TENANCY IN COMMON

20080088267

% Int 8.5000000

Type OTHER OWNER

Acquisition Date 06/11/2006

Document Date 02/28/2008

Inactive Date NONE

Name J G INVESTMENT TR 01/22/97

Document Numbers

R/I TENANCY IN COMMON

20080088268

% Int 40.3700000

Type OTHER OWNER

Acquisition Date 02/22/2007

Document Date 02/28/2008

Inactive Date NONE

Name J G INVESTMENT TR 01/22/97

Document Numbers

R/I TENANCY IN COMMON

20080088270

% Int 0.9700000

Type OTHER OWNER

Acquisition Date 06/16/2007

Document Date 02/28/2008

Inactive Date NONE

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
14447	3064581040000		172	5

Legal Description

PARCEL MAP 14447 PARCEL 3 BOOK 172 PAGE 5

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found





Prior Roll History

Year: 2020

TRA 20097	Land Value	1,082,105
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,082,105
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,082,105

Year: 2019

TRA 20097	Land Value	1,060,887
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,060,887
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,060,887



Year: 2018

TRA 20097	Land Value	1,040,085
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,040,085
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,040,085

Year: 2017

TRA 20097	Land Value	1,019,691
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	1,019,691
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	1,019,691



Year: 2016

TRA 20097	Land Value	999,697
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	999,697
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	999,697

Year: 2015

TRA 20097	Land Value	984,681
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	984,681
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	984,681



Year: 2014

TRA 20097	Land Value	965,392
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	965,392
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	965,392

Year: 2013

TRA 20097	Land Value	961,029
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	961,029
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	961,029



Year: 2012

TRA 20097	Land Value	942,185
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	942,185
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	942,185

Year: 2011

TRA 20097	Land Value	923,711
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	923,711
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	923,711



Year: 2010

TRA 20097	Land Value	916,807
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	916,807
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	916,807

Year: 2009

TRA 20097	Land Value	918,985
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	918,985
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	918,985



Year: 2008

TRA 20097	Land Value	900,966
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner	Total Value	900,966
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	900,966

Year: 2007

TRA 20097	Land Value	883,300
Supplement NO	Improvement Value	0
Correction Date 12/10/2008	Improvement Penalty	0
Correction Code 525N	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner OLEETHO-3 INC	Total Value	883,300
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	883,300



Year: 2006

TRA 20097	Land Value	865,980
Supplement NO	Improvement Value	0
Correction Date 12/10/2008	Improvement Penalty	0
Correction Code 525N	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner OLEETHO-3 INC	Total Value	865,980
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	865,980

Year: 2005

TRA 20097	Land Value	849,000
Supplement NO	Improvement Value	0
Correction Date 12/10/2008	Improvement Penalty	0
Correction Code 525N	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner J G INVESTMENT TR 01/22/97	Total Penalties	0
Joint Owner OLEETHO-3 INC	Total Value	849,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	849,000



Year: 2004

TRA 20097	Land Value	508,009
Supplement YES	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	508,009
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	508,009

Year: 2003

TRA 20097	Land Value	295,000
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	295,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	295,000



Year: 2002

TRA 20097	Land Value	200,000
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	200,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	200,000

Year: 2001

TRA 20097	Land Value	200,000
Supplement NO	Improvement Value	0
Correction Date 09/26/2001	Improvement Penalty	0
Correction Code 572D	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	200,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	200,000



Year: 2000

TRA 20097	Land Value	300,000
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	300,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	300,000

Year: 1999

TRA 20097	Land Value	300,000
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	300,000
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	300,000



Year: 1998

TRA 20097	Land Value	317,085
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	317,085
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	317,085

Year: 1997

TRA 20097	Land Value	310,868
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	310,868
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	310,868



Year: 1996

TRA 20097	Land Value	304,773
Supplement NO	Improvement Value	0
Correction Date	Improvement Penalty	0
Correction Code	Pers Prop Value	0
Original Parcel 3064581040000	Pers Prop Penalty	0
Billed Owner MESA POPLAR PROPERTIES	Total Penalties	0
Joint Owner	Total Value	304,773
	HOX Exemptions	0
	Special Exemptions	0
	Net Value	304,773

**Parcel History**

Event Date	02/28/2008	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	02/28/2008	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	02/28/2008	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	02/28/2008	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	02/28/2008	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	06/16/2007	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	02/22/2007	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	06/11/2006	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	



Event Date	08/05/2005	Multi Parcel List
Event Group/Type	TRANSFER - PARTIAL PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	07/09/2004	Multi Parcel List
Event Group/Type	TRANSFER - 100% PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	06/07/2004	Multi Parcel List
Event Group/Type	TRANSFER - 100% PER RECORDED DOCUMENT	
Multi Parcel	No	
Event Date	12/31/2003	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	
Event Date	12/31/2002	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	
Event Date	12/31/2001	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	
Event Date	12/31/2000	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	
Event Date	12/31/1999	Multi Parcel List
Event Group/Type	REVIEW - PROP 8 INITIATED BY ASSESSOR	
Multi Parcel	No	



Event Date	03/22/1995	Multi Parcel List
Event Group/Type	TRANSFER - WORKED IN OLD SYSTEM (100% OR PARTIAL)	
Multi Parcel	No	
Event Date	03/22/1995	Multi Parcel List
Event Group/Type	TRA EVENT - ADDED FROM PREVIOUS PARCEL	
Multi Parcel	No	
Event Date	03/22/1995	Multi Parcel List
Event Group/Type	CREATE - WORKED IN OLD SYSTEM (REPAR)	3064581040000 NEW-CRE 0405084230000 OLD-CRE
Multi Parcel	Yes	
Event Date	12/16/1994	Multi Parcel List
Event Group/Type	TRANSFER - WORKED IN OLD SYSTEM (100% OR PARTIAL)	
Multi Parcel	No	

**Ownership History****Owner Name: J G INVESTMENT TR 01/22/97**

	Document Numbers
R/I TENANCY IN COMMON	
% Int 0.9700000	20080088270
Type OTHER OWNER	
Acquisition Date 06/16/2007	
Document Date 02/28/2008	
Inactive Date NONE	

Owner Name: J G INVESTMENT TR 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 40.3700000	20080088268
Type OTHER OWNER	
Acquisition Date 02/22/2007	
Document Date 02/28/2008	
Inactive Date NONE	

Owner Name: J G INVESTMENT TR 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 8.5000000	20080088267
Type OTHER OWNER	
Acquisition Date 06/11/2006	
Document Date 02/28/2008	
Inactive Date NONE	

Owner Name: J G INVESTMENT TR 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 9.8000000	20080088266
Type OTHER OWNER	
Acquisition Date 08/04/2005	
Document Date 02/28/2008	
Inactive Date NONE	



Owner Name: J G INVESTMENT TR 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 40.3600000	20040490904
Type BILLED OWNER	20080088269
Acquisition Date 07/09/2004	
Document Date 07/09/2004	
Inactive Date NONE	

Owner Name: (DATE ERR) J G IINVESTMENT TR 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 40.3700000	20080088268
Type OTHER OWNER	
Acquisition Date 02/28/2008	
Document Date 02/28/2008	
Inactive Date 02/27/2008	

Owner Name: (DATE ERR) J G IINVESTMENT TR 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 9.8000000	20080088266
Type OTHER OWNER	
Acquisition Date 02/28/2008	
Document Date 02/28/2008	
Inactive Date 02/27/2008	

Owner Name: (DATE ERR) J G INVESTMENT TR 1/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 8.5000000	20080088267
Type OTHER OWNER	
Acquisition Date 02/28/2008	
Document Date 02/28/2008	
Inactive Date 02/27/2008	



Owner Name: (DATE ERR) J G INVESTMENT TR 1/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 0.9700000	20080088270
Type OTHER OWNER	
Acquisition Date 02/28/2008	
Document Date 02/28/2008	
Inactive Date 02/27/2008	

Owner Name: (DATE ERR) OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 0.9700000	20080088269
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 02/27/2008	

Owner Name: (DATE ERR) OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 49.8400000	20080088266
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 02/27/2008	

Owner Name: (DATE ERR) OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 41.3400000	20080088267
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 02/27/2008	

**Owner Name: (DATE ERR) OLEETHO-3 INC**

	Document Numbers
R/I TENANCY IN COMMON	
% Int 40.3300000	20080088270
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 02/27/2008	

Owner Name: (ERR) J G INVESTMENT TRUST 1/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 18.7600000	20080088269
Type OTHER OWNER	
Acquisition Date 02/28/2008	
Document Date 02/28/2008	
Inactive Date 02/27/2008	

Owner Name: OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 0.9700000	20080088268
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 06/15/2007	

Owner Name: OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 41.3400000	20080088267
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 02/21/2007	



Owner Name: OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 49.8400000	20080088266
Type JOINT MAIL OWNER	
Acquisition Date 07/09/2004	
Document Date 02/28/2008	
Inactive Date 06/10/2006	

Owner Name: OLEETHO-3 INC

	Document Numbers
R/I TENANCY IN COMMON	
% Int 59.6400000	20040490904
Type JOINT MAIL OWNER	20080088269
Acquisition Date 07/09/2004	
Document Date 07/09/2004	
Inactive Date 08/04/2005	

Owner Name: (ERR) J G INTERNANTIONAL TR 01/22/97

	Document Numbers
R/I TENANCY IN COMMON	
% Int 21.6000000	20040490904
Type BILLED OWNER	20080088269
Acquisition Date 07/09/2004	
Document Date 07/09/2004	
Inactive Date 07/08/2004	

Owner Name: APPELICAL PARTNERS LTD

	Document Numbers
R/I TENANCY IN COMMON	
% Int 50.0000000	20040400214
Type BILLED OWNER	
Acquisition Date 06/07/2004	
Document Date 06/07/2004	
Inactive Date 07/08/2004	



Owner Name: CALFORTY LTD

R/I TENANCY IN COMMON	Document Numbers
% Int 50.0000000	20040400214
Type JOINT MAIL OWNER	
Acquisition Date 06/07/2004	
Document Date 06/07/2004	
Inactive Date 07/08/2004	

Owner Name: MESA POPLAR PROPERTIES

R/I SOLE OWNER	Document Numbers
% Int 100.0000000	9508782100000
Type BILLED OWNER	
Acquisition Date NONE	
Document Date 03/22/1995	
Inactive Date 06/06/2004	



Supplement History

Supplement Date: 07/09/2004

Roll Type REGULAR SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 2004	New Land	849,000
Revised IND	New Imprv	0
Corrected Date 12/10/2008	Old Land	508,009
Correction Code 525N	Old Imprv	0
Legal Status SECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 11/23/2004	Supp HOX	0
Extract Date 01/08/2005	Special Exem	0
Months Prorated 11	Impr Penalty	0
Corr Status COR	Prior Supps	0
Original Parcel 3064581040000	Construction in Progress	0
	Net Value	340,991

Billed Owner J G INVESTMENT TR 01/22/97

Joint Owner OLEETHO-3 INC

Supplement Date: 07/09/2004

Roll Type REGULAR SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 2004	New Land	849,000
Revised IND Y	New Imprv	0
Corrected Date	Old Land	508,009
Correction Code	Old Imprv	0
Legal Status SECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 11/23/2004	Supp HOX	0
Extract Date 01/08/2005	Special Exem	0
Months Prorated 11	Impr Penalty	0
Corr Status	Prior Supps	0
Original Parcel 3064581040000	Construction in Progress	0
	Net Value	340,991

Billed Owner (ERR) J G INTERNANTIONAL TR 01/22/97

Joint Owner OLEETHO-3 INC



Supplement Date: 06/07/2004

Roll Type REGULAR SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 2004	New Land	849,000
Revised IND	New Imprv	0
Corrected Date	Old Land	508,009
Correction Code	Old Imprv	0
Legal Status UNSECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 11/23/2004	Supp HOX	0
Extract Date 01/08/2005	Special Exem	0
Months Prorated 1	Impr Penalty	0
Corr Status	Prior Supps	0
Original Parcel 3064581040000	Construction in Progress	0
	Net Value	340,991
Billed Owner APPELICAL PARTNERS LTD		
Joint Owner CALFORTY LTD		

Supplement Date: 03/22/1995

Roll Type REGULAR SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 1995	New Land	430,000
Revised IND	New Imprv	0
Corrected Date	Old Land	433,785
Correction Code	Old Imprv	0
Legal Status SECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 09/27/1995	Supp HOX	0
Extract Date 01/07/1996	Special Exem	0
Months Prorated 12	Impr Penalty	0
Corr Status	Prior Supps	0
Original Parcel 3064581040000	Construction in Progress	0
	Net Value	(3,785)
Billed Owner MESA POPLAR PROPERTIES		
Joint Owner		



Supplement Date: 03/22/1995

Roll Type INTERIM SUPPLEMENT	Supp Type OWNERSHIP TRANSFER	
Supp Year 1995	New Land	430,000
Revised IND	New Imprv	0
Corrected Date	Old Land	433,785
Correction Code	Old Imprv	0
Legal Status SECURED	New HOX	0
TRA 20097	Old HOX	0
NOPIC Date 09/27/1995	Supp HOX	0
Extract Date 01/07/1996	Special Exem	0
Months Prorated 3	Impr Penalty	0
Corr Status	Prior Supps	0
Original Parcel 3064581040000	Construction in Progress	0
	Net Value	(3,785)
Billed Owner MESA POPLAR PROPERTIES		
Joint Owner		





DATABASE REPORT

Project Property:	<i>Undeveloped Land Hesperia Hesperia CA</i>
Project No:	<i>CCG-4756</i>
Report Type:	<i>Database Report</i>
Order No:	<i>20300900105</i>
Requested by:	<i>Consolidated Consulting Group, LLC</i>
Date Completed:	<i>October 12, 2020</i>

Environmental Risk Information Services

A division of Glacier Media Inc.

1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Table of Contents.....	2
Executive Summary.....	3
Executive Summary: Report Summary.....	4
Executive Summary: Site Report Summary - Project Property.....	8
Executive Summary: Site Report Summary - Surrounding Properties.....	9
Executive Summary: Summary by Data Source.....	12
Map.....	16
Aerial.....	19
Topographic Map.....	20
Detail Report.....	21
Unplottable Summary.....	56
Unplottable Report.....	57
Appendix: Database Descriptions.....	60
Definitions.....	72

Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as database review of environmental records.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Inc. ("ERIS") using various sources of information, including information provided by Federal and State government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Trademark and Copyright: You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report (s) are protected by copyright owned by ERIS Information Inc. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERIS.

Executive Summary

Property Information:

Project Property: *Undeveloped Land
Hesperia Hesperia CA*

Project No: *CCG-4756*

Coordinates:

Latitude: *34.41763978*
Longitude: *-117.39268504*
UTM Northing: *3,808,534.52*
UTM Easting: *463,914.72*
UTM Zone: *11S*

Elevation: *3,601 FT*

Order Information:

Order No: *20300900105*
Date Requested: *October 9, 2020*
Requested by: *Consolidated Consulting Group, LLC*
Report Type: *Database Report*

Historicals/Products:

ERIS Xplorer [*ERIS Xplorer*](#)
Excel Add-On *Excel Add-On*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
<u>Standard Environmental Records</u>								
Federal								
FRP	Y	0.25	0	0	0	-	-	0
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA CESQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	1	3	-	-	4
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
RESPONSE	Y	1	0	0	0	0	0	0
ENVIROSTOR	Y	1	0	0	0	1	2	3
DELISTED ENVS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
HWP	Y	1	0	0	0	0	0	0
SWAT	Y	0.5	0	0	0	0	-	0
LDS	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	0	1	-	1
DELISTED LST	Y	0.5	0	0	0	0	-	0
SWRCB SWF	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
UST CLOSURE	Y	0.5	0	0	0	0	-	0
HHSS	Y	0.25	0	0	0	-	-	0
AST	Y	0.25	0	0	0	-	-	0
TANK OIL GAS	Y	0.25	0	0	0	-	-	0
DELISTED TNK	Y	0.25	0	0	0	-	-	0
CERS TANK	Y	0.25	0	0	1	-	-	1
LUR	Y	0.5	0	0	0	0	-	0
HLUR	Y	0.5	0	0	0	0	-	0
DEED	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
CLEANUP SITES	Y	0.5	0	0	0	0	-	0
DELISTED COUNTY	Y	0.25	0	0	0	-	-	0
DELISTED CTNK	Y	0.25	0	0	0	-	-	0
HIST TANK	Y	0.25	0	0	0	-	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED ILST	Y	0.5	0	0	0	0	-	0
DELISTED IUST	Y	0.25	0	0	0	-	-	0
County								
SANBERN CUPA	Y	0.25	0	4	6	-	-	10

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
<u>Additional Environmental Records</u>								
Federal								
PFAS NPL	Y	0.5	0	0	0	0	-	0
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCB	Y	0.5	0	0	0	0	-	0
State								
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DRYC GRANT	Y	0.25	0	0	0	-	-	0
PFAS	Y	0.5	0	0	0	0	-	0
PFAS GW	Y	0.5	0	0	0	0	-	0
HWSS CLEANUP	Y	0.5	0	0	0	0	-	0
DTSC HWF	Y	0.5	0	0	0	0	-	0
INSP COMP ENF	Y	1	0	0	0	0	0	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
SCH	Y	1	0	0	0	1	2	3
CHMIRS	Y	PO	0	-	-	-	-	0
HAZNET	Y	PO	0	-	-	-	-	0
HIST CHMIRS	Y	PO	0	-	-	-	-	0
HIST MANIFEST	Y	PO	0	-	-	-	-	0
HIST CORTESE	Y	0.5	0	0	0	0	-	0
CDO/CAO	Y	0.5	0	0	0	0	-	0
CERS HAZ	Y	0.125	0	3	-	-	-	3
DELISTED HAZ	Y	0.5	0	0	0	0	-	0
GEOTRACKER	Y	0.125	0	0	-	-	-	0
WASTE DISCHG	Y	0.25	0	0	0	-	-	0
EMISSIONS	Y	0.25	0	0	0	-	-	0
CDL	Y	0.125	0	0	-	-	-	0

Tribal *No Tribal additional environmental record sources available for this State.*

County *No County additional environmental databases were selected to be included in the search.*

Total:	0	8	10	3	4	25
---------------	---	---	----	---	---	----

*PO – Property Only

*'Property and adjoining properties' database search radii are set at 0.25 miles.

Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Direction</i>	<i>Distance (mi/ft)</i>	<i>Elev Diff (ft)</i>	<i>Page Number</i>
--------------------	-----------	--------------------------	----------------	------------------	-----------------------------	---------------------------	------------------------

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	SANBERN CUPA	DESERT DYNAMICS OFFROAD	12221 POPLAR ST BLDG B-10 HESPERIA CA 92344	SW	0.09 / 481.92	26	21
1	SANBERN CUPA	THE LITZENBERGER COMPANY	12221 POPLAR ST 14 HESPERIA CA 92345	SW	0.09 / 481.92	26	21
1	SANBERN CUPA	3M OAK HILLS	12221 POPLAR ST UNIT D20 OAK HILLS CA 92344	SW	0.09 / 481.92	26	21
1	CERS HAZ	3M OAK HILLS	12221 POPLAR ST UNIT D20 OAK HILLS CA 92344	SW	0.09 / 481.92	26	22
1	CERS HAZ	Superior Pool Products LLC #548A	12221 POPLAR ST BLDG E HESPERIA CA 92344	SW	0.09 / 481.92	26	24
2	SANBERN CUPA	Velocity Truck Centers High Desert	8995 Three Flags AVE Hesperia CA 92345	SW	0.12 / 615.20	30	26
2	CERS HAZ	Velocity Truck Centers High Desert	8995 THREE FLAGS AVE HESPERIA CA 92345	SW	0.12 / 615.20	30	26
3	RCRA NON GEN	HIGH DESERT TRUCK & TRAILER	8995 THREE FLAGS AVE STE B&C VICTORVILLE CA 92344-9487 EPA Handler ID: CAL000320679	SSW	0.12 / 619.21	29	31
4	SANBERN CUPA	ZIPPY LUBE-A-TRUCK	8899 THREE FLAGS AVE Hesperia CA 92344	S	0.15 / 793.05	26	32
4	SANBERN CUPA	Little Sister's Truck Wash	8899 Three Flags AVE Hesperia CA 92344	S	0.15 / 793.05	26	33
4	CERS TANK	ZIPPY LUBE-A-TRUCK	8899 THREE FLAGS AVE HESPERIA CA 92344 Site ID: 172882	S	0.15 / 793.05	26	33
4	RCRA NON GEN	ANELLE MANAGEMENT SERVICES INC DBA FLEET CREW	8899 THREE FLAGS AVE HESPERIA CA 92344-0497	S	0.15 / 793.05	26	44

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
EPA Handler ID: CAL000416670							
4	RCRA NON GEN	LITTLE SISTERS TRUCK WASH INC	8899 THREE FLAGS AVE OAK HILLS CA 92344-0497	S	0.15 / 793.05	26	45
EPA Handler ID: CAL000353253							
5	SANBERN CUPA	3M OAK HILLS REMOTE STORAGE	12269 SCARBROUGH CT HESPERIA CA 92344	SSW	0.20 / 1,071.34	41	46
5	SANBERN CUPA	DIRECTV	12269 SCARBROUGH CT HESPERIA CA 92345	SSW	0.20 / 1,071.34	41	46
5	SANBERN CUPA	CDM CONSTRUCTORS INC.	12269 SCARBROUGH CT HESPERIA CA 92345	SSW	0.20 / 1,071.34	41	46
6	SANBERN CUPA	RV Supply Center, Inc	8893 Three Flags AVE Ste B Oak Hills CA 92344	SSW	0.25 / 1,299.19	44	47
6	RCRA NON GEN	RV SUPPLY CENTER INC	8893 THREE FLAGS AVE STE B OAK HILLS CA 92344 EPA Handler ID: CAL000307361	SSW	0.25 / 1,299.19	44	47
7	LUST	TIMOTHY LANE	8685 US HIGHWAY 395 HESPERIA CA 92345 Global ID | Status | Status Date: T0607100957 | COMPLETED - CASE CLOSED | 7/1/1999	SW	0.42 / 2,225.97	58	48
8	SCH	NEW MESQUITE TRAILS WEST ELEMENTARY SCHOOL	12850 MUSCATEL STREET HESPERIA CA 92345 EPA Handler ID | Cleanup Status: 70000125 | NO ACTION REQUIRED AS OF 11/16/2005	ESE	0.47 / 2,488.33	-18	50
8	ENVIROSTOR	NEW MESQUITE TRAILS WEST ELEMENTARY SCHOOL	12850 MUSCATEL STREET HESPERIA CA 92345 EPA Handler ID | Cleanup Status: 70000125 | NO ACTION REQUIRED AS OF 11/16/2005	ESE	0.47 / 2,488.33	-18	51
9	SCH	MESQUITE TRAILS WEST SCHOOL SITE	MUSCATEL ROAD/COYOTE TRAIL HESPERIA CA 92345 EPA Handler ID | Cleanup Status: 36820003 | NO ACTION REQUIRED AS OF 6/6/2006	ESE	0.60 / 3,177.40	-3	52
9	ENVIROSTOR	MESQUITE TRAILS WEST SCHOOL SITE	MUSCATEL ROAD/COYOTE TRAIL HESPERIA CA 92345 EPA Handler ID | Cleanup Status: 36820003 | NO ACTION REQUIRED AS OF 6/6/2006	ESE	0.60 / 3,177.40	-3	53
10	SCH	MISSION CREST ELEMENTARY SCHOOL	13065 MUSCATEL STREET HESPERIA CA 92345 EPA Handler ID | Cleanup Status: 70000075 | NO ACTION REQUIRED AS OF 10/26/2005	ESE	0.63 / 3,301.76	-4	53

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Direction</i>	<i>Distance (mi/ft)</i>	<i>Elev Diff (ft)</i>	<i>Page Number</i>
10	ENVIROSTOR	MISSION CREST ELEMENTARY SCHOOL	13065 MUSCATEL STREET HESPERIA CA 92345	ESE	0.63 / 3,301.76	-4	54
<i>Estor/EPA ID | Cleanup Status:</i> 70000075 | NO ACTION REQUIRED AS OF 10/26/2005							

Executive Summary: Summary by Data Source

Standard

Federal

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Jul 27, 2020 has found that there are 4 RCRA NON GEN site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
HIGH DESERT TRUCK & TRAILER	8995 THREE FLAGS AVE STE B&C VICTORVILLE CA 92344-9487 <i>EPA Handler ID: CAL000320679</i>	SSW	0.12 / 619.21	<u>3</u>
ANELLE MANAGEMENT SERVICES INC DBA FLEET CREW	8899 THREE FLAGS AVE HESPERIA CA 92344-0497 <i>EPA Handler ID: CAL000416670</i>	S	0.15 / 793.05	<u>4</u>
LITTLE SISTERS TRUCK WASH INC	8899 THREE FLAGS AVE OAK HILLS CA 92344-0497 <i>EPA Handler ID: CAL000353253</i>	S	0.15 / 793.05	<u>4</u>
RV SUPPLY CENTER INC	8893 THREE FLAGS AVE STE B OAK HILLS CA 92344 <i>EPA Handler ID: CAL000307361</i>	SSW	0.25 / 1,299.19	<u>6</u>

State

ENVIROSTOR - EnviroStor Database

A search of the ENVIROSTOR database, dated Oct 5, 2020 has found that there are 3 ENVIROSTOR site(s) within approximately 1.00 miles of the project property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
NEW MESQUITE TRAILS WEST ELEMENTARY SCHOOL	12850 MUSCATEL STREET HESPERIA CA 92345 <i>Estor/EPA ID | Cleanup Status: 70000125 | NO ACTION REQUIRED AS OF 11/16/2005</i>	ESE	0.47 / 2,488.33	<u>8</u>
MESQUITE TRAILS WEST SCHOOL SITE	MUSCATEL ROAD/COYOTE TRAIL HESPERIA CA 92345 <i>Estor/EPA ID | Cleanup Status: 36820003 | NO ACTION REQUIRED AS OF 6/6/2006</i>	ESE	0.60 / 3,177.40	<u>9</u>
MISSION CREST ELEMENTARY SCHOOL	13065 MUSCATEL STREET HESPERIA CA 92345 <i>Estor/EPA ID | Cleanup Status: 70000075 | NO ACTION REQUIRED AS OF 10/26/2005</i>	ESE	0.63 / 3,301.76	<u>10</u>

LUST - Leaking Underground Fuel Tank Reports

A search of the LUST database, dated Jul 15, 2020 has found that there are 1 LUST site(s) within approximately 0.50 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
TIMOTHY LANE	8685 US HIGHWAY 395 HESPERIA CA 92345	SW	0.42 / 2,225.97	7

Global ID | Status | Status Date: T0607100957 | COMPLETED - CASE CLOSED | 7/1/1999

CERS TANK - California Environmental Reporting System (CERS) Tanks

A search of the CERS TANK database, dated Aug 7, 2020 has found that there are 1 CERS TANK site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ZIPPY LUBE-A-TRUCK	8899 THREE FLAGS AVE HESPERIA CA 92344	S	0.15 / 793.05	4

Site ID: 172882

County

SANBERN CUPA - San Bernardino County - CUPA List

A search of the SANBERN CUPA database, dated Apr 29, 2020 has found that there are 10 SANBERN CUPA site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
THE LITZENBERGER COMPANY	12221 POPLAR ST 14 HESPERIA CA 92345	SW	0.09 / 481.92	1
3M OAK HILLS	12221 POPLAR ST UNIT D20 OAK HILLS CA 92344	SW	0.09 / 481.92	1
DESERT DYNAMICS OFFROAD	12221 POPLAR ST BLDG B-10 HESPERIA CA 92344	SW	0.09 / 481.92	1
Velocity Truck Centers High Desert	8995 Three Flags AVE Hesperia CA 92345	SW	0.12 / 615.20	2
Little Sister's Truck Wash	8899 Three Flags AVE Hesperia CA 92344	S	0.15 / 793.05	4
ZIPPY LUBE-A-TRUCK	8899 THREE FLAGS AVE Hesperia CA 92344	S	0.15 / 793.05	4
CDM CONSTRUCTORS INC.	12269 SCARBROUGH CT HESPERIA CA 92345	SSW	0.20 / 1,071.34	5

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
3M OAK HILLS REMOTE STORAGE	12269 SCARBROUGH CT HESPERIA CA 92344	SSW	0.20 / 1,071.34	<u>5</u>
DIRECTV	12269 SCARBROUGH CT HESPERIA CA 92345	SSW	0.20 / 1,071.34	<u>5</u>
RV Supply Center, Inc	8893 Three Flags AVE Ste B Oak Hills CA 92344	SSW	0.25 / 1,299.19	<u>6</u>

Non Standard

State

SCH - School Property Evaluation Program Sites

A search of the SCH database, dated Oct 5, 2020 has found that there are 3 SCH site(s) within approximately 1.00 miles of the project property.

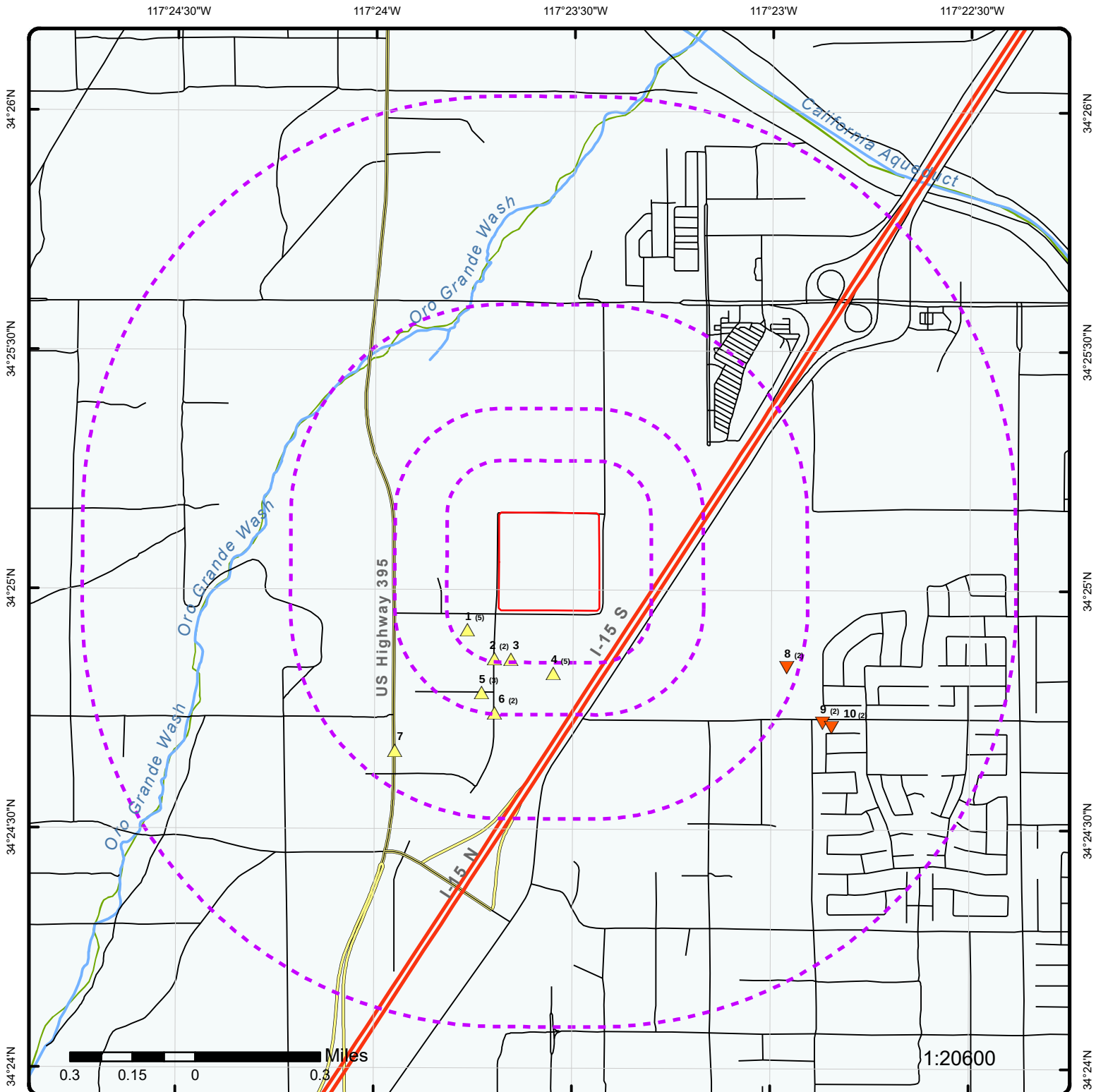
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
NEW MESQUITE TRAILS WEST ELEMENTARY SCHOOL	12850 MUSCATEL STREET HESPERIA CA 92345	ESE	0.47 / 2,488.33	<u>8</u>
<i>Estor/EPA ID | Cleanup Status: 70000125 | NO ACTION REQUIRED AS OF 11/16/2005</i>				
MESQUITE TRAILS WEST SCHOOL SITE	MUSCATEL ROAD/COYOTE TRAIL HESPERIA CA 92345	ESE	0.60 / 3,177.40	<u>9</u>
<i>Estor/EPA ID | Cleanup Status: 36820003 | NO ACTION REQUIRED AS OF 6/6/2006</i>				
MISSION CREST ELEMENTARY SCHOOL	13065 MUSCATEL STREET HESPERIA CA 92345	ESE	0.63 / 3,301.76	<u>10</u>
<i>Estor/EPA ID | Cleanup Status: 70000075 | NO ACTION REQUIRED AS OF 10/26/2005</i>				

CERS HAZ - California Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the CERS HAZ database, dated Aug 7, 2020 has found that there are 3 CERS HAZ site(s) within approximately 0.12 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
Superior Pool Products LLC #548A	12221 POPLAR ST BLDG E HESPERIA CA 92344	SW	0.09 / 481.92	<u>1</u>
3M OAK HILLS	12221 POPLAR ST UNIT D20 OAK HILLS CA 92344	SW	0.09 / 481.92	<u>1</u>
Velocity Truck Centers High Desert	8995 THREE FLAGS AVE HESPERIA CA 92345	SW	0.12 / 615.20	<u>2</u>

Map Key



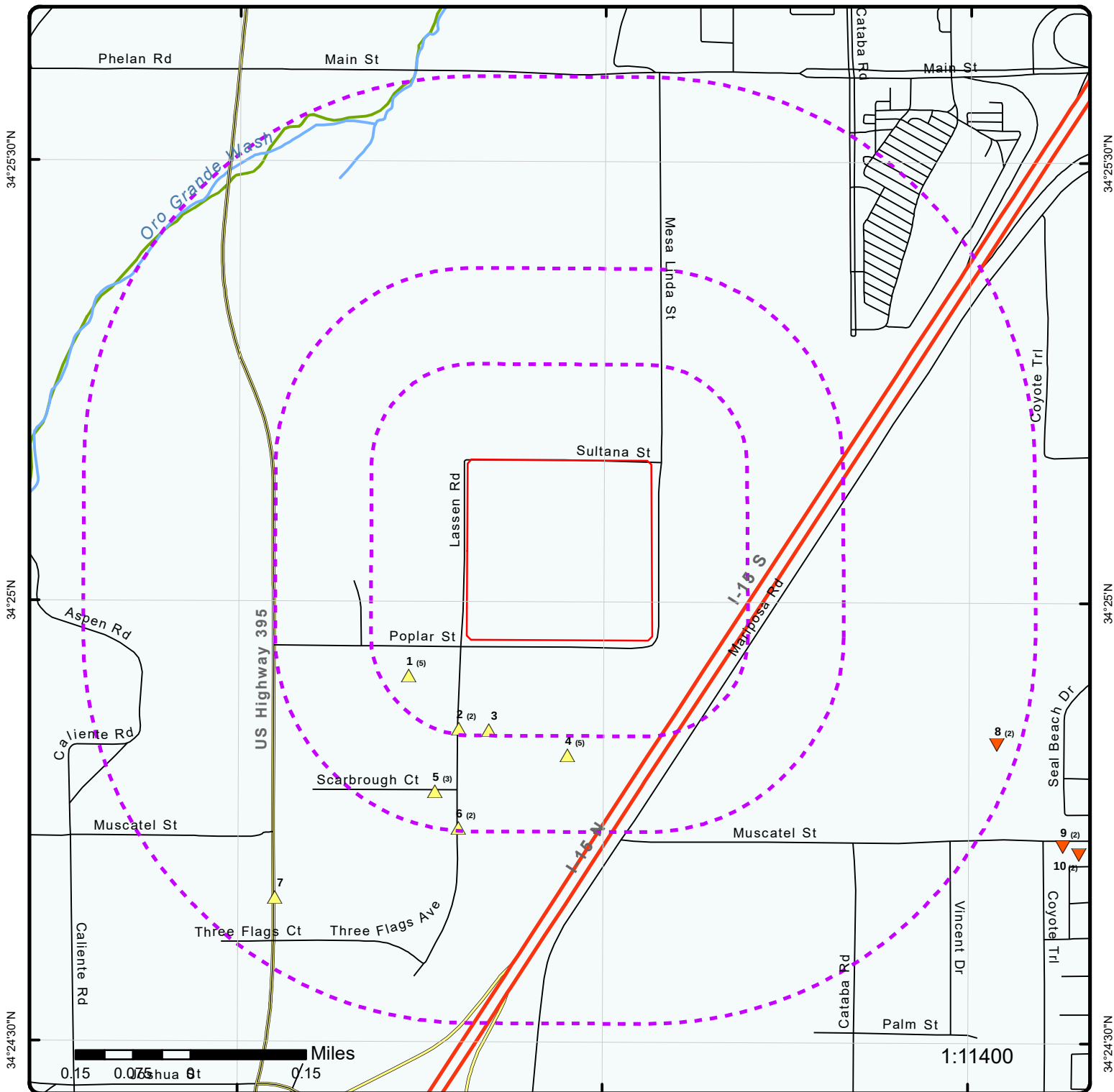
Map : 1.0 Mile Radius

Order Number: 20300900105

Address: Hesperia, Hesperia, CA



Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas: Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	Historic Fill	State Superfund Areas: NPL
Eris Sites with Unknown Elevation	Secondary Roads	100 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	500 Year Flood Zone	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		



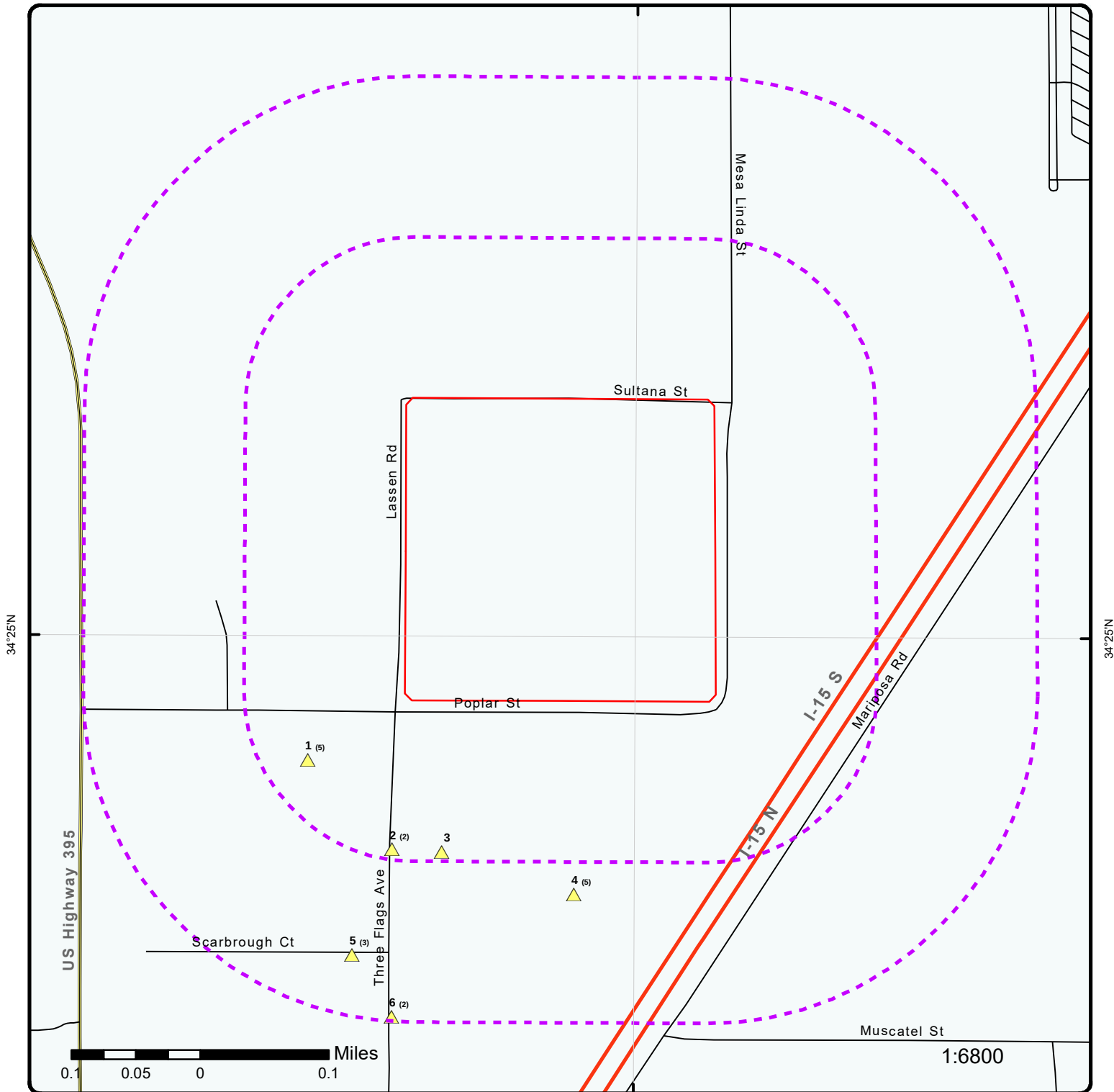
Map : 0.5 Mile Radius

Order Number: 20300900105

Address: Hesperia, Hesperia, CA



Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas: Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	Historic Fill	State Superfund Areas: NPL
Eris Sites with Unknown Elevation	Secondary Roads	100 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	500 Year Flood Zone	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		



Map : 0.25 Mile Radius

Order Number: 20300900105

Address: Hesperia, Hesperia, CA



Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas:Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	Historic Fill	State Superfund Areas:NPL
Eris Sites with Unknown Elevation	Secondary Roads	100 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	500 Year Flood Zone	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		

117°24'W

117°23'30"W

117°23'W

34°25'30"N

34°25'30"N

34°25'N

34°25'N

34°24'30"N

34°24'30"N



Aerial Year: 2019

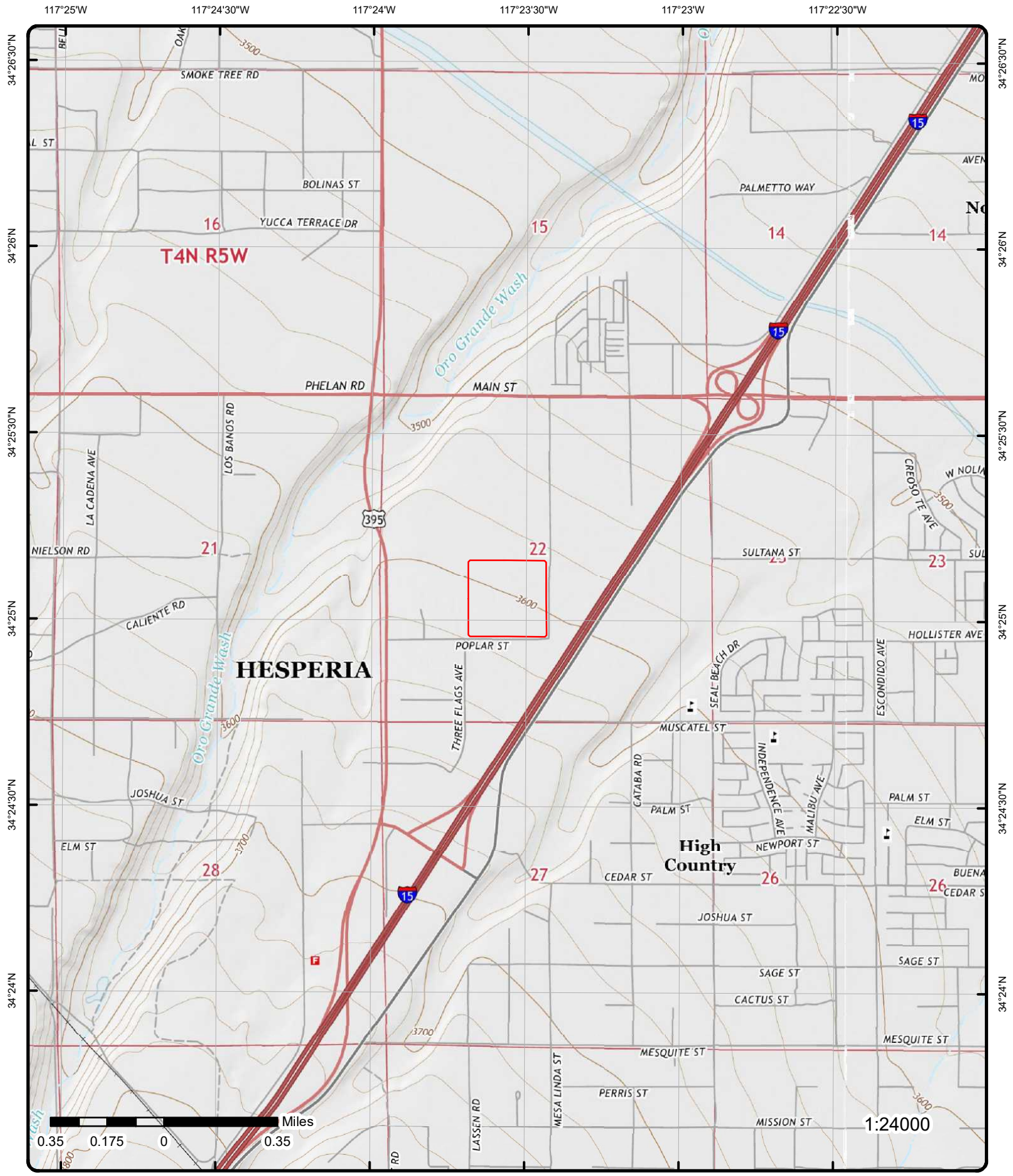
Address: Hesperia, Hesperia, CA

Source: ESRI World Imagery

Order Number: 20300900105



© ERIS Information Inc.



Topographic Map Year: 2015

Address: Hesperia, CA

Quadrangle(s): Hesperia,CA; Baldy Mesa,CA

Source: USGS Topographic Map

Order Number: 20300900105



© ERIS Information Inc.

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 5	SW	0.09 / 481.92	3,627.02 / 26	DESERT DYNAMICS OFFROAD 12221 POPLAR ST BLDG B-10 HESPERIA CA 92344	SANBERN CUPA
Facility ID: Owner Info: Mailing Care of: Mailing Address 1: Mailing Address 2: Mailing City: Mailing State: Mailing Zip:		FA0012792 LAWSON, DAVE DAVE LAWSON 12221 POPLAR ST BLDG B-10 HESPERIA CA 92344				
<u>Detail(s)</u>		Permit ID: Status: Program Element Code: Permit Desc: To:				
		PT0022349 INACTIVE 4221 HAZMAT HANDLER 0-10 EMPLOYEES 10/31/2010				
1	2 of 5	SW	0.09 / 481.92	3,627.02 / 26	THE LITZENBERGER COMPANY 12221 POPLAR ST 14 HESPERIA CA 92345	SANBERN CUPA
Facility ID: Owner Info: Mailing Care of: Mailing Address 1: Mailing Address 2: Mailing City: Mailing State: Mailing Zip:		FA0011408 LITZENBERGER, TROY TROY LITZENBERGER P.O. BOX 943 WRIGHTWOOD CA 92397-0943				
<u>Detail(s)</u>		Permit ID: Status: Program Element Code: Permit Desc: To:				
		PT0019744 INACTIVE 4221 HAZMAT HANDLER 0-10 EMPLOYEES 2/28/2013				
1	3 of 5	SW	0.09 / 481.92	3,627.02 / 26	3M OAK HILLS 12221 POPLAR ST UNIT D20 OAK HILLS CA 92344	SANBERN CUPA
Facility ID: Owner Info: Mailing Care of: Mailing Address 1: Mailing Address 2: Mailing City: Mailing State: Mailing Zip:		FA0013596 3M COMPANY 8981 US HWY 395 OAK HILLS CA 92344				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Detail(s)

Permit ID:	PT0023866
Status:	ACTIVE
Program Element Code:	4244
Permit Desc:	HAZARDOUS MATERIALS 11-30 CHEMICALS
To:	11/30/2020

1	4 of 5	SW	0.09 / 481.92	3,627.02 / 26	3M OAK HILLS 12221 POPLAR ST UNIT D20 OAK HILLS CA 92344	CERS HAZ
-------------------	--------	----	---------------	---------------	--	----------

Site ID:	617
Latitude:	34.415420
Longitude:	-117.396260
County:	San Bernardino Count

Regulated Programs

EI ID:	10311793	EI Description:	Chemical Storage Facilities
---------------	----------	------------------------	-----------------------------

Violations

Violation Date:	09/29/2016	Violation Source:	CERS
Violation Program:	HMRRP	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)		
Violation Notes:			

Returned to compliance on 10/19/2016. Update submitted chemical inventory, facility site map, and emergency response plan.

Violation Description:

Failure to electronically update business plan within 30 days of any one of the following events:
A 100 percent or more increase in the quantity of a previously disclosed material.
Any handling of a previously undisclosed hazardous materials at or above reportable quantities.
A change of business address, business ownership, or business name.
A substantial change in the handler's operations that requires modification to any portion of the business plan.

Violations

Violation Date:	11/21/2019	Violation Source:	CERS
Violation Program:	HMRRP	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 11/22/2019. OBSERVATION: The site map uploaded in CERS is missing the following requirements: north orientation, adjacent streets and hazardous materials storage area. CORRECTIVE ACTION: Submit an accurate and complete site map into CERS.

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Violations

Violation Date:	11/21/2019	Violation Source:	CERS
Violation Program:	HMRRP	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 11/22/2019. OBSERVATION: Observed (2) 275 gallon totes of Styronal ND 811 not being reported in CERS. CORRECTIVE ACTION: Submit an accurate and complete hazardous materials inventory via CERS.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	----------------------	-----------	---------------------	-------------------	------	----

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Enforcements

Enf Action Date:	09/29/2016	Enf Action Program:	HMRRP
Enf Action Type:	Notice of Violation (Unified Program)	Enf Action Source:	CERS
Enf Action Division:	San Bernardino County Fire Department		
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection		
Enf Action Notes:			

Evaluations

Eval Date:	09/29/2016
Violations Found:	Yes
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

HANDLER INSPECTION; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date:	11/21/2019
Violations Found:	Yes
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

Affiliations

Affil Type Desc:	Operator
Entity Name:	3M Oak Hills
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	(760) 949-4204

Affil Type Desc:	Document Preparer
Entity Name:	Jesse Cain
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	

Affil Type Desc:	Environmental Contact
Entity Name:	JESSE CAIN
Entity Title:	
Address:	13044 Rocky Trail Way

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
City: State: Country: Zip Code: Phone:		Victorville CA 92395				
Affil Type Desc: Entity Name: Entity Title: Address: City: State: Country: Zip Code: Phone:		Legal Owner 3M COMPANY 8981 HWY 395 OAK HILLS CA United States 92344 (760) 949-4204				
Affil Type Desc: Entity Name: Entity Title: Address: City: State: Country: Zip Code: Phone:		Parent Corporation 3M Oak Hills				
Affil Type Desc: Entity Name: Entity Title: Address: City: State: Country: Zip Code: Phone:		Facility Mailing Address Mailing Address 8981 US HWY 395 OAK HILLS CA 92344				
Affil Type Desc: Entity Name: Entity Title: Address: City: State: Country: Zip Code: Phone:		Identification Signer DANIEL BRAUN PLANT MANAGER				
Affil Type Desc: Entity Name: Entity Title: Address: City: State: Country: Zip Code: Phone:		CUPA District San Bernardino County Fire 620 South E Street San Bernardino CA 92415-0153 (909) 386-8401				
1	5 of 5	SW	0.09 / 481.92	3,627.02 / 26	Superior Pool Products LLC #548A 12221 POPLAR ST BLDG E HESPERIA CA 92344	CERS HAZ
Site ID: Latitude: Longitude: County:		437884 34.415420 -117.396790 San Bernardino Count				

Regulated Programs

Affil Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Address: 620 South E Street City: San Bernardino State: CA Country: Zip Code: 92415-0153 Phone: (909) 386-8401 Affil Type Desc: Facility Mailing Address Entity Name: Mailing Address Entity Title: Address: 109 Northpark Blvd., Suite 123 City: Covington State: LA Country: Zip Code: 70433 Phone: Affil Type Desc: Parent Corporation Entity Name: Superior Pool Products LLC #548A Entity Title: Address: City: State: Country: Zip Code: Phone:						
2	1 of 2	SW	0.12 / 615.20	3,631.10 / 30	Velocity Truck Centers High Desert 8995 Three Flags AVE Hesperia CA 92345	SANBERN CUPA
Facility ID: FA0016142 Owner Info: Brad Fauvre & Conan Barker Mailing Care of: DBECK@VVGTRUCK.COM Mailing Address 1: 2429 S. PECK RD. Mailing Address 2: Mailing City: WHITTIER Mailing State: CA Mailing Zip: 90601 <u>Detail(s)</u> Permit ID: PT0034885 Status: ACTIVE Program Element Code: 4243 Permit Desc: HAZARDOUS MATERIALS 4-10 CHEMICALS To: 8/31/2020 Permit ID: PT0034884 Status: ACTIVE Program Element Code: 4453 Permit Desc: SMALL QUANTITY GENERATOR To: 8/31/2020						
2	2 of 2	SW	0.12 / 615.20	3,631.10 / 30	Velocity Truck Centers High Desert 8995 THREE FLAGS AVE HESPERIA CA 92345	CERS HAZ
Site ID: 169689 Latitude: 34.414260 Longitude: -117.394270 County: San Bernardino Count						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Regulated Programs

EI ID:	10400761	EI Description:	Hazardous Waste Generator
EI ID:	10400761	EI Description:	Chemical Storage Facilities

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HMRRP	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)		
Violation Notes:			

Returned to compliance on 01/08/2020. There were undisclosed hazardous materials at or above reportable quantities.

Violation Description:

Failure to electronically update business plan within 30 days of any one of the following events:
 A 100 percent or more increase in the quantity of a previously disclosed material.
 Any handling of a previously undisclosed hazardous materials at or above reportable quantities.
 A change of business address, business ownership, or business name.
 A substantial change in the handler's operations that requires modification to any portion of the business plan.

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 01/09/2017. Failure to establish a Contingency Plan (CCR 66265.51(a)) Hazardous waste contingency plan has not been establish / submitted in California Environmental Reporting System (CERS).

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 01/09/2017. Failure to operate and maintain facility to prevent a fire, spill or release (CCR 66265.31) Observed oil accumulation in secondary containment; spills on shop floor.

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 01/09/2017. Failure to note accumulation start date on labels (CCR 66262.34(f)(2)) Accumulation start date missing on waste oily solids container.

Violation Description:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HMRRP	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 01/08/2020. Hazardous Materials Business Plan (HMBP) submitted on CERS on 7/20/2016 was incomplete, inaccurate, and/or not current. Hazardous Materials Inventory and Facility Site Map was not complete or accurate. There were hazardous materials that was not disclosed previously. Emergency Response / Contingency and Employee Training Plan was not submitted in CERS.

Violation Description:

Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 01/09/2017. Failure to manage hazardous waste lawfully (CHSC 25154) Hazardous waste was not managed lawfully. Compliance Requirement: Submit 3-weeks worth of hazardous waste weekly inspection to this Division.

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 01/09/2017. Failure to complete hazardous waste labels (CCR 66262.34(f)(3)) Accumulation start date missing on waste oily solids container. Compliance Requirement: Submit a signed statement indicating that all hazardous waste containers have been properly labeled.

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 01/09/2017. Hazardous waste accumulation time exceeded (CCR 66262.34(a)) Hazardous waste accumulation time exceeded for waste oily water. Last pick 6/4/14.

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 01/09/2017. Failure to keep hazardous waste containers closed when not in active use (CCR 66265.173(a)) Bung caps were missing on used oil drums.

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	12/14/2016	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 12/14/2016. Failure to train facility personnel in hazardous waste management procedures (CCR 66265.16) Employee training documentation not documented and / or available for review. Provided at end of inspection.

Violation Description:

Hazardous Waste Generator Program - Training - General

Enforcements

Enf Action Date:	12/14/2016	Enf Action Program:	HW
Enf Action Type:	Notice of Violation (Unified Program)	Enf Action Source:	CERS
Enf Action Division:	San Bernardino County Fire Department		
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection		
Enf Action Notes:			

Enf Action Date:	12/14/2016	Enf Action Program:	HMRRP
Enf Action Type:	Notice of Violation (Unified Program)	Enf Action Source:	CERS
Enf Action Division:	San Bernardino County Fire Department		
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection		
Enf Action Notes:			

Evaluations

Eval Date:	01/06/2020
Violations Found:	No
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

Eval Date:	12/14/2016
Violations Found:	Yes
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	HW
Eval Source:	CERS
Eval Notes:	

GENERATOR INSPECTION; Note: data in [EVAL Notes] field for some records is truncated from the source.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	----------------------	-----------	---------------------	-------------------	------	----

Eval Date:	12/14/2016
Violations Found:	Yes
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

HANDLER INSPECTION; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date:	01/06/2020
Violations Found:	No
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	HW
Eval Source:	CERS
Eval Notes:	

Affiliations

Affil Type Desc:	Operator
Entity Name:	Ronnie Bullocks
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	(909) 510-4186

Affil Type Desc:	Environmental Contact
Entity Name:	Devin Beck
Entity Title:	
Address:	2429 S. Peck Rd
City:	Whittier
State:	CA
Country:	
Zip Code:	90601
Phone:	

Affil Type Desc:	Document Preparer
Entity Name:	Devin Beck
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	

Affil Type Desc:	Parent Corporation
Entity Name:	Velocity Vehicle Group (VVG)
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	

Affil Type Desc:	Legal Owner
Entity Name:	Brad Fauvre & Conan Barker

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Entity Title:						
Address:		2429 South Peck Road				
City:		Whittier				
State:		CA				
Country:		United States				
Zip Code:		90601				
Phone:		(562) 447-1203				
Affil Type Desc:		Identification Signer				
Entity Name:		Devin Beck				
Entity Title:		Safety and Environmental Manager				
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		CUPA District				
Entity Name:		San Bernardino County Fire				
Entity Title:						
Address:		620 South E Street				
City:		San Bernardino				
State:		CA				
Country:						
Zip Code:		92415-0153				
Phone:		(909) 386-8401				
Affil Type Desc:		Property Owner				
Entity Name:		Brad Fauvre & Conan Barker				
Entity Title:						
Address:		2429 Peck Road				
City:		Whittier				
State:		CA				
Country:		United States				
Zip Code:		90601				
Phone:		(562) 447-1203				
Affil Type Desc:		Facility Mailing Address				
Entity Name:		Mailing Address				
Entity Title:						
Address:		8995 Three Flags Ave.				
City:		Hesperia				
State:		CA				
Country:						
Zip Code:		92345				
Phone:						

3	1 of 1	SSW	0.12 / 619.21	3,629.85 / 29	HIGH DESERT TRUCK & TRAILER 8995 THREE FLAGS AVE STE B&C VICTORVILLE CA 92344-9487	RCRA NON GEN
-------------------	--------	-----	---------------	---------------	--	-----------------

EPA Handler ID: CAL000320679
Gen Status Universe: No Report
Contact Name: DEVIN BECK
Contact Address: 2429 S. PCK RD. , , WHITTIER , CA, 90601-0000 ,
Contact Phone No and Ext: 909-510-4272
Contact Email: DBECK@VVGTRUCK.COM
Contact Country:
County Name: SAN BERNARDINO
EPA Region: 09
Land Type:
Receive Date: 20070613

Violation/Evaluation Summary

Note: NO RECORDS: As of May 2020, there are no Compliance Monitoring and Enforcement (violation) records

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
 Mixed Waste Generator: No
 Transporter Activity: No
 Transfer Facility: No
 Onsite Burner Exemption: No
 Furnace Exemption: No
 Underground Injection Activity: No
 Commercial TSD: No
 Used Oil Transporter: No
 Used Oil Transfer Facility: No
 Used Oil Processor: No
 Used Oil Refiner: No
 Used Oil Burner: No
 Used Oil Market Burner: No
 Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
 Receive Date: 20070613
 Handler Name: HIGH DESERT TRUCK & TRAILER
 Source Type: Implementer
 Federal Waste Generator Code: N
 Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	Street No:	
Type:	Other	Street 1:	2429 S. PCK RD.
Name:	DEVIN BECK	Street 2:	
Date Became Current:		City:	WHITTIER
Date Ended Current:		State:	CA
Phone:	909-510-4272	Country:	
Source Type:	Implementer	Zip Code:	90601-0000

Owner/Operator Ind:	Current Owner	Street No:	
Type:	Other	Street 1:	2429 PECK RD
Name:	LOS ANGELES TRUCK SERVICE LLC	Street 2:	
Date Became Current:		City:	WHITTIER
Date Ended Current:		State:	CA
Phone:	562-447-1200	Country:	
Source Type:	Implementer	Zip Code:	90601-0000

4	1 of 5	S	0.15 / 793.05	3,627.01 / 26	ZIPPY LUBE-A-TRUCK 8899 THREE FLAGS AVE Hesperia CA 92344	SANBERN CUPA
-------------------	--------	---	---------------	---------------	---	--------------

Facility ID: FA0009125
 Owner Info: Renald Anelle
 Mailing Care of: VIVIAN.LAM@FLEETCREW.COM
 Mailing Address 1: P.O. Box 7509
 Mailing Address 2:
 Mailing City: LAGUNA NIGUEL
 Mailing State: CA
 Mailing Zip: 92607

Detail(s)

Permit ID: PT0015214

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Status: ACTIVE Program Element Code: 4454 Permit Desc: LARGE QUANTITY GENERATOR To: 12/31/2020 Permit ID: PT0023266 Status: ACTIVE Program Element Code: 4031 Permit Desc: APSA 1,320-10,000 GAL FAC CAPACITY To: 12/31/2020 Permit ID: PT0015215 Status: ACTIVE Program Element Code: 4243 Permit Desc: HAZARDOUS MATERIALS 4-10 CHEMICALS To: 12/31/2020						
4	2 of 5	S	0.15 / 793.05	3,627.01 / 26	Little Sister's Truck Wash 8899 Three Flags AVE Hesperia CA 92344	SANBERN CUPA
Facility ID: FA0010378 Owner Info: Little Sister's Truck Wash, Inc. Mailing Care of: LSTWREN@GMAIL.COM Mailing Address 1: 25 Rollingview Lane Mailing Address 2: Mailing City: Fallbrook Mailing State: CA Mailing Zip: 92028						
<u>Detail(s)</u>						
Permit ID: PT0017654 Status: ACTIVE Program Element Code: 4243 Permit Desc: HAZARDOUS MATERIALS 4-10 CHEMICALS To: 5/31/2020 Permit ID: PT0017973 Status: ACTIVE Program Element Code: 4452 Permit Desc: CONDITIONALLY EXEMPT SM QTY GENERATOR To: 5/31/2020						
4	3 of 5	S	0.15 / 793.05	3,627.01 / 26	ZIPPY LUBE-A-TRUCK 8899 THREE FLAGS AVE HESPERIA CA 92344	CERS TANK
Site ID: 172882 County: San Bernardino Count Latitude: 34.413147 Longitude: -117.393130						
<u>Regulated Programs</u>						
EI ID: 10049617 EI Description: Hazardous Waste Generator EI ID: 10049617 EI Description: Aboveground Petroleum Storage EI ID: 10049617 EI Description: Chemical Storage Facilities						
<u>Violations</u>						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Violation Date:	01/09/2017	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 03/30/2017. Failure to keep hazardous waste containers closed when not in active use (CCR 66265.173(a)) Observed (1) 15 gallon drum of used oil that was not currently in use with no lid.

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	11/14/2013	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 11/14/2013. Failure to label hazardous waste containers (CCR 66262.34(f)(3)) corrected on site- operator properly labeled the hazwaste drum

Violation Description:

Haz Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	03/10/2020	Violation Source:	CERS
Violation Program:	HMRRP	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)		
Violation Notes:			

OBSERVATION: Training documents related to hazardous materials and hazardous waste safety handling were not provided. CORRECTIVE ACTION: Conduct initial and annual employee training and maintain training records for a minimum of three years. Submit a signed statement indicating that training has been conducted and that training records will be kept on site for review.

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date:	01/09/2017	Violation Source:	CERS
Violation Program:	HMRRP	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 03/30/2017. The map submitted on CERS is missing adjacent streets and north orientation. Update and resubmit on CERS.

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Violations

Violation Date:	03/10/2020	Violation Source:	CERS
Violation Program:	APSA	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)		
Violation Notes:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

OBSERVATION: The designated person in charge stated in the SPCC plan, Jake Sanchez, is no longer employed at the facility and an updated person has not been assigned. CORRECTIVE ACTION: Submit a signed statement indicating that a person who reports to facility management has been designated as accountable for discharge prevention.

Violation Description:

Failure to designate person who reports to management as accountable for discharge prevention at facility.

Violations

Violation Date: 03/10/2020
Violation Program: APSA
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Violation Source: CERS
Violation Division: San Bernardino County Fire Department

OBSERVATION: (2) 230 gallon and (2) 240 gallon empty tanks acquired from another location have not been properly closed. CORRECTIVE ACTION: Submit photographs indicating that the tanks have been properly closed with a "permanently closed" label and the date they were closed.

Violation Description:

Failure to properly close tanks when making a claim of "permanently closed."

Violations

Violation Date: 01/09/2017
Violation Program: HMRRP
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Notes:

Violation Source: CERS
Violation Division: San Bernardino County Fire Department

Returned to compliance on 03/30/2017.

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date: 01/09/2017
Violation Program: HW
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Notes:

Violation Source: CERS
Violation Division: San Bernardino County Fire Department

Returned to compliance on 03/30/2017. Failure to operate and maintain facility to prevent a fire, spill or release (CCR 66265.31) Failure to operate and maintain facility to prevent release/fire

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date: 03/10/2020
Violation Program: APSA
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Violation Source: CERS
Violation Division: San Bernardino County Fire Department

OBSERVATION: The oil storage containers and capacity section of the SPCC plan was not consistent with what was observed on site. CORRECTIVE ACTION: Submit a signed statement indicating that the SPCC plan has been revised to address the type of oil and storage capacity of storage containers.

Violation Description:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Failure to address in the SPCC Plan the type of oil and storage capacity for each fixed container.

For mobile or portable containers, either provide the type of oil and storage capacity, or an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities.

Violations

Violation Date: 01/09/2017
Violation Program: HMRRP
Citation: Un-Specified
Violation Notes:

Violation Source: CERS
Violation Division: San Bernardino County Fire Department

Returned to compliance on 03/30/2017. Failure to obtain a CUPA Hazardous Materials Handler permit (SBCC 23.0602(a)) CUPA permits expired on 12/31/16.

Violation Description:

Business Plan Program - Administration/Documentation - General Local Ordinance

Violations

Violation Date: 01/09/2017
Violation Program: HW
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Notes:

Violation Source: CERS
Violation Division: San Bernardino County Fire Department

Returned to compliance on 03/30/2017. Failure to train facility personnel in hazardous waste management procedures (CCR 66265.16) Per operator, hazardous waste management training is regularly conducted, but there was not documentation to this effect. This the site is a Large Quantity Generator (LQG), facility must provide annual hazardous waste management training.

Violation Description:

Hazardous Waste Generator Program - Training - General

Violations

Violation Date: 03/10/2020
Violation Program: HMRRP
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Notes:

Violation Source: CERS
Violation Division: San Bernardino County Fire Department

Returned to compliance on 04/08/2020. OBSERVATION: Facility failed to annually re-certify a complete business plan in CERS. Last submittal was dated 07/10/2019 (inventory element), 04/16/2018 (emergency response element) and 08/08/2018 (APSA element). CORRECTIVE ACTION: Review and certify the business plan via CERS. Your CERS ID number is 10049617.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violations

Violation Date: 01/09/2017
Violation Program: HMRRP
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Violation Source: CERS
Violation Division: San Bernardino County Fire Department

Returned to compliance on 03/30/2017. The hazardous materials inventory submitted 12/16/13 is missing (1) 275 gallon tote of Diesel Exhaust Fluid.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Violations

Violation Date: 01/09/2017
Violation Program: HW
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Notes:

Returned to compliance on 03/30/2017. Failure to obtain a CUPA Hazardous Waste Generator Permit (SBCC 23.0602(b)(1)) CUPA permits expired on 12/31/16.

Violation Description:

Hazardous Waste Generator Program - Administration/Documentation - General

Violations

Violation Date: 01/09/2017
Violation Program: APSA
Citation: HSC 6.67 25270.6(b) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.6(b)
Violation Notes:

Returned to compliance on 03/30/2017. CUPA permits expired on 12/31/16.

Violation Description:

Failure to pay the APSA Program fee.

Violations

Violation Date: 03/10/2020
Violation Program: APSA
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

OBSERVATION: Facility failed to provide training to oil-handling personnel. CORRECTIVE ACTION: Submit signed statement indicating that all oil-handling personnel have been trained.

Violation Description:

Failure to provide the following training to all oil-handling personnel:

1. Operation and maintenance of equipment to prevent discharges.
2. Discharge procedure protocols.
3. Applicable pollution control laws, rules, and regulations.
4. General facility operations.
5. Contents of the SPCC Plan.

Violations

Violation Date: 01/09/2017
Violation Program: HW
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Notes:

Returned to compliance on 03/30/2017. Failure to label hazardous waste containers (CCR 66262.34(f)(3)) Observed (1) 55 gallon container of used oil and (1) 55 gallon drum of waste grease with no hazardous waste label.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	01/09/2017	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 03/30/2017. Failure to note accumulation start date on labels (CCR 66262.34(f)(2)) Observed (1) 55 gallon drum of waste grease with no accumulation start date marked.

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	03/10/2020	Violation Source:	CERS
Violation Program:	APSA	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)		
Violation Notes:			

OBSERVATION: Facility failed to re-certify their SPCC plan every 5 years. Certified SPCC plan was dated for 12/16/2013. CORRECTIVE ACTION: Submit a signed statement indicating that the 5-year review has been performed, documented and SPCC plan amended if necessary.

Violation Description:

Failure to complete a review and evaluation of the SPCC Plan at least once every five years, document the completion of the review, and sign a statement as to whether the SPCC Plan will be amended.

Violations

Violation Date:	03/10/2020	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 25201 - California Health and Safety Code, Chapter 6.5, Section(s) 25201		
Violation Notes:			

OBSERVATION: (1) 55 gallon drum and (1) 100 gallon container of used antifreeze were observed with an accumulation start date of 05/13/2017 and 06/11/2019 and a manifest/receipt demonstrating disposal within the past 90 days was not available. CORRECTIVE ACTION: Dispose of the used antifreeze and submit a copy of the manifest/receipt to the CUPA.

Violation Description:

Failure to obtain a permit or grant of interim status after generator has accumulated hazardous waste on-site for longer than 90 days.

Violations

Violation Date:	01/09/2017	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 03/30/2017. Failure to complete hazardous waste labels (CCR 66262.34(f)(3)) Observed (1) 55 gallon drums of waste grease with an illegible hazardous waste label.

Violation Description:

Hazardous Waste Generator Program - Operations/Maintenance - General

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Violations

Violation Date: 01/09/2017
Violation Program: HW
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Notes:

Returned to compliance on 03/30/2017. Observed (4) 55 gallon drums of drained used oil filters with no lid, (2) 55 gallon drained used oil filters with no labels, and (1) 55 gallon drum of drained used oil filters with a label, but no accumulation start date.

Violation Description:

Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violations

Violation Date: 11/14/2013
Violation Program: HW
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Notes:

Returned to compliance on 11/14/2013. Failure to note accumulation start date on labels (CCR 66262.34(f)(2)) corrected on site- operator properly labeled the hazwaste drum

Violation Description:

Haz Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date: 03/10/2020
Violation Program: APSA
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Violation Description:

Failure to properly close tanks when making a claim of "permanently closed."

Violations

Violation Date: 03/10/2020
Violation Program: APSA
Citation: HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Notes:

OBSERVATION: Facility failed to include in the SPCC plan adequate training for oil-handling personnel. CORRECTIVE ACTION: Submit a signed statement indicating that the SPCC plan has been revised to training for oil-handling personnel.

Violation Description:

Failure to include in the SPCC plan an adequate description of employee training. Training shall address, at a minimum: operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; content of the facility SPCC plan; and annual discharge prevention briefings for oil-handling personnel to assure adequate understanding of the SPCC plan.

Violations

Violation Date: 01/09/2017
Violation Program: APSA
Violation Source: CERS
Violation Division: San Bernardino County Fire Department

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Citation: HSC 6.67 25270.6(a)(1), 25270.6(a)(2) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.6(a)(1), 25270.6(a)(2)

Violation Notes:

Returned to compliance on 03/30/2017. A Tank Facility Statement had not been submitted since 12/16/13.

Violation Description:

Failure to submit a tank facility statement on or before January 1 annually unless a current Business Plan has been submitted.

Violations

Violation Date:	11/14/2013	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple		
Violation Notes:			

Returned to compliance on 11/14/2013. Failure to complete hazardous waste labels (CCR 66262.34(f)(3)) corrected on site- operator properly labeled the hazwaste drum

Violation Description:

Haz Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date:	11/14/2013	Violation Source:	CERS
Violation Program:	HW	Violation Division:	San Bernardino County Fire Department
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130		
Violation Notes:			

Returned to compliance on 11/14/2013. corrected on site- operator properly labeled marked the drained used oil filter drum for the start date

Violation Description:

Failure to properly handle, manage, label, and recycle used oil and fuel filters.

Violations

Violation Date:	01/09/2017	Violation Source:	CERS
Violation Program:	HMRRP	Violation Division:	San Bernardino County Fire Department
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 03/30/2017. The Emergency Response (ER) Plan contains the incorrect phone number for the Local Unified Program Agency (CUPA). The correct phone number for the Emergency Response team at the CUPA is (909) 386-8425. Update the ER Plan and resubmit on CERS.

Violation Description:

Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.

Enforcements

Enf Action Date:	01/09/2017	Enf Action Program:	HMRRP
Enf Action Type:	Notice of Violation (Unified Program)	Enf Action Source:	CERS
Enf Action Division:	San Bernardino County Fire Department		
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection		
Enf Action Notes:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Enf Action Date:	11/14/2013				Enf Action Program:	HW
Enf Action Type:	Notice of Violation (Unified Program)				Enf Action Source:	CERS
Enf Action Division:	San Bernardino County Fire Department					
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection					
Enf Action Notes:						
Enf Action Date:	01/09/2017				Enf Action Program:	APSA
Enf Action Type:	Notice of Violation (Unified Program)				Enf Action Source:	CERS
Enf Action Division:	San Bernardino County Fire Department					
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection					
Enf Action Notes:						
Enf Action Date:	01/09/2017				Enf Action Program:	HW
Enf Action Type:	Notice of Violation (Unified Program)				Enf Action Source:	CERS
Enf Action Division:	San Bernardino County Fire Department					
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection					
Enf Action Notes:						

Evaluations

Eval Date: 03/10/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 03/10/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 11/14/2013
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

zippy lube- hesperia/ oak hills-insp; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/14/2013
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

zippy lube- hesperia/ oak hills-insp; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/09/2017
Violations Found: Yes

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	HW
Eval Source:	CERS
Eval Notes:	

ROUTINE GENERATOR INSPECTION; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date:	03/10/2020
Violations Found:	Yes
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	APSA
Eval Source:	CERS
Eval Notes:	

Eval Date:	01/09/2017
Violations Found:	Yes
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

ROUTINE HANDLER INSPECTION; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date:	01/09/2017
Violations Found:	Yes
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	APSA
Eval Source:	CERS
Eval Notes:	

ROUTINE APSA INSPECTION; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date:	11/14/2013
Violations Found:	No
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	San Bernardino County Fire Department
Eval Program:	APSA
Eval Source:	CERS
Eval Notes:	

zippy lube- hesperia/ oak hills-insp; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	
Address:	620 South E Street
City:	San Bernardino
State:	CA
Country:	
Zip Code:	92415-0153
Phone:	(909) 386-8401

Affil Type Desc:	Document Preparer
-------------------------	-------------------

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Entity Name:		Christina Ross				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		Legal Owner				
Entity Name:		Renald Anelle				
Entity Title:						
Address:		P.O. Box 1530				
City:		Bonsall				
State:		CA				
Country:		United States				
Zip Code:		92003				
Phone:		(949) 627-4644				
Affil Type Desc:		Facility Mailing Address				
Entity Name:		Mailing Address				
Entity Title:						
Address:		8899 Three Flags Ave.				
City:		Hesperia				
State:		CA				
Country:						
Zip Code:		92345				
Phone:						
Affil Type Desc:		Parent Corporation				
Entity Name:		ZIPPY LUBE				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		Identification Signer				
Entity Name:		Christina Ross				
Entity Title:		ENVIRONMENTAL CONTACT				
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		Operator				
Entity Name:		ZIPPY LUBE				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:		(949) 412-5059				
Affil Type Desc:		Environmental Contact				
Entity Name:		CHRISTINA ROSS				
Entity Title:						
Address:		P.O. Box 7509				
City:		Laguna Niguel				
State:		CA				
Country:						
Zip Code:		92607				
Phone:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Coordinates

Env Int Type Code:	HWG	Longitude:	-117.393120
Program ID:	10049617	Coord Name:	
Latitude:	34.413139	Ref Point Type Desc:	Unknown

<u>4</u>	4 of 5	S	0.15 / 793.05	3,627.01 / 26	ANELLE MANAGEMENT SERVICES INC DBA FLEET CREW 8899 THREE FLAGS AVE HESPERIA CA 92344-0497	RCRA NON GEN
--------------------------	--------	---	---------------	---------------	---	-----------------

EPA Handler ID:	CAL000416670
Gen Status Universe:	No Report
Contact Name:	CRAIG PHILLIPS
Contact Address:	29911 NIGUEL ROAD #7509 , , LAGUNA NIGUEL , CA, 92607-0000 ,
Contact Phone No and Ext:	951-660-0400
Contact Email:	CRAIG.PHILLIPS@FLEETCREW.COM
Contact Country:	
County Name:	SAN BERNARDINO
EPA Region:	09
Land Type:	
Receive Date:	20160502

Violation/Evaluation Summary

Note:	NO RECORDS: As of May 2020, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).
--------------	--

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20160502
Handler Name:	ANELLE MANAGEMENT SERVICES INC DBA FLEET CREW
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	Street No:	
Type:	Other	Street 1:	29911 NIGUEL ROAD
Name:	ANELLE MGMT SRV INC DBA FLEET CREW	Street 2:	#7509
Date Became Current:		City:	LAGUNA NIGUEL
Date Ended Current:		State:	CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Phone:	951-660-0400				Country:	
Source Type:	Implementer				Zip Code:	92607-0000
Owner/Operator Ind:	Current Operator				Street No:	
Type:	Other				Street 1:	29911 NIGUEL ROAD #7509
Name:	CRAIG PHILLIPS				Street 2:	
Date Became Current:					City:	LAGUNA NIGUEL
Date Ended Current:					State:	CA
Phone:	951-660-0400				Country:	
Source Type:	Implementer				Zip Code:	92607-0000

4	5 of 5	S	0.15 / 793.05	3,627.01 / 26	LITTLE SISTERS TRUCK WASH INC 8899 THREE FLAGS AVE OAK HILLS CA 92344-0497	RCRA NON GEN
-------------------	--------	---	---------------	---------------	--	-----------------

EPA Handler ID: CAL000353253
Gen Status Universe: No Report
Contact Name: JOE MCFANN
Contact Address: 8899 THREE FLAGS AVE , , OAK HILLS , CA, 92344 ,
Contact Phone No and Ext: 760-947-4448
Contact Email: RJA@YELLOWMAGIC.COM
Contact Country:
County Name: SAN BERNARDINO
EPA Region: 09
Land Type:
Receive Date: 20100610

Violation/Evaluation Summary

Note: NO RECORDS: As of May 2020, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20100610
Handler Name: LITTLE SISTERS TRUCK WASH INC
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner **Street No:**

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Type: Name: Date Became Current: Date Ended Current: Phone: Source Type: Other LITTLE SISTERS TRUCK WASH INC 760-731-3170 Implementer Street 1: Street 2: City: State: Country: Zip Code: 25 ROLLING VIEW LN FALLBROOK CA 92028-9234 Owner/Operator Ind: Type: Name: Date Became Current: Date Ended Current: Phone: Source Type: Current Operator Other JOE MCFANN 760-947-4448 Implementer Street No: Street 1: Street 2: City: State: Country: Zip Code: 8899 THREE FLAGS AVE OAK HILLS CA 92344						
5	1 of 3	SSW	0.20 / 1,071.34	3,641.64 / 41	3M OAK HILLS REMOTE STORAGE 12269 SCARBROUGH CT HESPERIA CA 92344	SANBERN CUPA
Facility ID: FA0012098 Owner Info: 3M COMPANY Mailing Care of: 3M OAK HILLS Mailing Address 1: 8981 US HWY 395 Mailing Address 2: Mailing City: HESPERIA Mailing State: CA Mailing Zip: 92344 Detail(s) Permit ID: PT0021294 Status: INACTIVE Program Element Code: 4250 Permit Desc: HAZMAT HANDLER - UNSTAFFED REMOTE FACILITY To: 3/31/2011						
5	2 of 3	SSW	0.20 / 1,071.34	3,641.64 / 41	DIRECTV 12269 SCARBROUGH CT HESPERIA CA 92345	SANBERN CUPA
Facility ID: FA0013884 Owner Info: DIRECTV Mailing Care of: Mailing Address 1: 12269 SCARBROUGH CT Mailing Address 2: Mailing City: HESPERIA Mailing State: CA Mailing Zip: 92344 Detail(s) Permit ID: PT0024398 Status: INACTIVE Program Element Code: 4241 Permit Desc: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL To: 9/30/2012						
5	3 of 3	SSW	0.20 / 1,071.34	3,641.64 / 41	CDM CONSTRUCTORS INC. 12269 SCARBROUGH CT HESPERIA CA 92345	SANBERN CUPA
Facility ID: FA0008728 Owner Info: CDM CONSTRUCTORS INC.						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Mailing Care of: JOYCE JACKSON Mailing Address 1: 12269 SCARBROUGH COURT Mailing Address 2: Mailing City: HESPERIA Mailing State: CA Mailing Zip: 92345-0000						
Detail(s)						
Permit ID: PT0015514 Status: INACTIVE Program Element Code: 4221 Permit Desc: HAZMAT HANDLER 0-10 EMPLOYEES To: 12/31/2006						
Permit ID: PT0015515 Status: INACTIVE Program Element Code: 4202 Permit Desc: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT) To: 12/31/2004						
6	1 of 2	SSW	0.25 / 1,299.19	3,645.08 / 44	RV Supply Center, Inc 8893 Three Flags AVE Ste B Oak Hills CA 92344	SANBERN CUPA
Facility ID: FA0016222 Owner Info: Mark Boesch Mailing Care of: Mailing Address 1: 8893 Three Flags Ave Ste B Mailing Address 2: Mailing City: Oak Hills Mailing State: CA Mailing Zip: 92344						
Detail(s)						
Permit ID: PT0036888 Status: ACTIVE Program Element Code: 4243 Permit Desc: HAZARDOUS MATERIALS 4-10 CHEMICALS To: 5/31/2020						
Permit ID: PT0036889 Status: ACTIVE Program Element Code: 4453 Permit Desc: SMALL QUANTITY GENERATOR To: 5/31/2020						
6	2 of 2	SSW	0.25 / 1,299.19	3,645.08 / 44	RV SUPPLY CENTER INC 8893 THREE FLAGS AVE STE B OAK HILLS CA 92344	RCRA NON GEN
EPA Handler ID: CAL000307361 Gen Status Universe: No Report Contact Name: MARK BOESCH Contact Address: 8893 THREE FLAGS AVE STE B , , OAK HILLS , CA, 92344 , Contact Phone No and Ext: 760-949-1222 Contact Email: MARK@RVSCINC.COM Contact Country: County Name: SAN BERNARDINO EPA Region: 09 Land Type: Receive Date: 20060526						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Violation/Evaluation Summary

Note: NO RECORDS: As of May 2020, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20060526
Handler Name: RV SUPPLY CENTER INC
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	Street No:	
Type:	Other	Street 1:	8893 THREE FLAGS AVE STE B
Name:	MARK BOESCH	Street 2:	
Date Became Current:		City:	OAK HILLS
Date Ended Current:		State:	CA
Phone:	760-949-1222	Country:	
Source Type:	Implementer	Zip Code:	92344
Owner/Operator Ind:	Current Owner	Street No:	
Type:	Other	Street 1:	8893 THREE FLAGS AVE STE B
Name:	RV SUPPLY CENTER INC	Street 2:	
Date Became Current:		City:	OAK HILLS
Date Ended Current:		State:	CA
Phone:	760-949-1222	Country:	
Source Type:	Implementer	Zip Code:	92344-0000

7	1 of 1	SW	0.42 / 2,225.97	3,659.32 / 58	TIMOTHY LANE 8685 US HIGHWAY 395 HESPERIA CA 92345	LUST
Global ID:	T0607100957			County:	SAN BERNARDINO	
Status:	COMPLETED - CASE CLOSED			Latitude:	34.409644	
Status Date:	7/1/1999			Longitude:	-117.3991616	
Case Type:	LUST CLEANUP SITE					
Date Source:	LUST Cleanup Sites from GeoTracker Search; LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download					

LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download - Facilities Detail

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
RB Case No:	6B3600962T				Potential COC:	Gasoline
Local Case No:					How Discovered:	Other Means
Begin Date:	6/21/1999				Stop Method:	
Lead Agency:	HESPERIA, CITY OF				Stop Description:	
Local Agency:	SAN BERNARDINO COUNTY				Case Worker:	
CUF Case:	NO				File Location:	
Potential Media of Concern:	Soil					
How Discovered Description:						
Calwater Watershed Name:	Mojave - Upper Mojave (628.20)					
DWR GW Subbasin Name:	Upper Mojave River Valley (6-042)					
Disadvantaged Community:						
Site History:						

Regulatory Activity

Action Type: Other
Date : 7/1/1999
Action: Leak Reported

Action Type: Other
Date : 7/1/1999
Action: Leak Stopped

Action Type: Other
Date : 6/21/1999
Action: Leak Discovery

Regulatory Contacts

Contact Type: Local Agency Caseworker
Contact Name: JACKSON CRUTSINGER
City: SAN BERNARDINO
Organization Name: SAN BERNARDINO COUNTY

Address: 620 SOUTH E STREET
Email: jcrutsinger@sbcfire.org
Phone No:

Contact Type: Regional Board Caseworker
Contact Name: JEHIEL CASS
City: VICTORVILLE
Organization Name: LAHONTAN RWQCB (REGION 6V)

Address: 15095 Armagosa Road, Building 2, Suite 210
Email: jehiel.cass@waterboards.ca.gov
Phone No: 7602412434

Status History

Status: Completed - Case Closed
Status Date: 7/1/1999

Status: Open - Case Begin Date
Status Date: 6/21/1999

LUST Sites from GeoTracker Search - Regulatory Profile (as of Feb 24, 2020)

Site Facility Name: TIMOTHY LANE
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED

Potential COC: GASOLINE
Facility Type:
Composting Method:
Address: 8685 US HIGHWAY 395
City: HESPERIA
Zip: 92345
County: SAN BERNARDINO
CUF Claim:

Project Status:
WDR Place Type:
WDR File:
WDR Order:
CUF Priority Assig:
CUF Amount Paid:
File Location:

Designated Beneficial Use: MUN, AGR, IND, FRSH, AQUA

Project Oversight Agencies:

Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0607100957

Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 7/1/1999

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Cleanup History Link:		https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0607100957&tabname=regulatoryhistory				
Potential Media of Concern:		SOIL				
User Defined Beneficial Use:						
DWR GW Sub Basin:		Upper Mojave River Valley (6-042)				
Calwater Watershed Name:		Mojave - Upper Mojave (628.20)				
Post Closure Site Management:						
Future Land Use:						
Cleanup Oversight Agencies:		HESPERIA, CITY OF (LEAD) LAHONTAN RWQCB (REGION 6V) - CASE #: 6B3600962T CASEWORKER: JEHIEL CASS				
Gndwater Monitoring Freque:						
Designated Beneficial Use Desc:		Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Freshwater Replenishment, AQUA				
Site History:						
No site history available						

LUST Sites from GeoTracker Search - Cleanup Status History (as of Feb 24, 2020)

Status:	Completed - Case Closed
Date :	7/1/1999
Status:	Open - Case Begin Date
Date :	6/21/1999

LUST Sites from GeoTracker Search - Regulatory Activities (as of Feb 24, 2020)

Action Type:	Leak Action
Action Date:	7/1/1999
Received Issue Date:	
Action:	Leak Stopped
Doc Link:	
Title Description Comments:	
Action Type:	Leak Action
Action Date:	7/1/1999
Received Issue Date:	
Action:	Leak Reported
Doc Link:	
Title Description Comments:	
Action Type:	Leak Action
Action Date:	6/21/1999
Received Issue Date:	
Action:	Leak Discovery
Doc Link:	
Title Description Comments:	

8	1 of 2	ESE	0.47 / 2,488.33	3,582.84 / -18	NEW MESQUITE TRAILS WEST ELEMENTARY SCHOOL 12850 MUSCATEL STREET HESPERIA CA 92345	SCH
Estor/EPA ID:		70000125	Permit Renewal Lead:			
Site Code:		404669	Project Manager:			
Nat Priority List:		NO	Supervisor: SHAHIR HADDAD			
Acres:		7 ACRES	Public Partici Spclst:			
Special Program:			Census Tract: 6071010017			
Funding:		SCHOOL DISTRICT	County: SAN BERNARDINO			
Assembly District:		33	Latitude: 34.4139790415062			
Senate District:		21	Longitude: -117.382682081209			
School District:		HESPERIA UNIFIED SCHOOL DISTRICT				
APN:		3064-631-07				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

Cleanup Status: NO ACTION REQUIRED AS OF 11/16/2005
Cleanup Oversight Agencies: DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY
Site Type: SCHOOL
Office: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
Past Use that Caused Contam: NONE
Potential Media Affected: NO MEDIA AFFECTED
Potential Contamin of Concern:

NO CONTAMINANTS FOUND

SITE HISTORY:

The site is in a an area of mixed residential and undeveloped land. An existing school consisting of modular buildings occupies the site. A retention basin is in one portion that recieves on site runoff. A previous Phase I was submitted that included a dry wash area. Based on the site visit, the retention basin does not pose a problem for a no action.

Status: NO ACTION REQUIRED
Program Type: SCHOOL EVALUATION
CalEnviroScreen Score: 56-60%
Summary Link: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=70000125

Completed Activities

Title: Phase 1 Environmental Site Assessment New Mesquite Trails West ES Site (URS 11/3)
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=70000125&doc_id=6008733
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Phase 1
Date Completed: 11/16/2005
Comments: Phase I review complete.

8	2 of 2	ESE	0.47 / 2,488.33	3,582.84 / -18	NEW MESQUITE TRAILS WEST ELEMENTARY SCHOOL 12850 MUSCATEL STREET HESPERIA CA 92345	ENVIROSTOR
-------------------	--------	-----	--------------------	-------------------	---	------------

Estor/EPA ID:	70000125	Assembly District:	33
Site Code:	404669	Senate District:	21
Nat Priority List:	NO	Permit Renewal Lead:	
APN:	3064-631-07	Public Partici Spclst:	
Census Tract:	6071010017	Project Manager:	
Site Type:	SCHOOL	County:	SAN BERNARDINO
Address Description:	12850 MUSCATEL STREET	Latitude:	34.4139790415062
Office:	SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH	Longitude:	-117.382682081209
Special Program:		Acres:	7 ACRES
Funding:	SCHOOL DISTRICT	Supervisor:	SHAHIR HADDAD
Cleanup Status:	NO ACTION REQUIRED AS OF 11/16/2005		
Cleanup Oversight Agencies:	DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY		
School District:	HESPERIA UNIFIED SCHOOL DISTRICT		
Past Use that Caused Contam:	NONE		
Potential Media Affected:	NO MEDIA AFFECTED		
Potential Contamin of Concern:			

NO CONTAMINANTS FOUND

Site History:

The site is in a an area of mixed residential and undeveloped land. An existing school consisting of modular buildings occupies the site. A retention basin is in one portion that recieves on site runoff. A previous Phase I was submitted that included a dry wash area. Based on the site visit, the retention basin does not pose a problem for a no action.

Status: NO ACTION REQUIRED
A2 Program Type: SCHOOL EVALUATION

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
---------	-------------------	-----------	------------------	----------------	------	----

CalEnviroScreen Score:	56-60%
Summary Link:	http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=70000125

Completed Activities

Title:	Phase 1 Environmental Site Assessment New Mesquite Trails West ES Site (URS 11/3)
Title Link:	http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=70000125&doc_id=6008733
Area Name:	
Area Link:	
Sub Area:	
Sub Area Link:	
Document Type:	Phase 1
Date Completed:	11/16/2005
Comments:	Phase I review complete.

9	1 of 2	ESE	0.60 / 3,177.40	3,597.76 / -3	MESQUITE TRAILS WEST SCHOOL SITE MUSCATEL ROAD/COYOTE TRAIL HESPERIA CA 92345	SCH
-------------------	--------	-----	-----------------	---------------	---	-----

Estor/EPA ID:	36820003	Permit Renewal Lead:	
Site Code:	404588	Project Manager:	AMIT PATHAK
Nat Priority List:	NO	Supervisor:	SHAHIR HADDAD
Acres:	20 ACRES	Public Partici Spclst:	
Special Program:		Census Tract:	6071010017
Funding:	SCHOOL DISTRICT	County:	SAN BERNARDINO
Assembly District:	33	Latitude:	34.412056
Senate District:	21	Longitude:	-117.381167
School District:	HESPERIA UNIFIED SCHOOL DISTRICT		
APN:	NONE SPECIFIED		
Cleanup Status:	NO ACTION REQUIRED AS OF 6/6/2006		
Cleanup Oversight Agencies:	DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY		
Site Type:	SCHOOL		
Office:	SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH		
Past Use that Caused Contam:	EDUCATIONAL SERVICES		
Potential Media Affected:	NO MEDIA AFFECTED		
Potential Contamin of Concern:			

NO CONTAMINANTS FOUND

SITE HISTORY:

The site is currently occupied by the Sheryl Malone Educational Park Facilities for California Charter Academies. The site is an inactive school consisting of single story individual modular classroom buildings occupying the 7-acre triangular shaped southeast portion of the 20-acre land parcel. The school was constructed in 2002. The site is located within a vacant residential desert land community with one existing single family residence across the site. The existing school is on an elevated pad relative to the surrounding adjacent properties. A parking lot is in the southern portion and two basketball courts are built in the north-central portion of the property. The entire school site is enclosed with a chainlink fence, iron fence and a gate in front. The rear apex of the school site is an existing detention basin enclosed with a chainlink fence. RESUBMITTED IN A REVISED PHASE I NOVEMBER 2005

Status:	NO ACTION REQUIRED
Program Type:	SCHOOL EVALUATION
CalEnviroScreen Score:	56-60%
Summary Link:	http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=36820003

Completed Activities

Title:	Phase 1
Title Link:	http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=36820003&doc_id=6005086
Area Name:	
Area Link:	
Sub Area:	
Sub Area Link:	
Document Type:	Phase 1
Date Completed:	2/7/2005

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Comments:						
9	2 of 2	ESE	0.60 / 3,177.40	3,597.76 / -3	MESQUITE TRAILS WEST SCHOOL SITE MUSCATEL ROAD/COYOTE TRAIL HESPERIA CA 92345	ENVIROSTOR
Estor/EPA ID:		36820003		Assembly District:		33
Site Code:		404588		Senate District:		21
Nat Priority List:		NO		Permit Renewal Lead:		
APN:		NONE SPECIFIED		Public Partici Spclst:		
Census Tract:		6071010017		Project Manager:		AMIT PATHAK
Site Type:		SCHOOL		County:		SAN BERNARDINO
Address Description:		MUSCATEL ROAD/COYOTE TRAIL		Latitude:		34.412056
Office:		SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH		Longitude:		-117.381167
Special Program:				Acres:		20 ACRES
Funding:		SCHOOL DISTRICT		Supervisor:		SHAHIR HADDAD
Cleanup Status:		NO ACTION REQUIRED AS OF 6/6/2006				
Cleanup Oversight Agencies:		DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY				
School District:		HESPERIA UNIFIED SCHOOL DISTRICT				
Past Use that Caused Contam:		EDUCATIONAL SERVICES				
Potential Media Affected:		NO MEDIA AFFECTED				
Potential Contamin of Concern:						
NO CONTAMINANTS FOUND						
Site History:						
The site is currently occupied by the Sheryl Malone Educational Park Facilities for California Charter Academies. The site is an inactive school consisting of single story individual modular classroom buildings occupying the 7-acre triangular shaped southeast portion of the 20-acre land parcel. The school was constructed in 2002. The site is located within a vacant residential desert land community with one existing single family residence across the site. The existing school is on an elevated pad relative to the surrounding adjacent properties. A parking lot is in the southern portion and two basketball courts are built in the north-central portion of the property. The entire school site is enclosed with a chainlink fence, iron fence and a gate in front. The rear apex of the school site is an existing detention basin enclosed with a chainlink fence. RESUBMITTED IN A REVISED PHASE I NOVEMBER 2005						
Status:		NO ACTION REQUIRED				
A2 Program Type:		SCHOOL EVALUATION				
CalEnviroScreen Score:		56-60%				
Summary Link:		http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=36820003				
Completed Activities						
Title:		Phase 1				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=36820003&doc_id=6005086				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Phase 1				
Date Completed:		2/7/2005				
Comments:						
10	1 of 2	ESE	0.63 / 3,301.76	3,596.86 / -4	MISSION CREST ELEMENTARY SCHOOL 13065 MUSCATEL STREET HESPERIA CA 92345	SCH
Estor/EPA ID:		70000075		Permit Renewal Lead:		
Site Code:		404658		Project Manager:		
Nat Priority List:		NO		Supervisor:		YOLANDA GARZA
Acres:		10 ACRES		Public Partici Spclst:		
Special Program:				Census Tract:		6071010017
Funding:		SCHOOL DISTRICT		County:		SAN BERNARDINO
Assembly District:		33		Latitude:		34.4119

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Senate District: School District: APN: Cleanup Status: Cleanup Oversight Agencies: Site Type: Office: Past Use that Caused Contam: Potential Media Affected: SITE HISTORY:	21				Longitude: -117.3808 HESPERIA UNIFIED SCHOOL DISTRICT 3046-011-01 NO ACTION REQUIRED AS OF 10/26/2005 DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY SCHOOL SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH NONE NO MEDIA AFFECTED	
The site occupies approximately 10 acres of graded land in an area of mixed residential and undeveloped land. The vicinity of the site is undergoing increased residential development and contains both unpaved and developed roadways. Potential Contamin of Concern: NO CONTAMINANTS FOUND Status: NO ACTION REQUIRED Program Type: SCHOOL EVALUATION CalEnviroScreen Score: 56-60% Summary Link: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=70000075 Completed Activities Title: Phase 1 Environmental Site Assessment Mission Crest Elementary School (URS Corporation 9/28/05) Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=70000075&doc_id=6008178 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Phase 1 Date Completed: 10/26/2005 Comments: Completed No Action.						
10	2 of 2	ESE	0.63 / 3,301.76	3,596.86 / -4	MISSION CREST ELEMENTARY SCHOOL 13065 MUSCATEL STREET HESPERIA CA 92345	ENVIROSTOR

Estor/EPA ID:	70000075	Assembly District:	33
Site Code:	404658	Senate District:	21
Nat Priority List:	NO	Permit Renewal Lead:	
APN:	3046-011-01	Public Partici Spclst:	
Census Tract:	6071010017	Project Manager:	
Site Type:	SCHOOL	County:	SAN BERNARDINO
Address Description:	13065 MUSCATEL STREET	Latitude:	34.4119
Office:	SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH	Longitude:	-117.3808
Special Program:		Acres:	10 ACRES
Funding:	SCHOOL DISTRICT	Supervisor:	YOLANDA GARZA
Cleanup Status:	NO ACTION REQUIRED AS OF 10/26/2005		
Cleanup Oversight Agencies:	DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY		
School District:	HESPERIA UNIFIED SCHOOL DISTRICT		
Past Use that Caused Contam:	NONE		
Potential Media Affected:	NO MEDIA AFFECTED		
Site History:			

The site occupies approximately 10 acres of graded land in an area of mixed residential and undeveloped land. The vicinity of the site is undergoing increased residential development and contains both unpaved and developed roadways.

Potential Contamin of Concern:

NO CONTAMINANTS FOUND

Status: NO ACTION REQUIRED

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
A2 Program Type:		SCHOOL EVALUATION				
CalEnviroScreen Score:		56-60%				
Summary Link:		http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=70000075				
<u>Completed Activities</u>						
Title:		Phase 1 Environmental Site Assessment Mission Crest Elementary School (URS Corporation 9/28/05)				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=70000075&doc_id=6008178				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Phase 1				
Date Completed:		10/26/2005				
Comments:		Completed No Action.				

Unplottable Summary

Total: 2 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
HMIRS		I-15 SB	SAN BERNARDINO CA		818151863
RCRA NON GEN	UPS FREIGHT	I-15 NORTH BOUND	PHELAN CA	92407	882464155
		<i>EPA Handler ID:</i> CAC003061675			

Unplottable Report

Site:

I-15 SB SAN BERNARDINO CA

HMIRS

Incident County:

SAN BERNARDINO

HMIR Incident Reports

Report No: I-2003121107
Report Type: A hazardous material incident
Date of Incident: 2003-08-06
Time of Incident: 1200
Haz Class Code:
Hazardous Class: 5.1
Commodity Short Nm: NICKEL NITRATE
Commodity Long Nm: NICKEL NITRATE
Trade Name:
ID No: UN2725
Haz Waste Ind: No
Haz Waste EPA No:
HMIS Tox Inhalation?: No
TIH Hazard Zone:
Qty Released: 1
Unit of Measure: Solid - Pound
What Failed: 103
What Failed Desc: Basic Material
How Failed Code: 310
How Failed Desc: Ripped or Torn
Failure Cause Code:
Failure Cause Desc:
Ident. Markings:
Cont1 Pkging Type:
Cont1 Const Mat:
Cont1 Head Type:
Cont1 Pkg Capacity: 46
C1 Capacity UOM: SLB
Cont1 Pkg Amt: 0
C1 Pkg Amt UOM:
Cont1 Pkg No: 910
C1 Pkg NO Failed: 1
Cont1 Pkg Mnfctr: NOT REPORTED BY CARRIER
Cont1 Pkg Mnfct Dt: 0-00-00 00:00:00
Cont1 Pkg Serial NO:
C1 Pkg Last Test Dt: 0-00-00 00:00:00
C1 Test Const Mat:
C1 Pkg Dsign Pres.: 0
C1 Dsign Press UOM:
C1 Pkg Shell Thick: 0
C1 Shell Thick UOM:
C1 Head Thickness: 0
C1 Head Thick UOM:
C1 Pkg Srvs Pres.: 0
C1 Srvs Press UOM:
C1 Valve/Device Fail?: No
C1 Device Type:
C1 Device Mnfctr:
C1 Device Model:
NRC No:

RAM Pkg Category:
RAM Pkg Cert.: FALSE

Fed DOT Agency Nm:
Fed DOT Report No:
Report Submit Src: Paper
Inc Multiple Rows: No
Inc Non US State:
Mode Transport: Highway
Transport Phase: In Transit
Incident Occrrnce:
Mat Ship Approval?: No
Mat Ship Approv No:
Undecl Hazmat Ship?: No
Packaging Type: Non-Bulk
Packing Group:
Carrier Reporter: C.R. ENGLAND, INC.
CR Street Name: 4701 W 2100 S
CR City: SALT LAKE CITY
CR State: UT
CR Postal Code: 84120-1223
CR Non US State:
CR Fed DOT ID: 28406
CR Hazmat Reg ID:
CR Country: US
Shipper Name: BORCHERS AMERICAS, INC.
Shipper Street Name: 240 TWO MILE RUN RD
Shipper City: FRANKLIN
Shipper State: PA
Shipper Postal: 16323-6250
Shipper Non US St:
Shipper Country: US
Shipper Waybill: 2883717
Ship Hazmat Reg ID:
Origin City: FRANKLIN
Origin State: PENNSYLVANIA
Origin Postal:
Origin Non US St:
Origin Country: US
Destination City: AZUSA
Destination State: CALIFORNIA
Destination Postal:
Destination Non US:
Destination Country: US
Cont2 Package Type:
Cont2 Const Mat:
Cont2 Pkg Capacity: 0
Cont2 Capacity UOM:
Cont2 Pkg Amount: 0
Cont2 Pkg Amt UOM:
Cont2 Pkg No: 0
Cont2 Pkg No Failed: 0

Haz NonHosp Public: 0
Haz NonHosp Old:

RAM Pkg Cert. NBR:		Tot Haz Non Hosp Inj:	
RAM Nuclide S:		Total Hazmat Injuries:	0
RAM Transport Index:		Evacuation Indicator:	No
RAM UOM:		Public Evacuated:	0
RAM Activity Rpted:	0	Employees Evac:	0
RAM UOM Rpted:		Total Evacuated:	0
RAM Activity:	0	Total Evacuation Hrs:	0
RAM Activity UOM:		Major Artery Closed:	No
RAM Mat Safety:		Mjr Artery Hrs Closed:	0
Spillage Result:	Yes	Material Involved:	No
Fire Result:	No	Estimated Speed:	3
Explosion Result:	No	Weather Conditions:	
Water Sewer Result:	No	Vehicle Overturn:	No
Gas Dispersion:	No	Vehicle Left Roadway:	No
Environment Damage:	No	Passenger Aircraft:	No
No Release Result:	No	Cargo Baggage:	
Fire EMS Report:	No	Ship Non Transport:	No
Fire EMS EMS Report:		Ship Air First Flight:	No
Police Report:	No	Ship Air Subflight:	No
Police Report No:		Ship Init Transport:	No
In House Cleanup:	No	Ship Phase Transfer:	No
Other Cleanup:	No	Contact Name:	MICHAEL PEDLES
Damage > 500:	No	Contact Title:	SAFETY MANAGER
Material Loss:	0	Contact Business:	
Carrier Damage:	0	Contact Street:	
Property Damage:	0	Contact City:	
Response Cost:	0	Contact State:	
Remediation Cost:	0	Contact Postal:	
Damage Old Form:	0	Contact Non US St:	
Total Damages Amt:	0	Contact Country:	US
Hazmat Fatality:	No	Inc. Report Prepared:	
Haz Fatal Employees:	0	HMIS Serious Incidnt:	No
Haz Fatal Respndrs:	0	HMIS Serious Fatality:	No
Haz Fatal Gen Public:	0	HMIS Serious Injury:	No
Tot Hazmat Fatalities:	0	HMIS Flight Plan:	No
Non Hazmat Fatality:	No	HMIS Serious Evacs:	No
Non Hazmat FataIs:	0	HMIS Major Artery:	No
Hazmat Injury:	No	HMIS Bulk Release:	No
Haz Hospital Empl:	0	HMIS Marine Pollutnt:	No
Haz Hospital Resp:	0	HMIS Radioactive:	No
Haz Hosp Gen Public:	0	HMIS Gen Pkg Type:	BAG
Haz Hosp Old Form:	0	HMIS Container Code:	BAG
Total Haz Hosp Inj:	0	HMIS Container Desc:	Bag, no description given
Haz Non Hosp Empl:	0	HMIS Bulk Incident:	No
Haz Non Hosp Resp:	0	Undeclared Shipment:	No
Description of Events:	CR ENGLAND VEHICLE PULLED INTO POE AND HAD A POWDER ON DOT BUMPER. FIRE DEPARTMENT CLEANED UP POWDER AND LET CR ENGLAND VEHICLE LEAVE.		
Recommend Actions Taken:			

Site: UPS FREIGHT
I-15 NORTH BOUND PHELAN CA 92407

RCRA NON GEN

EPA Handler ID: CAC003061675
Gen Status Universe: No Report
Contact Name: UPS FREIGHT
Contact Address: 1000 SEMMES AVE , , RICHMOND , VA, 23224-2265 ,
Contact Phone No and Ext: 804-231-8000
Contact Email: CANGUIANO@OCEAN-BLUE.COM
Contact Country:
County Name: SAN BERNARDINO
EPA Region: 09
Land Type:
Receive Date: 20200330

Violation/Evaluation Summary

Note: NO RECORDS: As of May 2020, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20200330
Handler Name: UPS FREIGHT
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: UPS FREIGHT
Date Became Current:
Date Ended Current:
Phone: 804-231-8000
Source Type: Implementer

Street No:
Street 1: 1000 SEMMES AVE
Street 2:
City: RICHMOND
State: VA
Country:
Zip Code: 23224-2265

Owner/Operator Ind: Current Operator
Type: Other
Name: UPS FREIGHT
Date Became Current:
Date Ended Current:
Phone: 804-231-8000
Source Type: Implementer

Street No:
Street 1: 1000 SEMMES AVE
Street 2:
City: RICHMOND
State: VA
Country:
Zip Code: 23224-2265

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

Facility Response Plan:

FRP

List of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Mar 26, 2020

National Priority List:

NPL

National Priorities List (Superfund)-NPL: EPA's (United States Environmental Protection Agency) list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action.

Government Publication Date: Jun 26, 2020

National Priority List - Proposed:

PROPOSED NPL

Includes sites proposed (by the EPA, the state, or concerned citizens) for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.

Government Publication Date: Jun 26, 2020

Deleted NPL:

DELETED NPL

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Government Publication Date: Jun 26, 2020

SEMS List 8R Active Site Inventory:

SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: May 22, 2020

Inventory of Open Dumps, June 1985:

ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites:[SEMS ARCHIVE](#)

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: May 22, 2020

Comprehensive Environmental Response, Compensation and Liability Information System -[CERCLIS](#)**CERCLIS:**

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands:[IODI](#)

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned:[CERCLIS NFRAP](#)

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens:[CERCLIS LIENS](#)

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action:[RCRA CORRACTS](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Jul 27, 2020

RCRA non-CORRACTS TSD Facilities:[RCRA TSD](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Jul 27, 2020

RCRA Generator List:[RCRA LQG](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Jul 27, 2020

RCRA Small Quantity Generators List:

RCRA SQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Jul 27, 2020

RCRA Conditionally Exempt and Very Small Quantity Generators List:

RCRA CESQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Conditionally Exempt and Very Small Quantity Generators (VSQG and CESQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG and CESQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Jul 27, 2020

RCRA Non-Generators:

RCRA NON GEN

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Jul 27, 2020

Federal Engineering Controls-ECs:

FED ENG

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Aug 26, 2020

Federal Institutional Controls- ICs:

FED INST

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: Aug 26, 2020

Emergency Response Notification System:

ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System:

ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System:

ERNS

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Nov 25, 2019

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database:

[FED BROWNFIELDS](#)

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Sep 3, 2019

FEMA Underground Storage Tank Listing:

[FEMA UST](#)

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Petroleum Refineries:

[REFN](#)

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Jul 10, 2020

Petroleum Product and Crude Oil Rail Terminals:

[BULK TERMINAL](#)

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Apr 28, 2020

LIEN on Property:

[SEMS LIEN](#)

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

Government Publication Date: May 22, 2020

Superfund Decision Documents:

[SUPERFUND ROD](#)

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

Government Publication Date: Jun 26, 2020

State

State Response Sites:

[RESPONSE](#)

A list of identified confirmed release sites where the Department of Toxic Substances Control (DTSC) is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. This database is state equivalent NPL.

Government Publication Date: Oct 5, 2020

EnviroStor Database:

[ENVIROSTOR](#)

The EnviroStor Data Management System is made available by the Department of Toxic Substances Control (DTSC). Includes Corrective Action sites, Tiered Permit sites, Historical Sites and Evaluation/Investigation sites. This database is state equivalent CERCLIS.

Government Publication Date: Oct 5, 2020

Delisted State Response Sites:

[DELISTED ENVS](#)

Sites removed from the list of State Response Sites made available by the EnviroStor Data Management System, Department of Toxic Substances Control (DTSC).

Government Publication Date: Oct 5, 2020

Solid Waste Information System (SWIS):

[SWF/LF](#)

The Solid Waste Information System (SWIS) database made available by the Department of Resources Recycling and Recovery (CalRecycle) contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

Government Publication Date: May 1, 2020

EnviroStor Hazardous Waste Facilities:

HWP

A list of hazardous waste facilities including permitted, post-closure and historical facilities found in the Department of Toxic Substances Control (DTSC) EnviroStor database.

Government Publication Date: Oct 5, 2020

Sites Listed in the Solid Waste Assessment Test (SWAT) Program Report:

SWAT

In a 1993 Memorandum of Understanding, the State Water Resources Control Board (SWRCB) agreed to submit a comprehensive report on the Solid Waste Assessment Test (SWAT) Program to the California Integrated Waste Management Board (CIWMB). This report summarizes the work completed to date on the SWAT Program, and addresses both the impacts that leakage from solid waste disposal sites (SWDS) may have upon waters of the State and the actions taken to address such leakage.

Government Publication Date: Dec 31, 1995

Land Disposal Sites:

LDS

Land Disposal Sites in GeoTracker, the State Water Resources Control Board (SWRCB)'s data management system. The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units. Waste management units include waste piles, surface impoundments, and landfills.

Government Publication Date: Jul 15, 2020

Leaking Underground Fuel Tank Reports:

LUST

List of Leaking Underground Storage Tanks within the Cleanup Sites data in GeoTracker database. GeoTracker is the State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense and Site Cleanup Program) as well as permitted facilities such as operating Underground Storage Tanks. The Leak Prevention Program that overlooks LUST sites is the SWRCB in California's Environmental Protection Agency.

Government Publication Date: Jul 15, 2020

Delisted Leaking Storage Tanks:

DELISTED LST

List of Leaking Underground Storage Tanks (LUST) cleanup sites removed from GeoTracker, the State Water Resources Control Board (SWRCB)'s database system, as well as sites removed from the SWRCB's list of UST Case closures.

Government Publication Date: Jul 15, 2020

Solid Waste Disposal Sites with Waste Constituents Above Hazardous Waste Levels:

SWRCB SWF

This is a list of solid waste disposal sites identified by California State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit.

Government Publication Date: Sep 20, 2006

Permitted Underground Storage Tank (UST) in GeoTracker:

UST

List of Permitted Underground Storage Tank (UST) sites made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA).

Government Publication Date: Jul 12, 2020

Proposed Closure of Underground Storage Tank Cases:

UST CLOSURE

List of UST cases that are being considered for closure by either the California Environmental Protection Agency, State Water Resources Control Board or the Executive Director that have been posted for a 60-day public comment period.

Government Publication Date: Jul 7, 2020

Historical Hazardous Substance Storage Information Database:

HHSS

The Historical Hazardous Substance Storage database contains information collected in the 1980s from facilities that stored hazardous substances. The information was originally collected on paper forms, was later transferred to microfiche, and recently indexed as a searchable database. When using this database, please be aware that it is based upon self-reported information submitted by facilities which has not been independently verified. It is unlikely that every facility responded to the survey and the database should not be expected to be a complete inventory of all facilities that were operating at that time. This database is maintained by the California State Water Resources Control Board's (SWRCB) Geotracker.

Government Publication Date: Aug 27, 2015

Aboveground Storage Tanks:

AST

A statewide list from 2009 of aboveground storage tanks (ASTs) made available by the Cal FIRE Office of the State Fire Marshal (OSFM). This list is no longer maintained or updated by the Cal FIRE OSFM.

Government Publication Date: Aug 31, 2009

Oil and Gas Facility Tanks:

TANK OIL GAS

Locations of oil and gas tanks that fall under the jurisdiction of the Geologic Energy Management Division of the California Department of Conservation (CalGEM) (CCR 1760). CalGEM was formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR).

Government Publication Date: Jul 21, 2020

Delisted Storage Tanks:

DELISTED TNK

This database contains a list of storage tank sites that were removed by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA) and the Cal FIRE Office of State Fire Marshal (OSFM).

Government Publication Date: Sep 15, 2020

California Environmental Reporting System (CERS) Tanks:

CERS TANK

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Aug 7, 2020

Site Mitigation and Brownfields Reuse Program Facility Sites with Land Use Restrictions:

LUR

The Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents land use restrictions that are active. Some sites have multiple land use restrictions.

Government Publication Date: Oct 5, 2020

Hazardous Waste Management Program Facility Sites with Deed / Land Use Restrictions:

HLUR

The Department of Toxic Substances Control (DTSC) Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Government Publication Date: Apr 8, 2020

Deed Restrictions and Land Use Restrictions:

DEED

List of Deed Restrictions, Land Use Restrictions and Covenants in GeoTracker made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency. A deed restriction (land use covenant) may be required to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

Government Publication Date: Jul 15, 2020

Voluntary Cleanup Program:

VCP

List of sites in the Voluntary Cleanup Program made available by the Department of Toxic Substances and Control (DTSC). The Voluntary Cleanup Program was designed to respond to lower priority sites. Under the Voluntary Cleanup Program, DTSC enters site-specific agreements with project proponents for DTSC oversight of site assessment, investigation, and/or removal or remediation activities, and the project proponents agree to pay DTSC's reasonable costs for those services.

Government Publication Date: Oct 5, 2020

GeoTracker Cleanup Program Sites:

CLEANUP SITES

A list of Cleanup Program sites in the state of California made available by The State Water Resources Control Board (SWRCB) of the California Environmental Protection Agency (EPA). SWRCB tracks leaking underground storage tank cleanups as well as other water board cleanups.

Government Publication Date: Jul 15, 2020

Delisted County Records:

DELISTED COUNTY

Records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Oct 5, 2020

Delisted California Environmental Reporting System (CERS) Tanks:[DELISTED CTNK](#)

This database contains a list of Aboveground Petroleum Storage and Underground Storage Tank sites that were removed from in the California Environmental Protection Agency (CalEPA) Regulated Site Portal.

Government Publication Date: Aug 7, 2020

Historical Hazardous Substance Storage Container Information - Facility Summary:[HIST TANK](#)

The State Water Resources Control Board maintained the Hazardous Substance Storage Containers listing and inventory in the 1980s. This facility summary lists historic tank sites where the following container types were present: farm motor vehicle fuel tanks; waste tanks; sumps; pits, ponds, lagoons, and others; and all other product tanks. This set, published in May 1988, lists facility and owner information, as well as the number of containers. This data is historic and will not be updated.

Government Publication Date: May 27, 1988

Tribal**Leaking Underground Storage Tanks (LUSTs) on Indian Lands:**[INDIAN LUST](#)

LUSTs on Tribal/Indian Lands in Region 9, which includes California.

Government Publication Date: Apr 8, 2020

Underground Storage Tanks (USTs) on Indian Lands:[INDIAN UST](#)

USTs on Tribal/Indian Lands in Region 9, which includes California.

Government Publication Date: Apr 8, 2020

Delisted Tribal Leaking Storage Tanks:[DELISTED ILST](#)

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

Government Publication Date: Apr 14, 2020

Delisted Tribal Underground Storage Tanks:[DELISTED IUST](#)

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

Government Publication Date: Apr 14, 2020

County**San Bernardino County - CUPA List:**[SANBERN CUPA](#)

A list of facilities associated with various Certified Unified Program Agency (CUPA) programs in San Bernardino County. This list is made available by San Bernardino County Fire Department which is the CUPA for all areas of the County except the city of Victorville.

Government Publication Date: Apr 29, 2020

Additional Environmental Record Sources**Federal****PFOA/PFOS Contaminated Sites:**[PFAS NPL](#)

List of sites where PFOA or PFOS contaminants have been found in drinking water or soil. Made available by the Federal Environmental Protection Agency (EPA).

Government Publication Date: Jul 7, 2020

Facility Registry Service/Facility Index:[FINDS/FRS](#)

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Jun 15, 2020

Toxics Release Inventory (TRI) Program:

TRIS

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: Feb 19, 2020

Perfluorinated Alkyl Substances (PFAS) Releases:

PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.

Government Publication Date: Feb 19, 2020

Perfluorinated Alkyl Substances (PFAS) Water Quality:

PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

Government Publication Date: Jul 20, 2020

Hazardous Materials Information Reporting System:

HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Jan 8, 2020

National Clandestine Drug Labs:

NCDL

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Mar 19, 2020

Toxic Substances Control Act:

TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

Government Publication Date: Apr 11, 2019

Hist TSCA:

HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing:

FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing:

FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Potentially Responsible Parties List:

PRP

Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.

Government Publication Date: Jul 29, 2020

State Coalition for Remediation of Drycleaners Listing:

SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS):

ICIS

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.

Government Publication Date: Nov 18, 2016

Drycleaner Facilities:

FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) online search. The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: Jan 20, 2020

Delisted Drycleaner Facilities:

DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: Jan 20, 2020

Formerly Used Defense Sites:

FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

Government Publication Date: Jan 28, 2020

PHMSA Pipeline Safety Flagged Incidents:

PIPELINE INCIDENT

A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.

Government Publication Date: Jul 7, 2020

Material Licensing Tracking System (MLTS):

MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: Aug 5, 2020

Historic Material Licensing Tracking System (MLTS) sites:

HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File:

MINES

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

Government Publication Date: May 1, 2020

Alternative Fueling Stations:[ALT FUELS](#)

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: Sep 24, 2020

Registered Pesticide Establishments:[SSTS](#)

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

Government Publication Date: Mar 31, 2020

Polychlorinated Biphenyl (PCB) Notifiers:[PCB](#)

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Oct 9, 2019

State**Dry Cleaning Facilities:**[DRYCLEANERS](#)

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial, linen supply, commercial laundry, dry cleaning and pressing machines - Coin Operated Laundry and Dry Cleaning. This is provided by the Department of Toxic Substance Control.

Government Publication Date: Aug 12, 2020

Delisted Drycleaners:[DELISTED DRYCLEANERS](#)

Sites removed from the list of drycleaner related facilities that have EPA ID numbers, made available by the California Department of Toxic Substance Control.

Government Publication Date: Aug 12, 2020

Non-Toxic Dry Cleaning Incentive Program:[DRYC GRANT](#)

A list of grant recipients of the Non-Toxic Dry Cleaning Incentive Program made available by the California Air Resources Board (CARB). The program provides grants to eligible dry cleaning businesses to assist them in transitioning away from PERC machines to alternative non-toxic and non-smog forming technologies.

Government Publication Date: Feb 28, 2018

Per- and Polyfluoroalkyl Substances (PFAS):[PFAS](#)

List of sites from the State Water Resources Control Board (SWRCB)'s GeoTracker at which one or more of the potential contaminants of concern are in the PFAS Master List of PFAS Substances made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Jul 15, 2020

PFOA/PFOS Groundwater:[PFAS GW](#)

A list of water wells from the Groundwater Ambient Monitoring and Assessment Program (GAMA) Groundwater Information System with the groundwater chemical perfluorooctanoic acid (PFOA) (NL = 0.014 UG/L) or perfluorooctanoic sulfonate (PFOS) (NL = 0.013 UG/L). The GAMA Groundwater Information System search is made available by California Water Boards.

Government Publication Date: Jul 28, 2020

Hazardous Waste and Substances Site List - Site Cleanup:[HWSS CLEANUP](#)

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. This list is published by California Department of Toxic Substance Control.

Government Publication Date: Aug 19, 2020

List of Hazardous Waste Facilities Subject to Corrective Action:

DTSC HWF

This is a list of hazardous waste facilities identified in Health and Safety Code (HSC) § 25187.5. These facilities are those where Department of Toxic Substances Control (DTSC) has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.

Government Publication Date: Jul 18, 2016

EnviroStor Inspection, Compliance, and Enforcement:

INSP COMP ENF

A list of permitted facilities with inspections and enforcements tracked in the Department of Toxic Substance Control (DTSC) EnviroStor.

Government Publication Date: Jul 20, 2020

School Property Evaluation Program Sites:

SCH

A list of sites registered with The Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup (SPEC) Division. SPEC is responsible for assessing, investigating and cleaning up proposed school sites. The Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school.

Government Publication Date: Oct 5, 2020

California Hazardous Material Incident Report System (CHMIRS):

CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS). This list has been made available by the California Office of Emergency Services (OES).

Government Publication Date: Jul 22, 2020

Hazardous Waste Manifest Data:

HAZNET

A list of hazardous waste manifests received each year by Department of Toxic Substances Control (DTSC). The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.

Government Publication Date: Oct 24, 2016

Historical California Hazardous Material Incident Report System (CHMIRS):

HIST CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS) prior to 1993. This list has been made available by the California Office of Emergency Services (OES).

Government Publication Date: Jan 1, 1993

Historical Hazardous Waste Manifest Data:

HIST MANIFEST

A list of historic hazardous waste manifests received by the Department of Toxic Substances Control (DTSC) from year the 1980 to 1992. The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.

Government Publication Date: Dec 31, 1992

Historical Cortese List:

HIST CORTESE

List of sites which were once included on the Cortese list. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements for providing information about the location of hazardous sites.

Government Publication Date: Nov 13, 2008

Cease and Desist Orders and Cleanup and Abatement Orders:

CDO/CAO

The California Environment Protection Agency "Cortese List" of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO). This list contains many CDOs and CAOs that do NOT concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water Boards' database does not distinguish between these types of orders.

Government Publication Date: Feb 16, 2012

California Environmental Reporting System (CERS) Hazardous Waste Sites:

CERS HAZ

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Aug 7, 2020

Delisted Environmental Reporting System (CERS) Hazardous Waste Sites:[DELISTED HAZ](#)

This database contains a list of sites that were removed from the California Environmental Protection Agency (CalEPA) in the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator.

Government Publication Date: Nov 29, 2018

Sites in GeoTracker:[GEOTRACKER](#)

GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. This is a list of sites in GeoTracker that aren't otherwise categorized as LUST, Land Disposal Sites (LDS), Cleanup Sites, or sites having Waste Discharge Requirements (WDR). This listing includes program types such as Underground Injection Control (UIC), Confined Animal Facilities (CAF), Irrigated Lands Regulatory Program, plans, and non-case information.

Government Publication Date: Jul 15, 2020

Waste Discharge Requirements:[WASTE DISCHG](#)

List of sites in California State Water Resources Control Board (SWRCB) Waste Discharge Requirements (WDRs) Program in California, made available by the SWRCB via GeoTracker. The WDR program regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Government Publication Date: Jul 15, 2020

Toxic Pollutant Emissions Facilities:[EMISSIONS](#)

A list of criteria and toxic pollutant emissions data for facilities in California made available by the California Environmental Protection Agency - Air Resources Board (ARB). Risk data may be based on previous inventory submittals. The toxics data are submitted to the ARB by the local air districts as requirement of the Air Toxics "Hot Spots" Program. This program requires emission inventory updates every four years.

Government Publication Date: Dec 31, 2018

Clandestine Drug Lab Sites:[CDL](#)

The Department of Toxic Substances Control (DTSC) maintains a listing of drug lab sites. DTSC is responsible for removal and disposal of hazardous substances discovered by law enforcement officials while investigating illegal/ clandestine drug laboratories.

Government Publication Date: Jun 30, 2018

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental databases were selected to be included in the search.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

7.3 Interview Record Attachments – Records of Communication

Record of Communication

Property Name	17.87 Acre Tract (Undeveloped)
Street Address	Tracts 3 & 4 Poplar & Mesa Linda Streets Hesperia, San Bernardino County, CA 92344

Assessor's Office	See attached property information
Account #	
Legal Description	
Current Owners	
Comments:	

Zoning Department	
Contact Method:	☐ Telephone ☒ Online Open Records Request/Email ☒ Online Research - Website: https://www.cityofhesperia.us/
Contact Name/ Email Address:	ORR submitted, response pending...
Phone:	ORR submitted, response pending...
Zoning Designation	Regional Commercial (RC)
Outstanding Zoning Violations	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Acceptable Use	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
What is the required Parking Ratio	N/A
Comments:	ORR submitted, response pending...

Building Department	
Contact Method:	☐ Telephone ☒ Online Open Records Request/Email ☐ Online Research
Contact Name/ Email Address:	ORR submitted, response pending...
Phone:	ORR submitted, response pending...
Construction Year:	ORR submitted, response pending...
Building(s) have a valid Certificate of Occupancy?	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Open Permits or Outstanding Violations	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Demolition Permits:	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Permits for AST/UST:	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Permits for Septic Systems:	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Comments:	ORR submitted, response pending...

Fire Dept.	
Contact Method:	☐ Telephone ☒ Online Open Records Request/Email ☐ Online Research
Contact Name/ Email Address:	ORR submitted, response pending...
Phone:	ORR submitted, response pending...
Records of ASTs/USTs	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Records of Hazardous Materials	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Records of Spills	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Department Inspector Name:	N/A
Date of Last Inspection	N/A
Outstanding Code Violations	☐ Yes ☐ No ☐ Response Pending ☒ Not Applicable
Comments:	No responsive records reported.

Code Enforcement Dept.	
Contact Method:	☐ Telephone ☐ Online Open Records Request/Email ☐ Online Research
Contact Name/ Email Address:	N/A
Phone:	N/A
Department Inspector Name:	N/A
Date of Last Inspection:	N/A
Date of Next Schedule Inspection:	N/A
Outstanding Violations	☐ Yes ☒ No ☐ Response Pending ☒ Not Applicable
Comments:	N/A

Env't'l Services Dept.	
Contact Method:	☐ Telephone ☒ Online Open Records Request/Email ☐ Online Research
Contact Name/ Email Address:	ORR submitted, response pending...
Phone:	ORR submitted, response pending...
Records of Water Wells	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Records of AST/UST	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Record of Septic Systems	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Records of Spills	☐ Yes ☐ No ☒ Response Pending ☐ Not Applicable
Comments:	ORR submitted, response pending...

Water Dept.	
Contact Method:	☐ Telephone ☐ Online Open Records Request/Email ☒ Online Research - Website: https://www.cityofhesperia.us/
Contact Name/ Email Address:	N/A
Phone:	N/A
Water Supply Source	N/A
Within EPA guidelines?	N/A
Comments:	None

7.4 Site Reconnaissance & Investigation

Category	Attached	Not Applicable
7.4.1 Reporting/Notification Forms		X
7.4.2 Permits		X
7.4.3 Asbestos Survey Results		X
7.4.4 Lead-Based Paint Survey Results		X
7.4.5 Radon Survey Results		X
7.4.6 Lead in Drinking Water Survey Results		X
7.4.7 UST Test		X
7.4.8 Correction Action Plans		X
7.4.9 Reference Documents		X
7.4.10 Other Information (prior ESAs)		X

7.5 Certifications

Category	Attached	Not Applicable
7.5.1 Certification/Qualifications	X	
7.5.2 Sampling/Testing Certifications		X

Daniel Weis

Education

B.A. University of Delaware, 1995

M.S. Public Health, San Diego State University, 1999

Registration

California Registered Environmental Health Specialist

Experience

23 Years

Areas of Specialization

Environmental Due Diligence

Subsurface Assessments

Vapor Intrusion and Risk Assessment

Site Development

Mitigation and Remediation

Indoor Air Quality

Project Management

Expert Witness Testimony

Tonya L. Golden

Education

B.S. Environmental Science, Creighton University, Omaha, Nebraska
Specialization Environmental Pollution, 1995

Registrations

AHERA Accredited Asbestos Inspector, 1996-Current
AHERA Accredited Asbestos Management Planner, 2003-Current
Laws, Rules & Regulations Governing Asbestos Projects, 1997-Current
First Aid/CPR, American Red Cross, 1996

Experience

18 Years

Areas of Specialization

Phase I & II Environmental Site Assessments
Asbestos/Lead/Radon Surveys
Physical Condition Assessments
State/Federal Compliance Audits
Indoor Air Quality Investigations
Project Coordination & Management
Legal, Financial & Tax Business Aspects

Regulatory Experience

Clean Air Act, Clean Water Act, Phase I & II ESAs, PST, VCP, QA/QC Plans

Richard A. Mosman

Education

B.S. Agronomy, Texas A&M University, 1978
Post Graduate Studies – Environmental Policy, University of North Texas

Registrations

Loss Prevention Systems (LPS), Current
RCRA Hazardous Waste and Non-Hazardous Waste, Current
40 hour Hazardous Waste Site Training (OSHA 29 CFR 1910.120), Current
American Red Cross Adult CPR, AED and Basic First Aid, Current
38-Hour USACE Wetland Delineation and Management, 2001

Experience

22 Years

Areas of Specialization

Phase I Environmental Site Assessments (ESAs)
Environmental Subsurface Assessments and Remediation
Wetlands Determinations
Management and Peer Review of Due Diligence Projects
Spill Prevention, Control and Countermeasures (SPCC) and Stormwater Pollution Prevention Plans (SWP3)
Vapor Intrusion Assessments
State Petroleum Storage Tank, Voluntary Cleanup and Innocent Owner Programs
Management of Asbestos and Lead Paint Surveys and Abatement Projects

Appendix G-1

Preliminary Drainage Report

September, 2022
2021-352

Poplar 18 Industrial Park
City of Hesperia, CA

Preliminary Drainage Report

Prepared For:

Covington Development Group, Inc

*3 Corporate Plaza, Suite 230
Newport Beach, CA 92660*

Prepared By:

WestLAND Group, Inc.

4150 Concourses, Suite 100
Ontario, CA 91764
Tel: 909-989-9789

West**LAND**
Group, Inc.

TABLE OF CONTENTS

	<u>Section</u>
Purpose and Scope.....	I
Project Description	II
Methodology.....	III
Results and Analysis.....	IV
Conclusion.....	V

Appendix

A. Hydrology Exhibits

1. Pre-Development Exhibit
2. Post-Development Exhibit

B. Rational Method Calculations – Pre-Development

1. 10-Year Storm Event
2. 25-Year Storm Event
3. 100-Year Storm Event

C. Rational Method Calculations – Post-Development

1. 10-Year Storm Event
2. 100-Year Storm Event

D. Unit Hydrograph Calculations – Pre-Development

1. 10-Year Storm Event
2. 100-Year Storm Event

E. Unit Hydrograph Calculations – Post-Development

1. 10-Year Storm Event
2. 100-Year Storm Event

F. Basin Routing Analysis

1. Basin Summary Table

G. Hydraulic Analysis (Prepared in Final Engineering)

1. Weir Calculations
2. Pipe Sizing Calculations
3. Catch Basin Sizing Calculations

H. Reference Documents

1. Precipitation Data
2. Hydrologic Soil Map
3. Infiltration Report

1. Purpose and Scope

The I-15 Industrial Park Building 3 is located within the County of San Bernardino in the City of Hesperia and is intended to be developed into an industrial/commercial complex. The proposed development measures approximately 17.86 acres and is bounded by Poplar Street to the South and Mesa Linda Street to the East. The project intends to only develop Parcels 3 and 4 of Parcel Map 172/5-6, which measures to be approximately 17.86 acres, and Parcels 1 and 2 will remain undeveloped.

The purpose of this study is to evaluate the post-development hydrological conditions of the site including the storm drain system and Best Management Practices (BMPs) to ensure that they provide flood protection from the 100-year storm event without harming downstream conditions offsite.

2. Project Description

2.1 Project Description

The project site is located on the northwest corner of the intersection between Mesa Linda Street and Poplar Street and measures to be approximately 17.86 acres.

The project site is currently vacant, undeveloped land with poor coverage. The soils have a hydrologic soil group classification of "A", and the site topography shows that stormwater runoff sheet flows to the northeast where it will naturally evaporate and infiltrate into the soil. See the exhibit for the Pre-Development conditions in Appendix A for more information.

The proposed site will be an industrial development with one industrial building, parking areas, loading areas, drive aisles, and landscape areas. Stormwater runoff will be collected by nearby catch basins and conveyed to the proposed above ground basins via storm drain. Prior to entering the storm drain system, runoff will be pretreated via filter inserts placed in each catch basin. Further downstream within the storm drain system, the runoff will be further pretreated via hydrodynamic separator CDS unit prior to entering the underground CMP system. Runoff in Drainage Area A will be routed to the above ground basin to the northwest while runoff from Drainage Areas B and C will be routed to the above ground basin to the northeast. The basins are sized and designed to prevent flooding from a 100-year storm while also accommodating the required retention volume for water quality purposes. Both basins route water into the underground CMP system, which is designed to capture the entire volume generated from a 100-year storm even meaning that no runoff will be discharged off site. For more information, please refer to the exhibit for the post-development conditions in Appendix A.

2.2 Soil Conditions

Soils are found to be mostly loose to medium dense sandy silt and silty fines to coarse sand. Groundwater is considered to be at a depth in excess of the maximum explored depth of 12± feet below existing grades. While infiltration rates on-site are low (0.7-0.9 in/hr) per geotechnical infiltration report, infiltration is still feasible according to San Bernardino County technical guidance document (minimum of 0.3 in/hr). Applying a safety factor of 2 results in a design infiltration rate of 0.35 in/hr. The stormwater retention system is designed to drawdown stormwater runoff of up to a 100-year storm within 96 hours.

3. Methodology

3.1 Background

The methodology described in the San Bernardino County Hydrology Manual is used to compute hydrologic data from the project site. The main methods used for this project were the Rational Method, Unit Hydrograph Method, and Basin Analysis, and the Civil Design software was used to compute the data. Solving for the Rational Method returns the peak flowrate of the site along with the time of concentration. The time of concentration is then used to solve for the Unit Hydrograph of the site which returns the total volume generated from a storm event. The inflow hydrograph returned from the Unit Hydrograph Method is then used along with the storage-outflow-elevation relationship of the basin to perform basin routing analysis which returns the storage, outflow, and elevation of the basin at each timestep within the storm event.

In addition, since the site does not meet any of the hydromodification exemption criteria provided in the Mojave Watershed Technical Guidance Documentation, the project must demonstrate that the post-development runoff volume, time of concentration, and peak flow velocity for the 10-year storm does not exceed that of the pre-development condition by more than five percent to comply with hydromodification requirements. This report will refer to the volume retention and allowable runoff required for compliance as the hydromodification volume retention requirement and the hydromodification allowable peak flow respectively.

3.2 Design Methodology

To assist in determining the adequate size of the onsite storage BMPs, the required retention volume was computed. This is taken to be the greater of the Design Capture Volume (DCV), the hydromodification volume retention requirement, and the difference in stormwater runoff volume for the 100-year storm between the post-development and pre-development conditions. Refer to the WQMP for more information regarding the DCV and the hydromodification requirements. Once the required retention volume is retained onsite, the project site is allowed to release stormwater runoff offsite. However, this project will be retaining and infiltrating the entire volume from a 100-year storm meaning that no runoff will be released.

For this preliminary drainage study, the storm drain pipes and inlets have not been analyzed, but they will be sized to be able to accommodate the design storm of a 100-year storm event during final engineering.

3.3 Calculations Performed

Below is a summary of the calculations that were performed for hydrological analysis. Refer to Appendix H for pertinent information used in the calculations such as the precipitation data and the hydrologic soil group.

1. Rational Method
 - a. 10-year storm event for pre-development and post-development conditions
 - i. Used to determine hydromodification requirements
 - b. 25-year storm event for pre-development conditions
 - i. Used to determine allowable flow rate for 100-year storm
 - c. 100-year storm event for pre-development and post-development conditions
 - i. Used to determine volume differences
2. Unit Hydrograph
 - a. 10-year storm event for pre-development and post-development conditions
 - i. Used to determine hydromodification requirements
 - ii. Used to generate inflow hydrograph for post-development conditions
 - b. 100-year storm event for pre-development and post-development conditions
 - i. Used to determine volume differences
 - ii. Used to generate inflow hydrograph for post-development conditions
3. Basin Analysis
 - a. 10-year storm event for post-development conditions
 - i. Used to determine peak flows out of the basin for a 10-year storm
 - b. 100-year storm event for post-development conditions
 - i. Used to determine peak flows out of the basin for a 100-year storm
 - ii. Used to determine max water surface elevation for a 100-year storm
4. Storm Drain Pipe Sizing
 - a. To be performed during final engineering
5. Inlet Sizing
 - a. To be performed during final engineering

4. Results and Analysis

Table 4.1: Required Onsite Retention Volume

ONSITE RETENTION VOLUME REQUIREMENT			
Area ID	DCV (CF)	Hydromodification Retention Volume (CF)	ΔV_{100} (CF)
Total	44,076	98,341	39,065

Tables 4.2a and 4.2b show a summary of the flow rate and volumes calculated using the Rational Method and the Unit Hydrograph for the pre-development and post-development conditions respectively. In addition, Table 4.2c shows a summary of the HCOC calculations.

Table 4.2a: Pre-Development Peak Flows and Volumes (Refer to Pre-Development Exhibit)

PRE-DEVELOPMENT CONDITIONS						
Area ID	A_{subarea} , ac	Q_{10} , cfs	V_{10} , cf	Q_{25} , cfs	Q_{100} , cfs	V_{100} , cf
A	9.61	9.60	40,498	13.61	22.51	163,224
B	8.25	10.28	34,878	14.28	22.79	140,350
Total	17.86	19.88	75,376	27.89	45.30	303,574

Table 4.2b: Post-Development Peak Flows and Volumes (Refer to Post-Development Exhibit)

POST-DEVELOPMENT CONDITIONS (WITHOUT BMPS)					
Area ID	A_{subarea} , ac	Q_{10} , cfs	V_{10} , cf	Q_{100} , cfs	V_{100} , cf
A	2.40	8.95	24,616	15.55	46,143
B	11.64	31.95	119,280	55.90	223,550
C	3.82	5.86	38,964	10.68	72,946
Total	17.86	46.76	182,860	82.13	342,639

Table 4.2c: HCOC Calculations

HCOC CALCULATIONS SUMMARY			
	10-Year Time of Concentration (Min)	10-Year Peak Runoff (Cfs)	10-Year, 24-Hour Runoff Volume (CF)
Pre-Development Condition	16.22	19.88	75,376
Post-Development Condition	5.42	46.76	182,860
HCOC Requirement <i>0.95*(Post-Development) – Pre-Development</i>	9.99 <i>(Additional time to provide)</i>	24.54 <i>(Amount of runoff to reduce)</i>	98,341 <i>(Amount of runoff to retain)</i>
Summary (10-Year Storm)	15.41 <i>(Minimum Tc for Post-Conditions)</i>	22.22 <i>(Maximum outflow for Post-Conditions)</i>	98,341 <i>(Minimum amount of runoff to retain)</i>

Basin #1 is approximately 3.5' deep with a storage volume of 25,167 CF and Basin #2 is approximately 4' deep with a storage volume of 24,993 CF, totaling 50,160 CF of above ground storage. The above ground basins are designed with one foot of freeboard.

Retention systems should be designed to drawdown stormwater within an appropriate period of time. In this case, drawdown time was selected to be 48 hours, which also requires a large amount of infiltrating surface area. In order to maximize the amount of stormwater infiltrating within the allotted time, one underground 60" CMP chamber is required. Calculations for drawdown time were based on San Bernardino County technical guidance document Table 5-4 Estimation Methods for On-Site Retention BMPs. See Appendix F for more detailed drawdown time and volume calculations.

Table 4.3a: 96 Hour Drawdown Volume Analysis Summary

48 HOUR DRAWDOWN ANALYSIS SUMMARY					
CMP/Basin ID	100-Year Volume (CF)	CMP/Basin Surface Area (SF)	Design Infiltration Rate	Drawdown Volume in 48 Hours (CF)	Total Volume Provided (CF)
1		84,680	8.77 in/hr	2,969,445	
Basin 1		7,045	0.35 in/hr	9,863	
Basin 2		6,961	0.45 in/hr	9,746	
TOTAL	342,639	123,257			2,989,054

Table 4.3b: Basin Analysis

BASIN ANALYSIS				
10-Year Volume (CF)	100-Year Volume (CF)	Total Retention Provided (CF)	100-Year Peak Runoff (Cfs)	Max Water Surface Elevation (Ft)
182,860	342,639	398,681	0.00	1' Below the Top of the Above Ground Basin

The calculations show that the proposed underground CMP is sized large enough to accommodate the required retention volume for water quality purposes while also mitigating enough flows to prevent adverse impacts downstream of the project site. Since the basins are designed to retain and infiltrate the entire volume from the 100-year storm, there will be no runoff leaving the site for up to a 100-year storm. Refer to Appendix B-F for calculations regarding the Rational Method, Unit Hydrograph, and Basin Analysis.

The table below summarizes the calculations pertinent to the design.

PROJECT DESIGN CRITERIA	
Hydrology Results & Analysis Summary Table:	$\Delta V_{100} = 39,065 \text{ ft}^3 = V_{\text{POST}} - V_{\text{PRE}} = 342,639 - 303,574$ $\text{DCV} = 44,076 \text{ ft}^3$ $\Delta V_{10} (\text{Hydromodification}) = 98,341 \text{ ft}^3 = 0.95 * V_{\text{POST}} - V_{\text{PRE}}$ $= 0.95 * 182,860 - 75,376$ $\Delta V_{10} > \text{DCV} > \Delta V_{100}, \Delta V_{10} = \text{site design storage requirement}$ $V_{100} = 342,639 \text{ ft}^3$ $\text{Total } V_{\text{PROVIDED}} = 398,681 \text{ ft}^3$ $\text{Peak } Q_{100} (\text{Post w/ BMPs}) = 0.00 \text{ cfs (Entire Site)}$ $V_{\text{Provided}} > V_{100} = \text{Full Retention Onsite}$

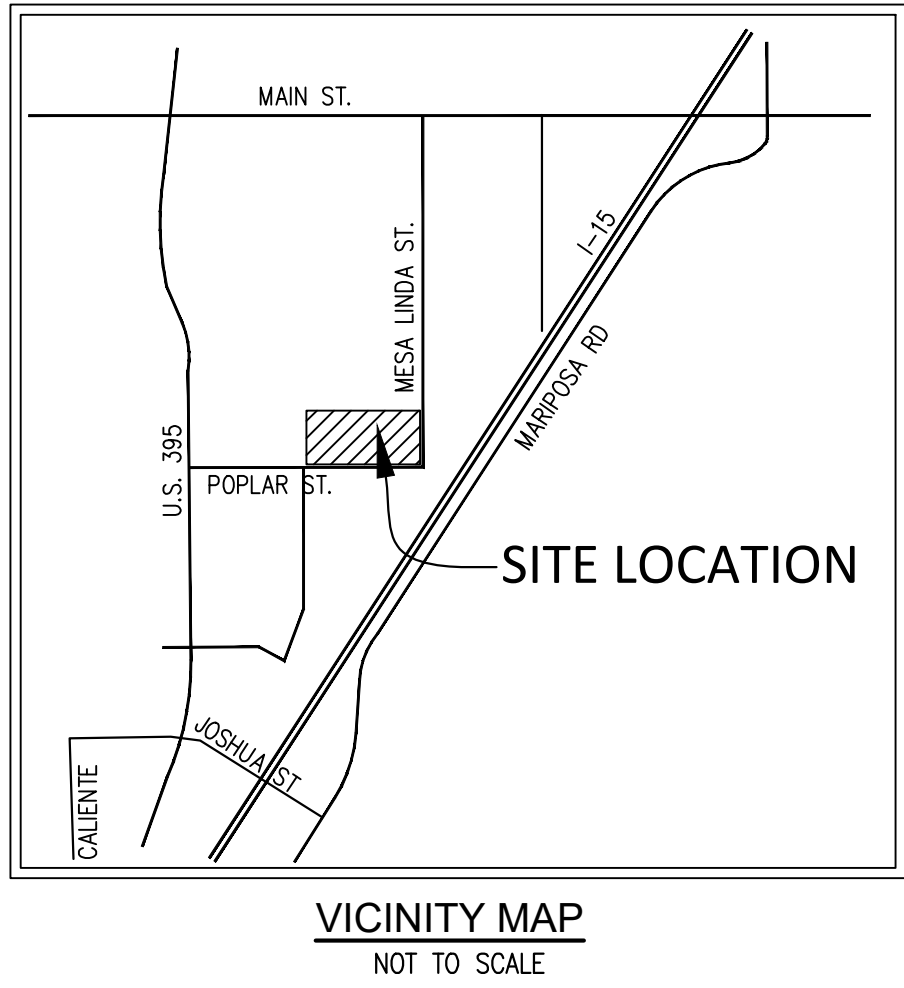
5. Conclusion

The results show that the proposed development will provide enough on-site retention volume and flow attenuation to prevent adverse impacts downstream of the project site. As shown in the post-development exhibit, the proposed BMPs for stormwater management are two above ground retention basins and one underground CMP system consisting of 6 separate CMPs, connected with equalizer storm drain pipes. The proposed basins will retain and infiltrate the entire volume generated from a 100-year storm event, and no stormwater runoff will be released offsite. The results demonstrate that the proposed underground CMP system will comply with the flood protection and WQMP requirements of the City of Hesperia and County of San Bernardino.

Appendix A – Hydrology Exhibits

- Pre-Development Exhibit
- Post-Development Exhibit

CITY OF HESPERIA
HYDROLOGY EXHIBIT
FOR
POPLAR 18 INDUSTRIAL
PARK

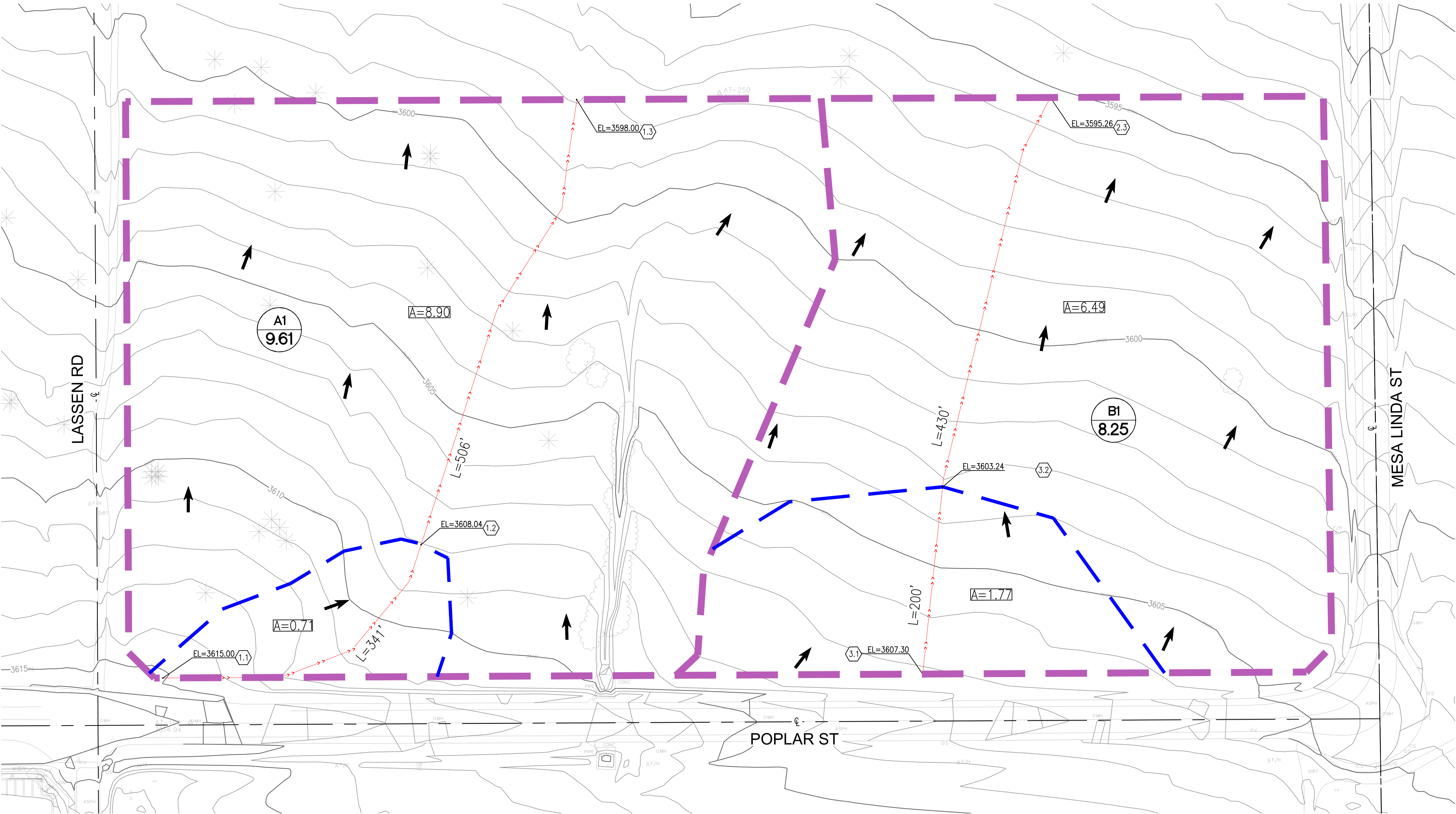


HYDROLOGY INFORMATION

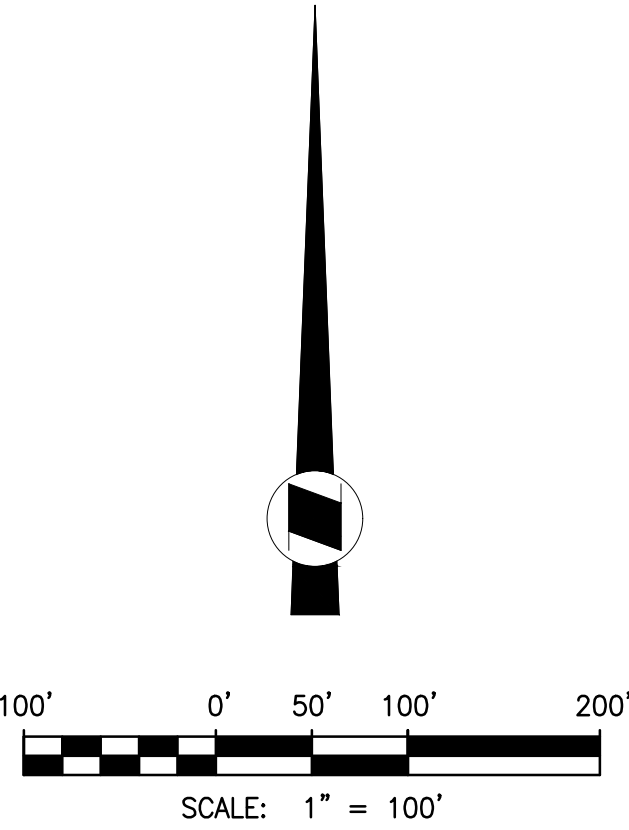
SITE AREA: 17.86 ACRE
SOIL GROUP: A (NRCS WEB SOIL SURVEY)
IMPERVIOUS: 0%
ISOHYETALS: 1.31" (100-YEAR 1 HOUR)
0.785" (10-YEAR 1 HOUR)
CN NUMBER: 67 (SOIL GROUP A)
FREQUENCY: 100 YEAR (FOR STORM DRAIN DESIGN)
10 YEAR (FOR STORMWATER QUALITY)
METHOD: SAN BERNARDINO COUNTY HYDROLOGY MANUAL

LEGEND:

- SUB DRAINAGE AREA BOUNDARY
- DRAINAGE AREA BOUNDARY
- FLOW PATH
- PROPOSED FLOW DIRECTION ARROW
- FLOW NODE
- DRAINAGE AREA DESIGNATION
- AREA (AC)



HYDROLOGY SUMMARY					
DRAINAGE AREA No.	TRIBUTARY AREA (AC)	IMPERVIOUS RATIO	10-YEAR VOLUME (CF)	100-YEAR VOLUME (CF)	25-YEAR PEAK FLOW (CFS)
A	9.61	0.00	40,498	163,224	13.61
B	8.25	0.00	34,878	140,350	14.28
TOTAL	17.86	0.00	75,376	303,574	27.89

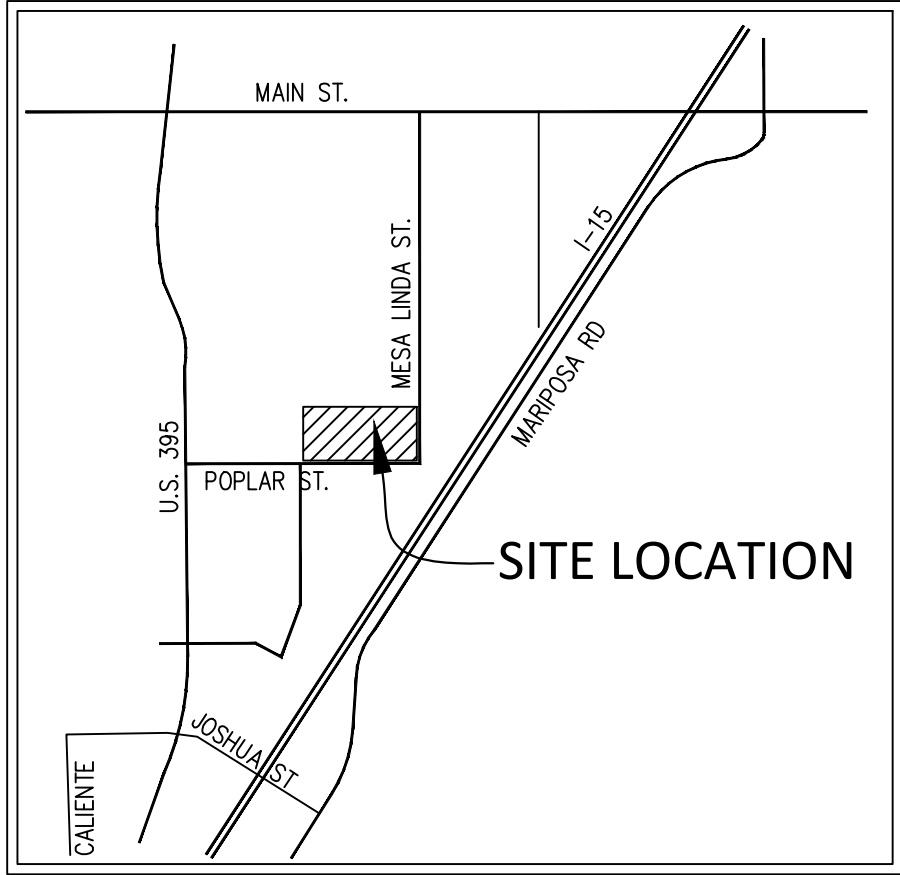


PREPARED BY:
WestLAND
Group, Inc. Land Surveyors • Civil Engineers • GIS
4150 CONCOURS, ONTARIO, CA 91764
PHONE: (909) 989-9789 FAX: (909) 989-9660
JOB NO: 2021-352

POPLAR 18 INDUSTRIAL PARK
HYDROLOGY EXHIBIT
PRE-DEVELOPMENT CONDITIONS
CITY OF HESPERIA

DATE: MAY 2022
SHEET
1
OF 1

CITY OF HESPERIA
HYDROLOGY EXHIBIT
FOR
POPLAR 18 INDUSTRIAL
PARK

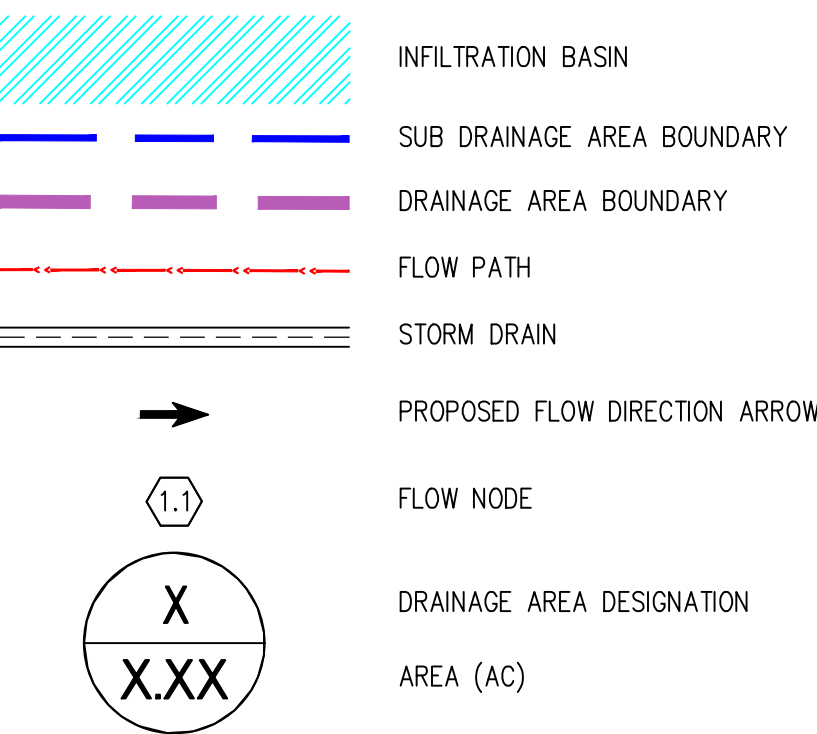


VICINITY MAP
NOT TO SCALE

HYDROLOGY INFORMATION

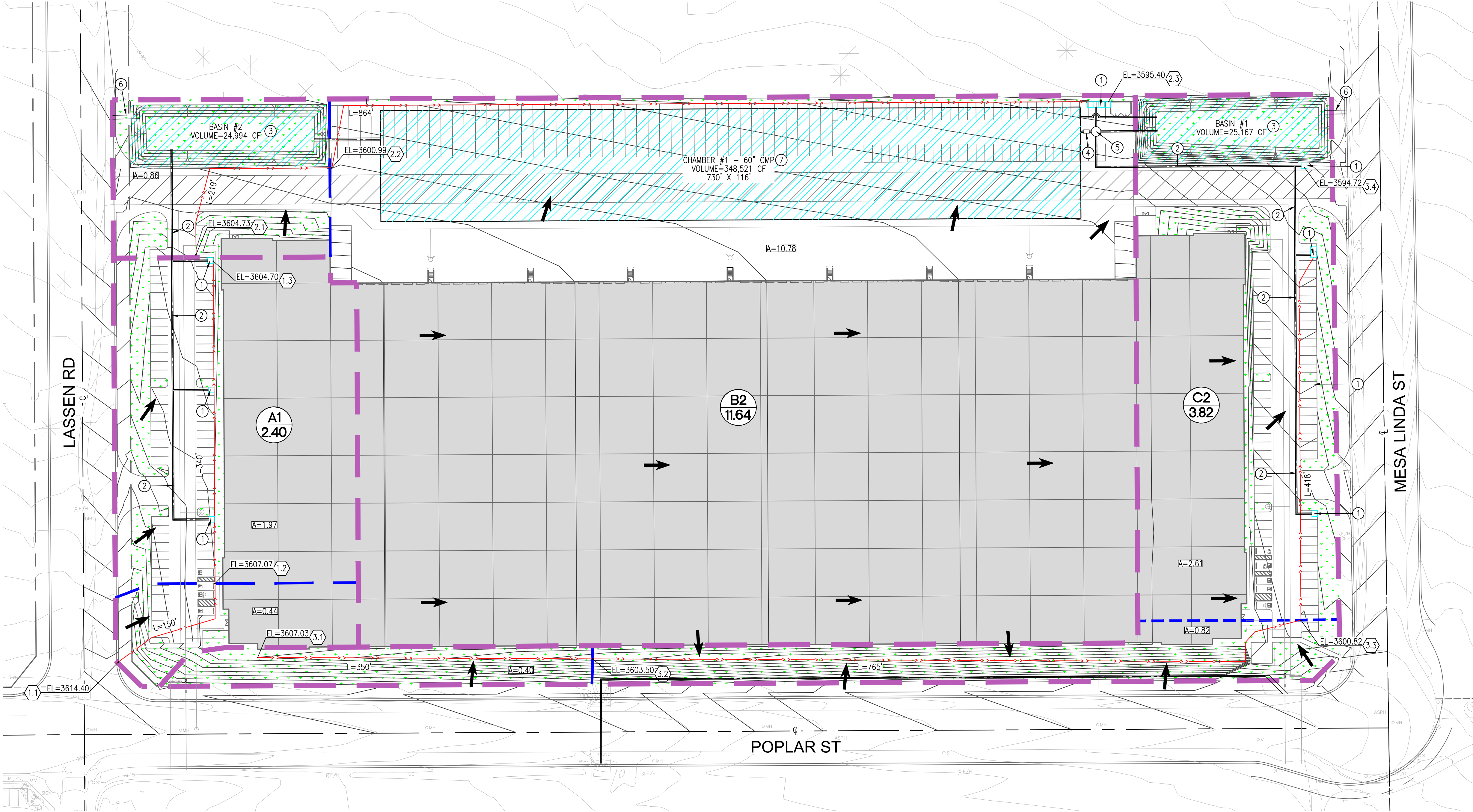
SITE AREA: 17.86 ACRE
SOIL GROUP: A (NRCS WEB SOIL SURVEY)
IMPERVIOUS: 81%
ISOHYETALS: 1.31" (100-YEAR 1 HOUR)
0.785" (10-YEAR 1 HOUR)
CN NUMBER: 67 (SOIL GROUP A)
FREQUENCY: 100 YEAR (FOR STORM DRAIN DESIGN)
10 YEAR (FOR STORMWATER QUALITY)
METHOD: SAN BERNARDINO COUNTY HYDROLOGY MANUAL

LEGEND:

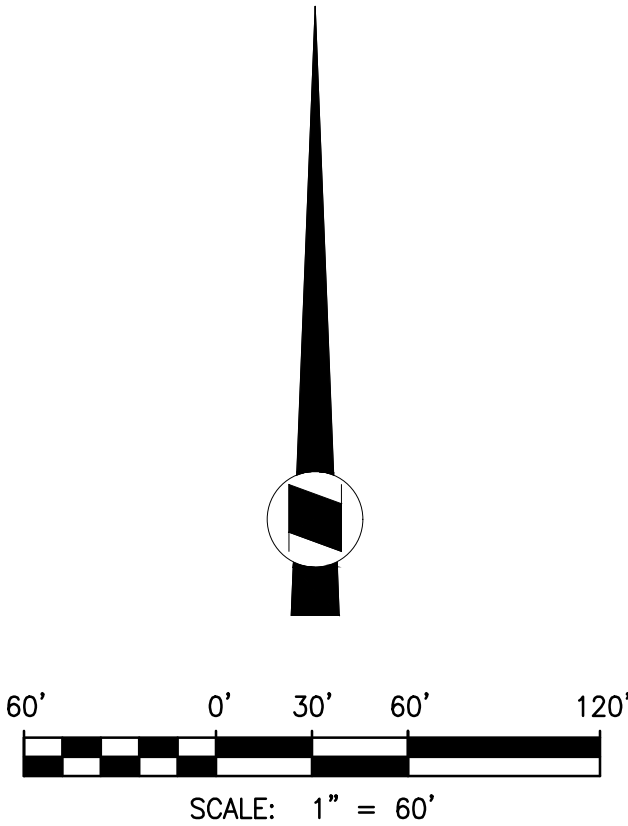


DRAINAGE NOTES:

- ① PROPOSED CATCH BASIN WITH FILTER INSERT
- ② PROPOSED STORM DRAIN PIPE PRIVATE MAINTAINED
- ③ PROPOSED BMP - ABOVE GROUND DETENTION BASIN
- ④ PROPOSED BMP - HYDRODYNAMIC SEPARATOR
- ⑤ DIVERSION STRUCTURE
- ⑥ EMERGENCY SPILLWAY
- ⑦ UNDERGROUND CMP STRUCTURE



HYDROLOGY SUMMARY							
DRAINAGE AREA No.	TRIBUTARY AREA (AC)	IMPERVIOUS RATIO	RUNOFF COEFFICIENT	DCV (CF)	HYDROMODIFICATION VOLUME TO RETAIN (CF)	100-YEAR VOLUME (CF)	TOTAL RETENTION VOLUME (CF)
A	2.40	0.81	0.61	-	98,341	342,639	24,994 (BASIN 2)
B	11.64	0.81	0.61	-			25,167 (BASIN 1)
C	3.82	0.81	0.61	-			348,521 (UNDERGROUND CMP)
TOTAL	17.86	0.81	0.61	44,076			398,681



PREPARED BY:
WestLAND
Group, Inc. Land Surveyors • Civil Engineers • GIS
4150 CONCOURS, ONTARIO, CA 91764
PHONE: (909) 989-9789 FAX: (909) 989-9660
JOB NO: 2021-352

POPLAR 18 INDUSTRIAL PARK
HYDROLOGY EXHIBIT
POST-DEVELOPMENT CONDITIONS
CITY OF HESPERIA

DATE: SEP 2022
SHEET
1
OF 1

Appendix B – Rational Method (Pre-Development)

- 10-Year Storm Event
- 25-Year Storm Event
- 100-Year Storm Event

Appendix B – Rational Method (Pre-Development)

- 10-Year Storm Event

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1
Rational Hydrology Study Date: 10/01/21

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 10 YR
MGUBBAREINER 2021-09-27
-

Program License Serial Number 6277

***** Hydrology Study Control Information *****

Rational hydrology study storm event year is 10.0
Computed rainfall intensity:
Storm year = 10.00 1 hour rainfall = 0.785 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 2

+++++
Process from Point/Station 1.100 to Point/Station 1.200
**** INITIAL AREA EVALUATION ****

Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.578(In/Hr)
Initial subarea data:
Initial area flow distance = 341.380(Ft.)
Top (of initial area) elevation = 3615.000(Ft.)
Bottom (of initial area) elevation = 3608.040(Ft.)
Difference in elevation = 6.960(Ft.)
Slope = 0.02039 s(%)= 2.04
 $TC = k(0.779)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 17.499 min.
Rainfall intensity = 1.860(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.620
Subarea runoff = 0.819(CFS)
Total initial stream area = 0.710(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.578(In/Hr)

Process from Point/Station 1.200 to Point/Station 1.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.573(Ft.), Average velocity = 3.241(Ft/s)
!!Warning: Water is above left or right bank elevations
***** Irregular Channel Data *****

Information entered for subchannel number 1 :
Point number 'X' coordinate 'Y' coordinate
1 0.00 0.50
2 2.50 0.00
3 5.00 0.50
Manning's 'N' friction factor = 0.030

Sub-Channel flow = 5.235(CFS)
' ' flow top width = 5.000(Ft.)
' ' velocity= 3.241(Ft/s)
' ' area = 1.615(Sq.Ft)
' ' Froude number = 1.005

Upstream point elevation = 3608.040(Ft.)
Downstream point elevation = 3598.000(Ft.)
Flow length = 506.390(Ft.)
Travel time = 2.60 min.
Time of concentration = 20.10 min.
Depth of flow = 0.573(Ft.)
Average velocity = 3.241(Ft/s)
Total irregular channel flow = 5.235(CFS)
Irregular channel normal depth above invert elev. = 0.573(Ft.)
Average velocity of channel(s) = 3.241(Ft/s)
!!Warning: Water is above left or right bank elevations
Adding area flow to channel
Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.578(In/Hr)
Rainfall intensity = 1.688(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.592
Subarea runoff = 8.776(CFS) for 8.900(Ac.)
Total runoff = 9.595(CFS)
Effective area this stream = 9.61(Ac.)
Total Study Area (Main Stream No. 1) = 9.61(Ac.)
Area averaged Fm value = 0.578(In/Hr)
Depth of flow = 0.715(Ft.), Average velocity = 4.130(Ft/s)
!!Warning: Water is above left or right bank elevations

```

+++++
Process from Point/Station      2.100 to Point/Station      2.200
**** INITIAL AREA EVALUATION ****

```

```

Soil classification AP and SCS  values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000      Max loss rate(Fm)=      0.578(In/Hr)
Initial subarea data:
Initial area flow distance = 199.840(Ft.)
Top (of initial area) elevation = 3607.300(Ft.)
Bottom (of initial area) elevation = 3603.240(Ft.)
Difference in elevation = 4.060(Ft.)
Slope = 0.02032 s(%)= 2.03
TC = k(0.779)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 14.135 min.
Rainfall intensity = 2.160(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.659
Subarea runoff = 2.519(CFS)
Total initial stream area = 1.770(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.578(In/Hr)

```

```

+++++
Process from Point/Station      2.200 to Point/Station      2.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

```

```

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.623(Ft.), Average velocity = 3.448(Ft/s)
!!Warning: Water is above left or right bank elevations
***** Irregular Channel Data *****

```

```

Information entered for subchannel number 1 :
Point number      'X' coordinate      'Y' coordinate
      1              0.00              0.50
      2              2.50              0.00
      3              5.00              0.50
Manning's 'N' friction factor = 0.030

```

```

Sub-Channel flow = 6.428(CFS)
'      '      flow top width = 5.000(Ft.)
'      '      velocity= 3.448(Ft/s)
'      '      area = 1.864(Sq.Ft)
'      '      Froude number = 0.995

```

```

Upstream point elevation = 3603.240(Ft.)
Downstream point elevation = 3595.260(Ft.)

```


Flow length = 430.480(Ft.)
Travel time = 2.08 min.
Time of concentration = 16.22 min.
Depth of flow = 0.623(Ft.)
Average velocity = 3.448(Ft/s)
Total irregular channel flow = 6.428(CFS)
Irregular channel normal depth above invert elev. = 0.623(Ft.)
Average velocity of channel(s) = 3.448(Ft/s)
!!Warning: Water is above left or right bank elevations
Adding area flow to channel
Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.578(In/Hr)
Rainfall intensity = 1.962(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.635
Subarea runoff = 7.765(CFS) for 6.490(Ac.)
Total runoff = 10.284(CFS)
Effective area this stream = 8.26(Ac.)
Total Study Area (Main Stream No. 1) = 17.87(Ac.)
Area averaged Fm value = 0.578(In/Hr)
Depth of flow = 0.744(Ft.), Average velocity = 4.161(Ft/s)
!!Warning: Water is above left or right bank elevations
End of computations, Total Study Area = 17.87 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged SCS curve number = 67.0

Appendix B – Rational Method (Pre-Development)

- 25-Year Storm Event

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1
Rational Hydrology Study Date: 10/01/21

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 25 YR
MGUBBAREINER 2021-09-27
-

Program License Serial Number 6277

***** Hydrology Study Control Information *****

Rational hydrology study storm event year is 25.0
Computed rainfall intensity:
Storm year = 25.00 1 hour rainfall = 0.989 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 2

+++++
Process from Point/Station 1.100 to Point/Station 1.200
**** INITIAL AREA EVALUATION ****

Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.578(In/Hr)
Initial subarea data:
Initial area flow distance = 341.380(Ft.)
Top (of initial area) elevation = 3615.000(Ft.)
Bottom (of initial area) elevation = 3608.040(Ft.)
Difference in elevation = 6.960(Ft.)
Slope = 0.02039 s(%)= 2.04
 $TC = k(0.779)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 17.499 min.
Rainfall intensity = 2.343(In/Hr) for a 25.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.678
Subarea runoff = 1.128(CFS)
Total initial stream area = 0.710(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.578(In/Hr)

+++++
Process from Point/Station 1.200 to Point/Station 1.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.648(Ft.), Average velocity = 3.722(Ft/s)
!!Warning: Water is above left or right bank elevations
***** Irregular Channel Data *****

Information entered for subchannel number 1 :
Point number 'X' coordinate 'Y' coordinate
1 0.00 0.50
2 2.50 0.00
3 5.00 0.50
Manning's 'N' friction factor = 0.030

Sub-Channel flow = 7.397(CFS)
' ' flow top width = 5.000(Ft.)
' ' velocity= 3.722(Ft/s)
' ' area = 1.988(Sq.Ft)
' ' Froude number = 1.040

Upstream point elevation = 3608.040(Ft.)
Downstream point elevation = 3598.000(Ft.)
Flow length = 506.390(Ft.)
Travel time = 2.27 min.
Time of concentration = 19.77 min.
Depth of flow = 0.648(Ft.)
Average velocity = 3.722(Ft/s)
Total irregular channel flow = 7.397(CFS)
Irregular channel normal depth above invert elev. = 0.648(Ft.)
Average velocity of channel(s) = 3.722(Ft/s)
!!Warning: Water is above left or right bank elevations
Adding area flow to channel
Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.578(In/Hr)
Rainfall intensity = 2.152(In/Hr) for a 25.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.658
Subarea runoff = 12.479(CFS) for 8.900(Ac.)
Total runoff = 13.607(CFS)
Effective area this stream = 9.61(Ac.)
Total Study Area (Main Stream No. 1) = 9.61(Ac.)
Area averaged Fm value = 0.578(In/Hr)
Depth of flow = 0.823(Ft.), Average velocity = 4.749(Ft/s)
!!Warning: Water is above left or right bank elevations

```

+++++
Process from Point/Station      2.100 to Point/Station      2.200
**** INITIAL AREA EVALUATION ****

```

```

Soil classification AP and SCS  values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000      Max loss rate(Fm)=      0.578(In/Hr)
Initial subarea data:
Initial area flow distance =   199.840(Ft.)
Top (of initial area) elevation =  3607.300(Ft.)
Bottom (of initial area) elevation =  3603.240(Ft.)
Difference in elevation =      4.060(Ft.)
Slope =      0.02032  s(%)=      2.03
TC = k(0.779)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   14.135 min.
Rainfall intensity =      2.721(In/Hr) for a   25.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.709
Subarea runoff =      3.413(CFS)
Total initial stream area =      1.770(Ac.)
Pervious area fraction = 1.000
Initial area Fm value =      0.578(In/Hr)

```

```

+++++
Process from Point/Station      2.200 to Point/Station      2.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

```

```

Estimated mean flow rate at midpoint of channel =      0.000(CFS)
Depth of flow =   0.702(Ft.), Average velocity =   3.923(Ft/s)
!!Warning: Water is above left or right bank elevations
          ***** Irregular Channel Data *****

```

```

-----
Information entered for subchannel number 1 :
Point number      'X' coordinate      'Y' coordinate
      1              0.00              0.50
      2              2.50              0.00
      3              5.00              0.50
Manning's 'N' friction factor =   0.030

```

```

Sub-Channel flow =      8.874(CFS)
'      '      flow top width =      5.000(Ft.)
'      '      velocity=      3.923(Ft/s)
'      '      area =      2.262(Sq.Ft)
'      '      Froude number =      1.028

```

```

Upstream point elevation =  3603.240(Ft.)
Downstream point elevation =  3595.260(Ft.)

```

Flow length = 430.480(Ft.)
 Travel time = 1.83 min.
 Time of concentration = 15.96 min.
 Depth of flow = 0.702(Ft.)
 Average velocity = 3.923(Ft/s)
 Total irregular channel flow = 8.874(CFS)
 Irregular channel normal depth above invert elev. = 0.702(Ft.)
 Average velocity of channel(s) = 3.923(Ft/s)
 !!Warning: Water is above left or right bank elevations
 Adding area flow to channel
 Soil classification AP and SCS values input by user
 USER INPUT of soil data for subarea
 SCS curve number for soil(AMC 2) = 67.00
 Pervious ratio(A_p) = 1.0000 Max loss rate(F_m) = 0.578(In/Hr)
 Rainfall intensity = 2.499(In/Hr) for a 25.0 year storm
 Effective runoff coefficient used for area, (total area with modified rational method)($Q=KCIA$) is $C = 0.692$
 Subarea runoff = 10.863(CFS) for 6.490(Ac.)
 Total runoff = 14.276(CFS)
 Effective area this stream = 8.26(Ac.)
 Total Study Area (Main Stream No. 1) = 17.87(Ac.)
 Area averaged F_m value = 0.578(In/Hr)
 Depth of flow = 0.852(Ft.), Average velocity = 4.745(Ft/s)
 !!Warning: Water is above left or right bank elevations
 End of computations, Total Study Area = 17.87 (Ac.)
 The following figures may
 be used for a unit hydrograph study of the same area.
 Note: These figures do not consider reduced effective area effects caused by confluences in the rational equation.

 Area averaged pervious area fraction(A_p) = 1.000
 Area averaged SCS curve number = 67.0

Appendix B – Rational Method (Pre-Development)

- 100-Year Storm Event

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1
Rational Hydrology Study Date: 10/01/21

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 100 YR
MGUBBAREINER 2021-09-27
-

Program License Serial Number 6277

***** Hydrology Study Control Information *****

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.310 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 3

+++++
Process from Point/Station 1.100 to Point/Station 1.200
**** INITIAL AREA EVALUATION ****

Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Adjusted SCS curve number for AMC 3 = 84.60
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.290(In/Hr)
Initial subarea data:
Initial area flow distance = 341.380(Ft.)
Top (of initial area) elevation = 3615.000(Ft.)
Bottom (of initial area) elevation = 3608.040(Ft.)
Difference in elevation = 6.960(Ft.)
Slope = 0.02039 s(%)= 2.04
 $TC = k(0.779)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 17.499 min.
Rainfall intensity = 3.104(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.816
Subarea runoff = 1.798(CFS)
Total initial stream area = 0.710(Ac.)
Pervious area fraction = 1.000

Initial area Fm value = 0.290(In/Hr)

+++++
Process from Point/Station 1.200 to Point/Station 1.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.786(Ft.), Average velocity = 4.544(Ft/s)
!!Warning: Water is above left or right bank elevations
***** Irregular Channel Data *****

Information entered for subchannel number 1 :
Point number 'X' coordinate 'Y' coordinate
1 0.00 0.50
2 2.50 0.00
3 5.00 0.50
Manning's 'N' friction factor = 0.030

Sub-Channel flow = 12.183(CFS)
' ' flow top width = 5.000(Ft.)
' ' velocity = 4.544(Ft/s)
' ' area = 2.681(Sq.Ft)
' ' Froude number = 1.093

Upstream point elevation = 3608.040(Ft.)
Downstream point elevation = 3598.000(Ft.)
Flow length = 506.390(Ft.)
Travel time = 1.86 min.
Time of concentration = 19.36 min.
Depth of flow = 0.786(Ft.)
Average velocity = 4.544(Ft/s)
Total irregular channel flow = 12.183(CFS)
Irregular channel normal depth above invert elev. = 0.786(Ft.)
Average velocity of channel(s) = 4.544(Ft/s)
!!Warning: Water is above left or right bank elevations
Adding area flow to channel
Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Adjusted SCS curve number for AMC 3 = 84.60
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.290(In/Hr)
Rainfall intensity = 2.892(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.810
Subarea runoff = 20.707(CFS) for 8.900(Ac.)
Total runoff = 22.505(CFS)
Effective area this stream = 9.61(Ac.)
Total Study Area (Main Stream No. 1) = 9.61(Ac.)
Area averaged Fm value = 0.290(In/Hr)

Depth of flow = 1.025(Ft.), Average velocity = 5.808(Ft/s)
!!Warning: Water is above left or right bank elevations

+++++
Process from Point/Station 2.100 to Point/Station 2.200
**** INITIAL AREA EVALUATION ****

Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Adjusted SCS curve number for AMC 3 = 84.60
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.290(In/Hr)
Initial subarea data:
Initial area flow distance = 199.840(Ft.)
Top (of initial area) elevation = 3607.300(Ft.)
Bottom (of initial area) elevation = 3603.240(Ft.)
Difference in elevation = 4.060(Ft.)
Slope = 0.02032 s(%)= 2.03
TC = $k(0.779)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$
Initial area time of concentration = 14.135 min.
Rainfall intensity = 3.604(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.828
Subarea runoff = 5.279(CFS)
Total initial stream area = 1.770(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.290(In/Hr)

+++++
Process from Point/Station 2.200 to Point/Station 2.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.846(Ft.), Average velocity = 4.716(Ft/s)
!!Warning: Water is above left or right bank elevations
***** Irregular Channel Data *****

Information entered for subchannel number 1 :
Point number 'X' coordinate 'Y' coordinate
1 0.00 0.50
2 2.50 0.00
3 5.00 0.50
Manning's 'N' friction factor = 0.030

Sub-Channel flow = 14.064(CFS)
' ' flow top width = 5.000(Ft.)
' ' velocity= 4.716(Ft/s)
' ' area = 2.982(Sq.Ft)
' ' Froude number = 1.076

Upstream point elevation = 3603.240(Ft.)
 Downstream point elevation = 3595.260(Ft.)
 Flow length = 430.480(Ft.)
 Travel time = 1.52 min.
 Time of concentration = 15.66 min.
 Depth of flow = 0.846(Ft.)
 Average velocity = 4.716(Ft/s)
 Total irregular channel flow = 14.064(CFS)
 Irregular channel normal depth above invert elev. = 0.846(Ft.)
 Average velocity of channel(s) = 4.716(Ft/s)
 !!Warning: Water is above left or right bank elevations
 Adding area flow to channel
 Soil classification AP and SCS values input by user
 USER INPUT of soil data for subarea
 SCS curve number for soil(AMC 2) = 67.00
 Adjusted SCS curve number for AMC 3 = 84.60
 Pervious ratio(A_p) = 1.0000 Max loss rate(F_m) = 0.290(In/Hr)
 Rainfall intensity = 3.355(In/Hr) for a 100.0 year storm
 Effective runoff coefficient used for area, (total area with modified
 rational method)($Q=KCIA$) is $C = 0.822$
 Subarea runoff = 17.506(CFS) for 6.490(Ac.)
 Total runoff = 22.785(CFS)
 Effective area this stream = 8.26(Ac.)
 Total Study Area (Main Stream No. 1) = 17.87(Ac.)
 Area averaged F_m value = 0.290(In/Hr)
 Depth of flow = 1.047(Ft.), Average velocity = 5.720(Ft/s)
 !!Warning: Water is above left or right bank elevations
 End of computations, Total Study Area = 17.87 (Ac.)
 The following figures may
 be used for a unit hydrograph study of the same area.
 Note: These figures do not consider reduced effective area
 effects caused by confluences in the rational equation.

 Area averaged pervious area fraction(A_p) = 1.000
 Area averaged SCS curve number = 67.0

Appendix C – Rational Method (Post-Development)

- 10-Year Storm Event
- 100-Year Storm Event

Appendix C – Rational Method (Post-Development)

- 10-Year Storm Event

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1
Rational Hydrology Study Date: 09/27/21

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 10 YR
MGUBBAREINER 2021-09-27
-

Program License Serial Number 6277

***** Hydrology Study Control Information *****

Rational hydrology study storm event year is 10.0
Computed rainfall intensity:
Storm year = 10.00 1 hour rainfall = 0.785 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 2

↑

+++++
Process from Point/Station 1.100 to Point/Station 1.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Initial subarea data:
Initial area flow distance = 150.000(Ft.)
Top (of initial area) elevation = 3614.400(Ft.)
Bottom (of initial area) elevation = 3607.070(Ft.)
Difference in elevation = 7.330(Ft.)
Slope = 0.04887 s(%)= 4.89
 $TC = k(0.304)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 4.126 min.
Rainfall intensity = 5.114(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.883

Subarea runoff = 1.986(CFS)
Total initial stream area = 0.440(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.098(In/Hr)

↑

+++++
Process from Point/Station 1.200 to Point/Station 1.300
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3607.070(Ft.)
Downstream point elevation = 3604.700(Ft.)
Channel length thru subarea = 339.930(Ft.)
Channel base width = 3.000(Ft.)
Slope or 'Z' of left channel bank = 1.000
Slope or 'Z' of right channel bank = 1.000
Estimated mean flow rate at midpoint of channel = 5.504(CFS)
Manning's 'N' = 0.013
Maximum depth of channel = 1.500(Ft.)
Flow(q) thru subarea = 5.504(CFS)
Depth of flow = 0.373(Ft.), Average velocity = 4.374(Ft/s)
Channel flow top width = 3.746(Ft.)
Flow Velocity = 4.37(Ft/s)
Travel time = 1.30 min.
Time of concentration = 5.42 min.
Critical depth = 0.445(Ft.)
Adding area flow to channel
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Rainfall intensity = 4.224(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.879
Subarea runoff = 6.964(CFS) for 1.970(Ac.)
Total runoff = 8.950(CFS)
Effective area this stream = 2.41(Ac.)
Total Study Area (Main Stream No. 1) = 2.41(Ac.)
Area averaged Fm value = 0.098(In/Hr)
Depth of flow = 0.498(Ft.), Average velocity = 5.139(Ft/s)
Critical depth = 0.609(Ft.)

↑

+++++
Process from Point/Station 1.300 to Point/Station 1.400

**** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3604.700(Ft.)
Downstream point/station elevation = 3595.170(Ft.)
Pipe length = 114.65(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 8.950(CFS)
Given pipe size = 1.50(In.)
NOTE: Normal flow is pressure flow in user selected pipe size.
The approximate hydraulic grade line above the pipe invert is
486347.902(Ft.) at the headworks or inlet of the pipe(s)
Pipe friction loss = 473969.207(Ft.)
Minor friction loss = 12388.225(Ft.) K-factor = 1.50
Pipe flow velocity = 729.29(Ft/s)
Travel time through pipe = 0.00 min.
Time of concentration (TC) = 5.42 min.

↑

+++++
Process from Point/Station 2.100 to Point/Station 2.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Initial subarea data:
Initial area flow distance = 219.190(Ft.)
Top (of initial area) elevation = 3604.730(Ft.)
Bottom (of initial area) elevation = 3600.990(Ft.)
Difference in elevation = 3.740(Ft.)
Slope = 0.01706 s(%)= 1.71
TC = $k(0.304)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 5.926 min.
Rainfall intensity = 3.968(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.878
Subarea runoff = 2.996(CFS)
Total initial stream area = 0.860(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.098(In/Hr)

↑

+++++
Process from Point/Station 2.200 to Point/Station 2.300
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3600.990(Ft.)
 Downstream point elevation = 3595.400(Ft.)
 Channel length thru subarea = 863.780(Ft.)
 Channel base width = 3.000(Ft.)
 Slope or 'Z' of left channel bank = 1.000
 Slope or 'Z' of right channel bank = 1.000
 Estimated mean flow rate at midpoint of channel = 17.516(CFS)
 Manning's 'N' = 0.013
 Maximum depth of channel = 1.500(Ft.)
 Flow(q) thru subarea = 17.516(CFS)
 Depth of flow = 0.754(Ft.), Average velocity = 6.185(Ft/s)
 Channel flow top width = 4.509(Ft.)
 Flow Velocity = 6.19(Ft/s)
 Travel time = 2.33 min.
 Time of concentration = 8.25 min.
 Critical depth = 0.914(Ft.)
 Adding area flow to channel
 COMMERCIAL subarea type
 Decimal fraction soil group A = 1.000
 Decimal fraction soil group B = 0.000
 Decimal fraction soil group C = 0.000
 Decimal fraction soil group D = 0.000
 SCS curve number for soil(AMC 2) = 32.00
 Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
 Rainfall intensity = 3.147(In/Hr) for a 10.0 year storm
 Effective runoff coefficient used for area,(total area with modified
 rational method)(Q=KCIA) is C = 0.872
 Subarea runoff = 28.949(CFS) for 10.780(Ac.)
 Total runoff = 31.945(CFS)
 Effective area this stream = 11.64(Ac.)
 Total Study Area (Main Stream No. 1) = 14.05(Ac.)
 Area averaged Fm value = 0.098(In/Hr)
 Depth of flow = 1.064(Ft.), Average velocity = 7.385(Ft/s)
 Critical depth = 1.313(Ft.)

↑

++++++
 Process from Point/Station 2.300 to Point/Station 2.400
 **** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3595.400(Ft.)
 Downstream point/station elevation = 3587.000(Ft.)
 Pipe length = 62.61(Ft.) Manning's N = 0.013
 No. of pipes = 1 Required pipe flow = 31.945(CFS)
 Given pipe size = 1.50(In.)
 NOTE: Normal flow is pressure flow in user selected pipe size.
 The approximate hydraulic grade line above the pipe invert is
 3455420.510(Ft.) at the headworks or inlet of the pipe(s)
 Pipe friction loss = 3297599.744(Ft.)

Minor friction loss = 157829.166(Ft.) K-factor = 1.50
Pipe flow velocity = 2603.10(Ft/s)
Travel time through pipe = 0.00 min.
Time of concentration (TC) = 8.25 min.

↑

+++++
Process from Point/Station 3.100 to Point/Station 3.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Initial subarea data:
Initial area flow distance = 350.000(Ft.)
Top (of initial area) elevation = 3607.030(Ft.)
Bottom (of initial area) elevation = 3603.500(Ft.)
Difference in elevation = 3.530(Ft.)
Slope = 0.01009 s(%)= 1.01
TC = $k(0.304)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$
Initial area time of concentration = 7.939 min.
Rainfall intensity = 3.234(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.873
Subarea runoff = 1.129(CFS)
Total initial stream area = 0.400(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.098(In/Hr)

↑

+++++
Process from Point/Station 3.200 to Point/Station 3.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.532(Ft.), Average velocity = 1.410(Ft/s)
***** Irregular Channel Data *****

Information entered for subchannel number 1 :
Point number 'X' coordinate 'Y' coordinate
1 0.00 3.00
2 15.00 0.00
3 40.00 8.50
Manning's 'N' friction factor = 0.025

Sub-Channel flow = 1.582(CFS)
 ' ' flow top width = 4.222(Ft.)
 ' ' velocity= 1.410(Ft/s)
 ' ' area = 1.122(Sq.Ft)
 ' ' Froude number = 0.482

Upstream point elevation = 3603.500(Ft.)
 Downstream point elevation = 3600.870(Ft.)
 Flow length = 764.880(Ft.)
 Travel time = 9.04 min.
 Time of concentration = 16.98 min.
 Depth of flow = 0.532(Ft.)
 Average velocity = 1.410(Ft/s)
 Total irregular channel flow = 1.582(CFS)
 Irregular channel normal depth above invert elev. = 0.532(Ft.)
 Average velocity of channel(s) = 1.410(Ft/s)

Adding area flow to channel
 COMMERCIAL subarea type
 Decimal fraction soil group A = 1.000
 Decimal fraction soil group B = 0.000
 Decimal fraction soil group C = 0.000
 Decimal fraction soil group D = 0.000
 SCS curve number for soil(AMC 2) = 32.00
 Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
 Rainfall intensity = 1.899(In/Hr) for a 10.0 year storm
 Effective runoff coefficient used for area,(total area with modified
 rational method)(Q=KCIA) is C = 0.854
 Subarea runoff = 0.849(CFS) for 0.820(Ac.)
 Total runoff = 1.978(CFS)
 Effective area this stream = 1.22(Ac.)
 Total Study Area (Main Stream No. 1) = 15.27(Ac.)
 Area averaged Fm value = 0.098(In/Hr)
 Depth of flow = 0.578(Ft.), Average velocity = 1.491(Ft/s)

↑

+++++
 Process from Point/Station 3.300 to Point/Station 3.400
 **** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3600.870(Ft.)
 Downstream point elevation = 3594.720(Ft.)
 Channel length thru subarea = 418.150(Ft.)
 Channel base width = 3.000(Ft.)
 Slope or 'Z' of left channel bank = 1.000
 Slope or 'Z' of right channel bank = 1.000
 Estimated mean flow rate at midpoint of channel = 3.962(CFS)
 Manning's 'N' = 0.013
 Maximum depth of channel = 1.500(Ft.)
 Flow(q) thru subarea = 3.962(CFS)

Depth of flow = 0.245(Ft.), Average velocity = 4.981(Ft/s)
 Channel flow top width = 3.490(Ft.)
 Flow Velocity = 4.98(Ft/s)
 Travel time = 1.40 min.
 Time of concentration = 18.38 min.
 Critical depth = 0.363(Ft.)
 Adding area flow to channel
 COMMERCIAL subarea type
 Decimal fraction soil group A = 1.000
 Decimal fraction soil group B = 0.000
 Decimal fraction soil group C = 0.000
 Decimal fraction soil group D = 0.000
 SCS curve number for soil(AMC 2) = 32.00
 Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
 Rainfall intensity = 1.797(In/Hr) for a 10.0 year storm
 Effective runoff coefficient used for area,(total area with modified
 rational method)(Q=KCIA) is C = 0.851
 Subarea runoff = 3.879(CFS) for 2.610(Ac.)
 Total runoff = 5.857(CFS)
 Effective area this stream = 3.83(Ac.)
 Total Study Area (Main Stream No. 1) = 17.88(Ac.)
 Area averaged Fm value = 0.098(In/Hr)
 Depth of flow = 0.310(Ft.), Average velocity = 5.712(Ft/s)
 Critical depth = 0.465(Ft.)

↑

++++++
 Process from Point/Station 3.400 to Point/Station 3.500
 **** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3594.720(Ft.)
 Downstream point/station elevation = 3587.000(Ft.)
 Pipe length = 75.93(Ft.) Manning's N = 0.013
 No. of pipes = 1 Required pipe flow = 5.857(CFS)
 Given pipe size = 1.50(In.)
 NOTE: Normal flow is pressure flow in user selected pipe size.
 The approximate hydraulic grade line above the pipe invert is
 139729.709(Ft.) at the headworks or inlet of the pipe(s)
 Pipe friction loss = 134431.979(Ft.)
 Minor friction loss = 5305.450(Ft.) K-factor = 1.50
 Pipe flow velocity = 477.26(Ft/s)
 Travel time through pipe = 0.00 min.
 Time of concentration (TC) = 18.38 min.
 End of computations, Total Study Area = 17.88 (Ac.)
 The following figures may
 be used for a unit hydrograph study of the same area.
 Note: These figures do not consider reduced effective area
 effects caused by confluences in the rational equation.

Area averaged pervious area fraction(A_p) = 0.100
Area averaged SCS curve number = 32.0

Appendix C – Rational Method (Post-Development)

- 100-Year Storm Event

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1
Rational Hydrology Study Date: 09/27/21

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 100 YR
MGUBBAREINER 2021-09-27
-

Program License Serial Number 6277

***** Hydrology Study Control Information *****

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.310 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 3

↑

+++++
Process from Point/Station 1.100 to Point/Station 1.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079(In/Hr)
Initial subarea data:
Initial area flow distance = 150.000(Ft.)
Top (of initial area) elevation = 3614.400(Ft.)
Bottom (of initial area) elevation = 3607.070(Ft.)
Difference in elevation = 7.330(Ft.)
Slope = 0.04887 s(%)= 4.89
TC = $k(0.304)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$
Initial area time of concentration = 4.126 min.
Rainfall intensity = 8.533(In/Hr) for a 100.0 year storm

Effective runoff coefficient used for area (Q=KCIA) is $C = 0.892$
Subarea runoff = 3.348(CFS)
Total initial stream area = 0.440(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.079(In/Hr)

↑

+++++
Process from Point/Station 1.200 to Point/Station 1.300
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3607.070(Ft.)
Downstream point elevation = 3604.700(Ft.)
Channel length thru subarea = 339.930(Ft.)
Channel base width = 3.000(Ft.)
Slope or 'Z' of left channel bank = 1.000
Slope or 'Z' of right channel bank = 1.000
Estimated mean flow rate at midpoint of channel = 9.477(CFS)
Manning's 'N' = 0.013
Maximum depth of channel = 1.500(Ft.)
Flow(q) thru subarea = 9.477(CFS)
Depth of flow = 0.515(Ft.), Average velocity = 5.235(Ft/s)
Channel flow top width = 4.030(Ft.)
Flow Velocity = 5.23(Ft/s)
Travel time = 1.08 min.
Time of concentration = 5.21 min.
Critical depth = 0.625(Ft.)
Adding area flow to channel
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079(In/Hr)
Rainfall intensity = 7.249(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is $C = 0.890$
Subarea runoff = 12.206(CFS) for 1.970(Ac.)
Total runoff = 15.554(CFS)
Effective area this stream = 2.41(Ac.)
Total Study Area (Main Stream No. 1) = 2.41(Ac.)
Area averaged Fm value = 0.079(In/Hr)
Depth of flow = 0.689(Ft.), Average velocity = 6.121(Ft/s)
Critical depth = 0.852(Ft.)

↑

+++++
Process from Point/Station 1.300 to Point/Station 1.400
**** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3604.700(Ft.)
Downstream point/station elevation = 3595.170(Ft.)
Pipe length = 114.65(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 15.554(CFS)
Given pipe size = 1.50(In.)
NOTE: Normal flow is pressure flow in user selected pipe size.
The approximate hydraulic grade line above the pipe invert is
1468931.082(Ft.) at the headworks or inlet of the pipe(s)
Pipe friction loss = 1431524.576(Ft.)
Minor friction loss = 37416.036(Ft.) K-factor = 1.50
Pipe flow velocity = 1267.44(Ft/s)
Travel time through pipe = 0.00 min.
Time of concentration (TC) = 5.21 min.

↑

+++++
Process from Point/Station 2.100 to Point/Station 2.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079(In/Hr)
Initial subarea data:
Initial area flow distance = 219.190(Ft.)
Top (of initial area) elevation = 3604.730(Ft.)
Bottom (of initial area) elevation = 3600.990(Ft.)
Difference in elevation = 3.740(Ft.)
Slope = 0.01706 s(%)= 1.71
TC = $k(0.304)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 5.926 min.
Rainfall intensity = 6.623(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.889
Subarea runoff = 5.065(CFS)
Total initial stream area = 0.860(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.079(In/Hr)

↑

+++++

Process from Point/Station 2.200 to Point/Station 2.300
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3600.990(Ft.)
Downstream point elevation = 3595.400(Ft.)
Channel length thru subarea = 863.780(Ft.)
Channel base width = 3.000(Ft.)
Slope or 'Z' of left channel bank = 1.000
Slope or 'Z' of right channel bank = 1.000
Estimated mean flow rate at midpoint of channel = 30.517(CFS)
Manning's 'N' = 0.013
Maximum depth of channel = 1.500(Ft.)
Flow(q) thru subarea = 30.517(CFS)
Depth of flow = 1.037(Ft.), Average velocity = 7.289(Ft/s)
Channel flow top width = 5.074(Ft.)
Flow Velocity = 7.29(Ft/s)
Travel time = 1.98 min.
Time of concentration = 7.90 min.
Critical depth = 1.266(Ft.)
Adding area flow to channel
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079(In/Hr)
Rainfall intensity = 5.415(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.887
Subarea runoff = 50.837(CFS) for 10.780(Ac.)
Total runoff = 55.902(CFS)
Effective area this stream = 11.64(Ac.)
Total Study Area (Main Stream No. 1) = 14.05(Ac.)
Area averaged Fm value = 0.079(In/Hr)
Depth of flow = 1.453(Ft.), Average velocity = 8.637(Ft/s)
Critical depth = 1.766(Ft.)

↑

+++++
Process from Point/Station 2.300 to Point/Station 2.400
**** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3595.400(Ft.)
Downstream point/station elevation = 3587.000(Ft.)
Pipe length = 62.61(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 55.902(CFS)
Given pipe size = 1.50(In.)

NOTE: Normal flow is pressure flow in user selected pipe size.
The approximate hydraulic grade line above the pipe invert is
10581754.695(Ft.) at the headworks or inlet of the pipe(s)

Pipe friction loss = 10098433.561(Ft.)
Minor friction loss = 483329.534(Ft.) K-factor = 1.50
Pipe flow velocity = 4555.32(Ft/s)
Travel time through pipe = 0.00 min.
Time of concentration (TC) = 7.90 min.

↑

+++++
Process from Point/Station 3.100 to Point/Station 3.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079(In/Hr)
Initial subarea data:
Initial area flow distance = 350.000(Ft.)
Top (of initial area) elevation = 3607.030(Ft.)
Bottom (of initial area) elevation = 3603.500(Ft.)
Difference in elevation = 3.530(Ft.)
Slope = 0.01009 s(%)= 1.01
TC = $k(0.304)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 7.939 min.
Rainfall intensity = 5.397(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.887
Subarea runoff = 1.915(CFS)
Total initial stream area = 0.400(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.079(In/Hr)

↑

+++++
Process from Point/Station 3.200 to Point/Station 3.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.658(Ft.), Average velocity = 1.624(Ft/s)
***** Irregular Channel Data *****

Information entered for subchannel number 1 :
Point number 'X' coordinate 'Y' coordinate

1	0.00	3.00
2	15.00	0.00
3	40.00	8.50

Manning's 'N' friction factor = 0.025

Sub-Channel flow = 2.789(CFS)

'	'	flow top width =	5.222(Ft.)
'	'	velocity=	1.624(Ft/s)
'	'	area =	1.717(Sq.Ft)
'	'	Froude number =	0.499

Upstream point elevation = 3603.500(Ft.)

Downstream point elevation = 3600.870(Ft.)

Flow length = 764.880(Ft.)

Travel time = 7.85 min.

Time of concentration = 15.79 min.

Depth of flow = 0.658(Ft.)

Average velocity = 1.624(Ft/s)

Total irregular channel flow = 2.789(CFS)

Irregular channel normal depth above invert elev. = 0.658(Ft.)

Average velocity of channel(s) = 1.624(Ft/s)

Adding area flow to channel

COMMERCIAL subarea type

Decimal fraction soil group A = 1.000

Decimal fraction soil group B = 0.000

Decimal fraction soil group C = 0.000

Decimal fraction soil group D = 0.000

SCS curve number for soil(AMC 2) = 32.00

Adjusted SCS curve number for AMC 3 = 52.00

Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079(In/Hr)

Rainfall intensity = 3.336(In/Hr) for a 100.0 year storm

Effective runoff coefficient used for area,(total area with modified rational method)(Q=KCIA) is C = 0.879

Subarea runoff = 1.662(CFS) for 0.820(Ac.)

Total runoff = 3.576(CFS)

Effective area this stream = 1.22(Ac.)

Total Study Area (Main Stream No. 1) = 15.27(Ac.)

Area averaged Fm value = 0.079(In/Hr)

Depth of flow = 0.722(Ft.), Average velocity = 1.729(Ft/s)

↑

+++++

Process from Point/Station 3.300 to Point/Station 3.400

**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3600.870(Ft.)

Downstream point elevation = 3594.720(Ft.)

Channel length thru subarea = 418.150(Ft.)

Channel base width = 3.000(Ft.)

Slope or 'Z' of left channel bank = 1.000
 Slope or 'Z' of right channel bank = 1.000
 Estimated mean flow rate at midpoint of channel = 7.163(CFS)
 Manning's 'N' = 0.013
 Maximum depth of channel = 1.500(Ft.)
 Flow(q) thru subarea = 7.163(CFS)
 Depth of flow = 0.349(Ft.), Average velocity = 6.121(Ft/s)
 Channel flow top width = 3.699(Ft.)
 Flow Velocity = 6.12(Ft/s)
 Travel time = 1.14 min.
 Time of concentration = 16.92 min.
 Critical depth = 0.531(Ft.)
 Adding area flow to channel
 COMMERCIAL subarea type
 Decimal fraction soil group A = 1.000
 Decimal fraction soil group B = 0.000
 Decimal fraction soil group C = 0.000
 Decimal fraction soil group D = 0.000
 SCS curve number for soil(AMC 2) = 32.00
 Adjusted SCS curve number for AMC 3 = 52.00
 Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079(In/Hr)
 Rainfall intensity = 3.177(In/Hr) for a 100.0 year storm
 Effective runoff coefficient used for area,(total area with modified
 rational method)(Q=KCIA) is C = 0.878
 Subarea runoff = 7.104(CFS) for 2.610(Ac.)
 Total runoff = 10.680(CFS)
 Effective area this stream = 3.83(Ac.)
 Total Study Area (Main Stream No. 1) = 17.88(Ac.)
 Area averaged Fm value = 0.079(In/Hr)
 Depth of flow = 0.443(Ft.), Average velocity = 6.999(Ft/s)
 Critical depth = 0.680(Ft.)

↑

++++++
 Process from Point/Station 3.400 to Point/Station 3.500
 **** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3594.720(Ft.)
 Downstream point/station elevation = 3587.000(Ft.)
 Pipe length = 75.93(Ft.) Manning's N = 0.013
 No. of pipes = 1 Required pipe flow = 10.680(CFS)
 Given pipe size = 1.50(In.)
 NOTE: Normal flow is pressure flow in user selected pipe size.
 The approximate hydraulic grade line above the pipe invert is
 464657.955(Ft.) at the headworks or inlet of the pipe(s)
 Pipe friction loss = 447023.584(Ft.)
 Minor friction loss = 17642.091(Ft.) K-factor = 1.50
 Pipe flow velocity = 870.31(Ft/s)
 Travel time through pipe = 0.00 min.

Time of concentration (TC) = 16.93 min.

End of computations, Total Study Area = 17.88 (Ac.)

The following figures may

be used for a unit hydrograph study of the same area.

Note: These figures do not consider reduced effective area effects caused by confluences in the rational equation.

Area averaged pervious area fraction(A_p) = 0.100

Area averaged SCS curve number = 32.0

Appendix D – Unit Hydrograph (Pre-Development)

- 10-Year Storm Event
- 100-Year Storm Event

Appendix D – Unit Hydrograph (Pre-Development)

- 10-Year Storm Event

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 10/01/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 10 YR UNIT HYDROGRAPH SUBAREA A
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
9.61	1	0.79

Rainfall data for year 10		
9.61	6	1.82

Rainfall data for year 10		
9.61	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
67.0	67.0	9.61	1.000	0.578	1.000	0.578

Area-averaged adjusted loss rate Fm (In/Hr) = 0.578

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
9.61	1.000	67.0	67.0	4.93	0.255

Area-averaged catchment yield fraction, Y = 0.255

Area-averaged low loss fraction, Yb = 0.745

User entry of time of concentration = 0.335 (hours)

+++++

Watershed area = 9.61(Ac.)

Catchment Lag time = 0.268 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 31.0945

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.578(In/Hr)

Average low loss rate fraction (Yb) = 0.745 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.372(In)

Computed peak 30-minute rainfall = 0.638(In)

Specified peak 1-hour rainfall = 0.785(In)

Computed peak 3-hour rainfall = 1.315(In)

Specified peak 6-hour rainfall = 1.820(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 9.61(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000	Adjusted rainfall = 0.372(In)
-------------------------	-------------------------------

30-minute factor = 1.000	Adjusted rainfall = 0.637(In)
--------------------------	-------------------------------

1-hour factor = 1.000	Adjusted rainfall = 0.785(In)
-----------------------	-------------------------------

3-hour factor = 1.000	Adjusted rainfall = 1.315(In)
-----------------------	-------------------------------

6-hour factor = 1.000	Adjusted rainfall = 1.820(In)
-----------------------	-------------------------------

24-hour factor = 1.000	Adjusted rainfall = 3.630(In)
------------------------	-------------------------------

U n i t H y d r o g r a p h

+++++

Interval	'S' Graph	Unit Hydrograph
----------	-----------	-----------------

Number	Mean values	((CFS))

	(K =	116.22 (CFS))
1	1.861	2.163
2	10.156	9.641
3	33.083	26.646
4	54.196	24.538
5	65.695	13.364
6	73.121	8.630
7	78.475	6.222
8	82.466	4.639
9	85.667	3.720
10	88.293	3.053
11	90.271	2.298
12	91.956	1.958
13	93.399	1.677
14	94.572	1.364
15	95.595	1.188
16	96.431	0.972
17	97.134	0.817
18	97.683	0.637
19	98.052	0.430
20	98.379	0.379
21	98.749	0.430
22	99.122	0.434
23	99.474	0.409
24	99.692	0.253
25	99.886	0.226
26	100.000	0.132

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3723	0.3723
2	0.4584	0.0861
3	0.5177	0.0593
4	0.5643	0.0467
5	0.6034	0.0391
6	0.6373	0.0339
7	0.6675	0.0302
8	0.6948	0.0273
9	0.7198	0.0250
10	0.7429	0.0231
11	0.7644	0.0215
12	0.7846	0.0202
13	0.8147	0.0301
14	0.8436	0.0289
15	0.8713	0.0278
16	0.8982	0.0268
17	0.9241	0.0259

18	0.9492	0.0251
19	0.9737	0.0244
20	0.9974	0.0237
21	1.0205	0.0231
22	1.0431	0.0225
23	1.0651	0.0220
24	1.0866	0.0215
25	1.1076	0.0210
26	1.1282	0.0206
27	1.1484	0.0202
28	1.1682	0.0198
29	1.1876	0.0194
30	1.2066	0.0191
31	1.2254	0.0187
32	1.2438	0.0184
33	1.2619	0.0181
34	1.2797	0.0178
35	1.2972	0.0175
36	1.3145	0.0173
37	1.3315	0.0170
38	1.3483	0.0168
39	1.3648	0.0165
40	1.3812	0.0163
41	1.3973	0.0161
42	1.4132	0.0159
43	1.4288	0.0157
44	1.4443	0.0155
45	1.4597	0.0153
46	1.4748	0.0151
47	1.4898	0.0150
48	1.5046	0.0148
49	1.5192	0.0146
50	1.5337	0.0145
51	1.5480	0.0143
52	1.5622	0.0142
53	1.5762	0.0140
54	1.5901	0.0139
55	1.6038	0.0138
56	1.6174	0.0136
57	1.6309	0.0135
58	1.6443	0.0134
59	1.6576	0.0132
60	1.6707	0.0131
61	1.6837	0.0130
62	1.6966	0.0129
63	1.7094	0.0128
64	1.7221	0.0127
65	1.7346	0.0126
66	1.7471	0.0125
67	1.7595	0.0124

68	1.7718	0.0123
69	1.7840	0.0122
70	1.7960	0.0121
71	1.8080	0.0120
72	1.8199	0.0119
73	1.8325	0.0125
74	1.8449	0.0125
75	1.8573	0.0124
76	1.8696	0.0123
77	1.8818	0.0122
78	1.8940	0.0121
79	1.9060	0.0121
80	1.9180	0.0120
81	1.9299	0.0119
82	1.9417	0.0118
83	1.9535	0.0118
84	1.9652	0.0117
85	1.9768	0.0116
86	1.9883	0.0115
87	1.9998	0.0115
88	2.0112	0.0114
89	2.0226	0.0114
90	2.0339	0.0113
91	2.0451	0.0112
92	2.0563	0.0112
93	2.0674	0.0111
94	2.0784	0.0110
95	2.0894	0.0110
96	2.1003	0.0109
97	2.1112	0.0109
98	2.1220	0.0108
99	2.1327	0.0108
100	2.1434	0.0107
101	2.1541	0.0106
102	2.1647	0.0106
103	2.1752	0.0105
104	2.1857	0.0105
105	2.1962	0.0104
106	2.2066	0.0104
107	2.2169	0.0103
108	2.2272	0.0103
109	2.2374	0.0102
110	2.2476	0.0102
111	2.2578	0.0102
112	2.2679	0.0101
113	2.2780	0.0101
114	2.2880	0.0100
115	2.2979	0.0100
116	2.3079	0.0099
117	2.3178	0.0099

118	2.3276	0.0098
119	2.3374	0.0098
120	2.3472	0.0098
121	2.3569	0.0097
122	2.3666	0.0097
123	2.3762	0.0096
124	2.3858	0.0096
125	2.3954	0.0096
126	2.4049	0.0095
127	2.4144	0.0095
128	2.4238	0.0094
129	2.4333	0.0094
130	2.4426	0.0094
131	2.4520	0.0093
132	2.4613	0.0093
133	2.4705	0.0093
134	2.4798	0.0092
135	2.4890	0.0092
136	2.4981	0.0092
137	2.5073	0.0091
138	2.5164	0.0091
139	2.5254	0.0091
140	2.5345	0.0090
141	2.5435	0.0090
142	2.5524	0.0090
143	2.5614	0.0089
144	2.5703	0.0089
145	2.5792	0.0089
146	2.5880	0.0088
147	2.5968	0.0088
148	2.6056	0.0088
149	2.6143	0.0088
150	2.6231	0.0087
151	2.6318	0.0087
152	2.6404	0.0087
153	2.6491	0.0086
154	2.6577	0.0086
155	2.6663	0.0086
156	2.6748	0.0086
157	2.6833	0.0085
158	2.6918	0.0085
159	2.7003	0.0085
160	2.7087	0.0084
161	2.7172	0.0084
162	2.7256	0.0084
163	2.7339	0.0084
164	2.7423	0.0083
165	2.7506	0.0083
166	2.7589	0.0083
167	2.7671	0.0083

168	2.7754	0.0082
169	2.7836	0.0082
170	2.7918	0.0082
171	2.7999	0.0082
172	2.8081	0.0081
173	2.8162	0.0081
174	2.8243	0.0081
175	2.8324	0.0081
176	2.8404	0.0080
177	2.8484	0.0080
178	2.8565	0.0080
179	2.8644	0.0080
180	2.8724	0.0080
181	2.8803	0.0079
182	2.8882	0.0079
183	2.8961	0.0079
184	2.9040	0.0079
185	2.9119	0.0078
186	2.9197	0.0078
187	2.9275	0.0078
188	2.9353	0.0078
189	2.9430	0.0078
190	2.9508	0.0077
191	2.9585	0.0077
192	2.9662	0.0077
193	2.9739	0.0077
194	2.9816	0.0077
195	2.9892	0.0076
196	2.9968	0.0076
197	3.0044	0.0076
198	3.0120	0.0076
199	3.0196	0.0076
200	3.0271	0.0075
201	3.0347	0.0075
202	3.0422	0.0075
203	3.0497	0.0075
204	3.0571	0.0075
205	3.0646	0.0075
206	3.0720	0.0074
207	3.0794	0.0074
208	3.0868	0.0074
209	3.0942	0.0074
210	3.1016	0.0074
211	3.1089	0.0073
212	3.1163	0.0073
213	3.1236	0.0073
214	3.1309	0.0073
215	3.1382	0.0073
216	3.1454	0.0073
217	3.1527	0.0072

218	3.1599	0.0072
219	3.1671	0.0072
220	3.1743	0.0072
221	3.1815	0.0072
222	3.1886	0.0072
223	3.1958	0.0071
224	3.2029	0.0071
225	3.2100	0.0071
226	3.2171	0.0071
227	3.2242	0.0071
228	3.2313	0.0071
229	3.2383	0.0071
230	3.2454	0.0070
231	3.2524	0.0070
232	3.2594	0.0070
233	3.2664	0.0070
234	3.2733	0.0070
235	3.2803	0.0070
236	3.2872	0.0069
237	3.2942	0.0069
238	3.3011	0.0069
239	3.3080	0.0069
240	3.3149	0.0069
241	3.3217	0.0069
242	3.3286	0.0069
243	3.3354	0.0068
244	3.3423	0.0068
245	3.3491	0.0068
246	3.3559	0.0068
247	3.3627	0.0068
248	3.3695	0.0068
249	3.3762	0.0068
250	3.3830	0.0067
251	3.3897	0.0067
252	3.3964	0.0067
253	3.4031	0.0067
254	3.4098	0.0067
255	3.4165	0.0067
256	3.4232	0.0067
257	3.4298	0.0067
258	3.4364	0.0066
259	3.4431	0.0066
260	3.4497	0.0066
261	3.4563	0.0066
262	3.4629	0.0066
263	3.4695	0.0066
264	3.4760	0.0066
265	3.4826	0.0066
266	3.4891	0.0065
267	3.4956	0.0065

268	3.5021	0.0065
269	3.5086	0.0065
270	3.5151	0.0065
271	3.5216	0.0065
272	3.5281	0.0065
273	3.5345	0.0065
274	3.5410	0.0064
275	3.5474	0.0064
276	3.5538	0.0064
277	3.5602	0.0064
278	3.5666	0.0064
279	3.5730	0.0064
280	3.5794	0.0064
281	3.5857	0.0064
282	3.5921	0.0063
283	3.5984	0.0063
284	3.6048	0.0063
285	3.6111	0.0063
286	3.6174	0.0063
287	3.6237	0.0063
288	3.6300	0.0063

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0063	0.0047	0.0016
2	0.0063	0.0047	0.0016
3	0.0063	0.0047	0.0016
4	0.0063	0.0047	0.0016
5	0.0063	0.0047	0.0016
6	0.0064	0.0047	0.0016
7	0.0064	0.0048	0.0016
8	0.0064	0.0048	0.0016
9	0.0064	0.0048	0.0016
10	0.0064	0.0048	0.0016
11	0.0065	0.0048	0.0016
12	0.0065	0.0048	0.0016
13	0.0065	0.0048	0.0017
14	0.0065	0.0048	0.0017
15	0.0065	0.0049	0.0017
16	0.0065	0.0049	0.0017
17	0.0066	0.0049	0.0017
18	0.0066	0.0049	0.0017
19	0.0066	0.0049	0.0017
20	0.0066	0.0049	0.0017
21	0.0066	0.0049	0.0017
22	0.0067	0.0050	0.0017
23	0.0067	0.0050	0.0017
24	0.0067	0.0050	0.0017

25	0.0067	0.0050	0.0017
26	0.0067	0.0050	0.0017
27	0.0068	0.0050	0.0017
28	0.0068	0.0050	0.0017
29	0.0068	0.0051	0.0017
30	0.0068	0.0051	0.0017
31	0.0068	0.0051	0.0017
32	0.0069	0.0051	0.0017
33	0.0069	0.0051	0.0018
34	0.0069	0.0051	0.0018
35	0.0069	0.0052	0.0018
36	0.0069	0.0052	0.0018
37	0.0070	0.0052	0.0018
38	0.0070	0.0052	0.0018
39	0.0070	0.0052	0.0018
40	0.0070	0.0052	0.0018
41	0.0071	0.0053	0.0018
42	0.0071	0.0053	0.0018
43	0.0071	0.0053	0.0018
44	0.0071	0.0053	0.0018
45	0.0072	0.0053	0.0018
46	0.0072	0.0054	0.0018
47	0.0072	0.0054	0.0018
48	0.0072	0.0054	0.0018
49	0.0073	0.0054	0.0018
50	0.0073	0.0054	0.0019
51	0.0073	0.0055	0.0019
52	0.0073	0.0055	0.0019
53	0.0074	0.0055	0.0019
54	0.0074	0.0055	0.0019
55	0.0074	0.0055	0.0019
56	0.0074	0.0055	0.0019
57	0.0075	0.0056	0.0019
58	0.0075	0.0056	0.0019
59	0.0075	0.0056	0.0019
60	0.0075	0.0056	0.0019
61	0.0076	0.0057	0.0019
62	0.0076	0.0057	0.0019
63	0.0076	0.0057	0.0019
64	0.0077	0.0057	0.0020
65	0.0077	0.0057	0.0020
66	0.0077	0.0058	0.0020
67	0.0078	0.0058	0.0020
68	0.0078	0.0058	0.0020
69	0.0078	0.0058	0.0020
70	0.0078	0.0059	0.0020
71	0.0079	0.0059	0.0020
72	0.0079	0.0059	0.0020
73	0.0080	0.0059	0.0020
74	0.0080	0.0059	0.0020

75	0.0080	0.0060	0.0020
76	0.0080	0.0060	0.0020
77	0.0081	0.0060	0.0021
78	0.0081	0.0061	0.0021
79	0.0082	0.0061	0.0021
80	0.0082	0.0061	0.0021
81	0.0082	0.0061	0.0021
82	0.0083	0.0062	0.0021
83	0.0083	0.0062	0.0021
84	0.0083	0.0062	0.0021
85	0.0084	0.0063	0.0021
86	0.0084	0.0063	0.0021
87	0.0085	0.0063	0.0022
88	0.0085	0.0063	0.0022
89	0.0086	0.0064	0.0022
90	0.0086	0.0064	0.0022
91	0.0086	0.0064	0.0022
92	0.0087	0.0065	0.0022
93	0.0087	0.0065	0.0022
94	0.0088	0.0065	0.0022
95	0.0088	0.0066	0.0022
96	0.0088	0.0066	0.0023
97	0.0089	0.0066	0.0023
98	0.0089	0.0067	0.0023
99	0.0090	0.0067	0.0023
100	0.0090	0.0067	0.0023
101	0.0091	0.0068	0.0023
102	0.0091	0.0068	0.0023
103	0.0092	0.0069	0.0023
104	0.0092	0.0069	0.0024
105	0.0093	0.0069	0.0024
106	0.0093	0.0070	0.0024
107	0.0094	0.0070	0.0024
108	0.0094	0.0070	0.0024
109	0.0095	0.0071	0.0024
110	0.0096	0.0071	0.0024
111	0.0096	0.0072	0.0025
112	0.0097	0.0072	0.0025
113	0.0098	0.0073	0.0025
114	0.0098	0.0073	0.0025
115	0.0099	0.0074	0.0025
116	0.0099	0.0074	0.0025
117	0.0100	0.0075	0.0026
118	0.0101	0.0075	0.0026
119	0.0102	0.0076	0.0026
120	0.0102	0.0076	0.0026
121	0.0103	0.0077	0.0026
122	0.0103	0.0077	0.0026
123	0.0104	0.0078	0.0027
124	0.0105	0.0078	0.0027

125	0.0106	0.0079	0.0027
126	0.0106	0.0079	0.0027
127	0.0108	0.0080	0.0027
128	0.0108	0.0081	0.0028
129	0.0109	0.0081	0.0028
130	0.0110	0.0082	0.0028
131	0.0111	0.0083	0.0028
132	0.0112	0.0083	0.0028
133	0.0113	0.0084	0.0029
134	0.0114	0.0085	0.0029
135	0.0115	0.0086	0.0029
136	0.0115	0.0086	0.0029
137	0.0117	0.0087	0.0030
138	0.0118	0.0088	0.0030
139	0.0119	0.0089	0.0030
140	0.0120	0.0089	0.0030
141	0.0121	0.0090	0.0031
142	0.0122	0.0091	0.0031
143	0.0124	0.0092	0.0032
144	0.0125	0.0093	0.0032
145	0.0119	0.0089	0.0030
146	0.0120	0.0089	0.0031
147	0.0122	0.0091	0.0031
148	0.0123	0.0092	0.0031
149	0.0125	0.0093	0.0032
150	0.0126	0.0094	0.0032
151	0.0128	0.0095	0.0033
152	0.0129	0.0096	0.0033
153	0.0131	0.0098	0.0033
154	0.0132	0.0099	0.0034
155	0.0135	0.0101	0.0034
156	0.0136	0.0102	0.0035
157	0.0139	0.0104	0.0035
158	0.0140	0.0105	0.0036
159	0.0143	0.0107	0.0036
160	0.0145	0.0108	0.0037
161	0.0148	0.0110	0.0038
162	0.0150	0.0112	0.0038
163	0.0153	0.0114	0.0039
164	0.0155	0.0116	0.0039
165	0.0159	0.0118	0.0040
166	0.0161	0.0120	0.0041
167	0.0165	0.0123	0.0042
168	0.0168	0.0125	0.0043
169	0.0173	0.0129	0.0044
170	0.0175	0.0131	0.0045
171	0.0181	0.0135	0.0046
172	0.0184	0.0137	0.0047
173	0.0191	0.0142	0.0049
174	0.0194	0.0145	0.0049

175	0.0202	0.0150	0.0051
176	0.0206	0.0154	0.0052
177	0.0215	0.0160	0.0055
178	0.0220	0.0164	0.0056
179	0.0231	0.0172	0.0059
180	0.0237	0.0177	0.0060
181	0.0251	0.0187	0.0064
182	0.0259	0.0193	0.0066
183	0.0278	0.0207	0.0071
184	0.0289	0.0215	0.0073
185	0.0202	0.0151	0.0051
186	0.0215	0.0161	0.0055
187	0.0250	0.0186	0.0064
188	0.0273	0.0203	0.0069
189	0.0339	0.0253	0.0086
190	0.0391	0.0291	0.0099
191	0.0593	0.0442	0.0151
192	0.0861	0.0482	0.0379
193	0.3723	0.0482	0.3241
194	0.0467	0.0348	0.0119
195	0.0302	0.0225	0.0077
196	0.0231	0.0172	0.0059
197	0.0301	0.0224	0.0077
198	0.0268	0.0200	0.0068
199	0.0244	0.0182	0.0062
200	0.0225	0.0168	0.0057
201	0.0210	0.0157	0.0054
202	0.0198	0.0147	0.0050
203	0.0187	0.0140	0.0048
204	0.0178	0.0133	0.0045
205	0.0170	0.0127	0.0043
206	0.0163	0.0122	0.0042
207	0.0157	0.0117	0.0040
208	0.0151	0.0113	0.0039
209	0.0146	0.0109	0.0037
210	0.0142	0.0106	0.0036
211	0.0138	0.0103	0.0035
212	0.0134	0.0100	0.0034
213	0.0130	0.0097	0.0033
214	0.0127	0.0095	0.0032
215	0.0124	0.0092	0.0032
216	0.0121	0.0090	0.0031
217	0.0125	0.0094	0.0032
218	0.0123	0.0092	0.0031
219	0.0121	0.0090	0.0031
220	0.0118	0.0088	0.0030
221	0.0116	0.0087	0.0030
222	0.0114	0.0085	0.0029
223	0.0112	0.0084	0.0029
224	0.0110	0.0082	0.0028

225	0.0109	0.0081	0.0028
226	0.0107	0.0080	0.0027
227	0.0105	0.0079	0.0027
228	0.0104	0.0077	0.0026
229	0.0102	0.0076	0.0026
230	0.0101	0.0075	0.0026
231	0.0100	0.0074	0.0025
232	0.0098	0.0073	0.0025
233	0.0097	0.0072	0.0025
234	0.0096	0.0072	0.0024
235	0.0095	0.0071	0.0024
236	0.0094	0.0070	0.0024
237	0.0093	0.0069	0.0024
238	0.0092	0.0068	0.0023
239	0.0091	0.0068	0.0023
240	0.0090	0.0067	0.0023
241	0.0089	0.0066	0.0023
242	0.0088	0.0065	0.0022
243	0.0087	0.0065	0.0022
244	0.0086	0.0064	0.0022
245	0.0085	0.0064	0.0022
246	0.0084	0.0063	0.0021
247	0.0084	0.0062	0.0021
248	0.0083	0.0062	0.0021
249	0.0082	0.0061	0.0021
250	0.0081	0.0061	0.0021
251	0.0081	0.0060	0.0021
252	0.0080	0.0060	0.0020
253	0.0079	0.0059	0.0020
254	0.0079	0.0059	0.0020
255	0.0078	0.0058	0.0020
256	0.0077	0.0058	0.0020
257	0.0077	0.0057	0.0020
258	0.0076	0.0057	0.0019
259	0.0076	0.0056	0.0019
260	0.0075	0.0056	0.0019
261	0.0075	0.0056	0.0019
262	0.0074	0.0055	0.0019
263	0.0073	0.0055	0.0019
264	0.0073	0.0054	0.0019
265	0.0072	0.0054	0.0018
266	0.0072	0.0054	0.0018
267	0.0071	0.0053	0.0018
268	0.0071	0.0053	0.0018
269	0.0071	0.0053	0.0018
270	0.0070	0.0052	0.0018
271	0.0070	0.0052	0.0018
272	0.0069	0.0052	0.0018
273	0.0069	0.0051	0.0017
274	0.0068	0.0051	0.0017

275	0.0068	0.0051	0.0017
276	0.0067	0.0050	0.0017
277	0.0067	0.0050	0.0017
278	0.0067	0.0050	0.0017
279	0.0066	0.0049	0.0017
280	0.0066	0.0049	0.0017
281	0.0066	0.0049	0.0017
282	0.0065	0.0049	0.0017
283	0.0065	0.0048	0.0016
284	0.0064	0.0048	0.0016
285	0.0064	0.0048	0.0016
286	0.0064	0.0048	0.0016
287	0.0063	0.0047	0.0016
288	0.0063	0.0047	0.0016

 Total soil rain loss = 2.46(In)
 Total effective rainfall = 1.17(In)
 Peak flow rate in flood hydrograph = 10.19(CFS)

+++++

24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
-----------	--------------	--------	---	-----	------	------	------

0+ 5	0.0000	0.00	Q
0+10	0.0002	0.02	Q
0+15	0.0006	0.06	Q
0+20	0.0013	0.10	Q
0+25	0.0021	0.12	Q
0+30	0.0031	0.14	Q
0+35	0.0041	0.15	Q
0+40	0.0051	0.15	Q
0+45	0.0062	0.16	Q
0+50	0.0074	0.17	Q
0+55	0.0086	0.17	Q
1+ 0	0.0098	0.17	Q
1+ 5	0.0110	0.18	Q
1+10	0.0122	0.18	Q
1+15	0.0135	0.18	Q
1+20	0.0148	0.18	Q
1+25	0.0160	0.19	Q
1+30	0.0173	0.19	Q
1+35	0.0186	0.19	Q
1+40	0.0199	0.19	Q
1+45	0.0213	0.19	Q

1+50	0.0226	0.19	Q
1+55	0.0239	0.19	QV
2+ 0	0.0253	0.19	QV
2+ 5	0.0266	0.20	QV
2+10	0.0280	0.20	QV
2+15	0.0293	0.20	QV
2+20	0.0307	0.20	QV
2+25	0.0321	0.20	QV
2+30	0.0334	0.20	QV
2+35	0.0348	0.20	QV
2+40	0.0362	0.20	QV
2+45	0.0376	0.20	QV
2+50	0.0389	0.20	QV
2+55	0.0403	0.20	QV
3+ 0	0.0417	0.20	QV
3+ 5	0.0431	0.20	QV
3+10	0.0445	0.20	QV
3+15	0.0459	0.20	QV
3+20	0.0474	0.21	Q V
3+25	0.0488	0.21	Q V
3+30	0.0502	0.21	Q V
3+35	0.0516	0.21	Q V
3+40	0.0530	0.21	Q V
3+45	0.0545	0.21	Q V
3+50	0.0559	0.21	Q V
3+55	0.0574	0.21	Q V
4+ 0	0.0588	0.21	Q V
4+ 5	0.0603	0.21	Q V
4+10	0.0617	0.21	Q V
4+15	0.0632	0.21	Q V
4+20	0.0647	0.21	Q V
4+25	0.0661	0.21	Q V
4+30	0.0676	0.21	Q V
4+35	0.0691	0.22	Q V
4+40	0.0706	0.22	Q V
4+45	0.0721	0.22	Q V
4+50	0.0736	0.22	Q V
4+55	0.0751	0.22	Q V
5+ 0	0.0766	0.22	Q V
5+ 5	0.0781	0.22	Q V
5+10	0.0797	0.22	Q V
5+15	0.0812	0.22	Q V
5+20	0.0827	0.22	Q V
5+25	0.0843	0.22	Q V
5+30	0.0858	0.22	Q V
5+35	0.0874	0.23	Q V
5+40	0.0889	0.23	Q V
5+45	0.0905	0.23	Q V
5+50	0.0921	0.23	Q V
5+55	0.0936	0.23	Q V

6+ 0	0.0952	0.23	Q	V				
6+ 5	0.0968	0.23	Q	V				
6+10	0.0984	0.23	Q	V				
6+15	0.1000	0.23	Q	V				
6+20	0.1016	0.23	Q	V				
6+25	0.1032	0.23	Q	V				
6+30	0.1049	0.24	Q	V				
6+35	0.1065	0.24	Q	V				
6+40	0.1081	0.24	Q	V				
6+45	0.1098	0.24	Q	V				
6+50	0.1114	0.24	Q	V				
6+55	0.1131	0.24	Q	V				
7+ 0	0.1147	0.24	Q	V				
7+ 5	0.1164	0.24	Q	V				
7+10	0.1181	0.24	Q	V				
7+15	0.1198	0.25	Q	V				
7+20	0.1215	0.25	Q	V				
7+25	0.1232	0.25	Q	V				
7+30	0.1249	0.25	Q	V				
7+35	0.1266	0.25	Q	V				
7+40	0.1283	0.25	Q	V				
7+45	0.1301	0.25	Q	V				
7+50	0.1318	0.25	Q	V				
7+55	0.1336	0.25	Q	V				
8+ 0	0.1353	0.26	Q	V				
8+ 5	0.1371	0.26	Q	V				
8+10	0.1389	0.26	Q	V				
8+15	0.1407	0.26	Q	V				
8+20	0.1425	0.26	Q	V				
8+25	0.1443	0.26	Q	V				
8+30	0.1461	0.26	Q	V				
8+35	0.1479	0.27	Q	V				
8+40	0.1498	0.27	Q	V				
8+45	0.1516	0.27	Q	V				
8+50	0.1535	0.27	Q	V				
8+55	0.1553	0.27	Q	V				
9+ 0	0.1572	0.27	Q	V				
9+ 5	0.1591	0.27	Q	V				
9+10	0.1610	0.28	Q	V				
9+15	0.1629	0.28	Q	V				
9+20	0.1648	0.28	Q	V				
9+25	0.1667	0.28	Q	V				
9+30	0.1687	0.28	Q	V				
9+35	0.1706	0.28	Q	V				
9+40	0.1726	0.29	Q	V				
9+45	0.1746	0.29	Q	V				
9+50	0.1766	0.29	Q	V				
9+55	0.1786	0.29	Q	V				
10+ 0	0.1806	0.29	Q	V				
10+ 5	0.1826	0.29	Q	V				

10+10	0.1847	0.30	Q	V				
10+15	0.1867	0.30	Q	V				
10+20	0.1888	0.30	Q	V				
10+25	0.1909	0.30	Q	V				
10+30	0.1930	0.31	Q	V				
10+35	0.1951	0.31	Q	V				
10+40	0.1972	0.31	Q	V				
10+45	0.1994	0.31	Q	V				
10+50	0.2016	0.31	Q	V				
10+55	0.2037	0.32	Q	V				
11+ 0	0.2059	0.32	Q	V				
11+ 5	0.2081	0.32	Q	V				
11+10	0.2104	0.32	Q	V				
11+15	0.2126	0.33	Q	V				
11+20	0.2149	0.33	Q	V				
11+25	0.2172	0.33	Q	V				
11+30	0.2195	0.33	Q	V				
11+35	0.2218	0.34	Q	V				
11+40	0.2241	0.34	Q	V				
11+45	0.2265	0.34	Q	V				
11+50	0.2289	0.35	Q	V				
11+55	0.2313	0.35	Q	V				
12+ 0	0.2337	0.35	Q	V				
12+ 5	0.2362	0.36	Q	V				
12+10	0.2387	0.36	Q	V				
12+15	0.2411	0.36	Q	V				
12+20	0.2436	0.36	Q	V				
12+25	0.2460	0.36	Q	V				
12+30	0.2485	0.36	Q	V				
12+35	0.2510	0.36	Q	V				
12+40	0.2535	0.37	Q	V				
12+45	0.2560	0.37	Q	V				
12+50	0.2586	0.37	Q	V				
12+55	0.2612	0.38	Q	V				
13+ 0	0.2638	0.38	Q	V				
13+ 5	0.2665	0.39	Q	V				
13+10	0.2692	0.39	Q	V				
13+15	0.2719	0.40	Q	V				
13+20	0.2747	0.40	Q	V				
13+25	0.2775	0.41	Q	V				
13+30	0.2804	0.41	Q	V				
13+35	0.2833	0.42	Q	V				
13+40	0.2862	0.43	Q	V				
13+45	0.2892	0.43	Q	V				
13+50	0.2922	0.44	Q	V				
13+55	0.2953	0.45	Q	V				
14+ 0	0.2985	0.46	Q	V				
14+ 5	0.3017	0.47	Q	V				
14+10	0.3049	0.47	Q	V				
14+15	0.3083	0.48	Q	V				

14+20	0.3117	0.49	Q		V			
14+25	0.3152	0.51	|Q		V			
14+30	0.3187	0.52	|Q		V			
14+35	0.3224	0.53	|Q		V			
14+40	0.3261	0.54	|Q		V			
14+45	0.3299	0.56	|Q		V			
14+50	0.3339	0.57	|Q		V			
14+55	0.3380	0.59	|Q		V			
15+ 0	0.3421	0.61	|Q		V			
15+ 5	0.3465	0.63	|Q		V			
15+10	0.3510	0.65	|Q		V			
15+15	0.3556	0.68	|Q		V			
15+20	0.3605	0.71	|Q		V			
15+25	0.3655	0.73	|Q		V			
15+30	0.3706	0.74	|Q		V			
15+35	0.3755	0.71	|Q		V			
15+40	0.3803	0.69	|Q		V			
15+45	0.3851	0.71	|Q		V			
15+50	0.3904	0.76	|Q		V			
15+55	0.3962	0.85	|Q		V			
16+ 0	0.4034	1.04	|Q		V			
16+ 5	0.4176	2.08	|Q	Q	V			
16+10	0.4516	4.93	|Q		V			
16+15	0.5218	10.19	|Q	Q	V			
16+20	0.5853	9.22	|Q		V			
16+25	0.6232	5.50	|Q	Q	V			
16+30	0.6497	3.84	|Q	Q	V			
16+35	0.6704	3.00	|Q	Q	V			
16+40	0.6872	2.45	|Q	Q	V			
16+45	0.7017	2.09	|Q	Q	V			
16+50	0.7142	1.82	|Q	Q	V			
16+55	0.7247	1.52	|Q	Q	V			
17+ 0	0.7341	1.37	|Q		V			
17+ 5	0.7426	1.23	|Q		V			
17+10	0.7501	1.10	|Q		V			
17+15	0.7570	1.00	|Q		V			
17+20	0.7633	0.90	|Q		V			
17+25	0.7689	0.82	|Q		V			
17+30	0.7740	0.74	|Q		V			
17+35	0.7785	0.65	|Q		V			
17+40	0.7827	0.62	|Q		V			
17+45	0.7870	0.62	|Q		V			
17+50	0.7911	0.60	|Q		V			
17+55	0.7950	0.57	|Q		V			
18+ 0	0.7985	0.51	|Q		V			
18+ 5	0.8018	0.48	|Q		V			
18+10	0.8049	0.44	|Q		V			
18+15	0.8076	0.39	|Q		V			
18+20	0.8102	0.38	|Q		V			
18+25	0.8128	0.38	|Q		V			

18+30	0.8154	0.37	Q				V
18+35	0.8179	0.36	Q				V
18+40	0.8203	0.36	Q				V
18+45	0.8227	0.35	Q				V
18+50	0.8251	0.34	Q				V
18+55	0.8274	0.34	Q				V
19+ 0	0.8297	0.33	Q				V
19+ 5	0.8320	0.33	Q				V
19+10	0.8342	0.32	Q				V
19+15	0.8364	0.32	Q				V
19+20	0.8385	0.31	Q				V
19+25	0.8407	0.31	Q				V
19+30	0.8427	0.30	Q				V
19+35	0.8448	0.30	Q				V
19+40	0.8468	0.30	Q				V
19+45	0.8489	0.29	Q				V
19+50	0.8508	0.29	Q				V
19+55	0.8528	0.28	Q				V
20+ 0	0.8547	0.28	Q				V
20+ 5	0.8566	0.28	Q				V
20+10	0.8585	0.27	Q				V
20+15	0.8604	0.27	Q				V
20+20	0.8623	0.27	Q				V
20+25	0.8641	0.27	Q				V
20+30	0.8659	0.26	Q				V
20+35	0.8677	0.26	Q				V
20+40	0.8695	0.26	Q				V
20+45	0.8712	0.25	Q				V
20+50	0.8730	0.25	Q				V
20+55	0.8747	0.25	Q				V
21+ 0	0.8764	0.25	Q				V
21+ 5	0.8781	0.25	Q				V
21+10	0.8797	0.24	Q				V
21+15	0.8814	0.24	Q				V
21+20	0.8830	0.24	Q				V
21+25	0.8847	0.24	Q				V
21+30	0.8863	0.23	Q				V
21+35	0.8879	0.23	Q				V
21+40	0.8895	0.23	Q				V
21+45	0.8911	0.23	Q				V
21+50	0.8926	0.23	Q				V
21+55	0.8942	0.23	Q				V
22+ 0	0.8957	0.22	Q				V
22+ 5	0.8973	0.22	Q				V
22+10	0.8988	0.22	Q				V
22+15	0.9003	0.22	Q				V
22+20	0.9018	0.22	Q				V
22+25	0.9033	0.22	Q				V
22+30	0.9047	0.21	Q				V
22+35	0.9062	0.21	Q				V

22+40	0.9077	0.21	Q				V
22+45	0.9091	0.21	Q				V
22+50	0.9105	0.21	Q				V
22+55	0.9120	0.21	Q				V
23+ 0	0.9134	0.21	Q				V
23+ 5	0.9148	0.20	Q				V
23+10	0.9162	0.20	Q				V
23+15	0.9176	0.20	Q				V
23+20	0.9190	0.20	Q				V
23+25	0.9203	0.20	Q				V
23+30	0.9217	0.20	Q				V
23+35	0.9231	0.20	Q				V
23+40	0.9244	0.20	Q				V
23+45	0.9258	0.19	Q				V
23+50	0.9271	0.19	Q				V
23+55	0.9284	0.19	Q				V
24+ 0	0.9297	0.19	Q				V

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 10/01/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 10 YR UNIT HYDROGRAPH SUBAREA B
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
8.25	1	0.79

Rainfall data for year 10
8.25 6 1.82

Rainfall data for year 10
8.25 24 3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
67.0	67.0	8.25	1.000	0.578	1.000	0.578

Area-averaged adjusted loss rate Fm (In/Hr) = 0.578

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
8.25	1.000	67.0	67.0	4.93	0.255

Area-averaged catchment yield fraction, Y = 0.255

Area-averaged low loss fraction, Yb = 0.745

User entry of time of concentration = 0.270 (hours)

+++++

Watershed area = 8.25(Ac.)

Catchment Lag time = 0.216 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 38.5802

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.578(In/Hr)

Average low loss rate fraction (Yb) = 0.745 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.375(In)

Computed peak 30-minute rainfall = 0.642(In)

Specified peak 1-hour rainfall = 0.790(In)

Computed peak 3-hour rainfall = 1.318(In)

Specified peak 6-hour rainfall = 1.820(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 8.25(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000	Adjusted rainfall = 0.375(In)
-------------------------	-------------------------------

30-minute factor = 1.000	Adjusted rainfall = 0.641(In)
--------------------------	-------------------------------

1-hour factor = 1.000	Adjusted rainfall = 0.790(In)
-----------------------	-------------------------------

3-hour factor = 1.000	Adjusted rainfall = 1.318(In)
-----------------------	-------------------------------

6-hour factor = 1.000	Adjusted rainfall = 1.820(In)
-----------------------	-------------------------------

24-hour factor = 1.000	Adjusted rainfall = 3.630(In)
------------------------	-------------------------------

U n i t H y d r o g r a p h

+++++

Interval	'S' Graph	Unit Hydrograph
----------	-----------	-----------------

Number	Mean values	((CFS))

	(K =	99.77 (CFS))
1	2.595	2.589
2	17.110	14.482
3	47.025	29.847
4	64.168	17.104
5	73.585	9.396
6	79.873	6.274
7	84.321	4.438
8	87.824	3.495
9	90.350	2.521
10	92.386	2.031
11	94.047	1.658
12	95.367	1.317
13	96.438	1.068
14	97.275	0.835
15	97.884	0.608
16	98.288	0.403
17	98.739	0.450
18	99.202	0.462
19	99.584	0.381
20	99.827	0.243
21	100.000	0.173

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3747	0.3747
2	0.4613	0.0866
3	0.5210	0.0597
4	0.5680	0.0470
5	0.6073	0.0393
6	0.6414	0.0341
7	0.6718	0.0304
8	0.6992	0.0275
9	0.7244	0.0251
10	0.7477	0.0233
11	0.7693	0.0217
12	0.7897	0.0203
13	0.8197	0.0300
14	0.8485	0.0288
15	0.8762	0.0277
16	0.9030	0.0268
17	0.9289	0.0259
18	0.9540	0.0251
19	0.9783	0.0243
20	1.0020	0.0237
21	1.0250	0.0230
22	1.0475	0.0225

23	1.0694	0.0219
24	1.0908	0.0214
25	1.1118	0.0210
26	1.1323	0.0205
27	1.1524	0.0201
28	1.1721	0.0197
29	1.1914	0.0193
30	1.2104	0.0190
31	1.2291	0.0186
32	1.2474	0.0183
33	1.2654	0.0180
34	1.2831	0.0177
35	1.3006	0.0175
36	1.3178	0.0172
37	1.3347	0.0169
38	1.3514	0.0167
39	1.3678	0.0165
40	1.3841	0.0162
41	1.4001	0.0160
42	1.4159	0.0158
43	1.4315	0.0156
44	1.4469	0.0154
45	1.4621	0.0152
46	1.4772	0.0150
47	1.4920	0.0149
48	1.5067	0.0147
49	1.5213	0.0145
50	1.5357	0.0144
51	1.5499	0.0142
52	1.5640	0.0141
53	1.5779	0.0139
54	1.5917	0.0138
55	1.6054	0.0137
56	1.6189	0.0135
57	1.6323	0.0134
58	1.6456	0.0133
59	1.6587	0.0132
60	1.6718	0.0130
61	1.6847	0.0129
62	1.6975	0.0128
63	1.7102	0.0127
64	1.7228	0.0126
65	1.7353	0.0125
66	1.7477	0.0124
67	1.7599	0.0123
68	1.7721	0.0122
69	1.7842	0.0121
70	1.7962	0.0120
71	1.8081	0.0119
72	1.8200	0.0118

73	1.8325	0.0125
74	1.8450	0.0125
75	1.8573	0.0124
76	1.8696	0.0123
77	1.8818	0.0122
78	1.8940	0.0121
79	1.9060	0.0121
80	1.9180	0.0120
81	1.9299	0.0119
82	1.9417	0.0118
83	1.9535	0.0118
84	1.9652	0.0117
85	1.9768	0.0116
86	1.9883	0.0115
87	1.9998	0.0115
88	2.0112	0.0114
89	2.0226	0.0114
90	2.0339	0.0113
91	2.0451	0.0112
92	2.0563	0.0112
93	2.0674	0.0111
94	2.0784	0.0110
95	2.0894	0.0110
96	2.1003	0.0109
97	2.1112	0.0109
98	2.1220	0.0108
99	2.1327	0.0108
100	2.1434	0.0107
101	2.1541	0.0106
102	2.1647	0.0106
103	2.1752	0.0105
104	2.1857	0.0105
105	2.1962	0.0104
106	2.2066	0.0104
107	2.2169	0.0103
108	2.2272	0.0103
109	2.2374	0.0102
110	2.2476	0.0102
111	2.2578	0.0102
112	2.2679	0.0101
113	2.2780	0.0101
114	2.2880	0.0100
115	2.2980	0.0100
116	2.3079	0.0099
117	2.3178	0.0099
118	2.3276	0.0098
119	2.3374	0.0098
120	2.3472	0.0098
121	2.3569	0.0097
122	2.3666	0.0097

123	2.3762	0.0096
124	2.3858	0.0096
125	2.3954	0.0096
126	2.4049	0.0095
127	2.4144	0.0095
128	2.4239	0.0094
129	2.4333	0.0094
130	2.4426	0.0094
131	2.4520	0.0093
132	2.4613	0.0093
133	2.4706	0.0093
134	2.4798	0.0092
135	2.4890	0.0092
136	2.4981	0.0092
137	2.5073	0.0091
138	2.5164	0.0091
139	2.5254	0.0091
140	2.5345	0.0090
141	2.5435	0.0090
142	2.5524	0.0090
143	2.5614	0.0089
144	2.5703	0.0089
145	2.5792	0.0089
146	2.5880	0.0088
147	2.5968	0.0088
148	2.6056	0.0088
149	2.6144	0.0088
150	2.6231	0.0087
151	2.6318	0.0087
152	2.6404	0.0087
153	2.6491	0.0086
154	2.6577	0.0086
155	2.6663	0.0086
156	2.6748	0.0086
157	2.6833	0.0085
158	2.6918	0.0085
159	2.7003	0.0085
160	2.7088	0.0084
161	2.7172	0.0084
162	2.7256	0.0084
163	2.7339	0.0084
164	2.7423	0.0083
165	2.7506	0.0083
166	2.7589	0.0083
167	2.7671	0.0083
168	2.7754	0.0082
169	2.7836	0.0082
170	2.7918	0.0082
171	2.8000	0.0082
172	2.8081	0.0081

173	2.8162	0.0081
174	2.8243	0.0081
175	2.8324	0.0081
176	2.8404	0.0080
177	2.8485	0.0080
178	2.8565	0.0080
179	2.8644	0.0080
180	2.8724	0.0080
181	2.8803	0.0079
182	2.8883	0.0079
183	2.8961	0.0079
184	2.9040	0.0079
185	2.9119	0.0078
186	2.9197	0.0078
187	2.9275	0.0078
188	2.9353	0.0078
189	2.9431	0.0078
190	2.9508	0.0077
191	2.9585	0.0077
192	2.9662	0.0077
193	2.9739	0.0077
194	2.9816	0.0077
195	2.9892	0.0076
196	2.9968	0.0076
197	3.0044	0.0076
198	3.0120	0.0076
199	3.0196	0.0076
200	3.0271	0.0075
201	3.0347	0.0075
202	3.0422	0.0075
203	3.0497	0.0075
204	3.0571	0.0075
205	3.0646	0.0075
206	3.0720	0.0074
207	3.0795	0.0074
208	3.0869	0.0074
209	3.0942	0.0074
210	3.1016	0.0074
211	3.1090	0.0073
212	3.1163	0.0073
213	3.1236	0.0073
214	3.1309	0.0073
215	3.1382	0.0073
216	3.1454	0.0073
217	3.1527	0.0072
218	3.1599	0.0072
219	3.1671	0.0072
220	3.1743	0.0072
221	3.1815	0.0072
222	3.1886	0.0072

223	3.1958	0.0071
224	3.2029	0.0071
225	3.2100	0.0071
226	3.2171	0.0071
227	3.2242	0.0071
228	3.2313	0.0071
229	3.2383	0.0071
230	3.2454	0.0070
231	3.2524	0.0070
232	3.2594	0.0070
233	3.2664	0.0070
234	3.2733	0.0070
235	3.2803	0.0070
236	3.2872	0.0069
237	3.2942	0.0069
238	3.3011	0.0069
239	3.3080	0.0069
240	3.3149	0.0069
241	3.3218	0.0069
242	3.3286	0.0069
243	3.3355	0.0068
244	3.3423	0.0068
245	3.3491	0.0068
246	3.3559	0.0068
247	3.3627	0.0068
248	3.3695	0.0068
249	3.3762	0.0068
250	3.3830	0.0067
251	3.3897	0.0067
252	3.3964	0.0067
253	3.4031	0.0067
254	3.4098	0.0067
255	3.4165	0.0067
256	3.4232	0.0067
257	3.4298	0.0067
258	3.4364	0.0066
259	3.4431	0.0066
260	3.4497	0.0066
261	3.4563	0.0066
262	3.4629	0.0066
263	3.4695	0.0066
264	3.4760	0.0066
265	3.4826	0.0066
266	3.4891	0.0065
267	3.4956	0.0065
268	3.5022	0.0065
269	3.5087	0.0065
270	3.5151	0.0065
271	3.5216	0.0065
272	3.5281	0.0065

273	3.5345	0.0065
274	3.5410	0.0064
275	3.5474	0.0064
276	3.5538	0.0064
277	3.5602	0.0064
278	3.5666	0.0064
279	3.5730	0.0064
280	3.5794	0.0064
281	3.5858	0.0064
282	3.5921	0.0063
283	3.5984	0.0063
284	3.6048	0.0063
285	3.6111	0.0063
286	3.6174	0.0063
287	3.6237	0.0063
288	3.6300	0.0063

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0063	0.0047	0.0016
2	0.0063	0.0047	0.0016
3	0.0063	0.0047	0.0016
4	0.0063	0.0047	0.0016
5	0.0063	0.0047	0.0016
6	0.0064	0.0047	0.0016
7	0.0064	0.0048	0.0016
8	0.0064	0.0048	0.0016
9	0.0064	0.0048	0.0016
10	0.0064	0.0048	0.0016
11	0.0065	0.0048	0.0016
12	0.0065	0.0048	0.0016
13	0.0065	0.0048	0.0017
14	0.0065	0.0048	0.0017
15	0.0065	0.0049	0.0017
16	0.0065	0.0049	0.0017
17	0.0066	0.0049	0.0017
18	0.0066	0.0049	0.0017
19	0.0066	0.0049	0.0017
20	0.0066	0.0049	0.0017
21	0.0066	0.0049	0.0017
22	0.0067	0.0050	0.0017
23	0.0067	0.0050	0.0017
24	0.0067	0.0050	0.0017
25	0.0067	0.0050	0.0017
26	0.0067	0.0050	0.0017
27	0.0068	0.0050	0.0017
28	0.0068	0.0050	0.0017
29	0.0068	0.0051	0.0017

30	0.0068	0.0051	0.0017
31	0.0068	0.0051	0.0017
32	0.0069	0.0051	0.0017
33	0.0069	0.0051	0.0018
34	0.0069	0.0051	0.0018
35	0.0069	0.0052	0.0018
36	0.0069	0.0052	0.0018
37	0.0070	0.0052	0.0018
38	0.0070	0.0052	0.0018
39	0.0070	0.0052	0.0018
40	0.0070	0.0052	0.0018
41	0.0071	0.0053	0.0018
42	0.0071	0.0053	0.0018
43	0.0071	0.0053	0.0018
44	0.0071	0.0053	0.0018
45	0.0072	0.0053	0.0018
46	0.0072	0.0054	0.0018
47	0.0072	0.0054	0.0018
48	0.0072	0.0054	0.0018
49	0.0073	0.0054	0.0018
50	0.0073	0.0054	0.0019
51	0.0073	0.0055	0.0019
52	0.0073	0.0055	0.0019
53	0.0074	0.0055	0.0019
54	0.0074	0.0055	0.0019
55	0.0074	0.0055	0.0019
56	0.0074	0.0055	0.0019
57	0.0075	0.0056	0.0019
58	0.0075	0.0056	0.0019
59	0.0075	0.0056	0.0019
60	0.0075	0.0056	0.0019
61	0.0076	0.0057	0.0019
62	0.0076	0.0057	0.0019
63	0.0076	0.0057	0.0019
64	0.0077	0.0057	0.0020
65	0.0077	0.0057	0.0020
66	0.0077	0.0058	0.0020
67	0.0078	0.0058	0.0020
68	0.0078	0.0058	0.0020
69	0.0078	0.0058	0.0020
70	0.0078	0.0059	0.0020
71	0.0079	0.0059	0.0020
72	0.0079	0.0059	0.0020
73	0.0080	0.0059	0.0020
74	0.0080	0.0059	0.0020
75	0.0080	0.0060	0.0020
76	0.0080	0.0060	0.0020
77	0.0081	0.0060	0.0021
78	0.0081	0.0061	0.0021
79	0.0082	0.0061	0.0021

80	0.0082	0.0061	0.0021
81	0.0082	0.0061	0.0021
82	0.0083	0.0062	0.0021
83	0.0083	0.0062	0.0021
84	0.0083	0.0062	0.0021
85	0.0084	0.0063	0.0021
86	0.0084	0.0063	0.0021
87	0.0085	0.0063	0.0022
88	0.0085	0.0063	0.0022
89	0.0086	0.0064	0.0022
90	0.0086	0.0064	0.0022
91	0.0086	0.0064	0.0022
92	0.0087	0.0065	0.0022
93	0.0087	0.0065	0.0022
94	0.0088	0.0065	0.0022
95	0.0088	0.0066	0.0022
96	0.0088	0.0066	0.0023
97	0.0089	0.0066	0.0023
98	0.0089	0.0067	0.0023
99	0.0090	0.0067	0.0023
100	0.0090	0.0067	0.0023
101	0.0091	0.0068	0.0023
102	0.0091	0.0068	0.0023
103	0.0092	0.0069	0.0023
104	0.0092	0.0069	0.0024
105	0.0093	0.0069	0.0024
106	0.0093	0.0070	0.0024
107	0.0094	0.0070	0.0024
108	0.0094	0.0070	0.0024
109	0.0095	0.0071	0.0024
110	0.0096	0.0071	0.0024
111	0.0096	0.0072	0.0025
112	0.0097	0.0072	0.0025
113	0.0098	0.0073	0.0025
114	0.0098	0.0073	0.0025
115	0.0099	0.0074	0.0025
116	0.0099	0.0074	0.0025
117	0.0100	0.0075	0.0026
118	0.0101	0.0075	0.0026
119	0.0102	0.0076	0.0026
120	0.0102	0.0076	0.0026
121	0.0103	0.0077	0.0026
122	0.0103	0.0077	0.0026
123	0.0104	0.0078	0.0027
124	0.0105	0.0078	0.0027
125	0.0106	0.0079	0.0027
126	0.0106	0.0079	0.0027
127	0.0108	0.0080	0.0027
128	0.0108	0.0081	0.0028
129	0.0109	0.0081	0.0028

130	0.0110	0.0082	0.0028
131	0.0111	0.0083	0.0028
132	0.0112	0.0083	0.0028
133	0.0113	0.0084	0.0029
134	0.0114	0.0085	0.0029
135	0.0115	0.0086	0.0029
136	0.0115	0.0086	0.0029
137	0.0117	0.0087	0.0030
138	0.0118	0.0088	0.0030
139	0.0119	0.0089	0.0030
140	0.0120	0.0089	0.0030
141	0.0121	0.0090	0.0031
142	0.0122	0.0091	0.0031
143	0.0124	0.0092	0.0032
144	0.0125	0.0093	0.0032
145	0.0118	0.0088	0.0030
146	0.0119	0.0089	0.0030
147	0.0121	0.0090	0.0031
148	0.0122	0.0091	0.0031
149	0.0124	0.0092	0.0032
150	0.0125	0.0093	0.0032
151	0.0127	0.0095	0.0032
152	0.0128	0.0095	0.0033
153	0.0130	0.0097	0.0033
154	0.0132	0.0098	0.0033
155	0.0134	0.0100	0.0034
156	0.0135	0.0101	0.0034
157	0.0138	0.0103	0.0035
158	0.0139	0.0104	0.0035
159	0.0142	0.0106	0.0036
160	0.0144	0.0107	0.0037
161	0.0147	0.0110	0.0037
162	0.0149	0.0111	0.0038
163	0.0152	0.0113	0.0039
164	0.0154	0.0115	0.0039
165	0.0158	0.0118	0.0040
166	0.0160	0.0119	0.0041
167	0.0165	0.0123	0.0042
168	0.0167	0.0124	0.0042
169	0.0172	0.0128	0.0044
170	0.0175	0.0130	0.0044
171	0.0180	0.0134	0.0046
172	0.0183	0.0137	0.0047
173	0.0190	0.0141	0.0048
174	0.0193	0.0144	0.0049
175	0.0201	0.0150	0.0051
176	0.0205	0.0153	0.0052
177	0.0214	0.0160	0.0055
178	0.0219	0.0163	0.0056
179	0.0230	0.0172	0.0059

180	0.0237	0.0176	0.0060
181	0.0251	0.0187	0.0064
182	0.0259	0.0193	0.0066
183	0.0277	0.0207	0.0071
184	0.0288	0.0215	0.0073
185	0.0203	0.0152	0.0052
186	0.0217	0.0162	0.0055
187	0.0251	0.0187	0.0064
188	0.0275	0.0205	0.0070
189	0.0341	0.0255	0.0087
190	0.0393	0.0293	0.0100
191	0.0597	0.0445	0.0152
192	0.0866	0.0482	0.0384
193	0.3747	0.0482	0.3265
194	0.0470	0.0350	0.0120
195	0.0304	0.0226	0.0077
196	0.0233	0.0173	0.0059
197	0.0300	0.0224	0.0076
198	0.0268	0.0199	0.0068
199	0.0243	0.0181	0.0062
200	0.0225	0.0167	0.0057
201	0.0210	0.0156	0.0053
202	0.0197	0.0147	0.0050
203	0.0186	0.0139	0.0047
204	0.0177	0.0132	0.0045
205	0.0169	0.0126	0.0043
206	0.0162	0.0121	0.0041
207	0.0156	0.0116	0.0040
208	0.0150	0.0112	0.0038
209	0.0145	0.0108	0.0037
210	0.0141	0.0105	0.0036
211	0.0137	0.0102	0.0035
212	0.0133	0.0099	0.0034
213	0.0129	0.0096	0.0033
214	0.0126	0.0094	0.0032
215	0.0123	0.0092	0.0031
216	0.0120	0.0089	0.0031
217	0.0125	0.0094	0.0032
218	0.0123	0.0092	0.0031
219	0.0121	0.0090	0.0031
220	0.0118	0.0088	0.0030
221	0.0116	0.0087	0.0030
222	0.0114	0.0085	0.0029
223	0.0112	0.0084	0.0029
224	0.0110	0.0082	0.0028
225	0.0109	0.0081	0.0028
226	0.0107	0.0080	0.0027
227	0.0105	0.0079	0.0027
228	0.0104	0.0077	0.0026
229	0.0102	0.0076	0.0026

230	0.0101	0.0075	0.0026
231	0.0100	0.0074	0.0025
232	0.0098	0.0073	0.0025
233	0.0097	0.0072	0.0025
234	0.0096	0.0072	0.0024
235	0.0095	0.0071	0.0024
236	0.0094	0.0070	0.0024
237	0.0093	0.0069	0.0024
238	0.0092	0.0068	0.0023
239	0.0091	0.0068	0.0023
240	0.0090	0.0067	0.0023
241	0.0089	0.0066	0.0023
242	0.0088	0.0065	0.0022
243	0.0087	0.0065	0.0022
244	0.0086	0.0064	0.0022
245	0.0085	0.0064	0.0022
246	0.0084	0.0063	0.0021
247	0.0084	0.0062	0.0021
248	0.0083	0.0062	0.0021
249	0.0082	0.0061	0.0021
250	0.0081	0.0061	0.0021
251	0.0081	0.0060	0.0021
252	0.0080	0.0060	0.0020
253	0.0079	0.0059	0.0020
254	0.0079	0.0059	0.0020
255	0.0078	0.0058	0.0020
256	0.0077	0.0058	0.0020
257	0.0077	0.0057	0.0020
258	0.0076	0.0057	0.0019
259	0.0076	0.0056	0.0019
260	0.0075	0.0056	0.0019
261	0.0075	0.0056	0.0019
262	0.0074	0.0055	0.0019
263	0.0073	0.0055	0.0019
264	0.0073	0.0054	0.0019
265	0.0072	0.0054	0.0018
266	0.0072	0.0054	0.0018
267	0.0071	0.0053	0.0018
268	0.0071	0.0053	0.0018
269	0.0071	0.0053	0.0018
270	0.0070	0.0052	0.0018
271	0.0070	0.0052	0.0018
272	0.0069	0.0052	0.0018
273	0.0069	0.0051	0.0017
274	0.0068	0.0051	0.0017
275	0.0068	0.0051	0.0017
276	0.0067	0.0050	0.0017
277	0.0067	0.0050	0.0017
278	0.0067	0.0050	0.0017
279	0.0066	0.0049	0.0017

280	0.0066	0.0049	0.0017
281	0.0066	0.0049	0.0017
282	0.0065	0.0049	0.0017
283	0.0065	0.0048	0.0016
284	0.0064	0.0048	0.0016
285	0.0064	0.0048	0.0016
286	0.0064	0.0048	0.0016
287	0.0063	0.0047	0.0016
288	0.0063	0.0047	0.0016

 Total soil rain loss = 2.46(In)
 Total effective rainfall = 1.17(In)
 Peak flow rate in flood hydrograph = 10.94(CFS)

+++++
 24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0000	0.00	Q				
0+10	0.0002	0.03	Q				
0+15	0.0007	0.08	Q				
0+20	0.0014	0.10	Q				
0+25	0.0023	0.12	Q				
0+30	0.0031	0.13	Q				
0+35	0.0041	0.14	Q				
0+40	0.0050	0.14	Q				
0+45	0.0061	0.15	Q				
0+50	0.0071	0.15	Q				
0+55	0.0081	0.15	Q				
1+ 0	0.0092	0.16	Q				
1+ 5	0.0103	0.16	Q				
1+10	0.0114	0.16	Q				
1+15	0.0125	0.16	Q				
1+20	0.0136	0.16	Q				
1+25	0.0147	0.16	Q				
1+30	0.0159	0.16	Q				
1+35	0.0170	0.17	Q				
1+40	0.0181	0.17	Q				
1+45	0.0193	0.17	Q				
1+50	0.0204	0.17	QV				
1+55	0.0216	0.17	QV				
2+ 0	0.0227	0.17	QV				
2+ 5	0.0239	0.17	QV				
2+10	0.0251	0.17	QV				

2+15	0.0262	0.17	QV
2+20	0.0274	0.17	QV
2+25	0.0286	0.17	QV
2+30	0.0298	0.17	QV
2+35	0.0310	0.17	QV
2+40	0.0321	0.17	QV
2+45	0.0333	0.17	QV
2+50	0.0345	0.17	QV
2+55	0.0357	0.17	QV
3+ 0	0.0369	0.17	QV
3+ 5	0.0381	0.17	QV
3+10	0.0393	0.18	QV
3+15	0.0405	0.18	Q V
3+20	0.0418	0.18	Q V
3+25	0.0430	0.18	Q V
3+30	0.0442	0.18	Q V
3+35	0.0454	0.18	Q V
3+40	0.0467	0.18	Q V
3+45	0.0479	0.18	Q V
3+50	0.0491	0.18	Q V
3+55	0.0504	0.18	Q V
4+ 0	0.0516	0.18	Q V
4+ 5	0.0529	0.18	Q V
4+10	0.0541	0.18	Q V
4+15	0.0554	0.18	Q V
4+20	0.0567	0.18	Q V
4+25	0.0579	0.18	Q V
4+30	0.0592	0.19	Q V
4+35	0.0605	0.19	Q V
4+40	0.0618	0.19	Q V
4+45	0.0631	0.19	Q V
4+50	0.0644	0.19	Q V
4+55	0.0657	0.19	Q V
5+ 0	0.0670	0.19	Q V
5+ 5	0.0683	0.19	Q V
5+10	0.0696	0.19	Q V
5+15	0.0709	0.19	Q V
5+20	0.0722	0.19	Q V
5+25	0.0736	0.19	Q V
5+30	0.0749	0.19	Q V
5+35	0.0762	0.19	Q V
5+40	0.0776	0.19	Q V
5+45	0.0789	0.20	Q V
5+50	0.0803	0.20	Q V
5+55	0.0816	0.20	Q V
6+ 0	0.0830	0.20	Q V
6+ 5	0.0844	0.20	Q V
6+10	0.0857	0.20	Q V
6+15	0.0871	0.20	Q V
6+20	0.0885	0.20	Q V

6+25	0.0899	0.20	Q	V				
6+30	0.0913	0.20	Q	V				
6+35	0.0927	0.20	Q	V				
6+40	0.0941	0.20	Q	V				
6+45	0.0955	0.21	Q	V				
6+50	0.0969	0.21	Q	V				
6+55	0.0984	0.21	Q	V				
7+ 0	0.0998	0.21	Q	V				
7+ 5	0.1013	0.21	Q	V				
7+10	0.1027	0.21	Q	V				
7+15	0.1042	0.21	Q	V				
7+20	0.1056	0.21	Q	V				
7+25	0.1071	0.21	Q	V				
7+30	0.1086	0.21	Q	V				
7+35	0.1100	0.22	Q	V				
7+40	0.1115	0.22	Q	V				
7+45	0.1130	0.22	Q	V				
7+50	0.1145	0.22	Q	V				
7+55	0.1160	0.22	Q	V				
8+ 0	0.1176	0.22	Q	V				
8+ 5	0.1191	0.22	Q	V				
8+10	0.1206	0.22	Q	V				
8+15	0.1222	0.22	Q	V				
8+20	0.1237	0.23	Q	V				
8+25	0.1253	0.23	Q	V				
8+30	0.1268	0.23	Q	V				
8+35	0.1284	0.23	Q	V				
8+40	0.1300	0.23	Q	V				
8+45	0.1316	0.23	Q	V				
8+50	0.1332	0.23	Q	V				
8+55	0.1348	0.23	Q	V				
9+ 0	0.1364	0.24	Q	V				
9+ 5	0.1381	0.24	Q	V				
9+10	0.1397	0.24	Q	V				
9+15	0.1413	0.24	Q	V				
9+20	0.1430	0.24	Q	V				
9+25	0.1447	0.24	Q	V				
9+30	0.1463	0.24	Q	V				
9+35	0.1480	0.25	Q	V				
9+40	0.1497	0.25	Q	V				
9+45	0.1514	0.25	Q	V				
9+50	0.1532	0.25	Q	V				
9+55	0.1549	0.25	Q	V				
10+ 0	0.1566	0.25	Q	V				
10+ 5	0.1584	0.25	Q	V				
10+10	0.1601	0.26	Q	V				
10+15	0.1619	0.26	Q	V				
10+20	0.1637	0.26	Q	V				
10+25	0.1655	0.26	Q	V				
10+30	0.1673	0.26	Q	V				

10+35	0.1692	0.27	Q	V				
10+40	0.1710	0.27	Q	V				
10+45	0.1728	0.27	Q	V				
10+50	0.1747	0.27	Q	V				
10+55	0.1766	0.27	Q	V				
11+ 0	0.1785	0.28	Q	V				
11+ 5	0.1804	0.28	Q	V				
11+10	0.1823	0.28	Q	V				
11+15	0.1843	0.28	Q	V				
11+20	0.1862	0.28	Q	V				
11+25	0.1882	0.29	Q	V				
11+30	0.1902	0.29	Q	V				
11+35	0.1922	0.29	Q	V				
11+40	0.1943	0.29	Q	V				
11+45	0.1963	0.30	Q	V				
11+50	0.1984	0.30	Q	V				
11+55	0.2004	0.30	Q	V				
12+ 0	0.2026	0.31	Q	V				
12+ 5	0.2047	0.31	Q	V				
12+10	0.2068	0.31	Q	V				
12+15	0.2089	0.31	Q	V				
12+20	0.2110	0.30	Q	V				
12+25	0.2131	0.31	Q	V				
12+30	0.2152	0.31	Q	V				
12+35	0.2174	0.31	Q	V				
12+40	0.2195	0.31	Q	V				
12+45	0.2217	0.32	Q	V				
12+50	0.2239	0.32	Q	V				
12+55	0.2262	0.32	Q	V				
13+ 0	0.2284	0.33	Q	V				
13+ 5	0.2307	0.33	Q	V				
13+10	0.2330	0.34	Q	V				
13+15	0.2354	0.34	Q	V				
13+20	0.2378	0.35	Q	V				
13+25	0.2402	0.35	Q	V				
13+30	0.2427	0.36	Q	V				
13+35	0.2452	0.36	Q	V				
13+40	0.2477	0.37	Q	V				
13+45	0.2503	0.38	Q	V				
13+50	0.2529	0.38	Q	V				
13+55	0.2556	0.39	Q	V				
14+ 0	0.2583	0.40	Q	V				
14+ 5	0.2611	0.40	Q	V				
14+10	0.2639	0.41	Q	V				
14+15	0.2668	0.42	Q	V				
14+20	0.2698	0.43	Q	V				
14+25	0.2728	0.44	Q	V				
14+30	0.2759	0.45	Q	V				
14+35	0.2791	0.46	Q	V				
14+40	0.2823	0.47	Q	V				

14+45	0.2857	0.49	Q		V			
14+50	0.2891	0.50	Q		V			
14+55	0.2927	0.52	Q		V			
15+ 0	0.2964	0.53	Q		V			
15+ 5	0.3002	0.55	Q		V			
15+10	0.3041	0.57	Q		V			
15+15	0.3082	0.60	Q		V			
15+20	0.3125	0.62	Q		V			
15+25	0.3170	0.65	Q		V			
15+30	0.3214	0.64	Q		V			
15+35	0.3255	0.60	Q		V			
15+40	0.3296	0.59	Q		V			
15+45	0.3339	0.63	Q		V			
15+50	0.3386	0.68	Q		V			
15+55	0.3440	0.78	Q		V			
16+ 0	0.3508	0.99	Q		V			
16+ 5	0.3665	2.27	Q		V			
16+10	0.4109	6.44		Q	V			
16+15	0.4862	10.94			Q	V		
16+20	0.5322	6.68		Q		V		
16+25	0.5600	4.03		Q		V		
16+30	0.5800	2.91	Q			V		
16+35	0.5958	2.29	Q			V		
16+40	0.6090	1.92	Q			V		
16+45	0.6197	1.56	Q			V		
16+50	0.6290	1.34	Q			V		
16+55	0.6371	1.18	Q			V		
17+ 0	0.6441	1.03	Q			V		
17+ 5	0.6504	0.91	Q			V		
17+10	0.6559	0.80	Q			V		
17+15	0.6607	0.70	Q			V		
17+20	0.6649	0.61	Q			V		
17+25	0.6690	0.60	Q			V		
17+30	0.6731	0.59	Q			V		
17+35	0.6768	0.54	Q			V		
17+40	0.6800	0.48	Q			V		
17+45	0.6830	0.43	Q			V		
17+50	0.6855	0.37	Q			V		
17+55	0.6880	0.35	Q			V		
18+ 0	0.6903	0.34	Q			V		
18+ 5	0.6926	0.33	Q			V		
18+10	0.6949	0.33	Q			V		
18+15	0.6971	0.33	Q			V		
18+20	0.6993	0.32	Q			V		
18+25	0.7015	0.32	Q			V		
18+30	0.7036	0.31	Q			V		
18+35	0.7057	0.30	Q			V		
18+40	0.7078	0.30	Q			V		
18+45	0.7098	0.29	Q			V		
18+50	0.7118	0.29	Q			V		

18+55	0.7138	0.28	Q				V
19+ 0	0.7157	0.28	Q				V
19+ 5	0.7176	0.28	Q				V
19+10	0.7195	0.27	Q				V
19+15	0.7213	0.27	Q				V
19+20	0.7231	0.26	Q				V
19+25	0.7249	0.26	Q				V
19+30	0.7267	0.26	Q				V
19+35	0.7285	0.25	Q				V
19+40	0.7302	0.25	Q				V
19+45	0.7319	0.25	Q				V
19+50	0.7336	0.24	Q				V
19+55	0.7352	0.24	Q				V
20+ 0	0.7369	0.24	Q				V
20+ 5	0.7385	0.24	Q				V
20+10	0.7401	0.23	Q				V
20+15	0.7417	0.23	Q				V
20+20	0.7433	0.23	Q				V
20+25	0.7448	0.23	Q				V
20+30	0.7463	0.22	Q				V
20+35	0.7479	0.22	Q				V
20+40	0.7494	0.22	Q				V
20+45	0.7509	0.22	Q				V
20+50	0.7523	0.21	Q				V
20+55	0.7538	0.21	Q				V
21+ 0	0.7553	0.21	Q				V
21+ 5	0.7567	0.21	Q				V
21+10	0.7581	0.21	Q				V
21+15	0.7595	0.21	Q				V
21+20	0.7609	0.20	Q				V
21+25	0.7623	0.20	Q				V
21+30	0.7637	0.20	Q				V
21+35	0.7651	0.20	Q				V
21+40	0.7664	0.20	Q				V
21+45	0.7678	0.20	Q				V
21+50	0.7691	0.19	Q				V
21+55	0.7704	0.19	Q				V
22+ 0	0.7717	0.19	Q				V
22+ 5	0.7730	0.19	Q				V
22+10	0.7743	0.19	Q				V
22+15	0.7756	0.19	Q				V
22+20	0.7769	0.19	Q				V
22+25	0.7782	0.18	Q				V
22+30	0.7794	0.18	Q				V
22+35	0.7807	0.18	Q				V
22+40	0.7819	0.18	Q				V
22+45	0.7831	0.18	Q				V
22+50	0.7844	0.18	Q				V
22+55	0.7856	0.18	Q				V
23+ 0	0.7868	0.18	Q				V

23+ 5	0.7880	0.17	Q				V
23+10	0.7892	0.17	Q				V
23+15	0.7904	0.17	Q				V
23+20	0.7915	0.17	Q				V
23+25	0.7927	0.17	Q				V
23+30	0.7939	0.17	Q				V
23+35	0.7950	0.17	Q				V
23+40	0.7962	0.17	Q				V
23+45	0.7973	0.17	Q				V
23+50	0.7985	0.17	Q				V
23+55	0.7996	0.16	Q				V
24+ 0	0.8007	0.16	Q				V

Appendix D – Unit Hydrograph (Pre-Development)

- 100-Year Storm Event

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 10/01/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 100 YR UNIT HYDROGRAPH SUBAREA A
MGUBBAREINER 2021-09-27
--

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
9.61	1	1.31

Rainfall data for year 100
9.61 6 3.05

Rainfall data for year 100
9.61 24 6.31

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 3)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
67.0	84.6	9.61	1.000	0.290	1.000	0.290

Area-averaged adjusted loss rate Fm (In/Hr) = 0.290

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC3)	S	Pervious Yield Fr
9.61	1.000	67.0	84.6	1.82	0.721

Area-averaged catchment yield fraction, Y = 0.721

Area-averaged low loss fraction, Yb = 0.279

User entry of time of concentration = 0.323 (hours)

+++++

Watershed area = 9.61(Ac.)

Catchment Lag time = 0.258 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 32.2497

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.290(In/Hr)

Average low loss rate fraction (Yb) = 0.279 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.622(In)

Computed peak 30-minute rainfall = 1.064(In)

Specified peak 1-hour rainfall = 1.310(In)

Computed peak 3-hour rainfall = 2.199(In)

Specified peak 6-hour rainfall = 3.050(In)

Specified peak 24-hour rainfall = 6.310(In)

Rainfall depth area reduction factors:

Using a total area of 9.61(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.621(In)

30-minute factor = 1.000 Adjusted rainfall = 1.064(In)

1-hour factor = 1.000 Adjusted rainfall = 1.309(In)

3-hour factor = 1.000 Adjusted rainfall = 2.199(In)

6-hour factor = 1.000 Adjusted rainfall = 3.050(In)

24-hour factor = 1.000 Adjusted rainfall = 6.310(In)

U n i t H y d r o g r a p h

+++++

Interval	'S' Graph	Unit Hydrograph
----------	-----------	-----------------

Number	Mean values	((CFS))

	(K =	116.22 (CFS))
1	1.968	2.287
2	11.006	10.504
3	35.541	28.514
4	56.083	23.874
5	67.112	12.818
6	74.342	8.403
7	79.546	6.049
8	83.410	4.491
9	86.558	3.658
10	89.053	2.899
11	90.960	2.216
12	92.593	1.898
13	93.980	1.612
14	95.102	1.304
15	96.058	1.111
16	96.865	0.938
17	97.478	0.713
18	97.943	0.541
19	98.271	0.381
20	98.646	0.436
21	99.033	0.450
22	99.412	0.440
23	99.660	0.288
24	99.862	0.234
25	100.000	0.161

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)

1	0.6213	0.6213
2	0.7649	0.1436
3	0.8639	0.0989
4	0.9418	0.0779
5	1.0070	0.0652
6	1.0636	0.0566
7	1.1139	0.0503
8	1.1594	0.0455
9	1.2011	0.0417
10	1.2397	0.0386
11	1.2757	0.0360
12	1.3094	0.0337
13	1.3598	0.0504
14	1.4082	0.0484
15	1.4549	0.0466
16	1.4999	0.0450
17	1.5434	0.0435
18	1.5856	0.0422

19	1.6266	0.0410
20	1.6665	0.0399
21	1.7053	0.0388
22	1.7431	0.0379
23	1.7801	0.0370
24	1.8162	0.0361
25	1.8516	0.0353
26	1.8862	0.0346
27	1.9201	0.0339
28	1.9533	0.0332
29	1.9859	0.0326
30	2.0180	0.0320
31	2.0494	0.0315
32	2.0804	0.0309
33	2.1108	0.0304
34	2.1408	0.0300
35	2.1703	0.0295
36	2.1993	0.0291
37	2.2279	0.0286
38	2.2561	0.0282
39	2.2839	0.0278
40	2.3114	0.0274
41	2.3385	0.0271
42	2.3652	0.0267
43	2.3916	0.0264
44	2.4177	0.0261
45	2.4434	0.0258
46	2.4689	0.0255
47	2.4941	0.0252
48	2.5190	0.0249
49	2.5436	0.0246
50	2.5679	0.0244
51	2.5920	0.0241
52	2.6159	0.0239
53	2.6395	0.0236
54	2.6629	0.0234
55	2.6860	0.0231
56	2.7090	0.0229
57	2.7317	0.0227
58	2.7542	0.0225
59	2.7765	0.0223
60	2.7986	0.0221
61	2.8205	0.0219
62	2.8422	0.0217
63	2.8637	0.0215
64	2.8851	0.0214
65	2.9063	0.0212
66	2.9273	0.0210
67	2.9481	0.0208
68	2.9688	0.0207

69	2.9893	0.0205
70	3.0096	0.0204
71	3.0299	0.0202
72	3.0499	0.0201
73	3.0721	0.0221
74	3.0940	0.0220
75	3.1159	0.0219
76	3.1376	0.0217
77	3.1592	0.0216
78	3.1807	0.0215
79	3.2020	0.0213
80	3.2232	0.0212
81	3.2442	0.0211
82	3.2652	0.0209
83	3.2860	0.0208
84	3.3067	0.0207
85	3.3273	0.0206
86	3.3478	0.0205
87	3.3681	0.0204
88	3.3884	0.0202
89	3.4085	0.0201
90	3.4285	0.0200
91	3.4485	0.0199
92	3.4683	0.0198
93	3.4880	0.0197
94	3.5076	0.0196
95	3.5271	0.0195
96	3.5466	0.0194
97	3.5659	0.0193
98	3.5851	0.0192
99	3.6043	0.0191
100	3.6233	0.0190
101	3.6423	0.0190
102	3.6611	0.0189
103	3.6799	0.0188
104	3.6986	0.0187
105	3.7172	0.0186
106	3.7357	0.0185
107	3.7542	0.0184
108	3.7725	0.0184
109	3.7908	0.0183
110	3.8090	0.0182
111	3.8271	0.0181
112	3.8452	0.0180
113	3.8631	0.0180
114	3.8810	0.0179
115	3.8989	0.0178
116	3.9166	0.0177
117	3.9343	0.0177
118	3.9519	0.0176

119	3.9694	0.0175
120	3.9869	0.0175
121	4.0042	0.0174
122	4.0216	0.0173
123	4.0388	0.0173
124	4.0560	0.0172
125	4.0731	0.0171
126	4.0902	0.0171
127	4.1072	0.0170
128	4.1241	0.0169
129	4.1410	0.0169
130	4.1578	0.0168
131	4.1745	0.0167
132	4.1912	0.0167
133	4.2078	0.0166
134	4.2244	0.0166
135	4.2409	0.0165
136	4.2573	0.0164
137	4.2737	0.0164
138	4.2900	0.0163
139	4.3063	0.0163
140	4.3225	0.0162
141	4.3387	0.0162
142	4.3548	0.0161
143	4.3709	0.0161
144	4.3869	0.0160
145	4.4028	0.0160
146	4.4187	0.0159
147	4.4346	0.0158
148	4.4504	0.0158
149	4.4661	0.0157
150	4.4818	0.0157
151	4.4974	0.0156
152	4.5130	0.0156
153	4.5286	0.0155
154	4.5441	0.0155
155	4.5595	0.0155
156	4.5749	0.0154
157	4.5903	0.0154
158	4.6056	0.0153
159	4.6209	0.0153
160	4.6361	0.0152
161	4.6513	0.0152
162	4.6664	0.0151
163	4.6815	0.0151
164	4.6965	0.0150
165	4.7115	0.0150
166	4.7265	0.0150
167	4.7414	0.0149
168	4.7562	0.0149

169	4.7711	0.0148
170	4.7859	0.0148
171	4.8006	0.0147
172	4.8153	0.0147
173	4.8300	0.0147
174	4.8446	0.0146
175	4.8592	0.0146
176	4.8737	0.0145
177	4.8882	0.0145
178	4.9027	0.0145
179	4.9171	0.0144
180	4.9315	0.0144
181	4.9458	0.0143
182	4.9601	0.0143
183	4.9744	0.0143
184	4.9887	0.0142
185	5.0029	0.0142
186	5.0170	0.0142
187	5.0311	0.0141
188	5.0452	0.0141
189	5.0593	0.0141
190	5.0733	0.0140
191	5.0873	0.0140
192	5.1013	0.0140
193	5.1152	0.0139
194	5.1291	0.0139
195	5.1429	0.0138
196	5.1567	0.0138
197	5.1705	0.0138
198	5.1842	0.0137
199	5.1980	0.0137
200	5.2116	0.0137
201	5.2253	0.0136
202	5.2389	0.0136
203	5.2525	0.0136
204	5.2660	0.0136
205	5.2796	0.0135
206	5.2931	0.0135
207	5.3065	0.0135
208	5.3199	0.0134
209	5.3333	0.0134
210	5.3467	0.0134
211	5.3600	0.0133
212	5.3734	0.0133
213	5.3866	0.0133
214	5.3999	0.0132
215	5.4131	0.0132
216	5.4263	0.0132
217	5.4394	0.0132
218	5.4526	0.0131

219	5.4657	0.0131
220	5.4788	0.0131
221	5.4918	0.0130
222	5.5048	0.0130
223	5.5178	0.0130
224	5.5308	0.0130
225	5.5437	0.0129
226	5.5566	0.0129
227	5.5695	0.0129
228	5.5823	0.0129
229	5.5952	0.0128
230	5.6080	0.0128
231	5.6207	0.0128
232	5.6335	0.0127
233	5.6462	0.0127
234	5.6589	0.0127
235	5.6716	0.0127
236	5.6842	0.0126
237	5.6968	0.0126
238	5.7094	0.0126
239	5.7220	0.0126
240	5.7345	0.0125
241	5.7471	0.0125
242	5.7596	0.0125
243	5.7720	0.0125
244	5.7845	0.0124
245	5.7969	0.0124
246	5.8093	0.0124
247	5.8217	0.0124
248	5.8340	0.0123
249	5.8463	0.0123
250	5.8586	0.0123
251	5.8709	0.0123
252	5.8832	0.0123
253	5.8954	0.0122
254	5.9076	0.0122
255	5.9198	0.0122
256	5.9320	0.0122
257	5.9441	0.0121
258	5.9562	0.0121
259	5.9683	0.0121
260	5.9804	0.0121
261	5.9924	0.0121
262	6.0045	0.0120
263	6.0165	0.0120
264	6.0285	0.0120
265	6.0404	0.0120
266	6.0524	0.0119
267	6.0643	0.0119
268	6.0762	0.0119

269	6.0881	0.0119
270	6.0999	0.0119
271	6.1118	0.0118
272	6.1236	0.0118
273	6.1354	0.0118
274	6.1472	0.0118
275	6.1589	0.0118
276	6.1707	0.0117
277	6.1824	0.0117
278	6.1941	0.0117
279	6.2057	0.0117
280	6.2174	0.0117
281	6.2290	0.0116
282	6.2406	0.0116
283	6.2522	0.0116
284	6.2638	0.0116
285	6.2754	0.0116
286	6.2869	0.0115
287	6.2984	0.0115
288	6.3099	0.0115

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0115	0.0032	0.0083
2	0.0115	0.0032	0.0083
3	0.0116	0.0032	0.0083
4	0.0116	0.0032	0.0084
5	0.0116	0.0032	0.0084
6	0.0116	0.0032	0.0084
7	0.0117	0.0033	0.0084
8	0.0117	0.0033	0.0084
9	0.0117	0.0033	0.0085
10	0.0118	0.0033	0.0085
11	0.0118	0.0033	0.0085
12	0.0118	0.0033	0.0085
13	0.0119	0.0033	0.0086
14	0.0119	0.0033	0.0086
15	0.0119	0.0033	0.0086
16	0.0119	0.0033	0.0086
17	0.0120	0.0033	0.0086
18	0.0120	0.0033	0.0087
19	0.0121	0.0034	0.0087
20	0.0121	0.0034	0.0087
21	0.0121	0.0034	0.0087
22	0.0121	0.0034	0.0088
23	0.0122	0.0034	0.0088
24	0.0122	0.0034	0.0088
25	0.0123	0.0034	0.0088

26	0.0123	0.0034	0.0089
27	0.0123	0.0034	0.0089
28	0.0123	0.0034	0.0089
29	0.0124	0.0035	0.0089
30	0.0124	0.0035	0.0090
31	0.0125	0.0035	0.0090
32	0.0125	0.0035	0.0090
33	0.0125	0.0035	0.0090
34	0.0126	0.0035	0.0091
35	0.0126	0.0035	0.0091
36	0.0126	0.0035	0.0091
37	0.0127	0.0035	0.0092
38	0.0127	0.0035	0.0092
39	0.0128	0.0036	0.0092
40	0.0128	0.0036	0.0092
41	0.0129	0.0036	0.0093
42	0.0129	0.0036	0.0093
43	0.0129	0.0036	0.0093
44	0.0130	0.0036	0.0094
45	0.0130	0.0036	0.0094
46	0.0130	0.0036	0.0094
47	0.0131	0.0036	0.0095
48	0.0131	0.0037	0.0095
49	0.0132	0.0037	0.0095
50	0.0132	0.0037	0.0095
51	0.0133	0.0037	0.0096
52	0.0133	0.0037	0.0096
53	0.0134	0.0037	0.0096
54	0.0134	0.0037	0.0097
55	0.0135	0.0037	0.0097
56	0.0135	0.0038	0.0097
57	0.0136	0.0038	0.0098
58	0.0136	0.0038	0.0098
59	0.0136	0.0038	0.0098
60	0.0137	0.0038	0.0099
61	0.0137	0.0038	0.0099
62	0.0138	0.0038	0.0099
63	0.0138	0.0039	0.0100
64	0.0139	0.0039	0.0100
65	0.0140	0.0039	0.0101
66	0.0140	0.0039	0.0101
67	0.0141	0.0039	0.0101
68	0.0141	0.0039	0.0102
69	0.0142	0.0039	0.0102
70	0.0142	0.0040	0.0102
71	0.0143	0.0040	0.0103
72	0.0143	0.0040	0.0103
73	0.0144	0.0040	0.0104
74	0.0144	0.0040	0.0104
75	0.0145	0.0040	0.0105

76	0.0145	0.0041	0.0105
77	0.0146	0.0041	0.0105
78	0.0147	0.0041	0.0106
79	0.0147	0.0041	0.0106
80	0.0148	0.0041	0.0107
81	0.0149	0.0041	0.0107
82	0.0149	0.0042	0.0108
83	0.0150	0.0042	0.0108
84	0.0150	0.0042	0.0109
85	0.0151	0.0042	0.0109
86	0.0152	0.0042	0.0109
87	0.0153	0.0043	0.0110
88	0.0153	0.0043	0.0110
89	0.0154	0.0043	0.0111
90	0.0155	0.0043	0.0111
91	0.0155	0.0043	0.0112
92	0.0156	0.0043	0.0113
93	0.0157	0.0044	0.0113
94	0.0157	0.0044	0.0114
95	0.0158	0.0044	0.0114
96	0.0159	0.0044	0.0115
97	0.0160	0.0045	0.0115
98	0.0161	0.0045	0.0116
99	0.0162	0.0045	0.0117
100	0.0162	0.0045	0.0117
101	0.0163	0.0045	0.0118
102	0.0164	0.0046	0.0118
103	0.0165	0.0046	0.0119
104	0.0166	0.0046	0.0119
105	0.0167	0.0046	0.0120
106	0.0167	0.0047	0.0121
107	0.0169	0.0047	0.0122
108	0.0169	0.0047	0.0122
109	0.0171	0.0048	0.0123
110	0.0171	0.0048	0.0124
111	0.0173	0.0048	0.0124
112	0.0173	0.0048	0.0125
113	0.0175	0.0049	0.0126
114	0.0175	0.0049	0.0126
115	0.0177	0.0049	0.0127
116	0.0177	0.0049	0.0128
117	0.0179	0.0050	0.0129
118	0.0180	0.0050	0.0130
119	0.0181	0.0050	0.0131
120	0.0182	0.0051	0.0131
121	0.0184	0.0051	0.0132
122	0.0184	0.0051	0.0133
123	0.0186	0.0052	0.0134
124	0.0187	0.0052	0.0135
125	0.0189	0.0053	0.0136

126	0.0190	0.0053	0.0137
127	0.0191	0.0053	0.0138
128	0.0192	0.0054	0.0139
129	0.0194	0.0054	0.0140
130	0.0195	0.0054	0.0141
131	0.0197	0.0055	0.0142
132	0.0198	0.0055	0.0143
133	0.0200	0.0056	0.0145
134	0.0201	0.0056	0.0145
135	0.0204	0.0057	0.0147
136	0.0205	0.0057	0.0148
137	0.0207	0.0058	0.0149
138	0.0208	0.0058	0.0150
139	0.0211	0.0059	0.0152
140	0.0212	0.0059	0.0153
141	0.0215	0.0060	0.0155
142	0.0216	0.0060	0.0156
143	0.0219	0.0061	0.0158
144	0.0220	0.0061	0.0159
145	0.0201	0.0056	0.0145
146	0.0202	0.0056	0.0146
147	0.0205	0.0057	0.0148
148	0.0207	0.0058	0.0149
149	0.0210	0.0059	0.0152
150	0.0212	0.0059	0.0153
151	0.0215	0.0060	0.0155
152	0.0217	0.0060	0.0157
153	0.0221	0.0062	0.0159
154	0.0223	0.0062	0.0161
155	0.0227	0.0063	0.0164
156	0.0229	0.0064	0.0165
157	0.0234	0.0065	0.0169
158	0.0236	0.0066	0.0170
159	0.0241	0.0067	0.0174
160	0.0244	0.0068	0.0176
161	0.0249	0.0069	0.0180
162	0.0252	0.0070	0.0182
163	0.0258	0.0072	0.0186
164	0.0261	0.0073	0.0188
165	0.0267	0.0074	0.0193
166	0.0271	0.0075	0.0195
167	0.0278	0.0077	0.0201
168	0.0282	0.0079	0.0203
169	0.0291	0.0081	0.0210
170	0.0295	0.0082	0.0213
171	0.0304	0.0085	0.0220
172	0.0309	0.0086	0.0223
173	0.0320	0.0089	0.0231
174	0.0326	0.0091	0.0235
175	0.0339	0.0094	0.0245

176	0.0346	0.0096	0.0250
177	0.0361	0.0101	0.0261
178	0.0370	0.0103	0.0267
179	0.0388	0.0108	0.0280
180	0.0399	0.0111	0.0288
181	0.0422	0.0118	0.0305
182	0.0435	0.0121	0.0314
183	0.0466	0.0130	0.0336
184	0.0484	0.0135	0.0349
185	0.0337	0.0094	0.0243
186	0.0360	0.0100	0.0259
187	0.0417	0.0116	0.0301
188	0.0455	0.0127	0.0328
189	0.0566	0.0158	0.0408
190	0.0652	0.0182	0.0470
191	0.0989	0.0242	0.0748
192	0.1436	0.0242	0.1195
193	0.6213	0.0242	0.5972
194	0.0779	0.0217	0.0562
195	0.0503	0.0140	0.0363
196	0.0386	0.0107	0.0278
197	0.0504	0.0140	0.0364
198	0.0450	0.0125	0.0325
199	0.0410	0.0114	0.0296
200	0.0379	0.0105	0.0273
201	0.0353	0.0098	0.0255
202	0.0332	0.0093	0.0240
203	0.0315	0.0088	0.0227
204	0.0300	0.0083	0.0216
205	0.0286	0.0080	0.0206
206	0.0274	0.0076	0.0198
207	0.0264	0.0074	0.0190
208	0.0255	0.0071	0.0184
209	0.0246	0.0069	0.0178
210	0.0239	0.0066	0.0172
211	0.0231	0.0064	0.0167
212	0.0225	0.0063	0.0162
213	0.0219	0.0061	0.0158
214	0.0214	0.0059	0.0154
215	0.0208	0.0058	0.0150
216	0.0204	0.0057	0.0147
217	0.0221	0.0062	0.0160
218	0.0217	0.0061	0.0157
219	0.0213	0.0059	0.0154
220	0.0209	0.0058	0.0151
221	0.0206	0.0057	0.0149
222	0.0202	0.0056	0.0146
223	0.0199	0.0056	0.0144
224	0.0196	0.0055	0.0142
225	0.0193	0.0054	0.0139

226	0.0190	0.0053	0.0137
227	0.0188	0.0052	0.0135
228	0.0185	0.0052	0.0134
229	0.0183	0.0051	0.0132
230	0.0180	0.0050	0.0130
231	0.0178	0.0050	0.0129
232	0.0176	0.0049	0.0127
233	0.0174	0.0048	0.0125
234	0.0172	0.0048	0.0124
235	0.0170	0.0047	0.0123
236	0.0168	0.0047	0.0121
237	0.0166	0.0046	0.0120
238	0.0164	0.0046	0.0119
239	0.0163	0.0045	0.0117
240	0.0161	0.0045	0.0116
241	0.0160	0.0044	0.0115
242	0.0158	0.0044	0.0114
243	0.0156	0.0044	0.0113
244	0.0155	0.0043	0.0112
245	0.0154	0.0043	0.0111
246	0.0152	0.0042	0.0110
247	0.0151	0.0042	0.0109
248	0.0150	0.0042	0.0108
249	0.0148	0.0041	0.0107
250	0.0147	0.0041	0.0106
251	0.0146	0.0041	0.0105
252	0.0145	0.0040	0.0104
253	0.0143	0.0040	0.0104
254	0.0142	0.0040	0.0103
255	0.0141	0.0039	0.0102
256	0.0140	0.0039	0.0101
257	0.0139	0.0039	0.0100
258	0.0138	0.0038	0.0100
259	0.0137	0.0038	0.0099
260	0.0136	0.0038	0.0098
261	0.0135	0.0038	0.0098
262	0.0134	0.0037	0.0097
263	0.0133	0.0037	0.0096
264	0.0132	0.0037	0.0096
265	0.0132	0.0037	0.0095
266	0.0131	0.0036	0.0094
267	0.0130	0.0036	0.0094
268	0.0129	0.0036	0.0093
269	0.0128	0.0036	0.0093
270	0.0127	0.0036	0.0092
271	0.0127	0.0035	0.0091
272	0.0126	0.0035	0.0091
273	0.0125	0.0035	0.0090
274	0.0124	0.0035	0.0090
275	0.0124	0.0034	0.0089

276	0.0123	0.0034	0.0089
277	0.0122	0.0034	0.0088
278	0.0122	0.0034	0.0088
279	0.0121	0.0034	0.0087
280	0.0120	0.0034	0.0087
281	0.0120	0.0033	0.0086
282	0.0119	0.0033	0.0086
283	0.0118	0.0033	0.0085
284	0.0118	0.0033	0.0085
285	0.0117	0.0033	0.0085
286	0.0117	0.0032	0.0084
287	0.0116	0.0032	0.0084
288	0.0115	0.0032	0.0083

 Total soil rain loss = 1.59(In)
 Total effective rainfall = 4.72(In)
 Peak flow rate in flood hydrograph = 22.85(CFS)

+++++

24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0001	0.02	Q				
0+10	0.0009	0.11	Q				
0+15	0.0032	0.34	Q				
0+20	0.0070	0.54	Q				
0+25	0.0114	0.65	Q				
0+30	0.0164	0.72	Q				
0+35	0.0217	0.77	VQ				
0+40	0.0273	0.81	VQ				
0+45	0.0331	0.84	VQ				
0+50	0.0391	0.87	VQ				
0+55	0.0452	0.89	VQ				
1+ 0	0.0515	0.91	VQ				
1+ 5	0.0579	0.92	VQ				
1+10	0.0643	0.94	VQ				
1+15	0.0709	0.95	VQ				
1+20	0.0775	0.96	VQ				
1+25	0.0842	0.97	VQ				
1+30	0.0909	0.98	VQ				
1+35	0.0976	0.98	|Q				
1+40	0.1044	0.99	|Q				
1+45	0.1113	0.99	|Q				
1+50	0.1182	1.00	|Q				

1+55	0.1251	1.01	| Q				
2+ 0	0.1320	1.01	| Q				
2+ 5	0.1390	1.01	| Q				
2+10	0.1460	1.02	| Q				
2+15	0.1531	1.02	| Q				
2+20	0.1601	1.02	| Q				
2+25	0.1672	1.03	| Q				
2+30	0.1742	1.03	| Q				
2+35	0.1813	1.03	| Q				
2+40	0.1885	1.03	| Q				
2+45	0.1956	1.04	| QV				
2+50	0.2028	1.04	| QV				
2+55	0.2100	1.04	| QV				
3+ 0	0.2172	1.05	| QV				
3+ 5	0.2244	1.05	| QV				
3+10	0.2317	1.05	| QV				
3+15	0.2389	1.06	| QV				
3+20	0.2462	1.06	| QV				
3+25	0.2535	1.06	| QV				
3+30	0.2609	1.07	| QV				
3+35	0.2682	1.07	| QV				
3+40	0.2756	1.07	| QV				
3+45	0.2830	1.08	| QV				
3+50	0.2904	1.08	| Q V				
3+55	0.2979	1.08	| Q V				
4+ 0	0.3054	1.09	| Q V				
4+ 5	0.3129	1.09	| Q V				
4+10	0.3204	1.09	| Q V				
4+15	0.3280	1.10	| Q V				
4+20	0.3355	1.10	| Q V				
4+25	0.3431	1.10	| Q V				
4+30	0.3508	1.11	| Q V				
4+35	0.3584	1.11	| Q V				
4+40	0.3661	1.11	| Q V				
4+45	0.3738	1.12	| Q V				
4+50	0.3815	1.12	| Q V				
4+55	0.3893	1.13	| Q V				
5+ 0	0.3970	1.13	| Q V				
5+ 5	0.4048	1.13	| Q V				
5+10	0.4127	1.14	| Q V				
5+15	0.4205	1.14	| Q V				
5+20	0.4284	1.15	| Q V				
5+25	0.4364	1.15	| Q V				
5+30	0.4443	1.15	| Q V				
5+35	0.4523	1.16	| Q V				
5+40	0.4603	1.16	| Q V				
5+45	0.4683	1.17	| Q V				
5+50	0.4764	1.17	| Q V				
5+55	0.4845	1.18	| Q V				
6+ 0	0.4926	1.18	| Q V				

6+ 5	0.5008	1.18	| Q	V	|	|	|	|
6+10	0.5090	1.19	| Q	V	|	|	|	|
6+15	0.5172	1.19	| Q	V	|	|	|	|
6+20	0.5254	1.20	| Q	V	|	|	|	|
6+25	0.5337	1.20	| Q	V	|	|	|	|
6+30	0.5420	1.21	| Q	V	|	|	|	|
6+35	0.5504	1.21	| Q	V	|	|	|	|
6+40	0.5588	1.22	| Q	V	|	|	|	|
6+45	0.5672	1.22	| Q	V	|	|	|	|
6+50	0.5757	1.23	| Q	V	|	|	|	|
6+55	0.5841	1.23	| Q	V	|	|	|	|
7+ 0	0.5927	1.24	| Q	V	|	|	|	|
7+ 5	0.6012	1.24	| Q	V	|	|	|	|
7+10	0.6098	1.25	| Q	V	|	|	|	|
7+15	0.6185	1.25	| Q	V	|	|	|	|
7+20	0.6271	1.26	| Q	V	|	|	|	|
7+25	0.6358	1.26	| Q	V	|	|	|	|
7+30	0.6446	1.27	| Q	V	|	|	|	|
7+35	0.6534	1.28	| Q	V	|	|	|	|
7+40	0.6622	1.28	| Q	V	|	|	|	|
7+45	0.6711	1.29	| Q	V	|	|	|	|
7+50	0.6800	1.29	| Q	V	|	|	|	|
7+55	0.6889	1.30	| Q	V	|	|	|	|
8+ 0	0.6979	1.31	| Q	V	|	|	|	|
8+ 5	0.7070	1.31	| Q	V	|	|	|	|
8+10	0.7160	1.32	| Q	V	|	|	|	|
8+15	0.7252	1.32	| Q	V	|	|	|	|
8+20	0.7343	1.33	| Q	V	|	|	|	|
8+25	0.7435	1.34	| Q	V	|	|	|	|
8+30	0.7528	1.34	| Q	V	|	|	|	|
8+35	0.7621	1.35	| Q	V	|	|	|	|
8+40	0.7715	1.36	| Q	V	|	|	|	|
8+45	0.7809	1.36	| Q	V	|	|	|	|
8+50	0.7903	1.37	| Q	V	|	|	|	|
8+55	0.7998	1.38	| Q	V	|	|	|	|
9+ 0	0.8093	1.39	| Q	V	|	|	|	|
9+ 5	0.8189	1.39	| Q	V	|	|	|	|
9+10	0.8286	1.40	| Q	V	|	|	|	|
9+15	0.8383	1.41	| Q	V	|	|	|	|
9+20	0.8481	1.42	| Q	V	|	|	|	|
9+25	0.8579	1.43	| Q	V	|	|	|	|
9+30	0.8677	1.43	| Q	V	|	|	|	|
9+35	0.8777	1.44	| Q	V	|	|	|	|
9+40	0.8877	1.45	| Q	V	|	|	|	|
9+45	0.8977	1.46	| Q	V	|	|	|	|
9+50	0.9078	1.47	| Q	V	|	|	|	|
9+55	0.9180	1.48	| Q	V	|	|	|	|
10+ 0	0.9282	1.49	| Q	V	|	|	|	|
10+ 5	0.9385	1.49	| Q	V	|	|	|	|
10+10	0.9488	1.50	| Q	V	|	|	|	|

10+15	0.9593	1.51	Q	V			
10+20	0.9698	1.52	Q	V			
10+25	0.9803	1.53	Q	V			
10+30	0.9909	1.54	Q	V			
10+35	1.0017	1.55	Q	V			
10+40	1.0124	1.56	Q	V			
10+45	1.0233	1.58	Q	V			
10+50	1.0342	1.59	Q	V			
10+55	1.0452	1.60	Q	V			
11+ 0	1.0563	1.61	Q	V			
11+ 5	1.0675	1.62	Q	V			
11+10	1.0787	1.63	Q	V			
11+15	1.0900	1.65	Q	V			
11+20	1.1015	1.66	Q	V			
11+25	1.1130	1.67	Q	V			
11+30	1.1246	1.69	Q	V			
11+35	1.1363	1.70	Q	V			
11+40	1.1481	1.71	Q	V			
11+45	1.1600	1.73	Q	V			
11+50	1.1720	1.74	Q	V			
11+55	1.1841	1.76	Q	V			
12+ 0	1.1963	1.77	Q	V			
12+ 5	1.2086	1.79	Q	V			
12+10	1.2209	1.79	Q	V			
12+15	1.2330	1.76	Q	V			
12+20	1.2449	1.74	Q	V			
12+25	1.2569	1.73	Q	V			
12+30	1.2689	1.74	Q	V			
12+35	1.2809	1.75	Q	V			
12+40	1.2930	1.76	Q	V			
12+45	1.3052	1.78	Q	V			
12+50	1.3176	1.79	Q	V			
12+55	1.3301	1.81	Q	V			
13+ 0	1.3427	1.83	Q	V			
13+ 5	1.3554	1.85	Q	V			
13+10	1.3683	1.87	Q	V			
13+15	1.3814	1.90	Q	V			
13+20	1.3947	1.92	Q	V			
13+25	1.4081	1.95	Q	V			
13+30	1.4217	1.98	Q	V			
13+35	1.4356	2.01	Q	V			
13+40	1.4496	2.04	Q	V			
13+45	1.4639	2.07	Q	V			
13+50	1.4784	2.11	Q	V			
13+55	1.4932	2.15	Q	V			
14+ 0	1.5082	2.18	Q	V			
14+ 5	1.5236	2.22	Q	V			
14+10	1.5392	2.27	Q	V			
14+15	1.5551	2.32	Q	V			
14+20	1.5714	2.36	Q	V			

14+25	1.5881	2.42	Q		V			
14+30	1.6051	2.47	Q		V			
14+35	1.6225	2.53	Q		V			
14+40	1.6404	2.60	Q		V			
14+45	1.6588	2.67	Q		V			
14+50	1.6776	2.74	Q		V			
14+55	1.6971	2.82	Q		V			
15+ 0	1.7171	2.91	Q		V			
15+ 5	1.7378	3.01	Q		V			
15+10	1.7593	3.12	Q		V			
15+15	1.7816	3.24	Q		V			
15+20	1.8049	3.37	Q		V			
15+25	1.8290	3.50	Q		V			
15+30	1.8533	3.53	Q		V			
15+35	1.8764	3.35	Q		V			
15+40	1.8989	3.26	Q		V			
15+45	1.9221	3.37	Q		V			
15+50	1.9470	3.62	Q		V			
15+55	1.9751	4.07	Q		V			
16+ 0	2.0087	4.89	Q		V			
16+ 5	2.0606	7.53		Q	V			
16+10	2.1530	13.42			Q	V		
16+15	2.3104	22.85				V	Q	
16+20	2.4447	19.50				VQ		
16+25	2.5321	12.68			Q	V		
16+30	2.5980	9.58		Q		V		
16+35	2.6532	8.01		Q		V		
16+40	2.7010	6.94		Q		V		
16+45	2.7437	6.20		Q		V		
16+50	2.7816	5.50		Q		V		
16+55	2.8153	4.89		Q		V		
17+ 0	2.8462	4.50	Q				V	
17+ 5	2.8747	4.14	Q				V	
17+10	2.9009	3.79	Q				V	
17+15	2.9251	3.52	Q				V	
17+20	2.9477	3.28	Q				V	
17+25	2.9685	3.02	Q				V	
17+30	2.9878	2.81	Q				V	
17+35	3.0059	2.63	Q				V	
17+40	3.0236	2.57	Q				V	
17+45	3.0408	2.49	Q				V	
17+50	3.0573	2.40	Q				V	
17+55	3.0727	2.24	Q				V	
18+ 0	3.0874	2.13	Q				V	
18+ 5	3.1013	2.02	Q				V	
18+10	3.1143	1.89	Q				V	
18+15	3.1273	1.88	Q				V	
18+20	3.1402	1.87	Q				V	
18+25	3.1529	1.85	Q				V	
18+30	3.1655	1.82	Q				V	

18+35	3.1778	1.79	Q				V
18+40	3.1900	1.77	Q				V
18+45	3.2020	1.74	Q				V
18+50	3.2138	1.71	Q				V
18+55	3.2254	1.69	Q				V
19+ 0	3.2368	1.66	Q				V
19+ 5	3.2481	1.64	Q				V
19+10	3.2592	1.61	Q				V
19+15	3.2701	1.59	Q				V
19+20	3.2810	1.57	Q				V
19+25	3.2916	1.55	Q				V
19+30	3.3022	1.53	Q				V
19+35	3.3126	1.51	Q				V
19+40	3.3228	1.49	Q				V
19+45	3.3330	1.47	Q				V
19+50	3.3430	1.46	Q				V
19+55	3.3529	1.44	Q				V
20+ 0	3.3627	1.42	Q				V
20+ 5	3.3724	1.41	Q				V
20+10	3.3820	1.39	Q				V
20+15	3.3915	1.38	Q				V
20+20	3.4009	1.36	Q				V
20+25	3.4102	1.35	Q				V
20+30	3.4194	1.34	Q				V
20+35	3.4285	1.32	Q				V
20+40	3.4375	1.31	Q				V
20+45	3.4464	1.30	Q				V
20+50	3.4553	1.29	Q				V
20+55	3.4641	1.27	Q				V
21+ 0	3.4728	1.26	Q				V
21+ 5	3.4814	1.25	Q				V
21+10	3.4899	1.24	Q				V
21+15	3.4984	1.23	Q				V
21+20	3.5068	1.22	Q				V
21+25	3.5152	1.21	Q				V
21+30	3.5234	1.20	Q				V
21+35	3.5317	1.19	Q				V
21+40	3.5398	1.18	Q				V
21+45	3.5479	1.17	Q				V
21+50	3.5559	1.17	Q				V
21+55	3.5639	1.16	Q				V
22+ 0	3.5718	1.15	Q				V
22+ 5	3.5796	1.14	Q				V
22+10	3.5874	1.13	Q				V
22+15	3.5952	1.12	Q				V
22+20	3.6029	1.12	Q				V
22+25	3.6105	1.11	Q				V
22+30	3.6181	1.10	Q				V
22+35	3.6256	1.09	Q				V
22+40	3.6331	1.09	Q				V

22+45	3.6406	1.08	|Q	|	|	|	V	|
22+50	3.6480	1.07	|Q	|	|	|	V	|
22+55	3.6553	1.07	|Q	|	|	|	V	|
23+ 0	3.6626	1.06	|Q	|	|	|	V	|
23+ 5	3.6699	1.05	|Q	|	|	|	V	|
23+10	3.6771	1.05	|Q	|	|	|	V	|
23+15	3.6843	1.04	|Q	|	|	|	V	|
23+20	3.6914	1.04	|Q	|	|	|	V	|
23+25	3.6985	1.03	|Q	|	|	|	V	|
23+30	3.7056	1.02	|Q	|	|	|	V	|
23+35	3.7126	1.02	|Q	|	|	|	V	|
23+40	3.7195	1.01	|Q	|	|	|	V	|
23+45	3.7265	1.01	|Q	|	|	|	V	|
23+50	3.7334	1.00	|Q	|	|	|	V	|
23+55	3.7402	1.00	|Q	|	|	|	V	|
24+ 0	3.7471	0.99	|Q	|	|	|	V	|

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 10/01/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 100 YR UNIT HYDROGRAPH SUBAREA B
MGUBBAREINER 2021-09-27
--

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
8.25	1	1.31

Rainfall data for year 100
8.25 6 3.05

Rainfall data for year 100
8.25 24 6.31

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 3)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
67.0	84.6	8.25	1.000	0.290	1.000	0.290

Area-averaged adjusted loss rate Fm (In/Hr) = 0.290

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC3)	S	Pervious Yield Fr
8.25	1.000	67.0	84.6	1.82	0.721

Area-averaged catchment yield fraction, Y = 0.721

Area-averaged low loss fraction, Yb = 0.279

User entry of time of concentration = 0.261 (hours)

+++++

Watershed area = 8.25(Ac.)

Catchment Lag time = 0.209 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 39.9106

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.290(In/Hr)

Average low loss rate fraction (Yb) = 0.279 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.622(In)

Computed peak 30-minute rainfall = 1.064(In)

Specified peak 1-hour rainfall = 1.310(In)

Computed peak 3-hour rainfall = 2.199(In)

Specified peak 6-hour rainfall = 3.050(In)

Specified peak 24-hour rainfall = 6.310(In)

Rainfall depth area reduction factors:

Using a total area of 8.25(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.621(In)

30-minute factor = 1.000 Adjusted rainfall = 1.064(In)

1-hour factor = 1.000 Adjusted rainfall = 1.309(In)

3-hour factor = 1.000 Adjusted rainfall = 2.199(In)

6-hour factor = 1.000 Adjusted rainfall = 3.050(In)

24-hour factor = 1.000 Adjusted rainfall = 6.310(In)

U n i t H y d r o g r a p h

+++++

Interval	'S' Graph	Unit Hydrograph
----------	-----------	-----------------

Number	Mean values	((CFS))

	(K =	99.77 (CFS))
1	2.738	2.732
2	18.596	15.822
3	49.023	30.358
4	65.535	16.474
5	74.720	9.164
6	80.812	6.079
7	85.184	4.362
8	88.553	3.362
9	90.987	2.429
10	92.970	1.978
11	94.548	1.574
12	95.821	1.270
13	96.835	1.012
14	97.591	0.754
15	98.087	0.495
16	98.523	0.435
17	99.002	0.478
18	99.457	0.454
19	99.740	0.282
20	100.000	0.260

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.6214	0.6214
2	0.7650	0.1436
3	0.8639	0.0989
4	0.9418	0.0779
5	1.0070	0.0652
6	1.0636	0.0566
7	1.1140	0.0503
8	1.1595	0.0455
9	1.2012	0.0417
10	1.2398	0.0386
11	1.2758	0.0360
12	1.3095	0.0337
13	1.3599	0.0504
14	1.4083	0.0484
15	1.4549	0.0466
16	1.4999	0.0450
17	1.5435	0.0435
18	1.5857	0.0422
19	1.6267	0.0410
20	1.6665	0.0399
21	1.7053	0.0388
22	1.7432	0.0379
23	1.7802	0.0370

24	1.8163	0.0361
25	1.8516	0.0353
26	1.8862	0.0346
27	1.9201	0.0339
28	1.9533	0.0332
29	1.9860	0.0326
30	2.0180	0.0320
31	2.0495	0.0315
32	2.0804	0.0309
33	2.1108	0.0304
34	2.1408	0.0300
35	2.1703	0.0295
36	2.1993	0.0290
37	2.2279	0.0286
38	2.2562	0.0282
39	2.2840	0.0278
40	2.3114	0.0274
41	2.3385	0.0271
42	2.3652	0.0267
43	2.3916	0.0264
44	2.4177	0.0261
45	2.4435	0.0258
46	2.4689	0.0255
47	2.4941	0.0252
48	2.5190	0.0249
49	2.5436	0.0246
50	2.5680	0.0244
51	2.5921	0.0241
52	2.6159	0.0239
53	2.6395	0.0236
54	2.6629	0.0234
55	2.6860	0.0231
56	2.7090	0.0229
57	2.7317	0.0227
58	2.7542	0.0225
59	2.7765	0.0223
60	2.7986	0.0221
61	2.8205	0.0219
62	2.8422	0.0217
63	2.8637	0.0215
64	2.8851	0.0214
65	2.9063	0.0212
66	2.9273	0.0210
67	2.9481	0.0208
68	2.9688	0.0207
69	2.9893	0.0205
70	3.0097	0.0204
71	3.0299	0.0202
72	3.0499	0.0201
73	3.0721	0.0221

74	3.0941	0.0220
75	3.1159	0.0219
76	3.1376	0.0217
77	3.1592	0.0216
78	3.1807	0.0215
79	3.2020	0.0213
80	3.2232	0.0212
81	3.2443	0.0211
82	3.2652	0.0209
83	3.2860	0.0208
84	3.3067	0.0207
85	3.3273	0.0206
86	3.3478	0.0205
87	3.3681	0.0204
88	3.3884	0.0202
89	3.4085	0.0201
90	3.4286	0.0200
91	3.4485	0.0199
92	3.4683	0.0198
93	3.4880	0.0197
94	3.5076	0.0196
95	3.5272	0.0195
96	3.5466	0.0194
97	3.5659	0.0193
98	3.5851	0.0192
99	3.6043	0.0191
100	3.6233	0.0190
101	3.6423	0.0190
102	3.6611	0.0189
103	3.6799	0.0188
104	3.6986	0.0187
105	3.7172	0.0186
106	3.7358	0.0185
107	3.7542	0.0184
108	3.7726	0.0184
109	3.7908	0.0183
110	3.8090	0.0182
111	3.8272	0.0181
112	3.8452	0.0180
113	3.8632	0.0180
114	3.8811	0.0179
115	3.8989	0.0178
116	3.9166	0.0177
117	3.9343	0.0177
118	3.9519	0.0176
119	3.9694	0.0175
120	3.9869	0.0175
121	4.0043	0.0174
122	4.0216	0.0173
123	4.0388	0.0173

124	4.0560	0.0172
125	4.0731	0.0171
126	4.0902	0.0171
127	4.1072	0.0170
128	4.1241	0.0169
129	4.1410	0.0169
130	4.1578	0.0168
131	4.1745	0.0167
132	4.1912	0.0167
133	4.2078	0.0166
134	4.2244	0.0166
135	4.2409	0.0165
136	4.2573	0.0164
137	4.2737	0.0164
138	4.2901	0.0163
139	4.3063	0.0163
140	4.3226	0.0162
141	4.3387	0.0162
142	4.3548	0.0161
143	4.3709	0.0161
144	4.3869	0.0160
145	4.4028	0.0160
146	4.4187	0.0159
147	4.4346	0.0158
148	4.4504	0.0158
149	4.4661	0.0157
150	4.4818	0.0157
151	4.4975	0.0156
152	4.5131	0.0156
153	4.5286	0.0155
154	4.5441	0.0155
155	4.5596	0.0155
156	4.5750	0.0154
157	4.5903	0.0154
158	4.6056	0.0153
159	4.6209	0.0153
160	4.6361	0.0152
161	4.6513	0.0152
162	4.6664	0.0151
163	4.6815	0.0151
164	4.6965	0.0150
165	4.7115	0.0150
166	4.7265	0.0150
167	4.7414	0.0149
168	4.7563	0.0149
169	4.7711	0.0148
170	4.7859	0.0148
171	4.8006	0.0147
172	4.8153	0.0147
173	4.8300	0.0147

174	4.8446	0.0146
175	4.8592	0.0146
176	4.8737	0.0145
177	4.8882	0.0145
178	4.9027	0.0145
179	4.9171	0.0144
180	4.9315	0.0144
181	4.9458	0.0143
182	4.9602	0.0143
183	4.9744	0.0143
184	4.9887	0.0142
185	5.0029	0.0142
186	5.0170	0.0142
187	5.0312	0.0141
188	5.0453	0.0141
189	5.0593	0.0141
190	5.0733	0.0140
191	5.0873	0.0140
192	5.1013	0.0140
193	5.1152	0.0139
194	5.1291	0.0139
195	5.1429	0.0138
196	5.1567	0.0138
197	5.1705	0.0138
198	5.1843	0.0137
199	5.1980	0.0137
200	5.2117	0.0137
201	5.2253	0.0136
202	5.2389	0.0136
203	5.2525	0.0136
204	5.2661	0.0136
205	5.2796	0.0135
206	5.2931	0.0135
207	5.3065	0.0135
208	5.3200	0.0134
209	5.3334	0.0134
210	5.3467	0.0134
211	5.3601	0.0133
212	5.3734	0.0133
213	5.3866	0.0133
214	5.3999	0.0132
215	5.4131	0.0132
216	5.4263	0.0132
217	5.4395	0.0132
218	5.4526	0.0131
219	5.4657	0.0131
220	5.4788	0.0131
221	5.4918	0.0130
222	5.5048	0.0130
223	5.5178	0.0130

224	5.5308	0.0130
225	5.5437	0.0129
226	5.5566	0.0129
227	5.5695	0.0129
228	5.5824	0.0129
229	5.5952	0.0128
230	5.6080	0.0128
231	5.6208	0.0128
232	5.6335	0.0127
233	5.6462	0.0127
234	5.6589	0.0127
235	5.6716	0.0127
236	5.6842	0.0126
237	5.6969	0.0126
238	5.7094	0.0126
239	5.7220	0.0126
240	5.7346	0.0125
241	5.7471	0.0125
242	5.7596	0.0125
243	5.7720	0.0125
244	5.7845	0.0124
245	5.7969	0.0124
246	5.8093	0.0124
247	5.8217	0.0124
248	5.8340	0.0123
249	5.8463	0.0123
250	5.8587	0.0123
251	5.8709	0.0123
252	5.8832	0.0123
253	5.8954	0.0122
254	5.9076	0.0122
255	5.9198	0.0122
256	5.9320	0.0122
257	5.9441	0.0121
258	5.9562	0.0121
259	5.9683	0.0121
260	5.9804	0.0121
261	5.9925	0.0121
262	6.0045	0.0120
263	6.0165	0.0120
264	6.0285	0.0120
265	6.0404	0.0120
266	6.0524	0.0119
267	6.0643	0.0119
268	6.0762	0.0119
269	6.0881	0.0119
270	6.0999	0.0119
271	6.1118	0.0118
272	6.1236	0.0118
273	6.1354	0.0118

274	6.1472	0.0118
275	6.1589	0.0118
276	6.1707	0.0117
277	6.1824	0.0117
278	6.1941	0.0117
279	6.2057	0.0117
280	6.2174	0.0117
281	6.2290	0.0116
282	6.2407	0.0116
283	6.2522	0.0116
284	6.2638	0.0116
285	6.2754	0.0116
286	6.2869	0.0115
287	6.2984	0.0115
288	6.3099	0.0115

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0115	0.0032	0.0083
2	0.0115	0.0032	0.0083
3	0.0116	0.0032	0.0083
4	0.0116	0.0032	0.0084
5	0.0116	0.0032	0.0084
6	0.0116	0.0032	0.0084
7	0.0117	0.0033	0.0084
8	0.0117	0.0033	0.0084
9	0.0117	0.0033	0.0085
10	0.0118	0.0033	0.0085
11	0.0118	0.0033	0.0085
12	0.0118	0.0033	0.0085
13	0.0119	0.0033	0.0086
14	0.0119	0.0033	0.0086
15	0.0119	0.0033	0.0086
16	0.0119	0.0033	0.0086
17	0.0120	0.0033	0.0086
18	0.0120	0.0033	0.0087
19	0.0121	0.0034	0.0087
20	0.0121	0.0034	0.0087
21	0.0121	0.0034	0.0087
22	0.0121	0.0034	0.0088
23	0.0122	0.0034	0.0088
24	0.0122	0.0034	0.0088
25	0.0123	0.0034	0.0088
26	0.0123	0.0034	0.0089
27	0.0123	0.0034	0.0089
28	0.0123	0.0034	0.0089
29	0.0124	0.0035	0.0089
30	0.0124	0.0035	0.0090

31	0.0125	0.0035	0.0090
32	0.0125	0.0035	0.0090
33	0.0125	0.0035	0.0090
34	0.0126	0.0035	0.0091
35	0.0126	0.0035	0.0091
36	0.0126	0.0035	0.0091
37	0.0127	0.0035	0.0092
38	0.0127	0.0035	0.0092
39	0.0128	0.0036	0.0092
40	0.0128	0.0036	0.0092
41	0.0129	0.0036	0.0093
42	0.0129	0.0036	0.0093
43	0.0129	0.0036	0.0093
44	0.0130	0.0036	0.0094
45	0.0130	0.0036	0.0094
46	0.0130	0.0036	0.0094
47	0.0131	0.0036	0.0095
48	0.0131	0.0037	0.0095
49	0.0132	0.0037	0.0095
50	0.0132	0.0037	0.0095
51	0.0133	0.0037	0.0096
52	0.0133	0.0037	0.0096
53	0.0134	0.0037	0.0096
54	0.0134	0.0037	0.0097
55	0.0135	0.0037	0.0097
56	0.0135	0.0038	0.0097
57	0.0136	0.0038	0.0098
58	0.0136	0.0038	0.0098
59	0.0136	0.0038	0.0098
60	0.0137	0.0038	0.0099
61	0.0137	0.0038	0.0099
62	0.0138	0.0038	0.0099
63	0.0138	0.0039	0.0100
64	0.0139	0.0039	0.0100
65	0.0140	0.0039	0.0101
66	0.0140	0.0039	0.0101
67	0.0141	0.0039	0.0101
68	0.0141	0.0039	0.0102
69	0.0142	0.0039	0.0102
70	0.0142	0.0040	0.0102
71	0.0143	0.0040	0.0103
72	0.0143	0.0040	0.0103
73	0.0144	0.0040	0.0104
74	0.0144	0.0040	0.0104
75	0.0145	0.0040	0.0105
76	0.0145	0.0041	0.0105
77	0.0146	0.0041	0.0105
78	0.0147	0.0041	0.0106
79	0.0147	0.0041	0.0106
80	0.0148	0.0041	0.0107

81	0.0149	0.0041	0.0107
82	0.0149	0.0042	0.0108
83	0.0150	0.0042	0.0108
84	0.0150	0.0042	0.0109
85	0.0151	0.0042	0.0109
86	0.0152	0.0042	0.0109
87	0.0153	0.0043	0.0110
88	0.0153	0.0043	0.0110
89	0.0154	0.0043	0.0111
90	0.0155	0.0043	0.0111
91	0.0155	0.0043	0.0112
92	0.0156	0.0043	0.0113
93	0.0157	0.0044	0.0113
94	0.0157	0.0044	0.0114
95	0.0158	0.0044	0.0114
96	0.0159	0.0044	0.0115
97	0.0160	0.0045	0.0115
98	0.0161	0.0045	0.0116
99	0.0162	0.0045	0.0117
100	0.0162	0.0045	0.0117
101	0.0163	0.0045	0.0118
102	0.0164	0.0046	0.0118
103	0.0165	0.0046	0.0119
104	0.0166	0.0046	0.0119
105	0.0167	0.0046	0.0120
106	0.0167	0.0047	0.0121
107	0.0169	0.0047	0.0122
108	0.0169	0.0047	0.0122
109	0.0171	0.0048	0.0123
110	0.0171	0.0048	0.0124
111	0.0173	0.0048	0.0124
112	0.0173	0.0048	0.0125
113	0.0175	0.0049	0.0126
114	0.0175	0.0049	0.0126
115	0.0177	0.0049	0.0127
116	0.0177	0.0049	0.0128
117	0.0179	0.0050	0.0129
118	0.0180	0.0050	0.0130
119	0.0181	0.0050	0.0131
120	0.0182	0.0051	0.0131
121	0.0184	0.0051	0.0132
122	0.0184	0.0051	0.0133
123	0.0186	0.0052	0.0134
124	0.0187	0.0052	0.0135
125	0.0189	0.0053	0.0136
126	0.0190	0.0053	0.0137
127	0.0191	0.0053	0.0138
128	0.0192	0.0054	0.0139
129	0.0194	0.0054	0.0140
130	0.0195	0.0054	0.0141

131	0.0197	0.0055	0.0142
132	0.0198	0.0055	0.0143
133	0.0200	0.0056	0.0145
134	0.0201	0.0056	0.0145
135	0.0204	0.0057	0.0147
136	0.0205	0.0057	0.0148
137	0.0207	0.0058	0.0149
138	0.0208	0.0058	0.0150
139	0.0211	0.0059	0.0152
140	0.0212	0.0059	0.0153
141	0.0215	0.0060	0.0155
142	0.0216	0.0060	0.0156
143	0.0219	0.0061	0.0158
144	0.0220	0.0061	0.0159
145	0.0201	0.0056	0.0145
146	0.0202	0.0056	0.0146
147	0.0205	0.0057	0.0148
148	0.0207	0.0058	0.0149
149	0.0210	0.0059	0.0152
150	0.0212	0.0059	0.0153
151	0.0215	0.0060	0.0155
152	0.0217	0.0060	0.0157
153	0.0221	0.0062	0.0159
154	0.0223	0.0062	0.0161
155	0.0227	0.0063	0.0164
156	0.0229	0.0064	0.0165
157	0.0234	0.0065	0.0169
158	0.0236	0.0066	0.0170
159	0.0241	0.0067	0.0174
160	0.0244	0.0068	0.0176
161	0.0249	0.0069	0.0180
162	0.0252	0.0070	0.0182
163	0.0258	0.0072	0.0186
164	0.0261	0.0073	0.0188
165	0.0267	0.0074	0.0193
166	0.0271	0.0075	0.0195
167	0.0278	0.0077	0.0201
168	0.0282	0.0079	0.0203
169	0.0290	0.0081	0.0210
170	0.0295	0.0082	0.0213
171	0.0304	0.0085	0.0220
172	0.0309	0.0086	0.0223
173	0.0320	0.0089	0.0231
174	0.0326	0.0091	0.0235
175	0.0339	0.0094	0.0245
176	0.0346	0.0096	0.0250
177	0.0361	0.0101	0.0261
178	0.0370	0.0103	0.0267
179	0.0388	0.0108	0.0280
180	0.0399	0.0111	0.0288

181	0.0422	0.0118	0.0304
182	0.0435	0.0121	0.0314
183	0.0466	0.0130	0.0336
184	0.0484	0.0135	0.0349
185	0.0337	0.0094	0.0243
186	0.0360	0.0100	0.0259
187	0.0417	0.0116	0.0301
188	0.0455	0.0127	0.0328
189	0.0566	0.0158	0.0408
190	0.0652	0.0182	0.0470
191	0.0989	0.0242	0.0748
192	0.1436	0.0242	0.1195
193	0.6214	0.0242	0.5972
194	0.0779	0.0217	0.0562
195	0.0503	0.0140	0.0363
196	0.0386	0.0107	0.0278
197	0.0504	0.0140	0.0364
198	0.0450	0.0125	0.0325
199	0.0410	0.0114	0.0296
200	0.0379	0.0105	0.0273
201	0.0353	0.0098	0.0255
202	0.0332	0.0093	0.0240
203	0.0315	0.0088	0.0227
204	0.0300	0.0083	0.0216
205	0.0286	0.0080	0.0206
206	0.0274	0.0076	0.0198
207	0.0264	0.0074	0.0190
208	0.0255	0.0071	0.0184
209	0.0246	0.0069	0.0178
210	0.0239	0.0066	0.0172
211	0.0231	0.0064	0.0167
212	0.0225	0.0063	0.0162
213	0.0219	0.0061	0.0158
214	0.0214	0.0059	0.0154
215	0.0208	0.0058	0.0150
216	0.0204	0.0057	0.0147
217	0.0221	0.0062	0.0160
218	0.0217	0.0061	0.0157
219	0.0213	0.0059	0.0154
220	0.0209	0.0058	0.0151
221	0.0206	0.0057	0.0149
222	0.0202	0.0056	0.0146
223	0.0199	0.0056	0.0144
224	0.0196	0.0055	0.0142
225	0.0193	0.0054	0.0139
226	0.0190	0.0053	0.0137
227	0.0188	0.0052	0.0135
228	0.0185	0.0052	0.0134
229	0.0183	0.0051	0.0132
230	0.0180	0.0050	0.0130

231	0.0178	0.0050	0.0129
232	0.0176	0.0049	0.0127
233	0.0174	0.0048	0.0125
234	0.0172	0.0048	0.0124
235	0.0170	0.0047	0.0123
236	0.0168	0.0047	0.0121
237	0.0166	0.0046	0.0120
238	0.0164	0.0046	0.0119
239	0.0163	0.0045	0.0117
240	0.0161	0.0045	0.0116
241	0.0160	0.0044	0.0115
242	0.0158	0.0044	0.0114
243	0.0156	0.0044	0.0113
244	0.0155	0.0043	0.0112
245	0.0154	0.0043	0.0111
246	0.0152	0.0042	0.0110
247	0.0151	0.0042	0.0109
248	0.0150	0.0042	0.0108
249	0.0148	0.0041	0.0107
250	0.0147	0.0041	0.0106
251	0.0146	0.0041	0.0105
252	0.0145	0.0040	0.0104
253	0.0143	0.0040	0.0104
254	0.0142	0.0040	0.0103
255	0.0141	0.0039	0.0102
256	0.0140	0.0039	0.0101
257	0.0139	0.0039	0.0100
258	0.0138	0.0038	0.0100
259	0.0137	0.0038	0.0099
260	0.0136	0.0038	0.0098
261	0.0135	0.0038	0.0098
262	0.0134	0.0037	0.0097
263	0.0133	0.0037	0.0096
264	0.0132	0.0037	0.0096
265	0.0132	0.0037	0.0095
266	0.0131	0.0036	0.0094
267	0.0130	0.0036	0.0094
268	0.0129	0.0036	0.0093
269	0.0128	0.0036	0.0093
270	0.0127	0.0036	0.0092
271	0.0127	0.0035	0.0091
272	0.0126	0.0035	0.0091
273	0.0125	0.0035	0.0090
274	0.0124	0.0035	0.0090
275	0.0124	0.0034	0.0089
276	0.0123	0.0034	0.0089
277	0.0122	0.0034	0.0088
278	0.0122	0.0034	0.0088
279	0.0121	0.0034	0.0087
280	0.0120	0.0034	0.0087

281	0.0120	0.0033	0.0086
282	0.0119	0.0033	0.0086
283	0.0118	0.0033	0.0085
284	0.0118	0.0033	0.0085
285	0.0117	0.0033	0.0085
286	0.0117	0.0032	0.0084
287	0.0116	0.0032	0.0084
288	0.0115	0.0032	0.0083

 Total soil rain loss = 1.59(In)
 Total effective rainfall = 4.72(In)
 Peak flow rate in flood hydrograph = 22.68(CFS)

+++++

24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0002		0.02	Q				
0+10	0.0012		0.15	Q				
0+15	0.0040		0.41	Q				
0+20	0.0078		0.54	Q				
0+25	0.0120		0.62	Q				
0+30	0.0167		0.67	Q				
0+35	0.0216		0.71	Q				
0+40	0.0267		0.74	Q				
0+45	0.0319		0.76	VQ				
0+50	0.0373		0.78	VQ				
0+55	0.0428		0.80	VQ				
1+ 0	0.0483		0.81	VQ				
1+ 5	0.0540		0.82	VQ				
1+10	0.0597		0.83	VQ				
1+15	0.0654		0.83	VQ				
1+20	0.0712		0.84	VQ				
1+25	0.0770		0.85	VQ				
1+30	0.0829		0.85	|Q				
1+35	0.0888		0.86	|Q				
1+40	0.0947		0.86	|Q				
1+45	0.1007		0.86	|Q				
1+50	0.1066		0.87	|Q				
1+55	0.1126		0.87	|Q				
2+ 0	0.1186		0.87	|Q				
2+ 5	0.1246		0.87	|Q				
2+10	0.1306		0.88	|Q				
2+15	0.1367		0.88	|Q				

2+20	0.1427	0.88	| Q				
2+25	0.1488	0.88	| Q				
2+30	0.1549	0.89	| Q				
2+35	0.1610	0.89	| Q				
2+40	0.1672	0.89	| QV				
2+45	0.1733	0.89	| QV				
2+50	0.1795	0.90	| QV				
2+55	0.1857	0.90	| QV				
3+ 0	0.1919	0.90	| QV				
3+ 5	0.1981	0.90	| QV				
3+10	0.2043	0.91	| QV				
3+15	0.2106	0.91	| QV				
3+20	0.2169	0.91	| QV				
3+25	0.2232	0.91	| QV				
3+30	0.2295	0.92	| QV				
3+35	0.2358	0.92	| QV				
3+40	0.2422	0.92	| QV				
3+45	0.2485	0.93	| Q V				
3+50	0.2549	0.93	| Q V				
3+55	0.2614	0.93	| Q V				
4+ 0	0.2678	0.93	| Q V				
4+ 5	0.2742	0.94	| Q V				
4+10	0.2807	0.94	| Q V				
4+15	0.2872	0.94	| Q V				
4+20	0.2937	0.95	| Q V				
4+25	0.3003	0.95	| Q V				
4+30	0.3068	0.95	| Q V				
4+35	0.3134	0.96	| Q V				
4+40	0.3200	0.96	| Q V				
4+45	0.3267	0.96	| Q V				
4+50	0.3333	0.97	| Q V				
4+55	0.3400	0.97	| Q V				
5+ 0	0.3467	0.97	| Q V				
5+ 5	0.3534	0.98	| Q V				
5+10	0.3602	0.98	| Q V				
5+15	0.3669	0.98	| Q V				
5+20	0.3737	0.99	| Q V				
5+25	0.3806	0.99	| Q V				
5+30	0.3874	0.99	| Q V				
5+35	0.3943	1.00	| Q V				
5+40	0.4012	1.00	| Q V				
5+45	0.4081	1.00	| Q V				
5+50	0.4150	1.01	| Q V				
5+55	0.4220	1.01	| Q V				
6+ 0	0.4290	1.02	| Q V				
6+ 5	0.4360	1.02	| Q V				
6+10	0.4431	1.02	| Q V				
6+15	0.4502	1.03	| Q V				
6+20	0.4573	1.03	| Q V				
6+25	0.4644	1.04	| Q V				

6+30	0.4716	1.04	|Q	V	|	|	|	|
6+35	0.4788	1.04	|Q	V	|	|	|	|
6+40	0.4860	1.05	|Q	V	|	|	|	|
6+45	0.4932	1.05	|Q	V	|	|	|	|
6+50	0.5005	1.06	|Q	V	|	|	|	|
6+55	0.5078	1.06	|Q	V	|	|	|	|
7+ 0	0.5152	1.07	|Q	V	|	|	|	|
7+ 5	0.5226	1.07	|Q	V	|	|	|	|
7+10	0.5300	1.08	|Q	V	|	|	|	|
7+15	0.5374	1.08	|Q	V	|	|	|	|
7+20	0.5449	1.09	|Q	V	|	|	|	|
7+25	0.5524	1.09	|Q	V	|	|	|	|
7+30	0.5599	1.09	|Q	V	|	|	|	|
7+35	0.5675	1.10	|Q	V	|	|	|	|
7+40	0.5751	1.10	|Q	V	|	|	|	|
7+45	0.5828	1.11	|Q	V	|	|	|	|
7+50	0.5904	1.11	|Q	V	|	|	|	|
7+55	0.5982	1.12	|Q	V	|	|	|	|
8+ 0	0.6059	1.13	|Q	V	|	|	|	|
8+ 5	0.6137	1.13	|Q	V	|	|	|	|
8+10	0.6215	1.14	|Q	V	|	|	|	|
8+15	0.6294	1.14	|Q	V	|	|	|	|
8+20	0.6373	1.15	|Q	V	|	|	|	|
8+25	0.6452	1.15	|Q	V	|	|	|	|
8+30	0.6532	1.16	|Q	V	|	|	|	|
8+35	0.6612	1.16	|Q	V	|	|	|	|
8+40	0.6693	1.17	|Q	V	|	|	|	|
8+45	0.6774	1.18	|Q	V	|	|	|	|
8+50	0.6855	1.18	|Q	V	|	|	|	|
8+55	0.6937	1.19	|Q	V	|	|	|	|
9+ 0	0.7020	1.20	|Q	V	|	|	|	|
9+ 5	0.7102	1.20	|Q	V	|	|	|	|
9+10	0.7186	1.21	|Q	V	|	|	|	|
9+15	0.7269	1.22	|Q	V	|	|	|	|
9+20	0.7354	1.22	|Q	V	|	|	|	|
9+25	0.7438	1.23	|Q	V	|	|	|	|
9+30	0.7523	1.24	|Q	V	|	|	|	|
9+35	0.7609	1.24	|Q	V	|	|	|	|
9+40	0.7695	1.25	|Q	V	|	|	|	|
9+45	0.7782	1.26	|Q	V	|	|	|	|
9+50	0.7869	1.27	|Q	V	|	|	|	|
9+55	0.7957	1.27	|Q	V	|	|	|	|
10+ 0	0.8045	1.28	|Q	V	|	|	|	|
10+ 5	0.8134	1.29	|Q	V	|	|	|	|
10+10	0.8223	1.30	|Q	V	|	|	|	|
10+15	0.8313	1.31	|Q	V	|	|	|	|
10+20	0.8404	1.31	|Q	V	|	|	|	|
10+25	0.8495	1.32	|Q	V	|	|	|	|
10+30	0.8587	1.33	|Q	V	|	|	|	|
10+35	0.8679	1.34	|Q	V	|	|	|	|

10+40	0.8772	1.35	| Q	V			
10+45	0.8866	1.36	| Q	V			
10+50	0.8960	1.37	| Q	V			
10+55	0.9055	1.38	| Q	V			
11+ 0	0.9151	1.39	| Q	V			
11+ 5	0.9247	1.40	| Q	V			
11+10	0.9344	1.41	| Q	V			
11+15	0.9442	1.42	| Q	V			
11+20	0.9541	1.43	| Q	V			
11+25	0.9641	1.44	| Q	V			
11+30	0.9741	1.46	| Q	V			
11+35	0.9842	1.47	| Q	V			
11+40	0.9944	1.48	| Q	V			
11+45	1.0047	1.49	| Q	V			
11+50	1.0151	1.51	| Q	V			
11+55	1.0255	1.52	| Q	V			
12+ 0	1.0361	1.53	| Q	V			
12+ 5	1.0467	1.54	| Q	V			
12+10	1.0573	1.53	| Q	V			
12+15	1.0676	1.50	| Q	V			
12+20	1.0778	1.49	| Q	V			
12+25	1.0881	1.49	| Q	V			
12+30	1.0984	1.50	| Q	V			
12+35	1.1087	1.51	| Q	V			
12+40	1.1192	1.52	| Q	V			
12+45	1.1297	1.53	| Q	V			
12+50	1.1404	1.55	| Q	V			
12+55	1.1512	1.56	| Q	V			
13+ 0	1.1621	1.58	| Q	V			
13+ 5	1.1731	1.60	| Q	V			
13+10	1.1843	1.62	| Q	V			
13+15	1.1956	1.65	| Q	V			
13+20	1.2071	1.67	| Q	V			
13+25	1.2188	1.69	| Q	V			
13+30	1.2306	1.72	| Q	V			
13+35	1.2426	1.74	| Q	V			
13+40	1.2548	1.77	| Q	V			
13+45	1.2672	1.80	| Q	V			
13+50	1.2798	1.83	| Q	V			
13+55	1.2927	1.87	| Q	V			
14+ 0	1.3058	1.90	| Q	V			
14+ 5	1.3191	1.94	| Q	V			
14+10	1.3328	1.98	| Q	V			
14+15	1.3467	2.02	| Q	V			
14+20	1.3609	2.06	| Q	V			
14+25	1.3754	2.11	| Q	V			
14+30	1.3903	2.16	| Q	V			
14+35	1.4055	2.21	| Q	V			
14+40	1.4212	2.27	| Q	V			
14+45	1.4373	2.34	| Q	V			

14+50	1.4538	2.40	Q		V		
14+55	1.4709	2.48	Q		V		
15+ 0	1.4885	2.56	Q		V		
15+ 5	1.5067	2.65	Q		V		
15+10	1.5256	2.75	Q		V		
15+15	1.5453	2.86	Q		V		
15+20	1.5659	2.98	Q		V		
15+25	1.5872	3.09	Q		V		
15+30	1.6081	3.04	Q		V		
15+35	1.6276	2.82	Q		V		
15+40	1.6470	2.82	Q		V		
15+45	1.6674	2.97	Q		V		
15+50	1.6897	3.24	Q		V		
15+55	1.7154	3.72	Q		V		
16+ 0	1.7473	4.64	Q		V		
16+ 5	1.8003	7.70		Q	V		
16+10	1.9085	15.71			Q	V	
16+15	2.0647	22.68				V	Q
16+20	2.1641	14.43			Q	V	
16+25	2.2303	9.62		Q		V	
16+30	2.2815	7.43		Q		V	
16+35	2.3252	6.34		Q		V	
16+40	2.3634	5.55		Q		V	
16+45	2.3963	4.79		Q		V	
16+50	2.4259	4.30	Q			V	
16+55	2.4526	3.86	Q			V	
17+ 0	2.4767	3.51	Q			V	
17+ 5	2.4987	3.19	Q			V	
17+10	2.5187	2.90	Q			V	
17+15	2.5369	2.64	Q			V	
17+20	2.5541	2.50	Q			V	
17+25	2.5707	2.42	Q			V	
17+30	2.5866	2.31	Q			V	
17+35	2.6012	2.12	Q			V	
17+40	2.6151	2.01	Q			V	
17+45	2.6275	1.80	Q			V	
17+50	2.6395	1.74	Q			V	
17+55	2.6511	1.69	Q			V	
18+ 0	2.6624	1.64	Q			V	
18+ 5	2.6734	1.60	Q			V	
18+10	2.6843	1.58	Q			V	
18+15	2.6952	1.59	Q			V	
18+20	2.7061	1.58	Q			V	
18+25	2.7168	1.56	Q			V	
18+30	2.7274	1.54	Q			V	
18+35	2.7378	1.51	Q			V	
18+40	2.7481	1.49	Q			V	
18+45	2.7582	1.47	Q			V	
18+50	2.7682	1.45	Q			V	
18+55	2.7780	1.43	Q			V	

19+ 0	2.7877	1.41	Q				V
19+ 5	2.7972	1.39	Q				V
19+10	2.8066	1.37	Q				V
19+15	2.8159	1.35	Q				V
19+20	2.8251	1.33	Q				V
19+25	2.8341	1.31	Q				V
19+30	2.8431	1.30	Q				V
19+35	2.8519	1.28	Q				V
19+40	2.8606	1.27	Q				V
19+45	2.8692	1.25	Q				V
19+50	2.8777	1.24	Q				V
19+55	2.8862	1.22	Q				V
20+ 0	2.8945	1.21	Q				V
20+ 5	2.9027	1.20	Q				V
20+10	2.9109	1.18	Q				V
20+15	2.9189	1.17	Q				V
20+20	2.9269	1.16	Q				V
20+25	2.9348	1.15	Q				V
20+30	2.9426	1.14	Q				V
20+35	2.9504	1.12	Q				V
20+40	2.9580	1.11	Q				V
20+45	2.9656	1.10	Q				V
20+50	2.9732	1.09	Q				V
20+55	2.9807	1.08	Q				V
21+ 0	2.9881	1.08	Q				V
21+ 5	2.9954	1.07	Q				V
21+10	3.0027	1.06	Q				V
21+15	3.0099	1.05	Q				V
21+20	3.0171	1.04	Q				V
21+25	3.0242	1.03	Q				V
21+30	3.0312	1.02	Q				V
21+35	3.0382	1.02	Q				V
21+40	3.0452	1.01	Q				V
21+45	3.0520	1.00	Q				V
21+50	3.0589	0.99	Q				V
21+55	3.0657	0.99	Q				V
22+ 0	3.0724	0.98	Q				V
22+ 5	3.0791	0.97	Q				V
22+10	3.0858	0.97	Q				V
22+15	3.0924	0.96	Q				V
22+20	3.0989	0.95	Q				V
22+25	3.1054	0.95	Q				V
22+30	3.1119	0.94	Q				V
22+35	3.1184	0.93	Q				V
22+40	3.1247	0.93	Q				V
22+45	3.1311	0.92	Q				V
22+50	3.1374	0.92	Q				V
22+55	3.1437	0.91	Q				V
23+ 0	3.1499	0.91	Q				V
23+ 5	3.1561	0.90	Q				V

23+10	3.1623	0.89	|Q	|	|	|	V	|
23+15	3.1684	0.89	|Q	|	|	|	V	|
23+20	3.1745	0.88	|Q	|	|	|	V	|
23+25	3.1806	0.88	|Q	|	|	|	V	|
23+30	3.1866	0.87	|Q	|	|	|	V	|
23+35	3.1926	0.87	|Q	|	|	|	V	|
23+40	3.1985	0.86	|Q	|	|	|	V	|
23+45	3.2045	0.86	|Q	|	|	|	V	|
23+50	3.2103	0.86	|Q	|	|	|	V	|
23+55	3.2162	0.85	|Q	|	|	|	V	|
24+ 0	3.2220	0.85	|Q	|	|	|	V	|

Appendix E – Unit Hydrograph (Post-Development)

- 10-Year Storm Event
- 100-Year Storm Event

Appendix E – Unit Hydrograph (Post-Development)

- 10-Year Storm Event

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 10 Y UNIT HYDROGRAPH SUBAREA A
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
2.40	1	0.79

Rainfall data for year 10		
2.40	6	2.28

Rainfall data for year 10		
2.40	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	32.0	2.40	1.000	0.978	0.190	0.186

Area-averaged adjusted loss rate Fm (In/Hr) = 0.186

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
0.46	0.190	32.0	32.0	18.15	0.000
1.94	0.810	98.0	98.0	0.20	0.936

Area-averaged catchment yield fraction, Y = 0.758

Area-averaged low loss fraction, Yb = 0.242

User entry of time of concentration = 0.090 (hours)

+++++

Watershed area = 2.40(Ac.)

Catchment Lag time = 0.072 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 115.3562

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.186(In/Hr)

Average low loss rate fraction (Yb) = 0.242 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.372(In)

Computed peak 30-minute rainfall = 0.638(In)

Specified peak 1-hour rainfall = 0.785(In)

Computed peak 3-hour rainfall = 1.509(In)

Specified peak 6-hour rainfall = 2.280(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 2.40(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.372(In)

30-minute factor = 1.000 Adjusted rainfall = 0.638(In)

1-hour factor = 1.000 Adjusted rainfall = 0.785(In)

3-hour factor = 1.000 Adjusted rainfall = 1.509(In)

6-hour factor = 1.000 Adjusted rainfall = 2.280(In)

24-hour factor = 1.000 Adjusted rainfall = 3.630(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

	(K =	29.02 (CFS))
1	22.126	6.422
2	72.427	14.600
3	87.424	4.353
4	93.882	1.874
5	97.167	0.954
6	98.718	0.450
7	100.000	0.372

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3724	0.3724
2	0.4585	0.0861
3	0.5178	0.0593
4	0.5645	0.0467
5	0.6036	0.0391
6	0.6375	0.0339
7	0.6677	0.0302
8	0.6950	0.0273
9	0.7200	0.0250
10	0.7431	0.0231
11	0.7647	0.0216
12	0.7849	0.0202
13	0.8232	0.0383
14	0.8603	0.0371
15	0.8964	0.0361
16	0.9315	0.0351
17	0.9657	0.0342
18	0.9991	0.0334
19	1.0318	0.0327
20	1.0638	0.0320
21	1.0951	0.0313
22	1.1259	0.0307
23	1.1561	0.0302
24	1.1857	0.0297
25	1.2149	0.0292
26	1.2436	0.0287
27	1.2718	0.0282
28	1.2997	0.0278
29	1.3271	0.0274
30	1.3541	0.0270
31	1.3808	0.0267
32	1.4072	0.0263
33	1.4332	0.0260
34	1.4589	0.0257
35	1.4843	0.0254

36	1.5094	0.0251
37	1.5342	0.0248
38	1.5587	0.0245
39	1.5830	0.0243
40	1.6070	0.0240
41	1.6308	0.0238
42	1.6544	0.0236
43	1.6777	0.0233
44	1.7008	0.0231
45	1.7237	0.0229
46	1.7464	0.0227
47	1.7689	0.0225
48	1.7912	0.0223
49	1.8133	0.0221
50	1.8352	0.0219
51	1.8570	0.0218
52	1.8786	0.0216
53	1.9000	0.0214
54	1.9212	0.0213
55	1.9423	0.0211
56	1.9633	0.0209
57	1.9841	0.0208
58	2.0047	0.0206
59	2.0252	0.0205
60	2.0456	0.0204
61	2.0658	0.0202
62	2.0859	0.0201
63	2.1058	0.0200
64	2.1256	0.0198
65	2.1453	0.0197
66	2.1649	0.0196
67	2.1844	0.0195
68	2.2037	0.0193
69	2.2230	0.0192
70	2.2421	0.0191
71	2.2611	0.0190
72	2.2800	0.0189
73	2.2906	0.0106
74	2.3010	0.0105
75	2.3114	0.0104
76	2.3217	0.0103
77	2.3319	0.0102
78	2.3420	0.0101
79	2.3521	0.0100
80	2.3620	0.0099
81	2.3719	0.0099
82	2.3817	0.0098
83	2.3914	0.0097
84	2.4010	0.0096
85	2.4105	0.0096

86	2.4200	0.0095
87	2.4294	0.0094
88	2.4388	0.0093
89	2.4480	0.0093
90	2.4572	0.0092
91	2.4663	0.0091
92	2.4754	0.0091
93	2.4844	0.0090
94	2.4933	0.0089
95	2.5022	0.0089
96	2.5110	0.0088
97	2.5197	0.0087
98	2.5284	0.0087
99	2.5370	0.0086
100	2.5456	0.0086
101	2.5541	0.0085
102	2.5626	0.0085
103	2.5710	0.0084
104	2.5793	0.0083
105	2.5876	0.0083
106	2.5959	0.0082
107	2.6041	0.0082
108	2.6122	0.0081
109	2.6203	0.0081
110	2.6283	0.0080
111	2.6363	0.0080
112	2.6443	0.0079
113	2.6522	0.0079
114	2.6600	0.0079
115	2.6678	0.0078
116	2.6756	0.0078
117	2.6833	0.0077
118	2.6910	0.0077
119	2.6986	0.0076
120	2.7062	0.0076
121	2.7137	0.0075
122	2.7212	0.0075
123	2.7287	0.0075
124	2.7361	0.0074
125	2.7435	0.0074
126	2.7508	0.0073
127	2.7581	0.0073
128	2.7654	0.0073
129	2.7726	0.0072
130	2.7798	0.0072
131	2.7870	0.0072
132	2.7941	0.0071
133	2.8012	0.0071
134	2.8082	0.0070
135	2.8152	0.0070

136	2.8222	0.0070
137	2.8292	0.0069
138	2.8361	0.0069
139	2.8430	0.0069
140	2.8498	0.0068
141	2.8566	0.0068
142	2.8634	0.0068
143	2.8701	0.0067
144	2.8769	0.0067
145	2.8835	0.0067
146	2.8902	0.0067
147	2.8968	0.0066
148	2.9034	0.0066
149	2.9100	0.0066
150	2.9165	0.0065
151	2.9230	0.0065
152	2.9295	0.0065
153	2.9360	0.0065
154	2.9424	0.0064
155	2.9488	0.0064
156	2.9552	0.0064
157	2.9615	0.0063
158	2.9678	0.0063
159	2.9741	0.0063
160	2.9804	0.0063
161	2.9866	0.0062
162	2.9928	0.0062
163	2.9990	0.0062
164	3.0052	0.0062
165	3.0113	0.0061
166	3.0174	0.0061
167	3.0235	0.0061
168	3.0295	0.0061
169	3.0356	0.0060
170	3.0416	0.0060
171	3.0476	0.0060
172	3.0536	0.0060
173	3.0595	0.0059
174	3.0654	0.0059
175	3.0713	0.0059
176	3.0772	0.0059
177	3.0830	0.0059
178	3.0889	0.0058
179	3.0947	0.0058
180	3.1005	0.0058
181	3.1062	0.0058
182	3.1120	0.0057
183	3.1177	0.0057
184	3.1234	0.0057
185	3.1291	0.0057

186	3.1348	0.0057
187	3.1404	0.0056
188	3.1460	0.0056
189	3.1516	0.0056
190	3.1572	0.0056
191	3.1628	0.0056
192	3.1683	0.0055
193	3.1739	0.0055
194	3.1794	0.0055
195	3.1849	0.0055
196	3.1903	0.0055
197	3.1958	0.0055
198	3.2012	0.0054
199	3.2066	0.0054
200	3.2120	0.0054
201	3.2174	0.0054
202	3.2228	0.0054
203	3.2281	0.0053
204	3.2334	0.0053
205	3.2387	0.0053
206	3.2440	0.0053
207	3.2493	0.0053
208	3.2546	0.0053
209	3.2598	0.0052
210	3.2650	0.0052
211	3.2702	0.0052
212	3.2754	0.0052
213	3.2806	0.0052
214	3.2858	0.0052
215	3.2909	0.0051
216	3.2960	0.0051
217	3.3011	0.0051
218	3.3062	0.0051
219	3.3113	0.0051
220	3.3164	0.0051
221	3.3214	0.0050
222	3.3265	0.0050
223	3.3315	0.0050
224	3.3365	0.0050
225	3.3415	0.0050
226	3.3465	0.0050
227	3.3514	0.0050
228	3.3564	0.0049
229	3.3613	0.0049
230	3.3662	0.0049
231	3.3711	0.0049
232	3.3760	0.0049
233	3.3809	0.0049
234	3.3857	0.0049
235	3.3906	0.0048

236	3.3954	0.0048
237	3.4002	0.0048
238	3.4050	0.0048
239	3.4098	0.0048
240	3.4146	0.0048
241	3.4194	0.0048
242	3.4241	0.0048
243	3.4289	0.0047
244	3.4336	0.0047
245	3.4383	0.0047
246	3.4430	0.0047
247	3.4477	0.0047
248	3.4524	0.0047
249	3.4571	0.0047
250	3.4617	0.0047
251	3.4663	0.0046
252	3.4710	0.0046
253	3.4756	0.0046
254	3.4802	0.0046
255	3.4848	0.0046
256	3.4894	0.0046
257	3.4939	0.0046
258	3.4985	0.0046
259	3.5030	0.0045
260	3.5076	0.0045
261	3.5121	0.0045
262	3.5166	0.0045
263	3.5211	0.0045
264	3.5256	0.0045
265	3.5300	0.0045
266	3.5345	0.0045
267	3.5390	0.0045
268	3.5434	0.0044
269	3.5478	0.0044
270	3.5522	0.0044
271	3.5566	0.0044
272	3.5610	0.0044
273	3.5654	0.0044
274	3.5698	0.0044
275	3.5742	0.0044
276	3.5785	0.0044
277	3.5829	0.0043
278	3.5872	0.0043
279	3.5915	0.0043
280	3.5958	0.0043
281	3.6001	0.0043
282	3.6044	0.0043
283	3.6087	0.0043
284	3.6130	0.0043
285	3.6173	0.0043

286	3.6215	0.0043
287	3.6258	0.0042
288	3.6300	0.0042

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0042	0.0010	0.0032
2	0.0042	0.0010	0.0032
3	0.0043	0.0010	0.0032
4	0.0043	0.0010	0.0032
5	0.0043	0.0010	0.0033
6	0.0043	0.0010	0.0033
7	0.0043	0.0010	0.0033
8	0.0043	0.0010	0.0033
9	0.0044	0.0011	0.0033
10	0.0044	0.0011	0.0033
11	0.0044	0.0011	0.0033
12	0.0044	0.0011	0.0033
13	0.0044	0.0011	0.0033
14	0.0044	0.0011	0.0034
15	0.0045	0.0011	0.0034
16	0.0045	0.0011	0.0034
17	0.0045	0.0011	0.0034
18	0.0045	0.0011	0.0034
19	0.0045	0.0011	0.0034
20	0.0045	0.0011	0.0034
21	0.0046	0.0011	0.0035
22	0.0046	0.0011	0.0035
23	0.0046	0.0011	0.0035
24	0.0046	0.0011	0.0035
25	0.0046	0.0011	0.0035
26	0.0046	0.0011	0.0035
27	0.0047	0.0011	0.0035
28	0.0047	0.0011	0.0035
29	0.0047	0.0011	0.0036
30	0.0047	0.0011	0.0036
31	0.0047	0.0011	0.0036
32	0.0048	0.0012	0.0036
33	0.0048	0.0012	0.0036
34	0.0048	0.0012	0.0036
35	0.0048	0.0012	0.0037
36	0.0048	0.0012	0.0037
37	0.0049	0.0012	0.0037
38	0.0049	0.0012	0.0037
39	0.0049	0.0012	0.0037
40	0.0049	0.0012	0.0037
41	0.0049	0.0012	0.0037
42	0.0050	0.0012	0.0038

43	0.0050	0.0012	0.0038
44	0.0050	0.0012	0.0038
45	0.0050	0.0012	0.0038
46	0.0050	0.0012	0.0038
47	0.0051	0.0012	0.0038
48	0.0051	0.0012	0.0039
49	0.0051	0.0012	0.0039
50	0.0051	0.0012	0.0039
51	0.0052	0.0013	0.0039
52	0.0052	0.0013	0.0039
53	0.0052	0.0013	0.0040
54	0.0052	0.0013	0.0040
55	0.0053	0.0013	0.0040
56	0.0053	0.0013	0.0040
57	0.0053	0.0013	0.0040
58	0.0053	0.0013	0.0040
59	0.0054	0.0013	0.0041
60	0.0054	0.0013	0.0041
61	0.0054	0.0013	0.0041
62	0.0055	0.0013	0.0041
63	0.0055	0.0013	0.0042
64	0.0055	0.0013	0.0042
65	0.0055	0.0013	0.0042
66	0.0056	0.0013	0.0042
67	0.0056	0.0014	0.0042
68	0.0056	0.0014	0.0043
69	0.0057	0.0014	0.0043
70	0.0057	0.0014	0.0043
71	0.0057	0.0014	0.0043
72	0.0057	0.0014	0.0044
73	0.0058	0.0014	0.0044
74	0.0058	0.0014	0.0044
75	0.0059	0.0014	0.0044
76	0.0059	0.0014	0.0045
77	0.0059	0.0014	0.0045
78	0.0059	0.0014	0.0045
79	0.0060	0.0015	0.0045
80	0.0060	0.0015	0.0046
81	0.0061	0.0015	0.0046
82	0.0061	0.0015	0.0046
83	0.0061	0.0015	0.0046
84	0.0062	0.0015	0.0047
85	0.0062	0.0015	0.0047
86	0.0062	0.0015	0.0047
87	0.0063	0.0015	0.0048
88	0.0063	0.0015	0.0048
89	0.0064	0.0015	0.0048
90	0.0064	0.0015	0.0048
91	0.0065	0.0016	0.0049
92	0.0065	0.0016	0.0049

93	0.0065	0.0016	0.0050
94	0.0066	0.0016	0.0050
95	0.0066	0.0016	0.0050
96	0.0067	0.0016	0.0050
97	0.0067	0.0016	0.0051
98	0.0067	0.0016	0.0051
99	0.0068	0.0016	0.0052
100	0.0068	0.0017	0.0052
101	0.0069	0.0017	0.0052
102	0.0069	0.0017	0.0053
103	0.0070	0.0017	0.0053
104	0.0070	0.0017	0.0053
105	0.0071	0.0017	0.0054
106	0.0072	0.0017	0.0054
107	0.0072	0.0018	0.0055
108	0.0073	0.0018	0.0055
109	0.0073	0.0018	0.0056
110	0.0074	0.0018	0.0056
111	0.0075	0.0018	0.0057
112	0.0075	0.0018	0.0057
113	0.0076	0.0018	0.0057
114	0.0076	0.0018	0.0058
115	0.0077	0.0019	0.0058
116	0.0078	0.0019	0.0059
117	0.0079	0.0019	0.0059
118	0.0079	0.0019	0.0060
119	0.0080	0.0019	0.0061
120	0.0080	0.0019	0.0061
121	0.0081	0.0020	0.0062
122	0.0082	0.0020	0.0062
123	0.0083	0.0020	0.0063
124	0.0083	0.0020	0.0063
125	0.0085	0.0020	0.0064
126	0.0085	0.0021	0.0065
127	0.0086	0.0021	0.0065
128	0.0087	0.0021	0.0066
129	0.0088	0.0021	0.0067
130	0.0089	0.0021	0.0067
131	0.0090	0.0022	0.0068
132	0.0091	0.0022	0.0069
133	0.0092	0.0022	0.0070
134	0.0093	0.0022	0.0070
135	0.0094	0.0023	0.0071
136	0.0095	0.0023	0.0072
137	0.0096	0.0023	0.0073
138	0.0097	0.0024	0.0074
139	0.0099	0.0024	0.0075
140	0.0099	0.0024	0.0075
141	0.0101	0.0025	0.0077
142	0.0102	0.0025	0.0077

143	0.0104	0.0025	0.0079
144	0.0105	0.0025	0.0079
145	0.0189	0.0046	0.0143
146	0.0190	0.0046	0.0144
147	0.0192	0.0047	0.0146
148	0.0193	0.0047	0.0147
149	0.0196	0.0047	0.0148
150	0.0197	0.0048	0.0149
151	0.0200	0.0048	0.0151
152	0.0201	0.0049	0.0152
153	0.0204	0.0049	0.0154
154	0.0205	0.0050	0.0155
155	0.0208	0.0050	0.0158
156	0.0209	0.0051	0.0159
157	0.0213	0.0051	0.0161
158	0.0214	0.0052	0.0162
159	0.0218	0.0053	0.0165
160	0.0219	0.0053	0.0166
161	0.0223	0.0054	0.0169
162	0.0225	0.0054	0.0170
163	0.0229	0.0055	0.0174
164	0.0231	0.0056	0.0175
165	0.0236	0.0057	0.0178
166	0.0238	0.0058	0.0180
167	0.0243	0.0059	0.0184
168	0.0245	0.0059	0.0186
169	0.0251	0.0061	0.0190
170	0.0254	0.0061	0.0192
171	0.0260	0.0063	0.0197
172	0.0263	0.0064	0.0200
173	0.0270	0.0066	0.0205
174	0.0274	0.0066	0.0208
175	0.0282	0.0068	0.0214
176	0.0287	0.0069	0.0217
177	0.0297	0.0072	0.0225
178	0.0302	0.0073	0.0229
179	0.0313	0.0076	0.0238
180	0.0320	0.0077	0.0242
181	0.0334	0.0081	0.0253
182	0.0342	0.0083	0.0259
183	0.0361	0.0087	0.0273
184	0.0371	0.0090	0.0281
185	0.0202	0.0049	0.0153
186	0.0216	0.0052	0.0163
187	0.0250	0.0061	0.0189
188	0.0273	0.0066	0.0207
189	0.0339	0.0082	0.0257
190	0.0391	0.0095	0.0296
191	0.0593	0.0144	0.0449
192	0.0861	0.0155	0.0706

193	0.3724	0.0155	0.3570
194	0.0467	0.0113	0.0354
195	0.0302	0.0073	0.0229
196	0.0231	0.0056	0.0175
197	0.0383	0.0093	0.0290
198	0.0351	0.0085	0.0266
199	0.0327	0.0079	0.0248
200	0.0307	0.0074	0.0233
201	0.0292	0.0071	0.0221
202	0.0278	0.0067	0.0211
203	0.0267	0.0065	0.0202
204	0.0257	0.0062	0.0195
205	0.0248	0.0060	0.0188
206	0.0240	0.0058	0.0182
207	0.0233	0.0057	0.0177
208	0.0227	0.0055	0.0172
209	0.0221	0.0054	0.0168
210	0.0216	0.0052	0.0164
211	0.0211	0.0051	0.0160
212	0.0206	0.0050	0.0156
213	0.0202	0.0049	0.0153
214	0.0198	0.0048	0.0150
215	0.0195	0.0047	0.0147
216	0.0191	0.0046	0.0145
217	0.0106	0.0026	0.0080
218	0.0103	0.0025	0.0078
219	0.0100	0.0024	0.0076
220	0.0098	0.0024	0.0074
221	0.0096	0.0023	0.0072
222	0.0093	0.0023	0.0071
223	0.0091	0.0022	0.0069
224	0.0089	0.0022	0.0068
225	0.0087	0.0021	0.0066
226	0.0086	0.0021	0.0065
227	0.0084	0.0020	0.0064
228	0.0082	0.0020	0.0062
229	0.0081	0.0020	0.0061
230	0.0079	0.0019	0.0060
231	0.0078	0.0019	0.0059
232	0.0077	0.0019	0.0058
233	0.0075	0.0018	0.0057
234	0.0074	0.0018	0.0056
235	0.0073	0.0018	0.0055
236	0.0072	0.0017	0.0055
237	0.0071	0.0017	0.0054
238	0.0070	0.0017	0.0053
239	0.0069	0.0017	0.0052
240	0.0068	0.0016	0.0051
241	0.0067	0.0016	0.0051
242	0.0066	0.0016	0.0050

243	0.0065	0.0016	0.0049
244	0.0064	0.0016	0.0049
245	0.0063	0.0015	0.0048
246	0.0063	0.0015	0.0047
247	0.0062	0.0015	0.0047
248	0.0061	0.0015	0.0046
249	0.0060	0.0015	0.0046
250	0.0060	0.0014	0.0045
251	0.0059	0.0014	0.0045
252	0.0058	0.0014	0.0044
253	0.0058	0.0014	0.0044
254	0.0057	0.0014	0.0043
255	0.0056	0.0014	0.0043
256	0.0056	0.0014	0.0042
257	0.0055	0.0013	0.0042
258	0.0055	0.0013	0.0041
259	0.0054	0.0013	0.0041
260	0.0054	0.0013	0.0041
261	0.0053	0.0013	0.0040
262	0.0053	0.0013	0.0040
263	0.0052	0.0013	0.0039
264	0.0052	0.0012	0.0039
265	0.0051	0.0012	0.0039
266	0.0051	0.0012	0.0038
267	0.0050	0.0012	0.0038
268	0.0050	0.0012	0.0038
269	0.0049	0.0012	0.0037
270	0.0049	0.0012	0.0037
271	0.0048	0.0012	0.0037
272	0.0048	0.0012	0.0036
273	0.0048	0.0012	0.0036
274	0.0047	0.0011	0.0036
275	0.0047	0.0011	0.0036
276	0.0047	0.0011	0.0035
277	0.0046	0.0011	0.0035
278	0.0046	0.0011	0.0035
279	0.0045	0.0011	0.0034
280	0.0045	0.0011	0.0034
281	0.0045	0.0011	0.0034
282	0.0044	0.0011	0.0034
283	0.0044	0.0011	0.0033
284	0.0044	0.0011	0.0033
285	0.0043	0.0011	0.0033
286	0.0043	0.0010	0.0033
287	0.0043	0.0010	0.0032
288	0.0043	0.0010	0.0032

Total soil rain loss = 0.80(In)

Total effective rainfall = 2.83(In)

Peak flow rate in flood hydrograph = 5.88(CFS)

+++++

24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0001		0.02	Q				
0+10	0.0006		0.07	Q				
0+15	0.0012		0.08	Q				
0+20	0.0018		0.09	Q				
0+25	0.0024		0.09	Q				
0+30	0.0030		0.09	Q				
0+35	0.0037		0.09	Q				
0+40	0.0044		0.09	Q				
0+45	0.0050		0.10	Q				
0+50	0.0057		0.10	Q				
0+55	0.0063		0.10	Q				
1+ 0	0.0070		0.10	Q				
1+ 5	0.0077		0.10	Q				
1+10	0.0083		0.10	Q				
1+15	0.0090		0.10	Q				
1+20	0.0097		0.10	Q				
1+25	0.0103		0.10	Q				
1+30	0.0110		0.10	Q				
1+35	0.0117		0.10	Q				
1+40	0.0124		0.10	Q				
1+45	0.0131		0.10	Q				
1+50	0.0138		0.10	Q				
1+55	0.0145		0.10	QV				
2+ 0	0.0151		0.10	QV				
2+ 5	0.0158		0.10	QV				
2+10	0.0165		0.10	QV				
2+15	0.0172		0.10	QV				
2+20	0.0180		0.10	QV				
2+25	0.0187		0.10	QV				
2+30	0.0194		0.10	QV				
2+35	0.0201		0.10	QV				
2+40	0.0208		0.10	QV				
2+45	0.0215		0.10	QV				
2+50	0.0222		0.10	QV				
2+55	0.0230		0.11	QV				
3+ 0	0.0237		0.11	QV				
3+ 5	0.0244		0.11	QV				
3+10	0.0252		0.11	QV				
3+15	0.0259		0.11	QV				

3+20	0.0266	0.11	QV				
3+25	0.0274	0.11	QV				
3+30	0.0281	0.11	QV				
3+35	0.0289	0.11	Q V				
3+40	0.0296	0.11	Q V				
3+45	0.0304	0.11	Q V				
3+50	0.0312	0.11	Q V				
3+55	0.0319	0.11	Q V				
4+ 0	0.0327	0.11	Q V				
4+ 5	0.0335	0.11	Q V				
4+10	0.0342	0.11	Q V				
4+15	0.0350	0.11	Q V				
4+20	0.0358	0.11	Q V				
4+25	0.0366	0.11	Q V				
4+30	0.0374	0.11	Q V				
4+35	0.0382	0.12	Q V				
4+40	0.0390	0.12	Q V				
4+45	0.0398	0.12	Q V				
4+50	0.0406	0.12	Q V				
4+55	0.0414	0.12	Q V				
5+ 0	0.0422	0.12	Q V				
5+ 5	0.0430	0.12	Q V				
5+10	0.0438	0.12	Q V				
5+15	0.0447	0.12	Q V				
5+20	0.0455	0.12	Q V				
5+25	0.0463	0.12	Q V				
5+30	0.0472	0.12	Q V				
5+35	0.0480	0.12	Q V				
5+40	0.0488	0.12	Q V				
5+45	0.0497	0.12	Q V				
5+50	0.0506	0.12	Q V				
5+55	0.0514	0.12	Q V				
6+ 0	0.0523	0.13	Q V				
6+ 5	0.0532	0.13	Q V				
6+10	0.0540	0.13	Q V				
6+15	0.0549	0.13	Q V				
6+20	0.0558	0.13	Q V				
6+25	0.0567	0.13	Q V				
6+30	0.0576	0.13	Q V				
6+35	0.0585	0.13	Q V				
6+40	0.0594	0.13	Q V				
6+45	0.0603	0.13	Q V				
6+50	0.0612	0.13	Q V				
6+55	0.0621	0.13	Q V				
7+ 0	0.0631	0.13	Q V				
7+ 5	0.0640	0.14	Q V				
7+10	0.0649	0.14	Q V				
7+15	0.0659	0.14	Q V				
7+20	0.0668	0.14	Q V				
7+25	0.0678	0.14	Q V				

7+30	0.0687	0.14	Q	V				
7+35	0.0697	0.14	Q	V				
7+40	0.0707	0.14	Q	V				
7+45	0.0717	0.14	Q	V				
7+50	0.0726	0.14	Q	V				
7+55	0.0736	0.14	Q	V				
8+ 0	0.0746	0.15	Q	V				
8+ 5	0.0757	0.15	Q	V				
8+10	0.0767	0.15	Q	V				
8+15	0.0777	0.15	Q	V				
8+20	0.0787	0.15	Q	V				
8+25	0.0798	0.15	Q	V				
8+30	0.0808	0.15	Q	V				
8+35	0.0818	0.15	Q	V				
8+40	0.0829	0.15	Q	V				
8+45	0.0840	0.15	Q	V				
8+50	0.0850	0.16	Q	V				
8+55	0.0861	0.16	Q	V				
9+ 0	0.0872	0.16	Q	V				
9+ 5	0.0883	0.16	Q	V				
9+10	0.0894	0.16	Q	V				
9+15	0.0905	0.16	Q	V				
9+20	0.0917	0.16	Q	V				
9+25	0.0928	0.16	Q	V				
9+30	0.0940	0.17	Q	V				
9+35	0.0951	0.17	Q	V				
9+40	0.0963	0.17	Q	V				
9+45	0.0974	0.17	Q	V				
9+50	0.0986	0.17	Q	V				
9+55	0.0998	0.17	Q	V				
10+ 0	0.1010	0.18	Q	V				
10+ 5	0.1023	0.18	Q	V				
10+10	0.1035	0.18	Q	V				
10+15	0.1047	0.18	Q	V				
10+20	0.1060	0.18	Q	V				
10+25	0.1072	0.18	Q	V				
10+30	0.1085	0.19	Q	V				
10+35	0.1098	0.19	Q	V				
10+40	0.1111	0.19	Q	V				
10+45	0.1124	0.19	Q	V				
10+50	0.1137	0.19	Q	V				
10+55	0.1151	0.19	Q	V				
11+ 0	0.1164	0.20	Q	V				
11+ 5	0.1178	0.20	Q	V				
11+10	0.1192	0.20	Q	V				
11+15	0.1206	0.20	Q	V				
11+20	0.1220	0.21	Q	V				
11+25	0.1234	0.21	Q	V				
11+30	0.1249	0.21	Q	V				
11+35	0.1264	0.21	Q	V				

11+40	0.1279	0.22	Q	V				
11+45	0.1294	0.22	Q	V				
11+50	0.1309	0.22	Q	V				
11+55	0.1324	0.22	Q	V				
12+ 0	0.1340	0.23	Q	V				
12+ 5	0.1359	0.27	Q	V				
12+10	0.1384	0.36	Q	V				
12+15	0.1411	0.39	Q	V				
12+20	0.1439	0.41	Q	V				
12+25	0.1468	0.42	Q	V				
12+30	0.1497	0.43	Q	V				
12+35	0.1527	0.43	Q	V				
12+40	0.1557	0.44	Q	V				
12+45	0.1588	0.44	Q	V				
12+50	0.1618	0.45	Q	V				
12+55	0.1649	0.45	Q	V				
13+ 0	0.1681	0.46	Q	V				
13+ 5	0.1712	0.46	Q	V				
13+10	0.1745	0.47	Q	V				
13+15	0.1777	0.47	Q	V				
13+20	0.1810	0.48	Q	V				
13+25	0.1843	0.48	Q	V				
13+30	0.1877	0.49	Q	V				
13+35	0.1911	0.49	Q	V				
13+40	0.1945	0.50	Q	V				
13+45	0.1980	0.51	Q	V				
13+50	0.2015	0.52	Q	V				
13+55	0.2051	0.52	Q	V				
14+ 0	0.2088	0.53	Q	V				
14+ 5	0.2125	0.54	Q	V				
14+10	0.2163	0.55	Q	V				
14+15	0.2201	0.56	Q	V				
14+20	0.2240	0.57	Q	V				
14+25	0.2280	0.58	Q	V				
14+30	0.2321	0.59	Q	V				
14+35	0.2362	0.60	Q	V				
14+40	0.2405	0.62	Q	V				
14+45	0.2448	0.63	Q	V				
14+50	0.2493	0.65	Q	V				
14+55	0.2538	0.66	Q	V				
15+ 0	0.2585	0.68	Q	V				
15+ 5	0.2634	0.70	Q	V				
15+10	0.2684	0.73	Q	V				
15+15	0.2735	0.75	Q	V				
15+20	0.2789	0.78	Q	V				
15+25	0.2839	0.72	Q	V				
15+30	0.2877	0.55	Q	V				
15+35	0.2913	0.53	Q	V				
15+40	0.2951	0.56	Q	V				
15+45	0.2994	0.62	Q	V				

15+50	0.3044	0.72	Q		V		
15+55	0.3106	0.90	Q		V		
16+ 0	0.3197	1.32	Q		V		
16+ 5	0.3446	3.62		Q	V		
16+10	0.3851	5.88			Q	V	
16+15	0.4017	2.42		Q		V	
16+20	0.4111	1.37	Q			V	
16+25	0.4180	1.00	Q			V	
16+30	0.4244	0.93	Q			V	
16+35	0.4305	0.88	Q			V	
16+40	0.4354	0.72	Q			V	
16+45	0.4401	0.68	Q			V	
16+50	0.4446	0.65	Q			V	
16+55	0.4489	0.62	Q			V	
17+ 0	0.4530	0.60	Q			V	
17+ 5	0.4570	0.57	Q			V	
17+10	0.4608	0.55	Q			V	
17+15	0.4645	0.53	Q			V	
17+20	0.4680	0.52	Q			V	
17+25	0.4715	0.50	Q			V	
17+30	0.4749	0.49	Q			V	
17+35	0.4782	0.48	Q			V	
17+40	0.4814	0.47	Q			V	
17+45	0.4846	0.46	Q			V	
17+50	0.4876	0.45	Q			V	
17+55	0.4907	0.44	Q			V	
18+ 0	0.4936	0.43	Q			V	
18+ 5	0.4963	0.38	Q			V	
18+10	0.4982	0.28	Q			V	
18+15	0.5000	0.25	Q			V	
18+20	0.5016	0.23	Q			V	
18+25	0.5031	0.22	Q			V	
18+30	0.5046	0.21	Q			V	
18+35	0.5060	0.21	Q			V	
18+40	0.5074	0.20	Q			V	
18+45	0.5088	0.20	Q			V	
18+50	0.5101	0.19	Q			V	
18+55	0.5114	0.19	Q			V	
19+ 0	0.5127	0.19	Q			V	
19+ 5	0.5139	0.18	Q			V	
19+10	0.5152	0.18	Q			V	
19+15	0.5164	0.18	Q			V	
19+20	0.5176	0.17	Q			V	
19+25	0.5187	0.17	Q			V	
19+30	0.5199	0.17	Q			V	
19+35	0.5210	0.16	Q			V	
19+40	0.5221	0.16	Q			V	
19+45	0.5232	0.16	Q			V	
19+50	0.5243	0.16	Q			V	
19+55	0.5254	0.15	Q			V	

20+ 0	0.5264	0.15	Q				V
20+ 5	0.5274	0.15	Q				V
20+10	0.5285	0.15	Q				V
20+15	0.5295	0.15	Q				V
20+20	0.5304	0.14	Q				V
20+25	0.5314	0.14	Q				V
20+30	0.5324	0.14	Q				V
20+35	0.5333	0.14	Q				V
20+40	0.5343	0.14	Q				V
20+45	0.5352	0.13	Q				V
20+50	0.5361	0.13	Q				V
20+55	0.5370	0.13	Q				V
21+ 0	0.5379	0.13	Q				V
21+ 5	0.5388	0.13	Q				V
21+10	0.5397	0.13	Q				V
21+15	0.5406	0.13	Q				V
21+20	0.5414	0.12	Q				V
21+25	0.5423	0.12	Q				V
21+30	0.5431	0.12	Q				V
21+35	0.5439	0.12	Q				V
21+40	0.5448	0.12	Q				V
21+45	0.5456	0.12	Q				V
21+50	0.5464	0.12	Q				V
21+55	0.5472	0.12	Q				V
22+ 0	0.5480	0.11	Q				V
22+ 5	0.5488	0.11	Q				V
22+10	0.5495	0.11	Q				V
22+15	0.5503	0.11	Q				V
22+20	0.5511	0.11	Q				V
22+25	0.5518	0.11	Q				V
22+30	0.5526	0.11	Q				V
22+35	0.5533	0.11	Q				V
22+40	0.5540	0.11	Q				V
22+45	0.5548	0.11	Q				V
22+50	0.5555	0.11	Q				V
22+55	0.5562	0.10	Q				V
23+ 0	0.5569	0.10	Q				V
23+ 5	0.5576	0.10	Q				V
23+10	0.5583	0.10	Q				V
23+15	0.5590	0.10	Q				V
23+20	0.5597	0.10	Q				V
23+25	0.5604	0.10	Q				V
23+30	0.5611	0.10	Q				V
23+35	0.5618	0.10	Q				V
23+40	0.5624	0.10	Q				V
23+45	0.5631	0.10	Q				V
23+50	0.5638	0.10	Q				V
23+55	0.5644	0.10	Q				V
24+ 0	0.5651	0.09	Q				V
24+ 5	0.5656	0.07	Q				V

24+10	0.5657	0.03	Q	|	|	|	V|
24+15	0.5658	0.01	Q	|	|	|	V|
24+20	0.5659	0.01	Q	|	|	|	V|
24+25	0.5659	0.00	Q	|	|	|	V|
24+30	0.5659	0.00	Q	|	|	|	V

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 10 YR UNIT HYDROGRAPH SUBAREA B
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
11.64	1	0.79

Rainfall data for year 10		
11.64	6	2.28

Rainfall data for year 10		
11.64	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	32.0	11.64	1.000	0.978	0.190	0.186

Area-averaged adjusted loss rate Fm (In/Hr) = 0.186

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
2.21	0.190	32.0	32.0	18.15	0.000
9.43	0.810	98.0	98.0	0.20	0.936

Area-averaged catchment yield fraction, Y = 0.758

Area-averaged low loss fraction, Yb = 0.242

User entry of time of concentration = 0.138 (hours)

+++++

Watershed area = 11.64(Ac.)

Catchment Lag time = 0.110 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 75.7576

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.186(In/Hr)

Average low loss rate fraction (Yb) = 0.242 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.372(In)

Computed peak 30-minute rainfall = 0.638(In)

Specified peak 1-hour rainfall = 0.785(In)

Computed peak 3-hour rainfall = 1.509(In)

Specified peak 6-hour rainfall = 2.280(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 11.64(Ac.) (Ref: fig. E-4)

5-minute factor = 0.999 Adjusted rainfall = 0.372(In)

30-minute factor = 0.999 Adjusted rainfall = 0.637(In)

1-hour factor = 0.999 Adjusted rainfall = 0.785(In)

3-hour factor = 1.000 Adjusted rainfall = 1.509(In)

6-hour factor = 1.000 Adjusted rainfall = 2.280(In)

24-hour factor = 1.000 Adjusted rainfall = 3.630(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

	(K = 140.77 (CFS))	
1	9.432	13.278
2	54.666	63.676
3	76.153	30.248
4	85.629	13.340
5	91.034	7.608
6	94.436	4.789
7	96.655	3.123
8	97.962	1.840
9	98.827	1.218
10	99.611	1.103
11	100.000	0.548

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3723	0.3723
2	0.4583	0.0861
3	0.5176	0.0593
4	0.5643	0.0467
5	0.6033	0.0391
6	0.6373	0.0339
7	0.6674	0.0302
8	0.6947	0.0273
9	0.7197	0.0250
10	0.7428	0.0231
11	0.7644	0.0215
12	0.7846	0.0202
13	0.8229	0.0383
14	0.8600	0.0371
15	0.8961	0.0361
16	0.9312	0.0351
17	0.9654	0.0342
18	0.9988	0.0334
19	1.0315	0.0327
20	1.0635	0.0320
21	1.0949	0.0314
22	1.1256	0.0308
23	1.1558	0.0302
24	1.1855	0.0297
25	1.2147	0.0292
26	1.2434	0.0287
27	1.2716	0.0283
28	1.2995	0.0278
29	1.3269	0.0274
30	1.3540	0.0271
31	1.3807	0.0267

32	1.4070	0.0264
33	1.4331	0.0260
34	1.4588	0.0257
35	1.4842	0.0254
36	1.5093	0.0251
37	1.5341	0.0248
38	1.5586	0.0245
39	1.5829	0.0243
40	1.6069	0.0240
41	1.6307	0.0238
42	1.6543	0.0236
43	1.6776	0.0233
44	1.7007	0.0231
45	1.7236	0.0229
46	1.7463	0.0227
47	1.7688	0.0225
48	1.7911	0.0223
49	1.8132	0.0221
50	1.8352	0.0219
51	1.8569	0.0218
52	1.8785	0.0216
53	1.8999	0.0214
54	1.9212	0.0213
55	1.9423	0.0211
56	1.9632	0.0209
57	1.9840	0.0208
58	2.0046	0.0206
59	2.0251	0.0205
60	2.0455	0.0204
61	2.0657	0.0202
62	2.0858	0.0201
63	2.1057	0.0200
64	2.1256	0.0198
65	2.1453	0.0197
66	2.1649	0.0196
67	2.1843	0.0195
68	2.2037	0.0193
69	2.2229	0.0192
70	2.2420	0.0191
71	2.2610	0.0190
72	2.2799	0.0189
73	2.2905	0.0106
74	2.3010	0.0105
75	2.3114	0.0104
76	2.3216	0.0103
77	2.3319	0.0102
78	2.3420	0.0101
79	2.3520	0.0100
80	2.3619	0.0099
81	2.3718	0.0099

82	2.3816	0.0098
83	2.3913	0.0097
84	2.4009	0.0096
85	2.4105	0.0096
86	2.4200	0.0095
87	2.4294	0.0094
88	2.4387	0.0093
89	2.4480	0.0093
90	2.4571	0.0092
91	2.4663	0.0091
92	2.4753	0.0091
93	2.4843	0.0090
94	2.4933	0.0089
95	2.5021	0.0089
96	2.5109	0.0088
97	2.5197	0.0087
98	2.5284	0.0087
99	2.5370	0.0086
100	2.5456	0.0086
101	2.5541	0.0085
102	2.5625	0.0085
103	2.5709	0.0084
104	2.5793	0.0083
105	2.5876	0.0083
106	2.5958	0.0082
107	2.6040	0.0082
108	2.6121	0.0081
109	2.6202	0.0081
110	2.6283	0.0080
111	2.6363	0.0080
112	2.6442	0.0079
113	2.6521	0.0079
114	2.6599	0.0079
115	2.6677	0.0078
116	2.6755	0.0078
117	2.6832	0.0077
118	2.6909	0.0077
119	2.6985	0.0076
120	2.7061	0.0076
121	2.7137	0.0075
122	2.7212	0.0075
123	2.7286	0.0075
124	2.7360	0.0074
125	2.7434	0.0074
126	2.7508	0.0073
127	2.7581	0.0073
128	2.7653	0.0073
129	2.7726	0.0072
130	2.7798	0.0072
131	2.7869	0.0072

132	2.7940	0.0071
133	2.8011	0.0071
134	2.8082	0.0070
135	2.8152	0.0070
136	2.8222	0.0070
137	2.8291	0.0069
138	2.8360	0.0069
139	2.8429	0.0069
140	2.8497	0.0068
141	2.8566	0.0068
142	2.8633	0.0068
143	2.8701	0.0067
144	2.8768	0.0067
145	2.8835	0.0067
146	2.8901	0.0067
147	2.8968	0.0066
148	2.9034	0.0066
149	2.9099	0.0066
150	2.9165	0.0065
151	2.9230	0.0065
152	2.9295	0.0065
153	2.9359	0.0065
154	2.9423	0.0064
155	2.9487	0.0064
156	2.9551	0.0064
157	2.9614	0.0063
158	2.9678	0.0063
159	2.9740	0.0063
160	2.9803	0.0063
161	2.9865	0.0062
162	2.9928	0.0062
163	2.9989	0.0062
164	3.0051	0.0062
165	3.0112	0.0061
166	3.0173	0.0061
167	3.0234	0.0061
168	3.0295	0.0061
169	3.0355	0.0060
170	3.0415	0.0060
171	3.0475	0.0060
172	3.0535	0.0060
173	3.0594	0.0059
174	3.0654	0.0059
175	3.0713	0.0059
176	3.0771	0.0059
177	3.0830	0.0059
178	3.0888	0.0058
179	3.0946	0.0058
180	3.1004	0.0058
181	3.1062	0.0058

182	3.1119	0.0057
183	3.1177	0.0057
184	3.1234	0.0057
185	3.1291	0.0057
186	3.1347	0.0057
187	3.1404	0.0056
188	3.1460	0.0056
189	3.1516	0.0056
190	3.1572	0.0056
191	3.1627	0.0056
192	3.1683	0.0055
193	3.1738	0.0055
194	3.1793	0.0055
195	3.1848	0.0055
196	3.1903	0.0055
197	3.1957	0.0055
198	3.2012	0.0054
199	3.2066	0.0054
200	3.2120	0.0054
201	3.2174	0.0054
202	3.2227	0.0054
203	3.2281	0.0053
204	3.2334	0.0053
205	3.2387	0.0053
206	3.2440	0.0053
207	3.2493	0.0053
208	3.2545	0.0053
209	3.2598	0.0052
210	3.2650	0.0052
211	3.2702	0.0052
212	3.2754	0.0052
213	3.2806	0.0052
214	3.2857	0.0052
215	3.2909	0.0051
216	3.2960	0.0051
217	3.3011	0.0051
218	3.3062	0.0051
219	3.3113	0.0051
220	3.3163	0.0051
221	3.3214	0.0050
222	3.3264	0.0050
223	3.3314	0.0050
224	3.3364	0.0050
225	3.3414	0.0050
226	3.3464	0.0050
227	3.3514	0.0050
228	3.3563	0.0049
229	3.3612	0.0049
230	3.3662	0.0049
231	3.3711	0.0049

232	3.3760	0.0049
233	3.3808	0.0049
234	3.3857	0.0049
235	3.3905	0.0048
236	3.3954	0.0048
237	3.4002	0.0048
238	3.4050	0.0048
239	3.4098	0.0048
240	3.4146	0.0048
241	3.4193	0.0048
242	3.4241	0.0048
243	3.4288	0.0047
244	3.4336	0.0047
245	3.4383	0.0047
246	3.4430	0.0047
247	3.4477	0.0047
248	3.4523	0.0047
249	3.4570	0.0047
250	3.4617	0.0047
251	3.4663	0.0046
252	3.4709	0.0046
253	3.4755	0.0046
254	3.4801	0.0046
255	3.4847	0.0046
256	3.4893	0.0046
257	3.4939	0.0046
258	3.4984	0.0046
259	3.5030	0.0045
260	3.5075	0.0045
261	3.5120	0.0045
262	3.5165	0.0045
263	3.5210	0.0045
264	3.5255	0.0045
265	3.5300	0.0045
266	3.5345	0.0045
267	3.5389	0.0045
268	3.5433	0.0044
269	3.5478	0.0044
270	3.5522	0.0044
271	3.5566	0.0044
272	3.5610	0.0044
273	3.5654	0.0044
274	3.5698	0.0044
275	3.5741	0.0044
276	3.5785	0.0044
277	3.5828	0.0043
278	3.5872	0.0043
279	3.5915	0.0043
280	3.5958	0.0043
281	3.6001	0.0043

282	3.6044	0.0043
283	3.6087	0.0043
284	3.6130	0.0043
285	3.6172	0.0043
286	3.6215	0.0043
287	3.6257	0.0042
288	3.6299	0.0042

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0042	0.0010	0.0032
2	0.0042	0.0010	0.0032
3	0.0043	0.0010	0.0032
4	0.0043	0.0010	0.0032
5	0.0043	0.0010	0.0033
6	0.0043	0.0010	0.0033
7	0.0043	0.0010	0.0033
8	0.0043	0.0010	0.0033
9	0.0044	0.0011	0.0033
10	0.0044	0.0011	0.0033
11	0.0044	0.0011	0.0033
12	0.0044	0.0011	0.0033
13	0.0044	0.0011	0.0033
14	0.0044	0.0011	0.0034
15	0.0045	0.0011	0.0034
16	0.0045	0.0011	0.0034
17	0.0045	0.0011	0.0034
18	0.0045	0.0011	0.0034
19	0.0045	0.0011	0.0034
20	0.0045	0.0011	0.0034
21	0.0046	0.0011	0.0035
22	0.0046	0.0011	0.0035
23	0.0046	0.0011	0.0035
24	0.0046	0.0011	0.0035
25	0.0046	0.0011	0.0035
26	0.0046	0.0011	0.0035
27	0.0047	0.0011	0.0035
28	0.0047	0.0011	0.0035
29	0.0047	0.0011	0.0036
30	0.0047	0.0011	0.0036
31	0.0047	0.0011	0.0036
32	0.0048	0.0012	0.0036
33	0.0048	0.0012	0.0036
34	0.0048	0.0012	0.0036
35	0.0048	0.0012	0.0037
36	0.0048	0.0012	0.0037
37	0.0049	0.0012	0.0037
38	0.0049	0.0012	0.0037

39	0.0049	0.0012	0.0037
40	0.0049	0.0012	0.0037
41	0.0049	0.0012	0.0037
42	0.0050	0.0012	0.0038
43	0.0050	0.0012	0.0038
44	0.0050	0.0012	0.0038
45	0.0050	0.0012	0.0038
46	0.0050	0.0012	0.0038
47	0.0051	0.0012	0.0038
48	0.0051	0.0012	0.0039
49	0.0051	0.0012	0.0039
50	0.0051	0.0012	0.0039
51	0.0052	0.0013	0.0039
52	0.0052	0.0013	0.0039
53	0.0052	0.0013	0.0040
54	0.0052	0.0013	0.0040
55	0.0053	0.0013	0.0040
56	0.0053	0.0013	0.0040
57	0.0053	0.0013	0.0040
58	0.0053	0.0013	0.0040
59	0.0054	0.0013	0.0041
60	0.0054	0.0013	0.0041
61	0.0054	0.0013	0.0041
62	0.0055	0.0013	0.0041
63	0.0055	0.0013	0.0042
64	0.0055	0.0013	0.0042
65	0.0055	0.0013	0.0042
66	0.0056	0.0013	0.0042
67	0.0056	0.0014	0.0042
68	0.0056	0.0014	0.0043
69	0.0057	0.0014	0.0043
70	0.0057	0.0014	0.0043
71	0.0057	0.0014	0.0043
72	0.0057	0.0014	0.0044
73	0.0058	0.0014	0.0044
74	0.0058	0.0014	0.0044
75	0.0059	0.0014	0.0044
76	0.0059	0.0014	0.0045
77	0.0059	0.0014	0.0045
78	0.0059	0.0014	0.0045
79	0.0060	0.0015	0.0045
80	0.0060	0.0015	0.0046
81	0.0061	0.0015	0.0046
82	0.0061	0.0015	0.0046
83	0.0061	0.0015	0.0046
84	0.0062	0.0015	0.0047
85	0.0062	0.0015	0.0047
86	0.0062	0.0015	0.0047
87	0.0063	0.0015	0.0048
88	0.0063	0.0015	0.0048

89	0.0064	0.0015	0.0048
90	0.0064	0.0015	0.0048
91	0.0065	0.0016	0.0049
92	0.0065	0.0016	0.0049
93	0.0065	0.0016	0.0050
94	0.0066	0.0016	0.0050
95	0.0066	0.0016	0.0050
96	0.0067	0.0016	0.0050
97	0.0067	0.0016	0.0051
98	0.0067	0.0016	0.0051
99	0.0068	0.0017	0.0052
100	0.0068	0.0017	0.0052
101	0.0069	0.0017	0.0052
102	0.0069	0.0017	0.0053
103	0.0070	0.0017	0.0053
104	0.0070	0.0017	0.0053
105	0.0071	0.0017	0.0054
106	0.0072	0.0017	0.0054
107	0.0072	0.0018	0.0055
108	0.0073	0.0018	0.0055
109	0.0073	0.0018	0.0056
110	0.0074	0.0018	0.0056
111	0.0075	0.0018	0.0057
112	0.0075	0.0018	0.0057
113	0.0076	0.0018	0.0057
114	0.0076	0.0018	0.0058
115	0.0077	0.0019	0.0058
116	0.0078	0.0019	0.0059
117	0.0079	0.0019	0.0059
118	0.0079	0.0019	0.0060
119	0.0080	0.0019	0.0061
120	0.0080	0.0019	0.0061
121	0.0081	0.0020	0.0062
122	0.0082	0.0020	0.0062
123	0.0083	0.0020	0.0063
124	0.0083	0.0020	0.0063
125	0.0085	0.0020	0.0064
126	0.0085	0.0021	0.0065
127	0.0086	0.0021	0.0065
128	0.0087	0.0021	0.0066
129	0.0088	0.0021	0.0067
130	0.0089	0.0021	0.0067
131	0.0090	0.0022	0.0068
132	0.0091	0.0022	0.0069
133	0.0092	0.0022	0.0070
134	0.0093	0.0022	0.0070
135	0.0094	0.0023	0.0071
136	0.0095	0.0023	0.0072
137	0.0096	0.0023	0.0073
138	0.0097	0.0024	0.0074

139	0.0099	0.0024	0.0075
140	0.0099	0.0024	0.0075
141	0.0101	0.0025	0.0077
142	0.0102	0.0025	0.0077
143	0.0104	0.0025	0.0079
144	0.0105	0.0025	0.0079
145	0.0189	0.0046	0.0143
146	0.0190	0.0046	0.0144
147	0.0192	0.0047	0.0146
148	0.0193	0.0047	0.0147
149	0.0196	0.0047	0.0148
150	0.0197	0.0048	0.0149
151	0.0200	0.0048	0.0151
152	0.0201	0.0049	0.0152
153	0.0204	0.0049	0.0154
154	0.0205	0.0050	0.0155
155	0.0208	0.0050	0.0158
156	0.0209	0.0051	0.0159
157	0.0213	0.0051	0.0161
158	0.0214	0.0052	0.0162
159	0.0218	0.0053	0.0165
160	0.0219	0.0053	0.0166
161	0.0223	0.0054	0.0169
162	0.0225	0.0054	0.0170
163	0.0229	0.0055	0.0174
164	0.0231	0.0056	0.0175
165	0.0236	0.0057	0.0179
166	0.0238	0.0058	0.0180
167	0.0243	0.0059	0.0184
168	0.0245	0.0059	0.0186
169	0.0251	0.0061	0.0190
170	0.0254	0.0062	0.0192
171	0.0260	0.0063	0.0197
172	0.0264	0.0064	0.0200
173	0.0271	0.0066	0.0205
174	0.0274	0.0066	0.0208
175	0.0283	0.0068	0.0214
176	0.0287	0.0070	0.0218
177	0.0297	0.0072	0.0225
178	0.0302	0.0073	0.0229
179	0.0314	0.0076	0.0238
180	0.0320	0.0077	0.0242
181	0.0334	0.0081	0.0253
182	0.0342	0.0083	0.0259
183	0.0361	0.0087	0.0273
184	0.0371	0.0090	0.0281
185	0.0202	0.0049	0.0153
186	0.0215	0.0052	0.0163
187	0.0250	0.0061	0.0189
188	0.0273	0.0066	0.0207

189	0.0339	0.0082	0.0257
190	0.0391	0.0095	0.0296
191	0.0593	0.0144	0.0449
192	0.0861	0.0155	0.0706
193	0.3723	0.0155	0.3568
194	0.0467	0.0113	0.0354
195	0.0302	0.0073	0.0229
196	0.0231	0.0056	0.0175
197	0.0383	0.0093	0.0290
198	0.0351	0.0085	0.0266
199	0.0327	0.0079	0.0248
200	0.0308	0.0074	0.0233
201	0.0292	0.0071	0.0221
202	0.0278	0.0067	0.0211
203	0.0267	0.0065	0.0202
204	0.0257	0.0062	0.0195
205	0.0248	0.0060	0.0188
206	0.0240	0.0058	0.0182
207	0.0233	0.0057	0.0177
208	0.0227	0.0055	0.0172
209	0.0221	0.0054	0.0168
210	0.0216	0.0052	0.0164
211	0.0211	0.0051	0.0160
212	0.0206	0.0050	0.0156
213	0.0202	0.0049	0.0153
214	0.0198	0.0048	0.0150
215	0.0195	0.0047	0.0147
216	0.0191	0.0046	0.0145
217	0.0106	0.0026	0.0080
218	0.0103	0.0025	0.0078
219	0.0100	0.0024	0.0076
220	0.0098	0.0024	0.0074
221	0.0096	0.0023	0.0072
222	0.0093	0.0023	0.0071
223	0.0091	0.0022	0.0069
224	0.0089	0.0022	0.0068
225	0.0087	0.0021	0.0066
226	0.0086	0.0021	0.0065
227	0.0084	0.0020	0.0064
228	0.0082	0.0020	0.0062
229	0.0081	0.0020	0.0061
230	0.0079	0.0019	0.0060
231	0.0078	0.0019	0.0059
232	0.0077	0.0019	0.0058
233	0.0075	0.0018	0.0057
234	0.0074	0.0018	0.0056
235	0.0073	0.0018	0.0055
236	0.0072	0.0017	0.0055
237	0.0071	0.0017	0.0054
238	0.0070	0.0017	0.0053

239	0.0069	0.0017	0.0052
240	0.0068	0.0016	0.0051
241	0.0067	0.0016	0.0051
242	0.0066	0.0016	0.0050
243	0.0065	0.0016	0.0049
244	0.0064	0.0016	0.0049
245	0.0063	0.0015	0.0048
246	0.0063	0.0015	0.0047
247	0.0062	0.0015	0.0047
248	0.0061	0.0015	0.0046
249	0.0060	0.0015	0.0046
250	0.0060	0.0014	0.0045
251	0.0059	0.0014	0.0045
252	0.0058	0.0014	0.0044
253	0.0058	0.0014	0.0044
254	0.0057	0.0014	0.0043
255	0.0056	0.0014	0.0043
256	0.0056	0.0014	0.0042
257	0.0055	0.0013	0.0042
258	0.0055	0.0013	0.0041
259	0.0054	0.0013	0.0041
260	0.0054	0.0013	0.0041
261	0.0053	0.0013	0.0040
262	0.0053	0.0013	0.0040
263	0.0052	0.0013	0.0039
264	0.0052	0.0012	0.0039
265	0.0051	0.0012	0.0039
266	0.0051	0.0012	0.0038
267	0.0050	0.0012	0.0038
268	0.0050	0.0012	0.0038
269	0.0049	0.0012	0.0037
270	0.0049	0.0012	0.0037
271	0.0048	0.0012	0.0037
272	0.0048	0.0012	0.0036
273	0.0048	0.0012	0.0036
274	0.0047	0.0011	0.0036
275	0.0047	0.0011	0.0036
276	0.0047	0.0011	0.0035
277	0.0046	0.0011	0.0035
278	0.0046	0.0011	0.0035
279	0.0045	0.0011	0.0034
280	0.0045	0.0011	0.0034
281	0.0045	0.0011	0.0034
282	0.0044	0.0011	0.0034
283	0.0044	0.0011	0.0033
284	0.0044	0.0011	0.0033
285	0.0043	0.0011	0.0033
286	0.0043	0.0010	0.0033
287	0.0043	0.0010	0.0032
288	0.0043	0.0010	0.0032

 Total soil rain loss = 0.80(In)
 Total effective rainfall = 2.83(In)
 Peak flow rate in flood hydrograph = 26.42(CFS)

+++++
 24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0003	0.04	Q				
0+10	0.0020	0.25	Q				
0+15	0.0044	0.34	Q				
0+20	0.0070	0.39	Q				
0+25	0.0099	0.41	Q				
0+30	0.0129	0.43	Q				
0+35	0.0159	0.44	Q				
0+40	0.0190	0.45	Q				
0+45	0.0222	0.46	Q				
0+50	0.0253	0.46	Q				
0+55	0.0285	0.46	Q				
1+ 0	0.0317	0.47	Q				
1+ 5	0.0350	0.47	Q				
1+10	0.0382	0.47	Q				
1+15	0.0414	0.47	Q				
1+20	0.0447	0.47	Q				
1+25	0.0480	0.47	Q				
1+30	0.0513	0.48	Q				
1+35	0.0545	0.48	Q				
1+40	0.0579	0.48	Q				
1+45	0.0612	0.48	Q				
1+50	0.0645	0.48	Q				
1+55	0.0678	0.49	Q				
2+ 0	0.0712	0.49	QV				
2+ 5	0.0746	0.49	QV				
2+10	0.0780	0.49	QV				
2+15	0.0814	0.49	QV				
2+20	0.0848	0.50	QV				
2+25	0.0882	0.50	QV				
2+30	0.0916	0.50	QV				
2+35	0.0951	0.50	QV				
2+40	0.0986	0.50	QV				
2+45	0.1020	0.51	QV				
2+50	0.1055	0.51	QV				
2+55	0.1090	0.51	QV				

3+ 0	0.1126	0.51	QV
3+ 5	0.1161	0.51	QV
3+10	0.1197	0.52	QV
3+15	0.1232	0.52	QV
3+20	0.1268	0.52	QV
3+25	0.1304	0.52	QV
3+30	0.1340	0.53	QV
3+35	0.1377	0.53	Q V
3+40	0.1413	0.53	Q V
3+45	0.1450	0.53	Q V
3+50	0.1487	0.53	Q V
3+55	0.1524	0.54	Q V
4+ 0	0.1561	0.54	Q V
4+ 5	0.1598	0.54	Q V
4+10	0.1635	0.54	Q V
4+15	0.1673	0.55	Q V
4+20	0.1711	0.55	Q V
4+25	0.1749	0.55	Q V
4+30	0.1787	0.55	Q V
4+35	0.1825	0.56	Q V
4+40	0.1864	0.56	Q V
4+45	0.1903	0.56	Q V
4+50	0.1942	0.57	Q V
4+55	0.1981	0.57	Q V
5+ 0	0.2020	0.57	Q V
5+ 5	0.2060	0.57	Q V
5+10	0.2099	0.58	Q V
5+15	0.2139	0.58	Q V
5+20	0.2179	0.58	Q V
5+25	0.2220	0.59	Q V
5+30	0.2260	0.59	Q V
5+35	0.2301	0.59	Q V
5+40	0.2342	0.59	Q V
5+45	0.2383	0.60	Q V
5+50	0.2424	0.60	Q V
5+55	0.2466	0.60	Q V
6+ 0	0.2508	0.61	Q V
6+ 5	0.2550	0.61	Q V
6+10	0.2592	0.61	Q V
6+15	0.2635	0.62	Q V
6+20	0.2677	0.62	Q V
6+25	0.2720	0.62	Q V
6+30	0.2763	0.63	Q V
6+35	0.2807	0.63	Q V
6+40	0.2851	0.64	Q V
6+45	0.2895	0.64	Q V
6+50	0.2939	0.64	Q V
6+55	0.2983	0.65	Q V
7+ 0	0.3028	0.65	Q V
7+ 5	0.3073	0.65	Q V

7+10	0.3119	0.66	Q	V				
7+15	0.3164	0.66	Q	V				
7+20	0.3210	0.67	Q	V				
7+25	0.3256	0.67	Q	V				
7+30	0.3303	0.67	Q	V				
7+35	0.3349	0.68	Q	V				
7+40	0.3397	0.68	Q	V				
7+45	0.3444	0.69	Q	V				
7+50	0.3492	0.69	Q	V				
7+55	0.3540	0.70	Q	V				
8+ 0	0.3588	0.70	Q	V				
8+ 5	0.3637	0.71	Q	V				
8+10	0.3686	0.71	Q	V				
8+15	0.3735	0.72	Q	V				
8+20	0.3784	0.72	Q	V				
8+25	0.3835	0.73	Q	V				
8+30	0.3885	0.73	Q	V				
8+35	0.3936	0.74	Q	V				
8+40	0.3987	0.74	Q	V				
8+45	0.4038	0.75	Q	V				
8+50	0.4090	0.75	Q	V				
8+55	0.4142	0.76	Q	V				
9+ 0	0.4195	0.76	Q	V				
9+ 5	0.4248	0.77	Q	V				
9+10	0.4302	0.78	Q	V				
9+15	0.4355	0.78	Q	V				
9+20	0.4410	0.79	Q	V				
9+25	0.4465	0.80	Q	V				
9+30	0.4520	0.80	Q	V				
9+35	0.4576	0.81	Q	V				
9+40	0.4632	0.82	Q	V				
9+45	0.4688	0.82	Q	V				
9+50	0.4746	0.83	Q	V				
9+55	0.4803	0.84	Q	V				
10+ 0	0.4861	0.84	Q	V				
10+ 5	0.4920	0.85	Q	V				
10+10	0.4979	0.86	Q	V				
10+15	0.5039	0.87	Q	V				
10+20	0.5099	0.88	Q	V				
10+25	0.5160	0.88	Q	V				
10+30	0.5222	0.89	Q	V				
10+35	0.5284	0.90	Q	V				
10+40	0.5346	0.91	Q	V				
10+45	0.5410	0.92	Q	V				
10+50	0.5474	0.93	Q	V				
10+55	0.5538	0.94	Q	V				
11+ 0	0.5604	0.95	Q	V				
11+ 5	0.5670	0.96	Q	V				
11+10	0.5736	0.97	Q	V				
11+15	0.5804	0.98	Q	V				

11+20	0.5872	0.99	Q	V				
11+25	0.5941	1.00	Q	V				
11+30	0.6011	1.01	Q	V				
11+35	0.6082	1.03	Q	V				
11+40	0.6153	1.04	Q	V				
11+45	0.6225	1.05	Q	V				
11+50	0.6299	1.06	Q	V				
11+55	0.6373	1.08	Q	V				
12+ 0	0.6448	1.09	Q	V				
12+ 5	0.6530	1.19	Q	V				
12+10	0.6641	1.60	Q	V				
12+15	0.6765	1.81	Q	V				
12+20	0.6896	1.91	Q	V				
12+25	0.7032	1.97	Q	V				
12+30	0.7171	2.02	Q	V				
12+35	0.7313	2.06	Q	V				
12+40	0.7457	2.09	Q	V				
12+45	0.7602	2.12	Q	V				
12+50	0.7750	2.15	Q	V				
12+55	0.7900	2.17	Q	V				
13+ 0	0.8051	2.19	Q	V				
13+ 5	0.8203	2.22	Q	V				
13+10	0.8358	2.24	Q	V				
13+15	0.8514	2.26	Q	V				
13+20	0.8672	2.29	Q	V				
13+25	0.8831	2.32	Q	V				
13+30	0.8993	2.35	Q	V				
13+35	0.9157	2.38	Q	V				
13+40	0.9323	2.41	Q	V				
13+45	0.9491	2.44	Q	V				
13+50	0.9661	2.48	Q	V				
13+55	0.9834	2.51	Q	V				
14+ 0	1.0010	2.55	Q	V				
14+ 5	1.0188	2.59	Q	V				
14+10	1.0369	2.63	Q	V				
14+15	1.0553	2.67	Q	V				
14+20	1.0741	2.73	Q	V				
14+25	1.0932	2.77	Q	V				
14+30	1.1127	2.83	Q	V				
14+35	1.1325	2.88	Q	V				
14+40	1.1528	2.95	Q	V				
14+45	1.1736	3.01	Q	V				
14+50	1.1949	3.09	Q	V				
14+55	1.2166	3.16	Q	V				
15+ 0	1.2390	3.25	Q	V				
15+ 5	1.2621	3.34	Q	V				
15+10	1.2859	3.46	Q	V				
15+15	1.3104	3.57	Q	V				
15+20	1.3360	3.71	Q	V				
15+25	1.3611	3.66	Q	V				

15+30	1.3812	2.91	Q		V		
15+35	1.3995	2.65	Q		V		
15+40	1.4182	2.72	Q		V		
15+45	1.4382	2.90	Q		V		
15+50	1.4610	3.32	Q		V		
15+55	1.4881	3.93	Q		V		
16+ 0	1.5256	5.44		Q	V		
16+ 5	1.6043	11.43			V		
16+10	1.7863	26.42		Q		V	Q
16+15	1.8892	14.94			Q	V	
16+20	1.9475	8.46		Q		V	
16+25	1.9886	5.98		Q		V	
16+30	2.0258	5.39		Q		V	
16+35	2.0590	4.82		Q		V	
16+40	2.0882	4.24		Q		V	
16+45	2.1148	3.86		Q		V	
16+50	2.1398	3.64	Q			V	
16+55	2.1625	3.29	Q			V	
17+ 0	2.1830	2.98	Q			V	
17+ 5	2.2027	2.86	Q			V	
17+10	2.2217	2.76	Q			V	
17+15	2.2400	2.67	Q			V	
17+20	2.2578	2.58	Q			V	
17+25	2.2750	2.50	Q			V	
17+30	2.2918	2.43	Q			V	
17+35	2.3080	2.37	Q			V	
17+40	2.3239	2.31	Q			V	
17+45	2.3395	2.26	Q			V	
17+50	2.3547	2.21	Q			V	
17+55	2.3696	2.16	Q			V	
18+ 0	2.3841	2.12	Q			V	
18+ 5	2.3979	2.00	Q			V	
18+10	2.4087	1.56	Q			V	
18+15	2.4179	1.34	Q			V	
18+20	2.4263	1.23	Q			V	
18+25	2.4343	1.15	Q			V	
18+30	2.4418	1.09	Q			V	
18+35	2.4490	1.05	Q			V	
18+40	2.4560	1.01	Q			V	
18+45	2.4628	0.98	Q			V	
18+50	2.4694	0.96	Q			V	
18+55	2.4758	0.93	Q			V	
19+ 0	2.4821	0.91	Q			V	
19+ 5	2.4883	0.90	Q			V	
19+10	2.4944	0.88	Q			V	
19+15	2.5003	0.86	Q			V	
19+20	2.5061	0.85	Q			V	
19+25	2.5119	0.83	Q			V	
19+30	2.5175	0.82	Q			V	
19+35	2.5231	0.81	Q			V	

19+40	2.5285	0.79	|Q				V
19+45	2.5339	0.78	|Q				V
19+50	2.5392	0.77	|Q				V
19+55	2.5444	0.76	|Q				V
20+ 0	2.5495	0.74	Q				V
20+ 5	2.5546	0.73	Q				V
20+10	2.5595	0.72	Q				V
20+15	2.5645	0.71	Q				V
20+20	2.5693	0.70	Q				V
20+25	2.5741	0.69	Q				V
20+30	2.5788	0.69	Q				V
20+35	2.5835	0.68	Q				V
20+40	2.5881	0.67	Q				V
20+45	2.5926	0.66	Q				V
20+50	2.5971	0.65	Q				V
20+55	2.6015	0.64	Q				V
21+ 0	2.6059	0.64	Q				V
21+ 5	2.6103	0.63	Q				V
21+10	2.6145	0.62	Q				V
21+15	2.6188	0.62	Q				V
21+20	2.6230	0.61	Q				V
21+25	2.6271	0.60	Q				V
21+30	2.6312	0.60	Q				V
21+35	2.6353	0.59	Q				V
21+40	2.6393	0.58	Q				V
21+45	2.6433	0.58	Q				V
21+50	2.6472	0.57	Q				V
21+55	2.6511	0.57	Q				V
22+ 0	2.6550	0.56	Q				V
22+ 5	2.6588	0.56	Q				V
22+10	2.6626	0.55	Q				V
22+15	2.6663	0.55	Q				V
22+20	2.6701	0.54	Q				V
22+25	2.6738	0.54	Q				V
22+30	2.6774	0.53	Q				V
22+35	2.6810	0.53	Q				V
22+40	2.6846	0.52	Q				V
22+45	2.6882	0.52	Q				V
22+50	2.6917	0.51	Q				V
22+55	2.6952	0.51	Q				V
23+ 0	2.6987	0.50	Q				V
23+ 5	2.7021	0.50	Q				V
23+10	2.7056	0.50	Q				V
23+15	2.7089	0.49	Q				V
23+20	2.7123	0.49	Q				V
23+25	2.7156	0.48	Q				V
23+30	2.7190	0.48	Q				V
23+35	2.7222	0.48	Q				V
23+40	2.7255	0.47	Q				V
23+45	2.7287	0.47	Q				V

23+50	2.7320	0.47	Q	|	|	|	V|
23+55	2.7352	0.46	Q	|	|	|	V|
24+ 0	2.7383	0.46	Q	|	|	|	V|
24+ 5	2.7412	0.41	Q	|	|	|	V|
24+10	2.7426	0.21	Q	|	|	|	V|
24+15	2.7434	0.11	Q	|	|	|	V|
24+20	2.7438	0.07	Q	|	|	|	V|
24+25	2.7441	0.04	Q	|	|	|	V|
24+30	2.7443	0.03	Q	|	|	|	V|

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 10 YR UNIT HYDROGRAPH SUBAREA C
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
3.82	1	0.79

Rainfall data for year 10		
3.82	6	2.28

Rainfall data for year 10		
3.82	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	32.0	3.82	1.000	0.978	0.190	0.186

Area-averaged adjusted loss rate Fm (In/Hr) = 0.186

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
0.73	0.190	32.0	32.0	18.15	0.000
3.09	0.810	98.0	98.0	0.20	0.936

Area-averaged catchment yield fraction, Y = 0.758

Area-averaged low loss fraction, Yb = 0.242

User entry of time of concentration = 0.306 (hours)

+++++

Watershed area = 3.82(Ac.)

Catchment Lag time = 0.245 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 34.0081

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.186(In/Hr)

Average low loss rate fraction (Yb) = 0.242 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.372(In)

Computed peak 30-minute rainfall = 0.638(In)

Specified peak 1-hour rainfall = 0.785(In)

Computed peak 3-hour rainfall = 1.509(In)

Specified peak 6-hour rainfall = 2.280(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 3.82(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.372(In)

30-minute factor = 1.000 Adjusted rainfall = 0.638(In)

1-hour factor = 1.000 Adjusted rainfall = 0.785(In)

3-hour factor = 1.000 Adjusted rainfall = 1.509(In)

6-hour factor = 1.000 Adjusted rainfall = 2.280(In)

24-hour factor = 1.000 Adjusted rainfall = 3.630(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

	(K =	46.20 (CFS))
1	2.136	0.987
2	12.478	4.778
3	39.080	12.289
4	58.659	9.045
5	69.125	4.835
6	76.070	3.209
7	81.019	2.286
8	84.761	1.729
9	87.813	1.410
10	90.071	1.043
11	91.928	0.858
12	93.498	0.725
13	94.753	0.580
14	95.829	0.497
15	96.709	0.406
16	97.388	0.314
17	97.907	0.240
18	98.256	0.161
19	98.650	0.182
20	99.058	0.189
21	99.449	0.181
22	99.695	0.114
23	100.000	0.057

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3724	0.3724
2	0.4585	0.0861
3	0.5178	0.0593
4	0.5645	0.0467
5	0.6036	0.0391
6	0.6375	0.0339
7	0.6677	0.0302
8	0.6950	0.0273
9	0.7200	0.0250
10	0.7431	0.0231
11	0.7646	0.0216
12	0.7849	0.0202
13	0.8232	0.0383
14	0.8603	0.0371
15	0.8963	0.0361
16	0.9314	0.0351
17	0.9657	0.0342
18	0.9991	0.0334
19	1.0318	0.0327

20	1.0638	0.0320
21	1.0951	0.0313
22	1.1258	0.0307
23	1.1560	0.0302
24	1.1857	0.0297
25	1.2149	0.0292
26	1.2436	0.0287
27	1.2718	0.0283
28	1.2996	0.0278
29	1.3271	0.0274
30	1.3541	0.0271
31	1.3808	0.0267
32	1.4071	0.0263
33	1.4332	0.0260
34	1.4589	0.0257
35	1.4842	0.0254
36	1.5093	0.0251
37	1.5342	0.0248
38	1.5587	0.0245
39	1.5830	0.0243
40	1.6070	0.0240
41	1.6308	0.0238
42	1.6543	0.0236
43	1.6777	0.0233
44	1.7008	0.0231
45	1.7237	0.0229
46	1.7464	0.0227
47	1.7689	0.0225
48	1.7912	0.0223
49	1.8133	0.0221
50	1.8352	0.0219
51	1.8570	0.0218
52	1.8786	0.0216
53	1.9000	0.0214
54	1.9212	0.0213
55	1.9423	0.0211
56	1.9633	0.0209
57	1.9840	0.0208
58	2.0047	0.0206
59	2.0252	0.0205
60	2.0455	0.0204
61	2.0658	0.0202
62	2.0859	0.0201
63	2.1058	0.0200
64	2.1256	0.0198
65	2.1453	0.0197
66	2.1649	0.0196
67	2.1844	0.0195
68	2.2037	0.0193
69	2.2230	0.0192

70	2.2421	0.0191
71	2.2611	0.0190
72	2.2800	0.0189
73	2.2905	0.0106
74	2.3010	0.0105
75	2.3114	0.0104
76	2.3217	0.0103
77	2.3319	0.0102
78	2.3420	0.0101
79	2.3521	0.0100
80	2.3620	0.0099
81	2.3719	0.0099
82	2.3816	0.0098
83	2.3914	0.0097
84	2.4010	0.0096
85	2.4105	0.0096
86	2.4200	0.0095
87	2.4294	0.0094
88	2.4387	0.0093
89	2.4480	0.0093
90	2.4572	0.0092
91	2.4663	0.0091
92	2.4754	0.0091
93	2.4844	0.0090
94	2.4933	0.0089
95	2.5022	0.0089
96	2.5110	0.0088
97	2.5197	0.0087
98	2.5284	0.0087
99	2.5370	0.0086
100	2.5456	0.0086
101	2.5541	0.0085
102	2.5626	0.0085
103	2.5710	0.0084
104	2.5793	0.0083
105	2.5876	0.0083
106	2.5959	0.0082
107	2.6040	0.0082
108	2.6122	0.0081
109	2.6203	0.0081
110	2.6283	0.0080
111	2.6363	0.0080
112	2.6442	0.0079
113	2.6521	0.0079
114	2.6600	0.0079
115	2.6678	0.0078
116	2.6756	0.0078
117	2.6833	0.0077
118	2.6909	0.0077
119	2.6986	0.0076

120	2.7062	0.0076
121	2.7137	0.0075
122	2.7212	0.0075
123	2.7287	0.0075
124	2.7361	0.0074
125	2.7435	0.0074
126	2.7508	0.0073
127	2.7581	0.0073
128	2.7654	0.0073
129	2.7726	0.0072
130	2.7798	0.0072
131	2.7870	0.0072
132	2.7941	0.0071
133	2.8012	0.0071
134	2.8082	0.0070
135	2.8152	0.0070
136	2.8222	0.0070
137	2.8292	0.0069
138	2.8361	0.0069
139	2.8429	0.0069
140	2.8498	0.0068
141	2.8566	0.0068
142	2.8634	0.0068
143	2.8701	0.0067
144	2.8768	0.0067
145	2.8835	0.0067
146	2.8902	0.0067
147	2.8968	0.0066
148	2.9034	0.0066
149	2.9100	0.0066
150	2.9165	0.0065
151	2.9230	0.0065
152	2.9295	0.0065
153	2.9360	0.0065
154	2.9424	0.0064
155	2.9488	0.0064
156	2.9551	0.0064
157	2.9615	0.0063
158	2.9678	0.0063
159	2.9741	0.0063
160	2.9804	0.0063
161	2.9866	0.0062
162	2.9928	0.0062
163	2.9990	0.0062
164	3.0051	0.0062
165	3.0113	0.0061
166	3.0174	0.0061
167	3.0235	0.0061
168	3.0295	0.0061
169	3.0356	0.0060

170	3.0416	0.0060
171	3.0476	0.0060
172	3.0535	0.0060
173	3.0595	0.0059
174	3.0654	0.0059
175	3.0713	0.0059
176	3.0772	0.0059
177	3.0830	0.0059
178	3.0889	0.0058
179	3.0947	0.0058
180	3.1005	0.0058
181	3.1062	0.0058
182	3.1120	0.0057
183	3.1177	0.0057
184	3.1234	0.0057
185	3.1291	0.0057
186	3.1348	0.0057
187	3.1404	0.0056
188	3.1460	0.0056
189	3.1516	0.0056
190	3.1572	0.0056
191	3.1628	0.0056
192	3.1683	0.0055
193	3.1739	0.0055
194	3.1794	0.0055
195	3.1849	0.0055
196	3.1903	0.0055
197	3.1958	0.0055
198	3.2012	0.0054
199	3.2066	0.0054
200	3.2120	0.0054
201	3.2174	0.0054
202	3.2228	0.0054
203	3.2281	0.0053
204	3.2334	0.0053
205	3.2387	0.0053
206	3.2440	0.0053
207	3.2493	0.0053
208	3.2546	0.0053
209	3.2598	0.0052
210	3.2650	0.0052
211	3.2702	0.0052
212	3.2754	0.0052
213	3.2806	0.0052
214	3.2858	0.0052
215	3.2909	0.0051
216	3.2960	0.0051
217	3.3011	0.0051
218	3.3062	0.0051
219	3.3113	0.0051

220	3.3164	0.0051
221	3.3214	0.0050
222	3.3265	0.0050
223	3.3315	0.0050
224	3.3365	0.0050
225	3.3415	0.0050
226	3.3465	0.0050
227	3.3514	0.0050
228	3.3564	0.0049
229	3.3613	0.0049
230	3.3662	0.0049
231	3.3711	0.0049
232	3.3760	0.0049
233	3.3809	0.0049
234	3.3857	0.0049
235	3.3906	0.0048
236	3.3954	0.0048
237	3.4002	0.0048
238	3.4050	0.0048
239	3.4098	0.0048
240	3.4146	0.0048
241	3.4194	0.0048
242	3.4241	0.0048
243	3.4289	0.0047
244	3.4336	0.0047
245	3.4383	0.0047
246	3.4430	0.0047
247	3.4477	0.0047
248	3.4524	0.0047
249	3.4570	0.0047
250	3.4617	0.0047
251	3.4663	0.0046
252	3.4710	0.0046
253	3.4756	0.0046
254	3.4802	0.0046
255	3.4848	0.0046
256	3.4893	0.0046
257	3.4939	0.0046
258	3.4985	0.0046
259	3.5030	0.0045
260	3.5075	0.0045
261	3.5121	0.0045
262	3.5166	0.0045
263	3.5211	0.0045
264	3.5256	0.0045
265	3.5300	0.0045
266	3.5345	0.0045
267	3.5389	0.0045
268	3.5434	0.0044
269	3.5478	0.0044

270	3.5522	0.0044
271	3.5566	0.0044
272	3.5610	0.0044
273	3.5654	0.0044
274	3.5698	0.0044
275	3.5742	0.0044
276	3.5785	0.0044
277	3.5829	0.0043
278	3.5872	0.0043
279	3.5915	0.0043
280	3.5958	0.0043
281	3.6001	0.0043
282	3.6044	0.0043
283	3.6087	0.0043
284	3.6130	0.0043
285	3.6173	0.0043
286	3.6215	0.0043
287	3.6257	0.0042
288	3.6300	0.0042

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0042	0.0010	0.0032
2	0.0042	0.0010	0.0032
3	0.0043	0.0010	0.0032
4	0.0043	0.0010	0.0032
5	0.0043	0.0010	0.0033
6	0.0043	0.0010	0.0033
7	0.0043	0.0010	0.0033
8	0.0043	0.0010	0.0033
9	0.0044	0.0011	0.0033
10	0.0044	0.0011	0.0033
11	0.0044	0.0011	0.0033
12	0.0044	0.0011	0.0033
13	0.0044	0.0011	0.0033
14	0.0044	0.0011	0.0034
15	0.0045	0.0011	0.0034
16	0.0045	0.0011	0.0034
17	0.0045	0.0011	0.0034
18	0.0045	0.0011	0.0034
19	0.0045	0.0011	0.0034
20	0.0045	0.0011	0.0034
21	0.0046	0.0011	0.0035
22	0.0046	0.0011	0.0035
23	0.0046	0.0011	0.0035
24	0.0046	0.0011	0.0035
25	0.0046	0.0011	0.0035
26	0.0046	0.0011	0.0035

27	0.0047	0.0011	0.0035
28	0.0047	0.0011	0.0035
29	0.0047	0.0011	0.0036
30	0.0047	0.0011	0.0036
31	0.0047	0.0011	0.0036
32	0.0048	0.0012	0.0036
33	0.0048	0.0012	0.0036
34	0.0048	0.0012	0.0036
35	0.0048	0.0012	0.0037
36	0.0048	0.0012	0.0037
37	0.0049	0.0012	0.0037
38	0.0049	0.0012	0.0037
39	0.0049	0.0012	0.0037
40	0.0049	0.0012	0.0037
41	0.0049	0.0012	0.0037
42	0.0050	0.0012	0.0038
43	0.0050	0.0012	0.0038
44	0.0050	0.0012	0.0038
45	0.0050	0.0012	0.0038
46	0.0050	0.0012	0.0038
47	0.0051	0.0012	0.0038
48	0.0051	0.0012	0.0039
49	0.0051	0.0012	0.0039
50	0.0051	0.0012	0.0039
51	0.0052	0.0013	0.0039
52	0.0052	0.0013	0.0039
53	0.0052	0.0013	0.0040
54	0.0052	0.0013	0.0040
55	0.0053	0.0013	0.0040
56	0.0053	0.0013	0.0040
57	0.0053	0.0013	0.0040
58	0.0053	0.0013	0.0040
59	0.0054	0.0013	0.0041
60	0.0054	0.0013	0.0041
61	0.0054	0.0013	0.0041
62	0.0055	0.0013	0.0041
63	0.0055	0.0013	0.0042
64	0.0055	0.0013	0.0042
65	0.0055	0.0013	0.0042
66	0.0056	0.0013	0.0042
67	0.0056	0.0014	0.0042
68	0.0056	0.0014	0.0043
69	0.0057	0.0014	0.0043
70	0.0057	0.0014	0.0043
71	0.0057	0.0014	0.0043
72	0.0057	0.0014	0.0044
73	0.0058	0.0014	0.0044
74	0.0058	0.0014	0.0044
75	0.0059	0.0014	0.0044
76	0.0059	0.0014	0.0045

77	0.0059	0.0014	0.0045
78	0.0059	0.0014	0.0045
79	0.0060	0.0015	0.0045
80	0.0060	0.0015	0.0046
81	0.0061	0.0015	0.0046
82	0.0061	0.0015	0.0046
83	0.0061	0.0015	0.0046
84	0.0062	0.0015	0.0047
85	0.0062	0.0015	0.0047
86	0.0062	0.0015	0.0047
87	0.0063	0.0015	0.0048
88	0.0063	0.0015	0.0048
89	0.0064	0.0015	0.0048
90	0.0064	0.0015	0.0048
91	0.0065	0.0016	0.0049
92	0.0065	0.0016	0.0049
93	0.0065	0.0016	0.0050
94	0.0066	0.0016	0.0050
95	0.0066	0.0016	0.0050
96	0.0067	0.0016	0.0050
97	0.0067	0.0016	0.0051
98	0.0067	0.0016	0.0051
99	0.0068	0.0016	0.0052
100	0.0068	0.0017	0.0052
101	0.0069	0.0017	0.0052
102	0.0069	0.0017	0.0053
103	0.0070	0.0017	0.0053
104	0.0070	0.0017	0.0053
105	0.0071	0.0017	0.0054
106	0.0072	0.0017	0.0054
107	0.0072	0.0018	0.0055
108	0.0073	0.0018	0.0055
109	0.0073	0.0018	0.0056
110	0.0074	0.0018	0.0056
111	0.0075	0.0018	0.0057
112	0.0075	0.0018	0.0057
113	0.0076	0.0018	0.0057
114	0.0076	0.0018	0.0058
115	0.0077	0.0019	0.0058
116	0.0078	0.0019	0.0059
117	0.0079	0.0019	0.0059
118	0.0079	0.0019	0.0060
119	0.0080	0.0019	0.0061
120	0.0080	0.0019	0.0061
121	0.0081	0.0020	0.0062
122	0.0082	0.0020	0.0062
123	0.0083	0.0020	0.0063
124	0.0083	0.0020	0.0063
125	0.0085	0.0020	0.0064
126	0.0085	0.0021	0.0065

127	0.0086	0.0021	0.0065
128	0.0087	0.0021	0.0066
129	0.0088	0.0021	0.0067
130	0.0089	0.0021	0.0067
131	0.0090	0.0022	0.0068
132	0.0091	0.0022	0.0069
133	0.0092	0.0022	0.0070
134	0.0093	0.0022	0.0070
135	0.0094	0.0023	0.0071
136	0.0095	0.0023	0.0072
137	0.0096	0.0023	0.0073
138	0.0097	0.0024	0.0074
139	0.0099	0.0024	0.0075
140	0.0099	0.0024	0.0075
141	0.0101	0.0025	0.0077
142	0.0102	0.0025	0.0077
143	0.0104	0.0025	0.0079
144	0.0105	0.0025	0.0079
145	0.0189	0.0046	0.0143
146	0.0190	0.0046	0.0144
147	0.0192	0.0047	0.0146
148	0.0193	0.0047	0.0147
149	0.0196	0.0047	0.0148
150	0.0197	0.0048	0.0149
151	0.0200	0.0048	0.0151
152	0.0201	0.0049	0.0152
153	0.0204	0.0049	0.0154
154	0.0205	0.0050	0.0155
155	0.0208	0.0050	0.0158
156	0.0209	0.0051	0.0159
157	0.0213	0.0051	0.0161
158	0.0214	0.0052	0.0162
159	0.0218	0.0053	0.0165
160	0.0219	0.0053	0.0166
161	0.0223	0.0054	0.0169
162	0.0225	0.0054	0.0170
163	0.0229	0.0055	0.0174
164	0.0231	0.0056	0.0175
165	0.0236	0.0057	0.0178
166	0.0238	0.0058	0.0180
167	0.0243	0.0059	0.0184
168	0.0245	0.0059	0.0186
169	0.0251	0.0061	0.0190
170	0.0254	0.0061	0.0192
171	0.0260	0.0063	0.0197
172	0.0263	0.0064	0.0200
173	0.0271	0.0066	0.0205
174	0.0274	0.0066	0.0208
175	0.0283	0.0068	0.0214
176	0.0287	0.0069	0.0217

177	0.0297	0.0072	0.0225
178	0.0302	0.0073	0.0229
179	0.0313	0.0076	0.0238
180	0.0320	0.0077	0.0242
181	0.0334	0.0081	0.0253
182	0.0342	0.0083	0.0259
183	0.0361	0.0087	0.0273
184	0.0371	0.0090	0.0281
185	0.0202	0.0049	0.0153
186	0.0216	0.0052	0.0163
187	0.0250	0.0061	0.0189
188	0.0273	0.0066	0.0207
189	0.0339	0.0082	0.0257
190	0.0391	0.0095	0.0296
191	0.0593	0.0144	0.0449
192	0.0861	0.0155	0.0706
193	0.3724	0.0155	0.3569
194	0.0467	0.0113	0.0354
195	0.0302	0.0073	0.0229
196	0.0231	0.0056	0.0175
197	0.0383	0.0093	0.0290
198	0.0351	0.0085	0.0266
199	0.0327	0.0079	0.0248
200	0.0307	0.0074	0.0233
201	0.0292	0.0071	0.0221
202	0.0278	0.0067	0.0211
203	0.0267	0.0065	0.0202
204	0.0257	0.0062	0.0195
205	0.0248	0.0060	0.0188
206	0.0240	0.0058	0.0182
207	0.0233	0.0057	0.0177
208	0.0227	0.0055	0.0172
209	0.0221	0.0054	0.0168
210	0.0216	0.0052	0.0164
211	0.0211	0.0051	0.0160
212	0.0206	0.0050	0.0156
213	0.0202	0.0049	0.0153
214	0.0198	0.0048	0.0150
215	0.0195	0.0047	0.0147
216	0.0191	0.0046	0.0145
217	0.0106	0.0026	0.0080
218	0.0103	0.0025	0.0078
219	0.0100	0.0024	0.0076
220	0.0098	0.0024	0.0074
221	0.0096	0.0023	0.0072
222	0.0093	0.0023	0.0071
223	0.0091	0.0022	0.0069
224	0.0089	0.0022	0.0068
225	0.0087	0.0021	0.0066
226	0.0086	0.0021	0.0065

227	0.0084	0.0020	0.0064
228	0.0082	0.0020	0.0062
229	0.0081	0.0020	0.0061
230	0.0079	0.0019	0.0060
231	0.0078	0.0019	0.0059
232	0.0077	0.0019	0.0058
233	0.0075	0.0018	0.0057
234	0.0074	0.0018	0.0056
235	0.0073	0.0018	0.0055
236	0.0072	0.0017	0.0055
237	0.0071	0.0017	0.0054
238	0.0070	0.0017	0.0053
239	0.0069	0.0017	0.0052
240	0.0068	0.0016	0.0051
241	0.0067	0.0016	0.0051
242	0.0066	0.0016	0.0050
243	0.0065	0.0016	0.0049
244	0.0064	0.0016	0.0049
245	0.0063	0.0015	0.0048
246	0.0063	0.0015	0.0047
247	0.0062	0.0015	0.0047
248	0.0061	0.0015	0.0046
249	0.0060	0.0015	0.0046
250	0.0060	0.0014	0.0045
251	0.0059	0.0014	0.0045
252	0.0058	0.0014	0.0044
253	0.0058	0.0014	0.0044
254	0.0057	0.0014	0.0043
255	0.0056	0.0014	0.0043
256	0.0056	0.0014	0.0042
257	0.0055	0.0013	0.0042
258	0.0055	0.0013	0.0041
259	0.0054	0.0013	0.0041
260	0.0054	0.0013	0.0041
261	0.0053	0.0013	0.0040
262	0.0053	0.0013	0.0040
263	0.0052	0.0013	0.0039
264	0.0052	0.0012	0.0039
265	0.0051	0.0012	0.0039
266	0.0051	0.0012	0.0038
267	0.0050	0.0012	0.0038
268	0.0050	0.0012	0.0038
269	0.0049	0.0012	0.0037
270	0.0049	0.0012	0.0037
271	0.0048	0.0012	0.0037
272	0.0048	0.0012	0.0036
273	0.0048	0.0012	0.0036
274	0.0047	0.0011	0.0036
275	0.0047	0.0011	0.0036
276	0.0047	0.0011	0.0035

277	0.0046	0.0011	0.0035
278	0.0046	0.0011	0.0035
279	0.0045	0.0011	0.0034
280	0.0045	0.0011	0.0034
281	0.0045	0.0011	0.0034
282	0.0044	0.0011	0.0034
283	0.0044	0.0011	0.0033
284	0.0044	0.0011	0.0033
285	0.0043	0.0011	0.0033
286	0.0043	0.0010	0.0033
287	0.0043	0.0010	0.0032
288	0.0043	0.0010	0.0032

 Total soil rain loss = 0.80(In)
 Total effective rainfall = 2.83(In)
 Peak flow rate in flood hydrograph = 5.77(CFS)

+++++

24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00	Q				
0+10	0.0001	0.02	Q				
0+15	0.0005	0.06	Q				
0+20	0.0011	0.09	Q				
0+25	0.0019	0.10	Q				
0+30	0.0026	0.11	Q				
0+35	0.0035	0.12	Q				
0+40	0.0044	0.13	Q				
0+45	0.0053	0.13	Q				
0+50	0.0062	0.14	Q				
0+55	0.0072	0.14	Q				
1+ 0	0.0081	0.14	Q				
1+ 5	0.0091	0.14	Q				
1+10	0.0101	0.15	Q				
1+15	0.0112	0.15	Q				
1+20	0.0122	0.15	Q				
1+25	0.0132	0.15	Q				
1+30	0.0143	0.15	Q				
1+35	0.0154	0.15	Q				
1+40	0.0164	0.15	Q				
1+45	0.0175	0.16	Q				
1+50	0.0186	0.16	Q				
1+55	0.0197	0.16	Q				

2+ 0	0.0207	0.16	Q
2+ 5	0.0218	0.16	Q
2+10	0.0229	0.16	QV
2+15	0.0240	0.16	QV
2+20	0.0252	0.16	QV
2+25	0.0263	0.16	QV
2+30	0.0274	0.16	QV
2+35	0.0285	0.16	QV
2+40	0.0296	0.16	QV
2+45	0.0308	0.16	QV
2+50	0.0319	0.16	QV
2+55	0.0330	0.17	QV
3+ 0	0.0342	0.17	QV
3+ 5	0.0353	0.17	QV
3+10	0.0365	0.17	QV
3+15	0.0376	0.17	QV
3+20	0.0388	0.17	QV
3+25	0.0400	0.17	QV
3+30	0.0411	0.17	QV
3+35	0.0423	0.17	QV
3+40	0.0435	0.17	QV
3+45	0.0447	0.17	QV
3+50	0.0459	0.17	Q V
3+55	0.0471	0.17	Q V
4+ 0	0.0483	0.17	Q V
4+ 5	0.0495	0.18	Q V
4+10	0.0507	0.18	Q V
4+15	0.0519	0.18	Q V
4+20	0.0532	0.18	Q V
4+25	0.0544	0.18	Q V
4+30	0.0556	0.18	Q V
4+35	0.0569	0.18	Q V
4+40	0.0581	0.18	Q V
4+45	0.0594	0.18	Q V
4+50	0.0606	0.18	Q V
4+55	0.0619	0.18	Q V
5+ 0	0.0632	0.18	Q V
5+ 5	0.0644	0.19	Q V
5+10	0.0657	0.19	Q V
5+15	0.0670	0.19	Q V
5+20	0.0683	0.19	Q V
5+25	0.0696	0.19	Q V
5+30	0.0709	0.19	Q V
5+35	0.0723	0.19	Q V
5+40	0.0736	0.19	Q V
5+45	0.0749	0.19	Q V
5+50	0.0763	0.19	Q V
5+55	0.0776	0.20	Q V
6+ 0	0.0790	0.20	Q V
6+ 5	0.0803	0.20	Q V

6+10	0.0817	0.20	Q	V				
6+15	0.0831	0.20	Q	V				
6+20	0.0844	0.20	Q	V				
6+25	0.0858	0.20	Q	V				
6+30	0.0872	0.20	Q	V				
6+35	0.0886	0.20	Q	V				
6+40	0.0900	0.21	Q	V				
6+45	0.0915	0.21	Q	V				
6+50	0.0929	0.21	Q	V				
6+55	0.0943	0.21	Q	V				
7+ 0	0.0958	0.21	Q	V				
7+ 5	0.0972	0.21	Q	V				
7+10	0.0987	0.21	Q	V				
7+15	0.1002	0.21	Q	V				
7+20	0.1017	0.22	Q	V				
7+25	0.1031	0.22	Q	V				
7+30	0.1046	0.22	Q	V				
7+35	0.1062	0.22	Q	V				
7+40	0.1077	0.22	Q	V				
7+45	0.1092	0.22	Q	V				
7+50	0.1107	0.22	Q	V				
7+55	0.1123	0.22	Q	V				
8+ 0	0.1139	0.23	Q	V				
8+ 5	0.1154	0.23	Q	V				
8+10	0.1170	0.23	Q	V				
8+15	0.1186	0.23	Q	V				
8+20	0.1202	0.23	Q	V				
8+25	0.1218	0.23	Q	V				
8+30	0.1234	0.24	Q	V				
8+35	0.1251	0.24	Q	V				
8+40	0.1267	0.24	Q	V				
8+45	0.1284	0.24	Q	V				
8+50	0.1300	0.24	Q	V				
8+55	0.1317	0.24	Q	V				
9+ 0	0.1334	0.25	Q	V				
9+ 5	0.1351	0.25	Q	V				
9+10	0.1369	0.25	Q	V				
9+15	0.1386	0.25	|Q	V				
9+20	0.1403	0.25	|Q	V				
9+25	0.1421	0.26	|Q	V				
9+30	0.1439	0.26	|Q	V				
9+35	0.1457	0.26	|Q	V				
9+40	0.1475	0.26	|Q	V				
9+45	0.1493	0.26	|Q	V				
9+50	0.1511	0.27	|Q	V				
9+55	0.1530	0.27	|Q	V				
10+ 0	0.1548	0.27	|Q	V				
10+ 5	0.1567	0.27	|Q	V				
10+10	0.1586	0.28	|Q	V				
10+15	0.1605	0.28	|Q	V				

10+20	0.1625	0.28	Q	V				
10+25	0.1644	0.28	Q	V				
10+30	0.1664	0.29	Q	V				
10+35	0.1684	0.29	Q	V				
10+40	0.1704	0.29	Q	V				
10+45	0.1724	0.29	Q	V				
10+50	0.1745	0.30	Q	V				
10+55	0.1765	0.30	Q	V				
11+ 0	0.1786	0.30	Q	V				
11+ 5	0.1808	0.31	Q	V				
11+10	0.1829	0.31	Q	V				
11+15	0.1850	0.31	Q	V				
11+20	0.1872	0.32	Q	V				
11+25	0.1894	0.32	Q	V				
11+30	0.1917	0.32	Q	V				
11+35	0.1939	0.33	Q	V				
11+40	0.1962	0.33	Q	V				
11+45	0.1985	0.34	Q	V				
11+50	0.2008	0.34	Q	V				
11+55	0.2032	0.34	Q	V				
12+ 0	0.2056	0.35	Q	V				
12+ 5	0.2081	0.36	Q	V				
12+10	0.2108	0.39	Q	V				
12+15	0.2140	0.47	Q	V				
12+20	0.2177	0.54	Q	V				
12+25	0.2217	0.57	Q	V				
12+30	0.2258	0.60	Q	V				
12+35	0.2300	0.62	Q	V				
12+40	0.2344	0.63	Q	V				
12+45	0.2388	0.65	Q	V				
12+50	0.2434	0.66	Q	V				
12+55	0.2480	0.67	Q	V				
13+ 0	0.2527	0.68	Q	V				
13+ 5	0.2575	0.70	Q	V				
13+10	0.2624	0.71	Q	V				
13+15	0.2673	0.72	Q	V				
13+20	0.2723	0.73	Q	V				
13+25	0.2774	0.74	Q	V				
13+30	0.2825	0.74	Q	V				
13+35	0.2877	0.75	Q	V				
13+40	0.2930	0.77	Q	V				
13+45	0.2983	0.78	Q	V				
13+50	0.3037	0.79	Q	V				
13+55	0.3092	0.80	Q	V				
14+ 0	0.3148	0.81	Q	V				
14+ 5	0.3204	0.82	Q	V				
14+10	0.3262	0.83	Q	V				
14+15	0.3320	0.85	Q	V				
14+20	0.3379	0.86	Q	V				
14+25	0.3440	0.87	Q	V				

14+30	0.3501	0.89	Q		V			
14+35	0.3563	0.91	Q		V			
14+40	0.3627	0.92	Q		V			
14+45	0.3692	0.94	Q		V			
14+50	0.3758	0.96	Q		V			
14+55	0.3826	0.99	Q		V			
15+ 0	0.3896	1.01	Q		V			
15+ 5	0.3967	1.04	Q		V			
15+10	0.4040	1.06	Q		V			
15+15	0.4116	1.10	Q		V			
15+20	0.4194	1.13	Q		V			
15+25	0.4274	1.16	Q		V			
15+30	0.4352	1.13	Q		V			
15+35	0.4421	1.01	Q		V			
15+40	0.4485	0.93	Q		V			
15+45	0.4550	0.94	Q		V			
15+50	0.4617	0.98	Q		V			
15+55	0.4692	1.09	Q		V			
16+ 0	0.4780	1.28	Q		V			
16+ 5	0.4913	1.93	Q		V			
16+10	0.5152	3.47		Q	V			
16+15	0.5550	5.77			QV			
16+20	0.5862	4.54			Q	V		
16+25	0.6067	2.97		Q		V		
16+30	0.6226	2.31		Q		V		
16+35	0.6365	2.02		Q		V		
16+40	0.6492	1.84		Q		V		
16+45	0.6608	1.69		Q		V		
16+50	0.6713	1.52		Q		V		
16+55	0.6810	1.41		Q		V		
17+ 0	0.6902	1.32		Q		V		
17+ 5	0.6986	1.23	Q			V		
17+10	0.7067	1.16	Q			V		
17+15	0.7142	1.10	Q			V		
17+20	0.7213	1.03	Q			V		
17+25	0.7281	0.98	Q			V		
17+30	0.7344	0.93	Q			V		
17+35	0.7407	0.91	Q			V		
17+40	0.7468	0.89	Q			V		
17+45	0.7527	0.86	Q			V		
17+50	0.7584	0.81	Q			V		
17+55	0.7637	0.77	Q			V		
18+ 0	0.7688	0.74	Q			V		
18+ 5	0.7737	0.72	Q			V		
18+10	0.7783	0.67	Q			V		
18+15	0.7823	0.58	Q			V		
18+20	0.7858	0.51	Q			V		
18+25	0.7891	0.47	Q			V		
18+30	0.7921	0.44	Q			V		
18+35	0.7949	0.41	Q			V		

18+40	0.7977	0.39	|Q				V
18+45	0.8002	0.38	|Q				V
18+50	0.8027	0.36	|Q				V
18+55	0.8051	0.35	|Q				V
19+ 0	0.8074	0.34	|Q				V
19+ 5	0.8097	0.33	|Q				V
19+10	0.8119	0.32	|Q				V
19+15	0.8140	0.31	|Q				V
19+20	0.8160	0.30	|Q				V
19+25	0.8181	0.29	|Q				V
19+30	0.8200	0.29	|Q				V
19+35	0.8219	0.28	|Q				V
19+40	0.8238	0.27	|Q				V
19+45	0.8257	0.27	|Q				V
19+50	0.8275	0.26	|Q				V
19+55	0.8293	0.26	|Q				V
20+ 0	0.8310	0.25	|Q				V
20+ 5	0.8327	0.25	Q				V
20+10	0.8344	0.25	Q				V
20+15	0.8361	0.24	Q				V
20+20	0.8377	0.24	Q				V
20+25	0.8394	0.24	Q				V
20+30	0.8410	0.23	Q				V
20+35	0.8425	0.23	Q				V
20+40	0.8441	0.23	Q				V
20+45	0.8456	0.22	Q				V
20+50	0.8472	0.22	Q				V
20+55	0.8487	0.22	Q				V
21+ 0	0.8501	0.22	Q				V
21+ 5	0.8516	0.21	Q				V
21+10	0.8530	0.21	Q				V
21+15	0.8545	0.21	Q				V
21+20	0.8559	0.21	Q				V
21+25	0.8573	0.20	Q				V
21+30	0.8587	0.20	Q				V
21+35	0.8600	0.20	Q				V
21+40	0.8614	0.20	Q				V
21+45	0.8627	0.19	Q				V
21+50	0.8640	0.19	Q				V
21+55	0.8654	0.19	Q				V
22+ 0	0.8666	0.19	Q				V
22+ 5	0.8679	0.19	Q				V
22+10	0.8692	0.18	Q				V
22+15	0.8705	0.18	Q				V
22+20	0.8717	0.18	Q				V
22+25	0.8729	0.18	Q				V
22+30	0.8742	0.18	Q				V
22+35	0.8754	0.18	Q				V
22+40	0.8766	0.17	Q				V
22+45	0.8778	0.17	Q				V

22+50	0.8790	0.17	Q				V
22+55	0.8801	0.17	Q				V
23+ 0	0.8813	0.17	Q				V
23+ 5	0.8824	0.17	Q				V
23+10	0.8836	0.17	Q				V
23+15	0.8847	0.16	Q				V
23+20	0.8858	0.16	Q				V
23+25	0.8870	0.16	Q				V
23+30	0.8881	0.16	Q				V
23+35	0.8892	0.16	Q				V
23+40	0.8903	0.16	Q				V
23+45	0.8913	0.16	Q				V
23+50	0.8924	0.16	Q				V
23+55	0.8935	0.15	Q				V
24+ 0	0.8945	0.15	Q				V
24+ 5	0.8956	0.15	Q				V
24+10	0.8965	0.13	Q				V
24+15	0.8971	0.09	Q				V
24+20	0.8975	0.06	Q				V
24+25	0.8979	0.05	Q				V
24+30	0.8981	0.04	Q				V

Appendix E – Unit Hydrograph (Post-Development)

- 100-Year Storm Event

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 100 YR UNIT HYDROGRAPH SUBAREA A
MGUBBAREINER 2021-09-27
--

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
2.40	1	1.31

Rainfall data for year 100		
2.40	6	3.05

Rainfall data for year 100		
2.40	24	6.31

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 3)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	52.0	2.40	1.000	0.785	0.190	0.149

Area-averaged adjusted loss rate Fm (In/Hr) = 0.149

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC3)	S	Pervious Yield Fr
0.46	0.190	32.0	52.0	9.23	0.231
1.94	0.810	98.0	98.0	0.20	0.962

Area-averaged catchment yield fraction, Y = 0.823

Area-averaged low loss fraction, Yb = 0.177

User entry of time of concentration = 0.090 (hours)

+++++

Watershed area = 2.40(Ac.)

Catchment Lag time = 0.072 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 115.7407

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.149(In/Hr)

Average low loss rate fraction (Yb) = 0.177 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.622(In)

Computed peak 30-minute rainfall = 1.064(In)

Specified peak 1-hour rainfall = 1.310(In)

Computed peak 3-hour rainfall = 2.199(In)

Specified peak 6-hour rainfall = 3.050(In)

Specified peak 24-hour rainfall = 6.310(In)

Rainfall depth area reduction factors:

Using a total area of 2.40(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.622(In)

30-minute factor = 1.000 Adjusted rainfall = 1.064(In)

1-hour factor = 1.000 Adjusted rainfall = 1.310(In)

3-hour factor = 1.000 Adjusted rainfall = 2.199(In)

6-hour factor = 1.000 Adjusted rainfall = 3.050(In)

24-hour factor = 1.000 Adjusted rainfall = 6.310(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

	(K =	29.02 (CFS))
1	22.244	6.456
2	72.542	14.599
3	87.498	4.341
4	93.933	1.868
5	97.199	0.948
6	98.743	0.448
7	100.000	0.365

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.6215	0.6215
2	0.7652	0.1437
3	0.8642	0.0990
4	0.9421	0.0779
5	1.0073	0.0652
6	1.0639	0.0566
7	1.1143	0.0504
8	1.1598	0.0455
9	1.2015	0.0417
10	1.2401	0.0386
11	1.2761	0.0360
12	1.3099	0.0337
13	1.3603	0.0504
14	1.4087	0.0484
15	1.4553	0.0466
16	1.5002	0.0450
17	1.5438	0.0435
18	1.5860	0.0422
19	1.6269	0.0410
20	1.6668	0.0398
21	1.7056	0.0388
22	1.7434	0.0378
23	1.7804	0.0369
24	1.8165	0.0361
25	1.8518	0.0353
26	1.8864	0.0346
27	1.9203	0.0339
28	1.9535	0.0332
29	1.9861	0.0326
30	2.0181	0.0320
31	2.0496	0.0315
32	2.0805	0.0309
33	2.1110	0.0304
34	2.1409	0.0299
35	2.1704	0.0295

36	2.1994	0.0290
37	2.2280	0.0286
38	2.2562	0.0282
39	2.2840	0.0278
40	2.3115	0.0274
41	2.3386	0.0271
42	2.3653	0.0267
43	2.3917	0.0264
44	2.4178	0.0261
45	2.4435	0.0258
46	2.4690	0.0255
47	2.4942	0.0252
48	2.5191	0.0249
49	2.5437	0.0246
50	2.5680	0.0244
51	2.5921	0.0241
52	2.6160	0.0239
53	2.6396	0.0236
54	2.6630	0.0234
55	2.6861	0.0231
56	2.7090	0.0229
57	2.7318	0.0227
58	2.7543	0.0225
59	2.7766	0.0223
60	2.7987	0.0221
61	2.8206	0.0219
62	2.8423	0.0217
63	2.8638	0.0215
64	2.8852	0.0214
65	2.9063	0.0212
66	2.9273	0.0210
67	2.9482	0.0208
68	2.9688	0.0207
69	2.9894	0.0205
70	3.0097	0.0204
71	3.0299	0.0202
72	3.0500	0.0201
73	3.0721	0.0221
74	3.0941	0.0220
75	3.1160	0.0219
76	3.1377	0.0217
77	3.1593	0.0216
78	3.1807	0.0215
79	3.2020	0.0213
80	3.2232	0.0212
81	3.2443	0.0211
82	3.2653	0.0209
83	3.2861	0.0208
84	3.3068	0.0207
85	3.3274	0.0206

86	3.3478	0.0205
87	3.3682	0.0204
88	3.3884	0.0202
89	3.4086	0.0201
90	3.4286	0.0200
91	3.4485	0.0199
92	3.4684	0.0198
93	3.4881	0.0197
94	3.5077	0.0196
95	3.5272	0.0195
96	3.5466	0.0194
97	3.5660	0.0193
98	3.5852	0.0192
99	3.6043	0.0191
100	3.6234	0.0190
101	3.6423	0.0190
102	3.6612	0.0189
103	3.6800	0.0188
104	3.6987	0.0187
105	3.7173	0.0186
106	3.7358	0.0185
107	3.7543	0.0184
108	3.7726	0.0184
109	3.7909	0.0183
110	3.8091	0.0182
111	3.8272	0.0181
112	3.8453	0.0180
113	3.8632	0.0180
114	3.8811	0.0179
115	3.8989	0.0178
116	3.9167	0.0177
117	3.9343	0.0177
118	3.9519	0.0176
119	3.9695	0.0175
120	3.9869	0.0175
121	4.0043	0.0174
122	4.0216	0.0173
123	4.0389	0.0173
124	4.0561	0.0172
125	4.0732	0.0171
126	4.0903	0.0171
127	4.1072	0.0170
128	4.1242	0.0169
129	4.1410	0.0169
130	4.1578	0.0168
131	4.1746	0.0167
132	4.1913	0.0167
133	4.2079	0.0166
134	4.2245	0.0166
135	4.2410	0.0165

136	4.2574	0.0164
137	4.2738	0.0164
138	4.2901	0.0163
139	4.3064	0.0163
140	4.3226	0.0162
141	4.3388	0.0162
142	4.3549	0.0161
143	4.3709	0.0161
144	4.3869	0.0160
145	4.4029	0.0160
146	4.4188	0.0159
147	4.4346	0.0158
148	4.4504	0.0158
149	4.4662	0.0157
150	4.4819	0.0157
151	4.4975	0.0156
152	4.5131	0.0156
153	4.5287	0.0155
154	4.5442	0.0155
155	4.5596	0.0155
156	4.5750	0.0154
157	4.5904	0.0154
158	4.6057	0.0153
159	4.6209	0.0153
160	4.6362	0.0152
161	4.6513	0.0152
162	4.6665	0.0151
163	4.6815	0.0151
164	4.6966	0.0150
165	4.7116	0.0150
166	4.7265	0.0150
167	4.7414	0.0149
168	4.7563	0.0149
169	4.7711	0.0148
170	4.7859	0.0148
171	4.8007	0.0147
172	4.8154	0.0147
173	4.8300	0.0147
174	4.8447	0.0146
175	4.8592	0.0146
176	4.8738	0.0145
177	4.8883	0.0145
178	4.9027	0.0145
179	4.9172	0.0144
180	4.9316	0.0144
181	4.9459	0.0143
182	4.9602	0.0143
183	4.9745	0.0143
184	4.9887	0.0142
185	5.0029	0.0142

186	5.0171	0.0142
187	5.0312	0.0141
188	5.0453	0.0141
189	5.0594	0.0141
190	5.0734	0.0140
191	5.0874	0.0140
192	5.1013	0.0140
193	5.1152	0.0139
194	5.1291	0.0139
195	5.1430	0.0138
196	5.1568	0.0138
197	5.1706	0.0138
198	5.1843	0.0137
199	5.1980	0.0137
200	5.2117	0.0137
201	5.2254	0.0136
202	5.2390	0.0136
203	5.2526	0.0136
204	5.2661	0.0136
205	5.2796	0.0135
206	5.2931	0.0135
207	5.3066	0.0135
208	5.3200	0.0134
209	5.3334	0.0134
210	5.3468	0.0134
211	5.3601	0.0133
212	5.3734	0.0133
213	5.3867	0.0133
214	5.3999	0.0132
215	5.4132	0.0132
216	5.4264	0.0132
217	5.4395	0.0132
218	5.4526	0.0131
219	5.4657	0.0131
220	5.4788	0.0131
221	5.4919	0.0130
222	5.5049	0.0130
223	5.5179	0.0130
224	5.5308	0.0130
225	5.5438	0.0129
226	5.5567	0.0129
227	5.5696	0.0129
228	5.5824	0.0129
229	5.5952	0.0128
230	5.6080	0.0128
231	5.6208	0.0128
232	5.6336	0.0127
233	5.6463	0.0127
234	5.6590	0.0127
235	5.6716	0.0127

236	5.6843	0.0126
237	5.6969	0.0126
238	5.7095	0.0126
239	5.7221	0.0126
240	5.7346	0.0125
241	5.7471	0.0125
242	5.7596	0.0125
243	5.7721	0.0125
244	5.7845	0.0124
245	5.7970	0.0124
246	5.8094	0.0124
247	5.8217	0.0124
248	5.8341	0.0123
249	5.8464	0.0123
250	5.8587	0.0123
251	5.8710	0.0123
252	5.8832	0.0123
253	5.8955	0.0122
254	5.9077	0.0122
255	5.9199	0.0122
256	5.9320	0.0122
257	5.9442	0.0121
258	5.9563	0.0121
259	5.9684	0.0121
260	5.9804	0.0121
261	5.9925	0.0121
262	6.0045	0.0120
263	6.0165	0.0120
264	6.0285	0.0120
265	6.0405	0.0120
266	6.0524	0.0119
267	6.0644	0.0119
268	6.0763	0.0119
269	6.0881	0.0119
270	6.1000	0.0119
271	6.1118	0.0118
272	6.1236	0.0118
273	6.1354	0.0118
274	6.1472	0.0118
275	6.1590	0.0118
276	6.1707	0.0117
277	6.1824	0.0117
278	6.1941	0.0117
279	6.2058	0.0117
280	6.2174	0.0117
281	6.2291	0.0116
282	6.2407	0.0116
283	6.2523	0.0116
284	6.2639	0.0116
285	6.2754	0.0116

286	6.2870	0.0115
287	6.2985	0.0115
288	6.3100	0.0115

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0115	0.0020	0.0095
2	0.0115	0.0020	0.0095
3	0.0116	0.0020	0.0095
4	0.0116	0.0020	0.0095
5	0.0116	0.0021	0.0096
6	0.0116	0.0021	0.0096
7	0.0117	0.0021	0.0096
8	0.0117	0.0021	0.0096
9	0.0117	0.0021	0.0097
10	0.0118	0.0021	0.0097
11	0.0118	0.0021	0.0097
12	0.0118	0.0021	0.0097
13	0.0119	0.0021	0.0098
14	0.0119	0.0021	0.0098
15	0.0119	0.0021	0.0098
16	0.0119	0.0021	0.0098
17	0.0120	0.0021	0.0099
18	0.0120	0.0021	0.0099
19	0.0121	0.0021	0.0099
20	0.0121	0.0021	0.0099
21	0.0121	0.0021	0.0100
22	0.0121	0.0021	0.0100
23	0.0122	0.0022	0.0100
24	0.0122	0.0022	0.0101
25	0.0123	0.0022	0.0101
26	0.0123	0.0022	0.0101
27	0.0123	0.0022	0.0101
28	0.0123	0.0022	0.0102
29	0.0124	0.0022	0.0102
30	0.0124	0.0022	0.0102
31	0.0125	0.0022	0.0103
32	0.0125	0.0022	0.0103
33	0.0125	0.0022	0.0103
34	0.0126	0.0022	0.0103
35	0.0126	0.0022	0.0104
36	0.0126	0.0022	0.0104
37	0.0127	0.0022	0.0105
38	0.0127	0.0022	0.0105
39	0.0128	0.0023	0.0105
40	0.0128	0.0023	0.0105
41	0.0129	0.0023	0.0106
42	0.0129	0.0023	0.0106

43	0.0129	0.0023	0.0106
44	0.0130	0.0023	0.0107
45	0.0130	0.0023	0.0107
46	0.0130	0.0023	0.0107
47	0.0131	0.0023	0.0108
48	0.0131	0.0023	0.0108
49	0.0132	0.0023	0.0109
50	0.0132	0.0023	0.0109
51	0.0133	0.0023	0.0109
52	0.0133	0.0024	0.0110
53	0.0134	0.0024	0.0110
54	0.0134	0.0024	0.0110
55	0.0135	0.0024	0.0111
56	0.0135	0.0024	0.0111
57	0.0136	0.0024	0.0112
58	0.0136	0.0024	0.0112
59	0.0136	0.0024	0.0112
60	0.0137	0.0024	0.0113
61	0.0137	0.0024	0.0113
62	0.0138	0.0024	0.0113
63	0.0138	0.0024	0.0114
64	0.0139	0.0025	0.0114
65	0.0140	0.0025	0.0115
66	0.0140	0.0025	0.0115
67	0.0141	0.0025	0.0116
68	0.0141	0.0025	0.0116
69	0.0142	0.0025	0.0117
70	0.0142	0.0025	0.0117
71	0.0143	0.0025	0.0118
72	0.0143	0.0025	0.0118
73	0.0144	0.0025	0.0118
74	0.0144	0.0026	0.0119
75	0.0145	0.0026	0.0119
76	0.0145	0.0026	0.0120
77	0.0146	0.0026	0.0120
78	0.0147	0.0026	0.0121
79	0.0147	0.0026	0.0121
80	0.0148	0.0026	0.0122
81	0.0149	0.0026	0.0122
82	0.0149	0.0026	0.0123
83	0.0150	0.0027	0.0123
84	0.0150	0.0027	0.0124
85	0.0151	0.0027	0.0125
86	0.0152	0.0027	0.0125
87	0.0153	0.0027	0.0126
88	0.0153	0.0027	0.0126
89	0.0154	0.0027	0.0127
90	0.0155	0.0027	0.0127
91	0.0155	0.0027	0.0128
92	0.0156	0.0028	0.0128

93	0.0157	0.0028	0.0129
94	0.0157	0.0028	0.0130
95	0.0158	0.0028	0.0130
96	0.0159	0.0028	0.0131
97	0.0160	0.0028	0.0132
98	0.0161	0.0028	0.0132
99	0.0162	0.0029	0.0133
100	0.0162	0.0029	0.0134
101	0.0163	0.0029	0.0134
102	0.0164	0.0029	0.0135
103	0.0165	0.0029	0.0136
104	0.0166	0.0029	0.0136
105	0.0167	0.0029	0.0137
106	0.0167	0.0030	0.0138
107	0.0169	0.0030	0.0139
108	0.0169	0.0030	0.0139
109	0.0171	0.0030	0.0140
110	0.0171	0.0030	0.0141
111	0.0173	0.0031	0.0142
112	0.0173	0.0031	0.0143
113	0.0175	0.0031	0.0144
114	0.0175	0.0031	0.0144
115	0.0177	0.0031	0.0145
116	0.0177	0.0031	0.0146
117	0.0179	0.0032	0.0147
118	0.0180	0.0032	0.0148
119	0.0181	0.0032	0.0149
120	0.0182	0.0032	0.0150
121	0.0184	0.0032	0.0151
122	0.0184	0.0033	0.0152
123	0.0186	0.0033	0.0153
124	0.0187	0.0033	0.0154
125	0.0189	0.0033	0.0155
126	0.0190	0.0034	0.0156
127	0.0191	0.0034	0.0158
128	0.0192	0.0034	0.0158
129	0.0194	0.0034	0.0160
130	0.0195	0.0035	0.0161
131	0.0197	0.0035	0.0162
132	0.0198	0.0035	0.0163
133	0.0200	0.0035	0.0165
134	0.0201	0.0036	0.0166
135	0.0204	0.0036	0.0168
136	0.0205	0.0036	0.0169
137	0.0207	0.0037	0.0170
138	0.0208	0.0037	0.0171
139	0.0211	0.0037	0.0173
140	0.0212	0.0037	0.0174
141	0.0215	0.0038	0.0177
142	0.0216	0.0038	0.0178

143	0.0219	0.0039	0.0180
144	0.0220	0.0039	0.0181
145	0.0201	0.0035	0.0165
146	0.0202	0.0036	0.0166
147	0.0205	0.0036	0.0169
148	0.0207	0.0037	0.0170
149	0.0210	0.0037	0.0173
150	0.0212	0.0037	0.0174
151	0.0215	0.0038	0.0177
152	0.0217	0.0038	0.0179
153	0.0221	0.0039	0.0182
154	0.0223	0.0039	0.0184
155	0.0227	0.0040	0.0187
156	0.0229	0.0041	0.0189
157	0.0234	0.0041	0.0192
158	0.0236	0.0042	0.0194
159	0.0241	0.0043	0.0198
160	0.0244	0.0043	0.0200
161	0.0249	0.0044	0.0205
162	0.0252	0.0045	0.0207
163	0.0258	0.0046	0.0212
164	0.0261	0.0046	0.0215
165	0.0267	0.0047	0.0220
166	0.0271	0.0048	0.0223
167	0.0278	0.0049	0.0229
168	0.0282	0.0050	0.0232
169	0.0290	0.0051	0.0239
170	0.0295	0.0052	0.0243
171	0.0304	0.0054	0.0250
172	0.0309	0.0055	0.0255
173	0.0320	0.0057	0.0264
174	0.0326	0.0058	0.0268
175	0.0339	0.0060	0.0279
176	0.0346	0.0061	0.0285
177	0.0361	0.0064	0.0297
178	0.0369	0.0065	0.0304
179	0.0388	0.0069	0.0319
180	0.0398	0.0070	0.0328
181	0.0422	0.0075	0.0347
182	0.0435	0.0077	0.0358
183	0.0466	0.0082	0.0384
184	0.0484	0.0086	0.0398
185	0.0337	0.0060	0.0278
186	0.0360	0.0064	0.0296
187	0.0417	0.0074	0.0343
188	0.0455	0.0081	0.0375
189	0.0566	0.0100	0.0466
190	0.0652	0.0115	0.0537
191	0.0990	0.0124	0.0865
192	0.1437	0.0124	0.1312

193	0.6215	0.0124	0.6091
194	0.0779	0.0124	0.0655
195	0.0504	0.0089	0.0415
196	0.0386	0.0068	0.0318
197	0.0504	0.0089	0.0415
198	0.0450	0.0080	0.0370
199	0.0410	0.0072	0.0337
200	0.0378	0.0067	0.0312
201	0.0353	0.0062	0.0291
202	0.0332	0.0059	0.0274
203	0.0315	0.0056	0.0259
204	0.0299	0.0053	0.0246
205	0.0286	0.0051	0.0236
206	0.0274	0.0049	0.0226
207	0.0264	0.0047	0.0217
208	0.0255	0.0045	0.0210
209	0.0246	0.0044	0.0203
210	0.0239	0.0042	0.0196
211	0.0231	0.0041	0.0191
212	0.0225	0.0040	0.0185
213	0.0219	0.0039	0.0180
214	0.0214	0.0038	0.0176
215	0.0208	0.0037	0.0172
216	0.0204	0.0036	0.0168
217	0.0221	0.0039	0.0182
218	0.0217	0.0038	0.0179
219	0.0213	0.0038	0.0176
220	0.0209	0.0037	0.0172
221	0.0206	0.0036	0.0169
222	0.0202	0.0036	0.0167
223	0.0199	0.0035	0.0164
224	0.0196	0.0035	0.0162
225	0.0193	0.0034	0.0159
226	0.0190	0.0034	0.0157
227	0.0188	0.0033	0.0155
228	0.0185	0.0033	0.0152
229	0.0183	0.0032	0.0150
230	0.0180	0.0032	0.0149
231	0.0178	0.0031	0.0147
232	0.0176	0.0031	0.0145
233	0.0174	0.0031	0.0143
234	0.0172	0.0030	0.0141
235	0.0170	0.0030	0.0140
236	0.0168	0.0030	0.0138
237	0.0166	0.0029	0.0137
238	0.0164	0.0029	0.0135
239	0.0163	0.0029	0.0134
240	0.0161	0.0028	0.0133
241	0.0160	0.0028	0.0131
242	0.0158	0.0028	0.0130

243	0.0156	0.0028	0.0129
244	0.0155	0.0027	0.0128
245	0.0154	0.0027	0.0126
246	0.0152	0.0027	0.0125
247	0.0151	0.0027	0.0124
248	0.0150	0.0026	0.0123
249	0.0148	0.0026	0.0122
250	0.0147	0.0026	0.0121
251	0.0146	0.0026	0.0120
252	0.0145	0.0026	0.0119
253	0.0143	0.0025	0.0118
254	0.0142	0.0025	0.0117
255	0.0141	0.0025	0.0116
256	0.0140	0.0025	0.0115
257	0.0139	0.0025	0.0115
258	0.0138	0.0024	0.0114
259	0.0137	0.0024	0.0113
260	0.0136	0.0024	0.0112
261	0.0135	0.0024	0.0111
262	0.0134	0.0024	0.0111
263	0.0133	0.0024	0.0110
264	0.0132	0.0023	0.0109
265	0.0132	0.0023	0.0108
266	0.0131	0.0023	0.0108
267	0.0130	0.0023	0.0107
268	0.0129	0.0023	0.0106
269	0.0128	0.0023	0.0106
270	0.0127	0.0023	0.0105
271	0.0127	0.0022	0.0104
272	0.0126	0.0022	0.0104
273	0.0125	0.0022	0.0103
274	0.0124	0.0022	0.0102
275	0.0124	0.0022	0.0102
276	0.0123	0.0022	0.0101
277	0.0122	0.0022	0.0101
278	0.0122	0.0022	0.0100
279	0.0121	0.0021	0.0100
280	0.0120	0.0021	0.0099
281	0.0120	0.0021	0.0098
282	0.0119	0.0021	0.0098
283	0.0118	0.0021	0.0097
284	0.0118	0.0021	0.0097
285	0.0117	0.0021	0.0096
286	0.0117	0.0021	0.0096
287	0.0116	0.0021	0.0095
288	0.0115	0.0020	0.0095

Total soil rain loss = 1.00(In)

Total effective rainfall = 5.31(In)

Peak flow rate in flood hydrograph = 10.13(CFS)

+++++

24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0004		0.06	Q				
0+10	0.0018		0.20	Q				
0+15	0.0035		0.24	Q				
0+20	0.0052		0.26	Q				
0+25	0.0071		0.27	Q				
0+30	0.0090		0.27	Q				
0+35	0.0109		0.28	Q				
0+40	0.0128		0.28	Q				
0+45	0.0147		0.28	Q				
0+50	0.0167		0.28	Q				
0+55	0.0186		0.28	Q				
1+ 0	0.0205		0.28	Q				
1+ 5	0.0225		0.28	Q				
1+10	0.0244		0.28	Q				
1+15	0.0264		0.28	Q				
1+20	0.0283		0.28	QV				
1+25	0.0303		0.29	QV				
1+30	0.0323		0.29	QV				
1+35	0.0343		0.29	QV				
1+40	0.0362		0.29	QV				
1+45	0.0382		0.29	QV				
1+50	0.0402		0.29	QV				
1+55	0.0422		0.29	QV				
2+ 0	0.0442		0.29	QV				
2+ 5	0.0462		0.29	QV				
2+10	0.0482		0.29	QV				
2+15	0.0503		0.29	QV				
2+20	0.0523		0.29	QV				
2+25	0.0543		0.29	Q V				
2+30	0.0563		0.30	Q V				
2+35	0.0584		0.30	Q V				
2+40	0.0604		0.30	Q V				
2+45	0.0625		0.30	Q V				
2+50	0.0646		0.30	Q V				
2+55	0.0666		0.30	Q V				
3+ 0	0.0687		0.30	Q V				
3+ 5	0.0708		0.30	Q V				
3+10	0.0729		0.30	Q V				
3+15	0.0750		0.30	Q V				

3+20	0.0771	0.30	Q	V				
3+25	0.0792	0.31	Q	V				
3+30	0.0813	0.31	Q	V				
3+35	0.0834	0.31	Q	V				
3+40	0.0855	0.31	Q	V				
3+45	0.0876	0.31	Q	V				
3+50	0.0898	0.31	Q	V				
3+55	0.0919	0.31	Q	V				
4+ 0	0.0941	0.31	Q	V				
4+ 5	0.0962	0.31	Q	V				
4+10	0.0984	0.31	Q	V				
4+15	0.1006	0.32	Q	V				
4+20	0.1028	0.32	Q	V				
4+25	0.1050	0.32	Q	V				
4+30	0.1072	0.32	Q	V				
4+35	0.1094	0.32	Q	V				
4+40	0.1116	0.32	Q	V				
4+45	0.1138	0.32	Q	V				
4+50	0.1160	0.32	Q	V				
4+55	0.1183	0.32	Q	V				
5+ 0	0.1205	0.33	Q	V				
5+ 5	0.1227	0.33	Q	V				
5+10	0.1250	0.33	Q	V				
5+15	0.1273	0.33	Q	V				
5+20	0.1295	0.33	Q	V				
5+25	0.1318	0.33	Q	V				
5+30	0.1341	0.33	Q	V				
5+35	0.1364	0.33	Q	V				
5+40	0.1387	0.34	Q	V				
5+45	0.1410	0.34	Q	V				
5+50	0.1434	0.34	Q	V				
5+55	0.1457	0.34	Q	V				
6+ 0	0.1481	0.34	Q	V				
6+ 5	0.1504	0.34	Q	V				
6+10	0.1528	0.34	Q	V				
6+15	0.1551	0.34	Q	V				
6+20	0.1575	0.35	Q	V				
6+25	0.1599	0.35	Q	V				
6+30	0.1623	0.35	Q	V				
6+35	0.1647	0.35	Q	V				
6+40	0.1672	0.35	Q	V				
6+45	0.1696	0.35	Q	V				
6+50	0.1720	0.35	Q	V				
6+55	0.1745	0.36	Q	V				
7+ 0	0.1769	0.36	Q	V				
7+ 5	0.1794	0.36	Q	V				
7+10	0.1819	0.36	Q	V				
7+15	0.1844	0.36	Q	V				
7+20	0.1869	0.36	Q	V				
7+25	0.1894	0.37	Q	V				

7+30	0.1920	0.37	Q	V				
7+35	0.1945	0.37	Q	V				
7+40	0.1970	0.37	Q	V				
7+45	0.1996	0.37	Q	V				
7+50	0.2022	0.37	Q	V				
7+55	0.2048	0.38	Q	V				
8+ 0	0.2074	0.38	Q	V				
8+ 5	0.2100	0.38	Q	V				
8+10	0.2126	0.38	Q	V				
8+15	0.2153	0.38	Q	V				
8+20	0.2179	0.39	Q	V				
8+25	0.2206	0.39	Q	V				
8+30	0.2233	0.39	Q	V				
8+35	0.2260	0.39	Q	V				
8+40	0.2287	0.39	Q	V				
8+45	0.2314	0.40	Q	V				
8+50	0.2341	0.40	Q	V				
8+55	0.2369	0.40	Q	V				
9+ 0	0.2397	0.40	Q	V				
9+ 5	0.2424	0.40	Q	V				
9+10	0.2452	0.41	Q	V				
9+15	0.2481	0.41	Q	V				
9+20	0.2509	0.41	Q	V				
9+25	0.2537	0.41	Q	V				
9+30	0.2566	0.42	Q	V				
9+35	0.2595	0.42	Q	V				
9+40	0.2624	0.42	Q	V				
9+45	0.2653	0.42	Q	V				
9+50	0.2682	0.43	Q	V				
9+55	0.2712	0.43	Q	V				
10+ 0	0.2742	0.43	Q	V				
10+ 5	0.2772	0.43	Q	V				
10+10	0.2802	0.44	Q	V				
10+15	0.2832	0.44	Q	V				
10+20	0.2863	0.44	Q	V				
10+25	0.2893	0.45	Q	V				
10+30	0.2924	0.45	Q	V				
10+35	0.2955	0.45	Q	V				
10+40	0.2987	0.46	Q	V				
10+45	0.3018	0.46	Q	V				
10+50	0.3050	0.46	Q	V				
10+55	0.3082	0.47	Q	V				
11+ 0	0.3115	0.47	Q	V				
11+ 5	0.3147	0.47	Q	V				
11+10	0.3180	0.48	Q	V				
11+15	0.3213	0.48	Q	V				
11+20	0.3247	0.48	Q	V				
11+25	0.3280	0.49	Q	V				
11+30	0.3314	0.49	Q	V				
11+35	0.3349	0.50	Q	V				

11+40	0.3383	0.50	|Q	V		
11+45	0.3418	0.51	|Q	V		
11+50	0.3453	0.51	|Q	V		
11+55	0.3489	0.52	|Q	V		
12+ 0	0.3524	0.52	|Q	V		
12+ 5	0.3560	0.51	|Q	V		
12+10	0.3594	0.49	Q	V		
12+15	0.3627	0.49	Q	V		
12+20	0.3661	0.49	Q	V		
12+25	0.3695	0.49	Q	V		
12+30	0.3730	0.50	|Q	V		
12+35	0.3764	0.51	|Q	V		
12+40	0.3800	0.51	|Q	V		
12+45	0.3835	0.52	|Q	V		
12+50	0.3872	0.53	|Q	V		
12+55	0.3908	0.53	|Q	V		
13+ 0	0.3945	0.54	|Q	V		
13+ 5	0.3983	0.55	|Q	V		
13+10	0.4021	0.56	|Q	V		
13+15	0.4060	0.56	|Q	V		
13+20	0.4099	0.57	|Q	V		
13+25	0.4139	0.58	|Q	V		
13+30	0.4180	0.59	|Q	V		
13+35	0.4222	0.60	|Q	V		
13+40	0.4264	0.61	|Q	V		
13+45	0.4306	0.62	|Q	V		
13+50	0.4350	0.63	|Q	V		
13+55	0.4395	0.65	|Q	V		
14+ 0	0.4440	0.66	|Q	V		
14+ 5	0.4486	0.67	|Q	V		
14+10	0.4534	0.69	|Q	V		
14+15	0.4582	0.70	|Q	V		
14+20	0.4632	0.72	|Q	V		
14+25	0.4683	0.74	|Q	V		
14+30	0.4735	0.76	|Q	V		
14+35	0.4788	0.78	|Q	V		
14+40	0.4843	0.80	|Q	V		
14+45	0.4900	0.82	|Q	V		
14+50	0.4959	0.85	|Q	V		
14+55	0.5020	0.88	|Q	V		
15+ 0	0.5083	0.92	|Q	V		
15+ 5	0.5148	0.95	|Q	V		
15+10	0.5216	0.99	|Q	V		
15+15	0.5288	1.04	|Q	V		
15+20	0.5363	1.09	|Q	V		
15+25	0.5436	1.05	|Q	V		
15+30	0.5498	0.90	|Q	V		
15+35	0.5561	0.91	|Q	V		
15+40	0.5629	0.99	|Q	V		
15+45	0.5706	1.11	|Q	V		

15+50	0.5796	1.31	Q		V	
15+55	0.5911	1.67	Q		V	
16+ 0	0.6083	2.49	Q		V	
16+ 5	0.6523	6.40		Q	V	
16+10	0.7221	10.13			Q	V
16+15	0.7513	4.24		Q		V
16+20	0.7679	2.41	Q			V
16+25	0.7796	1.70	Q			V
16+30	0.7896	1.44	Q			V
16+35	0.7984	1.29	Q			V
16+40	0.8054	1.00	Q			V
16+45	0.8117	0.93	Q			V
16+50	0.8177	0.86	Q			V
16+55	0.8233	0.81	Q			V
17+ 0	0.8286	0.77	Q			V
17+ 5	0.8336	0.73	Q			V
17+10	0.8384	0.70	Q			V
17+15	0.8430	0.67	Q			V
17+20	0.8474	0.64	Q			V
17+25	0.8516	0.62	Q			V
17+30	0.8557	0.60	Q			V
17+35	0.8597	0.58	Q			V
17+40	0.8636	0.56	Q			V
17+45	0.8673	0.54	Q			V
17+50	0.8709	0.53	Q			V
17+55	0.8745	0.51	Q			V
18+ 0	0.8779	0.50	Q			V
18+ 5	0.8814	0.50	Q			V
18+10	0.8850	0.52	Q			V
18+15	0.8885	0.52	Q			V
18+20	0.8920	0.51	Q			V
18+25	0.8955	0.50	Q			V
18+30	0.8989	0.49	Q			V
18+35	0.9022	0.49	Q			V
18+40	0.9055	0.48	Q			V
18+45	0.9088	0.47	Q			V
18+50	0.9120	0.46	Q			V
18+55	0.9151	0.46	Q			V
19+ 0	0.9182	0.45	Q			V
19+ 5	0.9213	0.44	Q			V
19+10	0.9243	0.44	Q			V
19+15	0.9273	0.43	Q			V
19+20	0.9302	0.43	Q			V
19+25	0.9331	0.42	Q			V
19+30	0.9360	0.42	Q			V
19+35	0.9388	0.41	Q			V
19+40	0.9416	0.41	Q			V
19+45	0.9444	0.40	Q			V
19+50	0.9472	0.40	Q			V
19+55	0.9499	0.39	Q			V

20+ 0	0.9526	0.39	Q				V
20+ 5	0.9552	0.39	Q				V
20+10	0.9578	0.38	Q				V
20+15	0.9605	0.38	Q				V
20+20	0.9630	0.37	Q				V
20+25	0.9656	0.37	Q				V
20+30	0.9681	0.37	Q				V
20+35	0.9706	0.36	Q				V
20+40	0.9731	0.36	Q				V
20+45	0.9756	0.36	Q				V
20+50	0.9780	0.36	Q				V
20+55	0.9805	0.35	Q				V
21+ 0	0.9829	0.35	Q				V
21+ 5	0.9853	0.35	Q				V
21+10	0.9876	0.34	Q				V
21+15	0.9900	0.34	Q				V
21+20	0.9923	0.34	Q				V
21+25	0.9946	0.34	Q				V
21+30	0.9969	0.33	Q				V
21+35	0.9992	0.33	Q				V
21+40	1.0014	0.33	Q				V
21+45	1.0037	0.33	Q				V
21+50	1.0059	0.32	Q				V
21+55	1.0081	0.32	Q				V
22+ 0	1.0103	0.32	Q				V
22+ 5	1.0125	0.32	Q				V
22+10	1.0147	0.32	Q				V
22+15	1.0168	0.31	Q				V
22+20	1.0190	0.31	Q				V
22+25	1.0211	0.31	Q				V
22+30	1.0232	0.31	Q				V
22+35	1.0253	0.31	Q				V
22+40	1.0274	0.30	Q				V
22+45	1.0295	0.30	Q				V
22+50	1.0316	0.30	Q				V
22+55	1.0336	0.30	Q				V
23+ 0	1.0356	0.30	Q				V
23+ 5	1.0377	0.29	Q				V
23+10	1.0397	0.29	Q				V
23+15	1.0417	0.29	Q				V
23+20	1.0437	0.29	Q				V
23+25	1.0457	0.29	Q				V
23+30	1.0476	0.29	Q				V
23+35	1.0496	0.28	Q				V
23+40	1.0516	0.28	Q				V
23+45	1.0535	0.28	Q				V
23+50	1.0554	0.28	Q				V
23+55	1.0573	0.28	Q				V
24+ 0	1.0593	0.28	Q				V
24+ 5	1.0607	0.22	Q				V

24+10	1.0613	0.08	Q	|	|	|	V|
24+15	1.0615	0.03	Q	|	|	|	V|
24+20	1.0616	0.02	Q	|	|	|	V|
24+25	1.0617	0.01	Q	|	|	|	V|
24+30	1.0617	0.00	Q	|	|	|	V|

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 100 YR UNIT HYDROGRAPH SUBAREA B
MGUBBAREINER 2021-09-27
--

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
11.64	1	1.31

Rainfall data for year 100		
11.64	6	3.05

Rainfall data for year 100		
0.00	24	6.31
11.64	24	6.31

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 3)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	52.0	11.64	1.000	0.785	0.190	0.149

Area-averaged adjusted loss rate Fm (In/Hr) = 0.149

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC3)	S	Pervious Yield Fr
2.21	0.190	32.0	52.0	9.23	0.231
9.43	0.810	98.0	98.0	0.20	0.962

Area-averaged catchment yield fraction, Y = 0.823

Area-averaged low loss fraction, Yb = 0.177

User entry of time of concentration = 0.130 (hours)

+++++

Watershed area = 11.64(Ac.)

Catchment Lag time = 0.104 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 80.1282

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.149(In/Hr)

Average low loss rate fraction (Yb) = 0.177 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.622(In)

Computed peak 30-minute rainfall = 1.064(In)

Specified peak 1-hour rainfall = 1.310(In)

Computed peak 3-hour rainfall = 2.199(In)

Specified peak 6-hour rainfall = 3.050(In)

Specified peak 24-hour rainfall = 6.310(In)

Rainfall depth area reduction factors:

Using a total area of 11.64(Ac.) (Ref: fig. E-4)

5-minute factor = 0.999 Adjusted rainfall = 0.621(In)

30-minute factor = 0.999 Adjusted rainfall = 1.063(In)

1-hour factor = 0.999 Adjusted rainfall = 1.309(In)

3-hour factor = 1.000 Adjusted rainfall = 2.199(In)

6-hour factor = 1.000 Adjusted rainfall = 3.050(In)

24-hour factor = 1.000 Adjusted rainfall = 6.310(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))
--------------------	--------------------------	----------------------------

(K = 140.77 (CFS))

1	10.763	15.151
2	57.466	65.745
3	77.881	28.738
4	86.957	12.776
5	92.047	7.166
6	95.237	4.490
7	97.251	2.835
8	98.331	1.520
9	99.257	1.304
10	100.000	1.046

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
---------------------	--------------------------------	-----------------------

1	0.6213	0.6213
2	0.7649	0.1436
3	0.8638	0.0989
4	0.9417	0.0779
5	1.0069	0.0652
6	1.0635	0.0566
7	1.1138	0.0503
8	1.1593	0.0455
9	1.2010	0.0417
10	1.2396	0.0386
11	1.2756	0.0360
12	1.3093	0.0337
13	1.3597	0.0504
14	1.4081	0.0484
15	1.4547	0.0466
16	1.4997	0.0450
17	1.5433	0.0435
18	1.5855	0.0422
19	1.6265	0.0410
20	1.6664	0.0399
21	1.7052	0.0388
22	1.7431	0.0379
23	1.7800	0.0370
24	1.8161	0.0361
25	1.8515	0.0353
26	1.8861	0.0346
27	1.9200	0.0339
28	1.9532	0.0332
29	1.9859	0.0326
30	2.0179	0.0320
31	2.0494	0.0315

32	2.0803	0.0309
33	2.1108	0.0304
34	2.1407	0.0300
35	2.1702	0.0295
36	2.1993	0.0291
37	2.2279	0.0286
38	2.2561	0.0282
39	2.2839	0.0278
40	2.3114	0.0274
41	2.3384	0.0271
42	2.3652	0.0267
43	2.3916	0.0264
44	2.4177	0.0261
45	2.4434	0.0258
46	2.4689	0.0255
47	2.4941	0.0252
48	2.5189	0.0249
49	2.5436	0.0246
50	2.5679	0.0244
51	2.5920	0.0241
52	2.6159	0.0239
53	2.6395	0.0236
54	2.6629	0.0234
55	2.6860	0.0231
56	2.7089	0.0229
57	2.7316	0.0227
58	2.7542	0.0225
59	2.7765	0.0223
60	2.7986	0.0221
61	2.8205	0.0219
62	2.8422	0.0217
63	2.8637	0.0215
64	2.8851	0.0214
65	2.9062	0.0212
66	2.9272	0.0210
67	2.9481	0.0208
68	2.9688	0.0207
69	2.9893	0.0205
70	3.0096	0.0204
71	3.0298	0.0202
72	3.0499	0.0201
73	3.0720	0.0221
74	3.0940	0.0220
75	3.1159	0.0219
76	3.1376	0.0217
77	3.1592	0.0216
78	3.1806	0.0215
79	3.2020	0.0213
80	3.2232	0.0212
81	3.2442	0.0211

82	3.2652	0.0209
83	3.2860	0.0208
84	3.3067	0.0207
85	3.3273	0.0206
86	3.3477	0.0205
87	3.3681	0.0204
88	3.3884	0.0202
89	3.4085	0.0201
90	3.4285	0.0200
91	3.4484	0.0199
92	3.4683	0.0198
93	3.4880	0.0197
94	3.5076	0.0196
95	3.5271	0.0195
96	3.5465	0.0194
97	3.5659	0.0193
98	3.5851	0.0192
99	3.6042	0.0191
100	3.6233	0.0190
101	3.6422	0.0190
102	3.6611	0.0189
103	3.6799	0.0188
104	3.6986	0.0187
105	3.7172	0.0186
106	3.7357	0.0185
107	3.7542	0.0184
108	3.7725	0.0184
109	3.7908	0.0183
110	3.8090	0.0182
111	3.8271	0.0181
112	3.8452	0.0180
113	3.8631	0.0180
114	3.8810	0.0179
115	3.8988	0.0178
116	3.9166	0.0177
117	3.9343	0.0177
118	3.9519	0.0176
119	3.9694	0.0175
120	3.9868	0.0175
121	4.0042	0.0174
122	4.0215	0.0173
123	4.0388	0.0173
124	4.0560	0.0172
125	4.0731	0.0171
126	4.0902	0.0171
127	4.1072	0.0170
128	4.1241	0.0169
129	4.1410	0.0169
130	4.1578	0.0168
131	4.1745	0.0167

132	4.1912	0.0167
133	4.2078	0.0166
134	4.2244	0.0166
135	4.2409	0.0165
136	4.2573	0.0164
137	4.2737	0.0164
138	4.2900	0.0163
139	4.3063	0.0163
140	4.3225	0.0162
141	4.3387	0.0162
142	4.3548	0.0161
143	4.3709	0.0161
144	4.3869	0.0160
145	4.4028	0.0160
146	4.4187	0.0159
147	4.4346	0.0158
148	4.4503	0.0158
149	4.4661	0.0157
150	4.4818	0.0157
151	4.4974	0.0156
152	4.5130	0.0156
153	4.5286	0.0155
154	4.5441	0.0155
155	4.5595	0.0155
156	4.5749	0.0154
157	4.5903	0.0154
158	4.6056	0.0153
159	4.6209	0.0153
160	4.6361	0.0152
161	4.6512	0.0152
162	4.6664	0.0151
163	4.6815	0.0151
164	4.6965	0.0150
165	4.7115	0.0150
166	4.7264	0.0150
167	4.7414	0.0149
168	4.7562	0.0149
169	4.7711	0.0148
170	4.7858	0.0148
171	4.8006	0.0147
172	4.8153	0.0147
173	4.8299	0.0147
174	4.8446	0.0146
175	4.8591	0.0146
176	4.8737	0.0145
177	4.8882	0.0145
178	4.9027	0.0145
179	4.9171	0.0144
180	4.9315	0.0144
181	4.9458	0.0143

182	4.9601	0.0143
183	4.9744	0.0143
184	4.9886	0.0142
185	5.0028	0.0142
186	5.0170	0.0142
187	5.0311	0.0141
188	5.0452	0.0141
189	5.0593	0.0141
190	5.0733	0.0140
191	5.0873	0.0140
192	5.1012	0.0140
193	5.1152	0.0139
194	5.1290	0.0139
195	5.1429	0.0138
196	5.1567	0.0138
197	5.1705	0.0138
198	5.1842	0.0137
199	5.1979	0.0137
200	5.2116	0.0137
201	5.2253	0.0136
202	5.2389	0.0136
203	5.2525	0.0136
204	5.2660	0.0136
205	5.2795	0.0135
206	5.2930	0.0135
207	5.3065	0.0135
208	5.3199	0.0134
209	5.3333	0.0134
210	5.3467	0.0134
211	5.3600	0.0133
212	5.3733	0.0133
213	5.3866	0.0133
214	5.3999	0.0132
215	5.4131	0.0132
216	5.4263	0.0132
217	5.4394	0.0132
218	5.4526	0.0131
219	5.4657	0.0131
220	5.4787	0.0131
221	5.4918	0.0130
222	5.5048	0.0130
223	5.5178	0.0130
224	5.5308	0.0130
225	5.5437	0.0129
226	5.5566	0.0129
227	5.5695	0.0129
228	5.5823	0.0129
229	5.5952	0.0128
230	5.6080	0.0128
231	5.6207	0.0128

232	5.6335	0.0127
233	5.6462	0.0127
234	5.6589	0.0127
235	5.6716	0.0127
236	5.6842	0.0126
237	5.6968	0.0126
238	5.7094	0.0126
239	5.7220	0.0126
240	5.7345	0.0125
241	5.7470	0.0125
242	5.7595	0.0125
243	5.7720	0.0125
244	5.7845	0.0124
245	5.7969	0.0124
246	5.8093	0.0124
247	5.8216	0.0124
248	5.8340	0.0123
249	5.8463	0.0123
250	5.8586	0.0123
251	5.8709	0.0123
252	5.8832	0.0123
253	5.8954	0.0122
254	5.9076	0.0122
255	5.9198	0.0122
256	5.9319	0.0122
257	5.9441	0.0121
258	5.9562	0.0121
259	5.9683	0.0121
260	5.9804	0.0121
261	5.9924	0.0121
262	6.0045	0.0120
263	6.0165	0.0120
264	6.0284	0.0120
265	6.0404	0.0120
266	6.0524	0.0119
267	6.0643	0.0119
268	6.0762	0.0119
269	6.0881	0.0119
270	6.0999	0.0119
271	6.1118	0.0118
272	6.1236	0.0118
273	6.1354	0.0118
274	6.1471	0.0118
275	6.1589	0.0118
276	6.1706	0.0117
277	6.1823	0.0117
278	6.1940	0.0117
279	6.2057	0.0117
280	6.2174	0.0117
281	6.2290	0.0116

282	6.2406	0.0116
283	6.2522	0.0116
284	6.2638	0.0116
285	6.2754	0.0116
286	6.2869	0.0115
287	6.2984	0.0115
288	6.3099	0.0115

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0115	0.0020	0.0095
2	0.0115	0.0020	0.0095
3	0.0116	0.0020	0.0095
4	0.0116	0.0020	0.0095
5	0.0116	0.0021	0.0096
6	0.0116	0.0021	0.0096
7	0.0117	0.0021	0.0096
8	0.0117	0.0021	0.0096
9	0.0117	0.0021	0.0097
10	0.0118	0.0021	0.0097
11	0.0118	0.0021	0.0097
12	0.0118	0.0021	0.0097
13	0.0119	0.0021	0.0098
14	0.0119	0.0021	0.0098
15	0.0119	0.0021	0.0098
16	0.0119	0.0021	0.0098
17	0.0120	0.0021	0.0099
18	0.0120	0.0021	0.0099
19	0.0121	0.0021	0.0099
20	0.0121	0.0021	0.0099
21	0.0121	0.0021	0.0100
22	0.0121	0.0021	0.0100
23	0.0122	0.0022	0.0100
24	0.0122	0.0022	0.0101
25	0.0123	0.0022	0.0101
26	0.0123	0.0022	0.0101
27	0.0123	0.0022	0.0101
28	0.0123	0.0022	0.0102
29	0.0124	0.0022	0.0102
30	0.0124	0.0022	0.0102
31	0.0125	0.0022	0.0103
32	0.0125	0.0022	0.0103
33	0.0125	0.0022	0.0103
34	0.0126	0.0022	0.0103
35	0.0126	0.0022	0.0104
36	0.0126	0.0022	0.0104
37	0.0127	0.0022	0.0105
38	0.0127	0.0022	0.0105

39	0.0128	0.0023	0.0105
40	0.0128	0.0023	0.0105
41	0.0129	0.0023	0.0106
42	0.0129	0.0023	0.0106
43	0.0129	0.0023	0.0106
44	0.0130	0.0023	0.0107
45	0.0130	0.0023	0.0107
46	0.0130	0.0023	0.0107
47	0.0131	0.0023	0.0108
48	0.0131	0.0023	0.0108
49	0.0132	0.0023	0.0109
50	0.0132	0.0023	0.0109
51	0.0133	0.0023	0.0109
52	0.0133	0.0024	0.0110
53	0.0134	0.0024	0.0110
54	0.0134	0.0024	0.0110
55	0.0135	0.0024	0.0111
56	0.0135	0.0024	0.0111
57	0.0136	0.0024	0.0112
58	0.0136	0.0024	0.0112
59	0.0136	0.0024	0.0112
60	0.0137	0.0024	0.0113
61	0.0137	0.0024	0.0113
62	0.0138	0.0024	0.0113
63	0.0138	0.0024	0.0114
64	0.0139	0.0025	0.0114
65	0.0140	0.0025	0.0115
66	0.0140	0.0025	0.0115
67	0.0141	0.0025	0.0116
68	0.0141	0.0025	0.0116
69	0.0142	0.0025	0.0117
70	0.0142	0.0025	0.0117
71	0.0143	0.0025	0.0118
72	0.0143	0.0025	0.0118
73	0.0144	0.0025	0.0118
74	0.0144	0.0026	0.0119
75	0.0145	0.0026	0.0119
76	0.0145	0.0026	0.0120
77	0.0146	0.0026	0.0120
78	0.0147	0.0026	0.0121
79	0.0147	0.0026	0.0121
80	0.0148	0.0026	0.0122
81	0.0149	0.0026	0.0122
82	0.0149	0.0026	0.0123
83	0.0150	0.0027	0.0123
84	0.0150	0.0027	0.0124
85	0.0151	0.0027	0.0125
86	0.0152	0.0027	0.0125
87	0.0153	0.0027	0.0126
88	0.0153	0.0027	0.0126

89	0.0154	0.0027	0.0127
90	0.0155	0.0027	0.0127
91	0.0155	0.0027	0.0128
92	0.0156	0.0028	0.0128
93	0.0157	0.0028	0.0129
94	0.0157	0.0028	0.0130
95	0.0158	0.0028	0.0130
96	0.0159	0.0028	0.0131
97	0.0160	0.0028	0.0132
98	0.0161	0.0028	0.0132
99	0.0162	0.0029	0.0133
100	0.0162	0.0029	0.0134
101	0.0163	0.0029	0.0134
102	0.0164	0.0029	0.0135
103	0.0165	0.0029	0.0136
104	0.0166	0.0029	0.0136
105	0.0167	0.0029	0.0137
106	0.0167	0.0030	0.0138
107	0.0169	0.0030	0.0139
108	0.0169	0.0030	0.0139
109	0.0171	0.0030	0.0140
110	0.0171	0.0030	0.0141
111	0.0173	0.0031	0.0142
112	0.0173	0.0031	0.0143
113	0.0175	0.0031	0.0144
114	0.0175	0.0031	0.0144
115	0.0177	0.0031	0.0145
116	0.0177	0.0031	0.0146
117	0.0179	0.0032	0.0147
118	0.0180	0.0032	0.0148
119	0.0181	0.0032	0.0149
120	0.0182	0.0032	0.0150
121	0.0184	0.0032	0.0151
122	0.0184	0.0033	0.0152
123	0.0186	0.0033	0.0153
124	0.0187	0.0033	0.0154
125	0.0189	0.0033	0.0155
126	0.0190	0.0034	0.0156
127	0.0191	0.0034	0.0158
128	0.0192	0.0034	0.0158
129	0.0194	0.0034	0.0160
130	0.0195	0.0035	0.0161
131	0.0197	0.0035	0.0162
132	0.0198	0.0035	0.0163
133	0.0200	0.0035	0.0165
134	0.0201	0.0036	0.0166
135	0.0204	0.0036	0.0168
136	0.0205	0.0036	0.0169
137	0.0207	0.0037	0.0170
138	0.0208	0.0037	0.0171

139	0.0211	0.0037	0.0173
140	0.0212	0.0037	0.0174
141	0.0215	0.0038	0.0177
142	0.0216	0.0038	0.0178
143	0.0219	0.0039	0.0180
144	0.0220	0.0039	0.0181
145	0.0201	0.0035	0.0165
146	0.0202	0.0036	0.0166
147	0.0205	0.0036	0.0169
148	0.0207	0.0037	0.0170
149	0.0210	0.0037	0.0173
150	0.0212	0.0037	0.0174
151	0.0215	0.0038	0.0177
152	0.0217	0.0038	0.0179
153	0.0221	0.0039	0.0182
154	0.0223	0.0039	0.0184
155	0.0227	0.0040	0.0187
156	0.0229	0.0041	0.0189
157	0.0234	0.0041	0.0192
158	0.0236	0.0042	0.0194
159	0.0241	0.0043	0.0198
160	0.0244	0.0043	0.0200
161	0.0249	0.0044	0.0205
162	0.0252	0.0045	0.0207
163	0.0258	0.0046	0.0212
164	0.0261	0.0046	0.0215
165	0.0267	0.0047	0.0220
166	0.0271	0.0048	0.0223
167	0.0278	0.0049	0.0229
168	0.0282	0.0050	0.0232
169	0.0291	0.0051	0.0239
170	0.0295	0.0052	0.0243
171	0.0304	0.0054	0.0251
172	0.0309	0.0055	0.0255
173	0.0320	0.0057	0.0264
174	0.0326	0.0058	0.0269
175	0.0339	0.0060	0.0279
176	0.0346	0.0061	0.0285
177	0.0361	0.0064	0.0297
178	0.0370	0.0065	0.0304
179	0.0388	0.0069	0.0320
180	0.0399	0.0070	0.0328
181	0.0422	0.0075	0.0347
182	0.0435	0.0077	0.0358
183	0.0466	0.0082	0.0384
184	0.0484	0.0086	0.0399
185	0.0337	0.0060	0.0278
186	0.0360	0.0064	0.0296
187	0.0417	0.0074	0.0343
188	0.0455	0.0080	0.0375

189	0.0566	0.0100	0.0466
190	0.0652	0.0115	0.0537
191	0.0989	0.0124	0.0865
192	0.1436	0.0124	0.1312
193	0.6213	0.0124	0.6088
194	0.0779	0.0124	0.0654
195	0.0503	0.0089	0.0414
196	0.0386	0.0068	0.0317
197	0.0504	0.0089	0.0415
198	0.0450	0.0080	0.0370
199	0.0410	0.0072	0.0337
200	0.0379	0.0067	0.0312
201	0.0353	0.0062	0.0291
202	0.0332	0.0059	0.0274
203	0.0315	0.0056	0.0259
204	0.0300	0.0053	0.0247
205	0.0286	0.0051	0.0236
206	0.0274	0.0049	0.0226
207	0.0264	0.0047	0.0217
208	0.0255	0.0045	0.0210
209	0.0246	0.0044	0.0203
210	0.0239	0.0042	0.0196
211	0.0231	0.0041	0.0191
212	0.0225	0.0040	0.0185
213	0.0219	0.0039	0.0180
214	0.0214	0.0038	0.0176
215	0.0208	0.0037	0.0172
216	0.0204	0.0036	0.0168
217	0.0221	0.0039	0.0182
218	0.0217	0.0038	0.0179
219	0.0213	0.0038	0.0176
220	0.0209	0.0037	0.0172
221	0.0206	0.0036	0.0169
222	0.0202	0.0036	0.0167
223	0.0199	0.0035	0.0164
224	0.0196	0.0035	0.0162
225	0.0193	0.0034	0.0159
226	0.0190	0.0034	0.0157
227	0.0188	0.0033	0.0155
228	0.0185	0.0033	0.0152
229	0.0183	0.0032	0.0150
230	0.0180	0.0032	0.0149
231	0.0178	0.0031	0.0147
232	0.0176	0.0031	0.0145
233	0.0174	0.0031	0.0143
234	0.0172	0.0030	0.0141
235	0.0170	0.0030	0.0140
236	0.0168	0.0030	0.0138
237	0.0166	0.0029	0.0137
238	0.0164	0.0029	0.0135

239	0.0163	0.0029	0.0134
240	0.0161	0.0028	0.0133
241	0.0160	0.0028	0.0131
242	0.0158	0.0028	0.0130
243	0.0156	0.0028	0.0129
244	0.0155	0.0027	0.0128
245	0.0154	0.0027	0.0126
246	0.0152	0.0027	0.0125
247	0.0151	0.0027	0.0124
248	0.0150	0.0026	0.0123
249	0.0148	0.0026	0.0122
250	0.0147	0.0026	0.0121
251	0.0146	0.0026	0.0120
252	0.0145	0.0026	0.0119
253	0.0143	0.0025	0.0118
254	0.0142	0.0025	0.0117
255	0.0141	0.0025	0.0116
256	0.0140	0.0025	0.0115
257	0.0139	0.0025	0.0115
258	0.0138	0.0024	0.0114
259	0.0137	0.0024	0.0113
260	0.0136	0.0024	0.0112
261	0.0135	0.0024	0.0111
262	0.0134	0.0024	0.0111
263	0.0133	0.0024	0.0110
264	0.0132	0.0023	0.0109
265	0.0132	0.0023	0.0108
266	0.0131	0.0023	0.0108
267	0.0130	0.0023	0.0107
268	0.0129	0.0023	0.0106
269	0.0128	0.0023	0.0106
270	0.0127	0.0023	0.0105
271	0.0127	0.0022	0.0104
272	0.0126	0.0022	0.0104
273	0.0125	0.0022	0.0103
274	0.0124	0.0022	0.0102
275	0.0124	0.0022	0.0102
276	0.0123	0.0022	0.0101
277	0.0122	0.0022	0.0101
278	0.0122	0.0022	0.0100
279	0.0121	0.0021	0.0100
280	0.0120	0.0021	0.0099
281	0.0120	0.0021	0.0098
282	0.0119	0.0021	0.0098
283	0.0118	0.0021	0.0097
284	0.0118	0.0021	0.0097
285	0.0117	0.0021	0.0096
286	0.0117	0.0021	0.0096
287	0.0116	0.0021	0.0095
288	0.0115	0.0020	0.0095

 Total soil rain loss = 1.00(In)
 Total effective rainfall = 5.31(In)
 Peak flow rate in flood hydrograph = 46.71(CFS)

+++++
 24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	12.5	25.0	37.5	50.0
0+ 5	0.0010	0.14	Q				
0+10	0.0063	0.77	Q				
0+15	0.0134	1.04	Q				
0+20	0.0214	1.16	Q				
0+25	0.0299	1.23	Q				
0+30	0.0387	1.28	VQ				
0+35	0.0478	1.31	VQ				
0+40	0.0569	1.33	VQ				
0+45	0.0662	1.34	VQ				
0+50	0.0755	1.36	VQ				
0+55	0.0849	1.36	VQ				
1+ 0	0.0943	1.36	VQ				
1+ 5	0.1037	1.37	VQ				
1+10	0.1131	1.37	VQ				
1+15	0.1226	1.37	VQ				
1+20	0.1321	1.38	Q				
1+25	0.1416	1.38	Q				
1+30	0.1511	1.39	Q				
1+35	0.1607	1.39	Q				
1+40	0.1703	1.39	Q				
1+45	0.1799	1.40	Q				
1+50	0.1895	1.40	Q				
1+55	0.1992	1.40	Q				
2+ 0	0.2089	1.41	Q				
2+ 5	0.2186	1.41	Q				
2+10	0.2284	1.42	Q				
2+15	0.2382	1.42	Q				
2+20	0.2480	1.42	Q				
2+25	0.2578	1.43	QV				
2+30	0.2677	1.43	QV				
2+35	0.2776	1.44	QV				
2+40	0.2875	1.44	QV				
2+45	0.2974	1.44	QV				
2+50	0.3074	1.45	QV				
2+55	0.3174	1.45	QV				

3+ 0	0.3275	1.46	|QV				
3+ 5	0.3375	1.46	|QV				
3+10	0.3476	1.47	|QV				
3+15	0.3578	1.47	|QV				
3+20	0.3679	1.48	|QV				
3+25	0.3781	1.48	|QV				
3+30	0.3884	1.49	|Q V				
3+35	0.3986	1.49	|Q V				
3+40	0.4089	1.49	|Q V				
3+45	0.4192	1.50	|Q V				
3+50	0.4296	1.50	|Q V				
3+55	0.4400	1.51	|Q V				
4+ 0	0.4504	1.51	|Q V				
4+ 5	0.4609	1.52	|Q V				
4+10	0.4713	1.52	|Q V				
4+15	0.4819	1.53	|Q V				
4+20	0.4924	1.53	|Q V				
4+25	0.5030	1.54	|Q V				
4+30	0.5137	1.54	|Q V				
4+35	0.5243	1.55	|Q V				
4+40	0.5350	1.55	|Q V				
4+45	0.5458	1.56	|Q V				
4+50	0.5566	1.57	|Q V				
4+55	0.5674	1.57	|Q V				
5+ 0	0.5782	1.58	|Q V				
5+ 5	0.5891	1.58	|Q V				
5+10	0.6001	1.59	|Q V				
5+15	0.6110	1.59	|Q V				
5+20	0.6220	1.60	|Q V				
5+25	0.6331	1.60	|Q V				
5+30	0.6442	1.61	|Q V				
5+35	0.6553	1.62	|Q V				
5+40	0.6665	1.62	|Q V				
5+45	0.6777	1.63	|Q V				
5+50	0.6890	1.64	|Q V				
5+55	0.7003	1.64	|Q V				
6+ 0	0.7116	1.65	|Q V				
6+ 5	0.7230	1.65	|Q V				
6+10	0.7345	1.66	|Q V				
6+15	0.7459	1.67	|Q V				
6+20	0.7575	1.67	|Q V				
6+25	0.7690	1.68	|Q V				
6+30	0.7807	1.69	|Q V				
6+35	0.7923	1.69	|Q V				
6+40	0.8040	1.70	|Q V				
6+45	0.8158	1.71	|Q V				
6+50	0.8276	1.72	|Q V				
6+55	0.8395	1.72	|Q V				
7+ 0	0.8514	1.73	|Q V				
7+ 5	0.8634	1.74	|Q V				

7+10	0.8754	1.75	|Q	V	|	|	|	|
7+15	0.8875	1.75	|Q	V	|	|	|	|
7+20	0.8996	1.76	|Q	V	|	|	|	|
7+25	0.9118	1.77	|Q	V	|	|	|	|
7+30	0.9240	1.78	|Q	V	|	|	|	|
7+35	0.9363	1.78	|Q	V	|	|	|	|
7+40	0.9487	1.79	|Q	V	|	|	|	|
7+45	0.9611	1.80	|Q	V	|	|	|	|
7+50	0.9735	1.81	|Q	V	|	|	|	|
7+55	0.9861	1.82	|Q	V	|	|	|	|
8+ 0	0.9987	1.83	|Q	V	|	|	|	|
8+ 5	1.0113	1.84	|Q	V	|	|	|	|
8+10	1.0240	1.85	|Q	V	|	|	|	|
8+15	1.0368	1.85	|Q	V	|	|	|	|
8+20	1.0496	1.86	|Q	V	|	|	|	|
8+25	1.0625	1.87	|Q	V	|	|	|	|
8+30	1.0755	1.88	|Q	V	|	|	|	|
8+35	1.0885	1.89	|Q	V	|	|	|	|
8+40	1.1016	1.90	|Q	V	|	|	|	|
8+45	1.1148	1.91	|Q	V	|	|	|	|
8+50	1.1280	1.92	|Q	V	|	|	|	|
8+55	1.1414	1.93	|Q	V	|	|	|	|
9+ 0	1.1547	1.94	|Q	V	|	|	|	|
9+ 5	1.1682	1.95	|Q	V	|	|	|	|
9+10	1.1817	1.97	|Q	V	|	|	|	|
9+15	1.1953	1.98	|Q	V	|	|	|	|
9+20	1.2090	1.99	|Q	V	|	|	|	|
9+25	1.2228	2.00	|Q	V	|	|	|	|
9+30	1.2367	2.01	|Q	V	|	|	|	|
9+35	1.2506	2.02	|Q	V	|	|	|	|
9+40	1.2646	2.04	|Q	V	|	|	|	|
9+45	1.2787	2.05	|Q	V	|	|	|	|
9+50	1.2929	2.06	|Q	V	|	|	|	|
9+55	1.3072	2.07	|Q	V	|	|	|	|
10+ 0	1.3216	2.09	|Q	V	|	|	|	|
10+ 5	1.3360	2.10	|Q	V	|	|	|	|
10+10	1.3506	2.11	|Q	V	|	|	|	|
10+15	1.3652	2.13	|Q	V	|	|	|	|
10+20	1.3800	2.14	|Q	V	|	|	|	|
10+25	1.3948	2.16	|Q	V	|	|	|	|
10+30	1.4098	2.17	|Q	V	|	|	|	|
10+35	1.4249	2.19	|Q	V	|	|	|	|
10+40	1.4400	2.20	|Q	V	|	|	|	|
10+45	1.4553	2.22	|Q	V	|	|	|	|
10+50	1.4707	2.23	|Q	V	|	|	|	|
10+55	1.4862	2.25	|Q	V	|	|	|	|
11+ 0	1.5018	2.27	|Q	V	|	|	|	|
11+ 5	1.5175	2.28	|Q	V	|	|	|	|
11+10	1.5334	2.30	|Q	V	|	|	|	|
11+15	1.5494	2.32	|Q	V	|	|	|	|

11+20	1.5655	2.34	Q	V		
11+25	1.5818	2.36	Q	V		
11+30	1.5982	2.38	Q	V		
11+35	1.6147	2.40	Q	V		
11+40	1.6314	2.42	Q	V		
11+45	1.6482	2.44	Q	V		
11+50	1.6651	2.46	Q	V		
11+55	1.6823	2.49	Q	V		
12+ 0	1.6995	2.51	Q	V		
12+ 5	1.7168	2.50	Q	V		
12+10	1.7334	2.41	Q	V		
12+15	1.7498	2.38	Q	V		
12+20	1.7662	2.39	Q	V		
12+25	1.7827	2.40	Q	V		
12+30	1.7994	2.42	Q	V		
12+35	1.8162	2.44	Q	V		
12+40	1.8332	2.47	Q	V		
12+45	1.8504	2.50	Q	V		
12+50	1.8678	2.53	Q	V		
12+55	1.8855	2.56	Q	V		
13+ 0	1.9034	2.60	Q	V		
13+ 5	1.9215	2.63	Q	V		
13+10	1.9399	2.67	Q	V		
13+15	1.9586	2.71	Q	V		
13+20	1.9775	2.75	Q	V		
13+25	1.9968	2.79	Q	V		
13+30	2.0163	2.84	Q	V		
13+35	2.0362	2.89	Q	V		
13+40	2.0564	2.94	Q	V		
13+45	2.0770	2.99	Q	V		
13+50	2.0980	3.05	Q	V		
13+55	2.1193	3.10	Q	V		
14+ 0	2.1411	3.16	Q	V		
14+ 5	2.1633	3.23	Q	V		
14+10	2.1861	3.30	Q	V		
14+15	2.2093	3.37	Q	V		
14+20	2.2330	3.45	Q	V		
14+25	2.2574	3.53	Q	V		
14+30	2.2823	3.63	Q	V		
14+35	2.3079	3.72	Q	V		
14+40	2.3343	3.83	Q	V		
14+45	2.3614	3.94	Q	V		
14+50	2.3894	4.07	Q	V		
14+55	2.4183	4.20	Q	V		
15+ 0	2.4484	4.36	Q	V		
15+ 5	2.4794	4.51	Q	V		
15+10	2.5119	4.72	Q	V		
15+15	2.5458	4.91	Q	V		
15+20	2.5814	5.18	Q	V		
15+25	2.6173	5.20	Q	V		

15+30	2.6485	4.54	Q		V		
15+35	2.6790	4.43	Q		V		
15+40	2.7115	4.72	Q		V		
15+45	2.7470	5.16	Q		V		
15+50	2.7882	5.98	Q		V		
15+55	2.8382	7.26	Q		V		
16+ 0	2.9102	10.45		Q	V		
16+ 5	3.0600	21.74			V		
16+10	3.3817	46.71				V	Q
16+15	3.5554	25.23			Q	V	
16+20	3.6553	14.50		Q		V	
16+25	3.7250	10.12		Q		V	
16+30	3.7839	8.56		Q		V	
16+35	3.8337	7.23		Q		V	
16+40	3.8756	6.07		Q		V	
16+45	3.9136	5.52		Q		V	
16+50	3.9479	4.98	Q			V	
16+55	3.9763	4.12	Q			V	
17+ 0	4.0029	3.86	Q			V	
17+ 5	4.0281	3.66	Q			V	
17+10	4.0521	3.49	Q			V	
17+15	4.0750	3.33	Q			V	
17+20	4.0970	3.19	Q			V	
17+25	4.1181	3.06	Q			V	
17+30	4.1384	2.95	Q			V	
17+35	4.1581	2.85	Q			V	
17+40	4.1771	2.76	Q			V	
17+45	4.1956	2.68	Q			V	
17+50	4.2135	2.61	Q			V	
17+55	4.2310	2.54	Q			V	
18+ 0	4.2480	2.47	Q			V	
18+ 5	4.2648	2.44	Q			V	
18+10	4.2821	2.51	Q			V	
18+15	4.2993	2.51	Q			V	
18+20	4.3164	2.48	Q			V	
18+25	4.3333	2.45	Q			V	
18+30	4.3499	2.41	Q			V	
18+35	4.3663	2.38	Q			V	
18+40	4.3824	2.34	Q			V	
18+45	4.3982	2.30	Q			V	
18+50	4.4139	2.27	Q			V	
18+55	4.4293	2.24	Q			V	
19+ 0	4.4445	2.20	Q			V	
19+ 5	4.4594	2.17	Q			V	
19+10	4.4742	2.14	Q			V	
19+15	4.4888	2.12	Q			V	
19+20	4.5031	2.09	Q			V	
19+25	4.5174	2.06	Q			V	
19+30	4.5314	2.04	Q			V	
19+35	4.5452	2.01	Q			V	

19+40	4.5589	1.99	Q				V
19+45	4.5725	1.97	Q				V
19+50	4.5859	1.95	Q				V
19+55	4.5991	1.92	Q				V
20+ 0	4.6122	1.90	Q				V
20+ 5	4.6252	1.88	Q				V
20+10	4.6381	1.86	Q				V
20+15	4.6508	1.85	Q				V
20+20	4.6634	1.83	Q				V
20+25	4.6758	1.81	Q				V
20+30	4.6882	1.79	Q				V
20+35	4.7004	1.78	Q				V
20+40	4.7126	1.76	Q				V
20+45	4.7246	1.75	Q				V
20+50	4.7365	1.73	Q				V
20+55	4.7483	1.72	Q				V
21+ 0	4.7601	1.70	Q				V
21+ 5	4.7717	1.69	Q				V
21+10	4.7832	1.67	Q				V
21+15	4.7947	1.66	Q				V
21+20	4.8060	1.65	Q				V
21+25	4.8173	1.64	Q				V
21+30	4.8285	1.62	Q				V
21+35	4.8396	1.61	Q				V
21+40	4.8506	1.60	Q				V
21+45	4.8615	1.59	Q				V
21+50	4.8724	1.58	Q				V
21+55	4.8832	1.57	Q				V
22+ 0	4.8939	1.55	Q				V
22+ 5	4.9045	1.54	Q				V
22+10	4.9151	1.53	Q				V
22+15	4.9256	1.52	Q				V
22+20	4.9360	1.51	Q				V
22+25	4.9463	1.50	Q				V
22+30	4.9566	1.49	Q				V
22+35	4.9669	1.49	Q				V
22+40	4.9770	1.48	Q				V
22+45	4.9871	1.47	Q				V
22+50	4.9972	1.46	Q				V
22+55	5.0072	1.45	Q				V
23+ 0	5.0171	1.44	Q				V
23+ 5	5.0270	1.43	Q				V
23+10	5.0368	1.42	Q				V
23+15	5.0465	1.42	Q				V
23+20	5.0562	1.41	Q				V
23+25	5.0659	1.40	Q				V
23+30	5.0755	1.39	Q				V
23+35	5.0850	1.39	Q				V
23+40	5.0945	1.38	Q				V
23+45	5.1039	1.37	Q				V

23+50	5.1133	1.36	|Q	|	|	|	V|
23+55	5.1227	1.36	|Q	|	|	|	V|
24+ 0	5.1320	1.35	|Q	|	|	|	V|
24+ 5	5.1402	1.20	Q	|	|	|	V|
24+10	5.1442	0.57	Q	|	|	|	V|
24+15	5.1462	0.30	Q	|	|	|	V|
24+20	5.1474	0.18	Q	|	|	|	V|
24+25	5.1482	0.11	Q	|	|	|	V|
24+30	5.1486	0.06	Q	|	|	|	V|

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 100 YR UNIT HYDROGRAPH SUBAREA C
MGUBBAREINER 2021-09-27
--

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
3.82	1	1.31

Rainfall data for year 100		
3.82	6	3.05

Rainfall data for year 100		
3.82	24	6.31

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 3)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	52.0	3.82	1.000	0.785	0.190	0.149

Area-averaged adjusted loss rate Fm (In/Hr) = 0.149

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC3)	S	Pervious Yield Fr
0.73	0.190	32.0	52.0	9.23	0.231
3.09	0.810	98.0	98.0	0.20	0.962

Area-averaged catchment yield fraction, Y = 0.823

Area-averaged low loss fraction, Yb = 0.177

User entry of time of concentration = 0.280 (hours)

+++++

Watershed area = 3.82(Ac.)

Catchment Lag time = 0.224 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 37.2024

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.149(In/Hr)

Average low loss rate fraction (Yb) = 0.177 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.622(In)

Computed peak 30-minute rainfall = 1.064(In)

Specified peak 1-hour rainfall = 1.310(In)

Computed peak 3-hour rainfall = 2.199(In)

Specified peak 6-hour rainfall = 3.050(In)

Specified peak 24-hour rainfall = 6.310(In)

Rainfall depth area reduction factors:

Using a total area of 3.82(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.621(In)

30-minute factor = 1.000 Adjusted rainfall = 1.064(In)

1-hour factor = 1.000 Adjusted rainfall = 1.310(In)

3-hour factor = 1.000 Adjusted rainfall = 2.199(In)

6-hour factor = 1.000 Adjusted rainfall = 3.050(In)

24-hour factor = 1.000 Adjusted rainfall = 6.310(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph (CFS))

	(K =	46.20 (CFS))
1	2.453	1.133
2	15.615	6.081
3	44.808	13.487
4	62.667	8.251
5	72.342	4.469
6	78.814	2.990
7	83.398	2.118
8	86.976	1.653
9	89.667	1.243
10	91.740	0.958
11	93.476	0.802
12	94.846	0.633
13	95.989	0.528
14	96.911	0.426
15	97.603	0.319
16	98.066	0.214
17	98.467	0.185
18	98.913	0.206
19	99.355	0.205
20	99.659	0.140
21	100.000	0.070

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.6215	0.6215
2	0.7652	0.1437
3	0.8641	0.0990
4	0.9420	0.0779
5	1.0072	0.0652
6	1.0639	0.0566
7	1.1142	0.0504
8	1.1598	0.0455
9	1.2015	0.0417
10	1.2400	0.0386
11	1.2760	0.0360
12	1.3098	0.0337
13	1.3602	0.0504
14	1.4086	0.0484
15	1.4552	0.0466
16	1.5002	0.0450
17	1.5437	0.0435
18	1.5859	0.0422
19	1.6269	0.0410
20	1.6667	0.0399
21	1.7055	0.0388

22	1.7434	0.0378
23	1.7803	0.0369
24	1.8164	0.0361
25	1.8518	0.0353
26	1.8864	0.0346
27	1.9202	0.0339
28	1.9535	0.0332
29	1.9861	0.0326
30	2.0181	0.0320
31	2.0496	0.0315
32	2.0805	0.0309
33	2.1109	0.0304
34	2.1409	0.0299
35	2.1704	0.0295
36	2.1994	0.0290
37	2.2280	0.0286
38	2.2562	0.0282
39	2.2840	0.0278
40	2.3115	0.0274
41	2.3385	0.0271
42	2.3653	0.0267
43	2.3917	0.0264
44	2.4177	0.0261
45	2.4435	0.0258
46	2.4690	0.0255
47	2.4942	0.0252
48	2.5190	0.0249
49	2.5437	0.0246
50	2.5680	0.0244
51	2.5921	0.0241
52	2.6160	0.0239
53	2.6396	0.0236
54	2.6630	0.0234
55	2.6861	0.0231
56	2.7090	0.0229
57	2.7317	0.0227
58	2.7542	0.0225
59	2.7765	0.0223
60	2.7986	0.0221
61	2.8205	0.0219
62	2.8423	0.0217
63	2.8638	0.0215
64	2.8851	0.0214
65	2.9063	0.0212
66	2.9273	0.0210
67	2.9482	0.0208
68	2.9688	0.0207
69	2.9893	0.0205
70	3.0097	0.0204
71	3.0299	0.0202

72	3.0500	0.0201
73	3.0721	0.0221
74	3.0941	0.0220
75	3.1160	0.0219
76	3.1377	0.0217
77	3.1593	0.0216
78	3.1807	0.0215
79	3.2020	0.0213
80	3.2232	0.0212
81	3.2443	0.0211
82	3.2652	0.0209
83	3.2861	0.0208
84	3.3068	0.0207
85	3.3273	0.0206
86	3.3478	0.0205
87	3.3682	0.0204
88	3.3884	0.0202
89	3.4086	0.0201
90	3.4286	0.0200
91	3.4485	0.0199
92	3.4683	0.0198
93	3.4881	0.0197
94	3.5077	0.0196
95	3.5272	0.0195
96	3.5466	0.0194
97	3.5660	0.0193
98	3.5852	0.0192
99	3.6043	0.0191
100	3.6234	0.0190
101	3.6423	0.0190
102	3.6612	0.0189
103	3.6800	0.0188
104	3.6987	0.0187
105	3.7173	0.0186
106	3.7358	0.0185
107	3.7542	0.0184
108	3.7726	0.0184
109	3.7909	0.0183
110	3.8091	0.0182
111	3.8272	0.0181
112	3.8452	0.0180
113	3.8632	0.0180
114	3.8811	0.0179
115	3.8989	0.0178
116	3.9167	0.0177
117	3.9343	0.0177
118	3.9519	0.0176
119	3.9695	0.0175
120	3.9869	0.0175
121	4.0043	0.0174

122	4.0216	0.0173
123	4.0389	0.0173
124	4.0561	0.0172
125	4.0732	0.0171
126	4.0902	0.0171
127	4.1072	0.0170
128	4.1242	0.0169
129	4.1410	0.0169
130	4.1578	0.0168
131	4.1746	0.0167
132	4.1913	0.0167
133	4.2079	0.0166
134	4.2244	0.0166
135	4.2409	0.0165
136	4.2574	0.0164
137	4.2738	0.0164
138	4.2901	0.0163
139	4.3064	0.0163
140	4.3226	0.0162
141	4.3388	0.0162
142	4.3549	0.0161
143	4.3709	0.0161
144	4.3869	0.0160
145	4.4029	0.0160
146	4.4188	0.0159
147	4.4346	0.0158
148	4.4504	0.0158
149	4.4662	0.0157
150	4.4819	0.0157
151	4.4975	0.0156
152	4.5131	0.0156
153	4.5286	0.0155
154	4.5441	0.0155
155	4.5596	0.0155
156	4.5750	0.0154
157	4.5904	0.0154
158	4.6057	0.0153
159	4.6209	0.0153
160	4.6361	0.0152
161	4.6513	0.0152
162	4.6664	0.0151
163	4.6815	0.0151
164	4.6966	0.0150
165	4.7116	0.0150
166	4.7265	0.0150
167	4.7414	0.0149
168	4.7563	0.0149
169	4.7711	0.0148
170	4.7859	0.0148
171	4.8007	0.0147

172	4.8154	0.0147
173	4.8300	0.0147
174	4.8446	0.0146
175	4.8592	0.0146
176	4.8738	0.0145
177	4.8883	0.0145
178	4.9027	0.0145
179	4.9172	0.0144
180	4.9315	0.0144
181	4.9459	0.0143
182	4.9602	0.0143
183	4.9745	0.0143
184	4.9887	0.0142
185	5.0029	0.0142
186	5.0171	0.0142
187	5.0312	0.0141
188	5.0453	0.0141
189	5.0593	0.0141
190	5.0734	0.0140
191	5.0874	0.0140
192	5.1013	0.0140
193	5.1152	0.0139
194	5.1291	0.0139
195	5.1430	0.0138
196	5.1568	0.0138
197	5.1705	0.0138
198	5.1843	0.0137
199	5.1980	0.0137
200	5.2117	0.0137
201	5.2253	0.0136
202	5.2390	0.0136
203	5.2525	0.0136
204	5.2661	0.0136
205	5.2796	0.0135
206	5.2931	0.0135
207	5.3066	0.0135
208	5.3200	0.0134
209	5.3334	0.0134
210	5.3468	0.0134
211	5.3601	0.0133
212	5.3734	0.0133
213	5.3867	0.0133
214	5.3999	0.0132
215	5.4131	0.0132
216	5.4263	0.0132
217	5.4395	0.0132
218	5.4526	0.0131
219	5.4657	0.0131
220	5.4788	0.0131
221	5.4919	0.0130

222	5.5049	0.0130
223	5.5179	0.0130
224	5.5308	0.0130
225	5.5438	0.0129
226	5.5567	0.0129
227	5.5695	0.0129
228	5.5824	0.0129
229	5.5952	0.0128
230	5.6080	0.0128
231	5.6208	0.0128
232	5.6335	0.0127
233	5.6463	0.0127
234	5.6590	0.0127
235	5.6716	0.0127
236	5.6843	0.0126
237	5.6969	0.0126
238	5.7095	0.0126
239	5.7221	0.0126
240	5.7346	0.0125
241	5.7471	0.0125
242	5.7596	0.0125
243	5.7721	0.0125
244	5.7845	0.0124
245	5.7969	0.0124
246	5.8093	0.0124
247	5.8217	0.0124
248	5.8341	0.0123
249	5.8464	0.0123
250	5.8587	0.0123
251	5.8710	0.0123
252	5.8832	0.0123
253	5.8955	0.0122
254	5.9077	0.0122
255	5.9198	0.0122
256	5.9320	0.0122
257	5.9442	0.0121
258	5.9563	0.0121
259	5.9684	0.0121
260	5.9804	0.0121
261	5.9925	0.0121
262	6.0045	0.0120
263	6.0165	0.0120
264	6.0285	0.0120
265	6.0405	0.0120
266	6.0524	0.0119
267	6.0643	0.0119
268	6.0762	0.0119
269	6.0881	0.0119
270	6.1000	0.0119
271	6.1118	0.0118

272	6.1236	0.0118
273	6.1354	0.0118
274	6.1472	0.0118
275	6.1590	0.0118
276	6.1707	0.0117
277	6.1824	0.0117
278	6.1941	0.0117
279	6.2058	0.0117
280	6.2174	0.0117
281	6.2291	0.0116
282	6.2407	0.0116
283	6.2523	0.0116
284	6.2639	0.0116
285	6.2754	0.0116
286	6.2870	0.0115
287	6.2985	0.0115
288	6.3100	0.0115

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0115	0.0020	0.0095
2	0.0115	0.0020	0.0095
3	0.0116	0.0020	0.0095
4	0.0116	0.0020	0.0095
5	0.0116	0.0021	0.0096
6	0.0116	0.0021	0.0096
7	0.0117	0.0021	0.0096
8	0.0117	0.0021	0.0096
9	0.0117	0.0021	0.0097
10	0.0118	0.0021	0.0097
11	0.0118	0.0021	0.0097
12	0.0118	0.0021	0.0097
13	0.0119	0.0021	0.0098
14	0.0119	0.0021	0.0098
15	0.0119	0.0021	0.0098
16	0.0119	0.0021	0.0098
17	0.0120	0.0021	0.0099
18	0.0120	0.0021	0.0099
19	0.0121	0.0021	0.0099
20	0.0121	0.0021	0.0099
21	0.0121	0.0021	0.0100
22	0.0121	0.0021	0.0100
23	0.0122	0.0022	0.0100
24	0.0122	0.0022	0.0101
25	0.0123	0.0022	0.0101
26	0.0123	0.0022	0.0101
27	0.0123	0.0022	0.0101
28	0.0123	0.0022	0.0102

29	0.0124	0.0022	0.0102
30	0.0124	0.0022	0.0102
31	0.0125	0.0022	0.0103
32	0.0125	0.0022	0.0103
33	0.0125	0.0022	0.0103
34	0.0126	0.0022	0.0103
35	0.0126	0.0022	0.0104
36	0.0126	0.0022	0.0104
37	0.0127	0.0022	0.0105
38	0.0127	0.0022	0.0105
39	0.0128	0.0023	0.0105
40	0.0128	0.0023	0.0105
41	0.0129	0.0023	0.0106
42	0.0129	0.0023	0.0106
43	0.0129	0.0023	0.0106
44	0.0130	0.0023	0.0107
45	0.0130	0.0023	0.0107
46	0.0130	0.0023	0.0107
47	0.0131	0.0023	0.0108
48	0.0131	0.0023	0.0108
49	0.0132	0.0023	0.0109
50	0.0132	0.0023	0.0109
51	0.0133	0.0023	0.0109
52	0.0133	0.0024	0.0110
53	0.0134	0.0024	0.0110
54	0.0134	0.0024	0.0110
55	0.0135	0.0024	0.0111
56	0.0135	0.0024	0.0111
57	0.0136	0.0024	0.0112
58	0.0136	0.0024	0.0112
59	0.0136	0.0024	0.0112
60	0.0137	0.0024	0.0113
61	0.0137	0.0024	0.0113
62	0.0138	0.0024	0.0113
63	0.0138	0.0024	0.0114
64	0.0139	0.0025	0.0114
65	0.0140	0.0025	0.0115
66	0.0140	0.0025	0.0115
67	0.0141	0.0025	0.0116
68	0.0141	0.0025	0.0116
69	0.0142	0.0025	0.0117
70	0.0142	0.0025	0.0117
71	0.0143	0.0025	0.0118
72	0.0143	0.0025	0.0118
73	0.0144	0.0025	0.0118
74	0.0144	0.0026	0.0119
75	0.0145	0.0026	0.0119
76	0.0145	0.0026	0.0120
77	0.0146	0.0026	0.0120
78	0.0147	0.0026	0.0121

79	0.0147	0.0026	0.0121
80	0.0148	0.0026	0.0122
81	0.0149	0.0026	0.0122
82	0.0149	0.0026	0.0123
83	0.0150	0.0027	0.0123
84	0.0150	0.0027	0.0124
85	0.0151	0.0027	0.0125
86	0.0152	0.0027	0.0125
87	0.0153	0.0027	0.0126
88	0.0153	0.0027	0.0126
89	0.0154	0.0027	0.0127
90	0.0155	0.0027	0.0127
91	0.0155	0.0027	0.0128
92	0.0156	0.0028	0.0128
93	0.0157	0.0028	0.0129
94	0.0157	0.0028	0.0130
95	0.0158	0.0028	0.0130
96	0.0159	0.0028	0.0131
97	0.0160	0.0028	0.0132
98	0.0161	0.0028	0.0132
99	0.0162	0.0029	0.0133
100	0.0162	0.0029	0.0134
101	0.0163	0.0029	0.0134
102	0.0164	0.0029	0.0135
103	0.0165	0.0029	0.0136
104	0.0166	0.0029	0.0136
105	0.0167	0.0029	0.0137
106	0.0167	0.0030	0.0138
107	0.0169	0.0030	0.0139
108	0.0169	0.0030	0.0139
109	0.0171	0.0030	0.0140
110	0.0171	0.0030	0.0141
111	0.0173	0.0031	0.0142
112	0.0173	0.0031	0.0143
113	0.0175	0.0031	0.0144
114	0.0175	0.0031	0.0144
115	0.0177	0.0031	0.0145
116	0.0177	0.0031	0.0146
117	0.0179	0.0032	0.0147
118	0.0180	0.0032	0.0148
119	0.0181	0.0032	0.0149
120	0.0182	0.0032	0.0150
121	0.0184	0.0032	0.0151
122	0.0184	0.0033	0.0152
123	0.0186	0.0033	0.0153
124	0.0187	0.0033	0.0154
125	0.0189	0.0033	0.0155
126	0.0190	0.0034	0.0156
127	0.0191	0.0034	0.0158
128	0.0192	0.0034	0.0158

129	0.0194	0.0034	0.0160
130	0.0195	0.0035	0.0161
131	0.0197	0.0035	0.0162
132	0.0198	0.0035	0.0163
133	0.0200	0.0035	0.0165
134	0.0201	0.0036	0.0166
135	0.0204	0.0036	0.0168
136	0.0205	0.0036	0.0169
137	0.0207	0.0037	0.0170
138	0.0208	0.0037	0.0171
139	0.0211	0.0037	0.0173
140	0.0212	0.0037	0.0174
141	0.0215	0.0038	0.0177
142	0.0216	0.0038	0.0178
143	0.0219	0.0039	0.0180
144	0.0220	0.0039	0.0181
145	0.0201	0.0035	0.0165
146	0.0202	0.0036	0.0166
147	0.0205	0.0036	0.0169
148	0.0207	0.0037	0.0170
149	0.0210	0.0037	0.0173
150	0.0212	0.0037	0.0174
151	0.0215	0.0038	0.0177
152	0.0217	0.0038	0.0179
153	0.0221	0.0039	0.0182
154	0.0223	0.0039	0.0184
155	0.0227	0.0040	0.0187
156	0.0229	0.0041	0.0189
157	0.0234	0.0041	0.0192
158	0.0236	0.0042	0.0194
159	0.0241	0.0043	0.0198
160	0.0244	0.0043	0.0200
161	0.0249	0.0044	0.0205
162	0.0252	0.0045	0.0207
163	0.0258	0.0046	0.0212
164	0.0261	0.0046	0.0215
165	0.0267	0.0047	0.0220
166	0.0271	0.0048	0.0223
167	0.0278	0.0049	0.0229
168	0.0282	0.0050	0.0232
169	0.0290	0.0051	0.0239
170	0.0295	0.0052	0.0243
171	0.0304	0.0054	0.0250
172	0.0309	0.0055	0.0255
173	0.0320	0.0057	0.0264
174	0.0326	0.0058	0.0268
175	0.0339	0.0060	0.0279
176	0.0346	0.0061	0.0285
177	0.0361	0.0064	0.0297
178	0.0369	0.0065	0.0304

179	0.0388	0.0069	0.0320
180	0.0399	0.0070	0.0328
181	0.0422	0.0075	0.0347
182	0.0435	0.0077	0.0358
183	0.0466	0.0082	0.0384
184	0.0484	0.0086	0.0398
185	0.0337	0.0060	0.0278
186	0.0360	0.0064	0.0296
187	0.0417	0.0074	0.0343
188	0.0455	0.0081	0.0375
189	0.0566	0.0100	0.0466
190	0.0652	0.0115	0.0537
191	0.0990	0.0124	0.0865
192	0.1437	0.0124	0.1312
193	0.6215	0.0124	0.6091
194	0.0779	0.0124	0.0655
195	0.0504	0.0089	0.0415
196	0.0386	0.0068	0.0318
197	0.0504	0.0089	0.0415
198	0.0450	0.0080	0.0370
199	0.0410	0.0072	0.0337
200	0.0378	0.0067	0.0312
201	0.0353	0.0062	0.0291
202	0.0332	0.0059	0.0274
203	0.0315	0.0056	0.0259
204	0.0299	0.0053	0.0246
205	0.0286	0.0051	0.0236
206	0.0274	0.0049	0.0226
207	0.0264	0.0047	0.0217
208	0.0255	0.0045	0.0210
209	0.0246	0.0044	0.0203
210	0.0239	0.0042	0.0196
211	0.0231	0.0041	0.0191
212	0.0225	0.0040	0.0185
213	0.0219	0.0039	0.0180
214	0.0214	0.0038	0.0176
215	0.0208	0.0037	0.0172
216	0.0204	0.0036	0.0168
217	0.0221	0.0039	0.0182
218	0.0217	0.0038	0.0179
219	0.0213	0.0038	0.0176
220	0.0209	0.0037	0.0172
221	0.0206	0.0036	0.0169
222	0.0202	0.0036	0.0167
223	0.0199	0.0035	0.0164
224	0.0196	0.0035	0.0162
225	0.0193	0.0034	0.0159
226	0.0190	0.0034	0.0157
227	0.0188	0.0033	0.0155
228	0.0185	0.0033	0.0152

229	0.0183	0.0032	0.0150
230	0.0180	0.0032	0.0149
231	0.0178	0.0031	0.0147
232	0.0176	0.0031	0.0145
233	0.0174	0.0031	0.0143
234	0.0172	0.0030	0.0141
235	0.0170	0.0030	0.0140
236	0.0168	0.0030	0.0138
237	0.0166	0.0029	0.0137
238	0.0164	0.0029	0.0135
239	0.0163	0.0029	0.0134
240	0.0161	0.0028	0.0133
241	0.0160	0.0028	0.0131
242	0.0158	0.0028	0.0130
243	0.0156	0.0028	0.0129
244	0.0155	0.0027	0.0128
245	0.0154	0.0027	0.0126
246	0.0152	0.0027	0.0125
247	0.0151	0.0027	0.0124
248	0.0150	0.0026	0.0123
249	0.0148	0.0026	0.0122
250	0.0147	0.0026	0.0121
251	0.0146	0.0026	0.0120
252	0.0145	0.0026	0.0119
253	0.0143	0.0025	0.0118
254	0.0142	0.0025	0.0117
255	0.0141	0.0025	0.0116
256	0.0140	0.0025	0.0115
257	0.0139	0.0025	0.0115
258	0.0138	0.0024	0.0114
259	0.0137	0.0024	0.0113
260	0.0136	0.0024	0.0112
261	0.0135	0.0024	0.0111
262	0.0134	0.0024	0.0111
263	0.0133	0.0024	0.0110
264	0.0132	0.0023	0.0109
265	0.0132	0.0023	0.0108
266	0.0131	0.0023	0.0108
267	0.0130	0.0023	0.0107
268	0.0129	0.0023	0.0106
269	0.0128	0.0023	0.0106
270	0.0127	0.0023	0.0105
271	0.0127	0.0022	0.0104
272	0.0126	0.0022	0.0104
273	0.0125	0.0022	0.0103
274	0.0124	0.0022	0.0102
275	0.0124	0.0022	0.0102
276	0.0123	0.0022	0.0101
277	0.0122	0.0022	0.0101
278	0.0122	0.0022	0.0100

279	0.0121	0.0021	0.0100
280	0.0120	0.0021	0.0099
281	0.0120	0.0021	0.0098
282	0.0119	0.0021	0.0098
283	0.0118	0.0021	0.0097
284	0.0118	0.0021	0.0097
285	0.0117	0.0021	0.0096
286	0.0117	0.0021	0.0096
287	0.0116	0.0021	0.0095
288	0.0115	0.0020	0.0095

 Total soil rain loss = 1.00(In)
 Total effective rainfall = 5.31(In)
 Peak flow rate in flood hydrograph = 10.65(CFS)

+++++

24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0001	0.01	Q				
0+10	0.0005	0.07	Q				
0+15	0.0019	0.20	Q				
0+20	0.0038	0.27	Q				
0+25	0.0060	0.32	Q				
0+30	0.0084	0.35	Q				
0+35	0.0109	0.37	Q				
0+40	0.0135	0.38	Q				
0+45	0.0163	0.40	Q				
0+50	0.0191	0.41	Q				
0+55	0.0219	0.42	Q				
1+ 0	0.0248	0.42	Q				
1+ 5	0.0278	0.43	Q				
1+10	0.0308	0.43	Q				
1+15	0.0338	0.44	Q				
1+20	0.0368	0.44	Q				
1+25	0.0399	0.44	Q				
1+30	0.0430	0.45	QV				
1+35	0.0461	0.45	QV				
1+40	0.0492	0.45	QV				
1+45	0.0523	0.45	QV				
1+50	0.0555	0.46	QV				
1+55	0.0586	0.46	QV				
2+ 0	0.0618	0.46	QV				
2+ 5	0.0650	0.46	QV				

2+10	0.0681	0.46	QV				
2+15	0.0713	0.46	QV				
2+20	0.0745	0.46	QV				
2+25	0.0777	0.47	QV				
2+30	0.0809	0.47	QV				
2+35	0.0842	0.47	QV				
2+40	0.0874	0.47	Q V				
2+45	0.0906	0.47	Q V				
2+50	0.0939	0.47	Q V				
2+55	0.0971	0.47	Q V				
3+ 0	0.1004	0.47	Q V				
3+ 5	0.1037	0.48	Q V				
3+10	0.1070	0.48	Q V				
3+15	0.1103	0.48	Q V				
3+20	0.1136	0.48	Q V				
3+25	0.1169	0.48	Q V				
3+30	0.1202	0.48	Q V				
3+35	0.1236	0.48	Q V				
3+40	0.1269	0.49	Q V				
3+45	0.1303	0.49	Q V				
3+50	0.1336	0.49	Q V				
3+55	0.1370	0.49	Q V				
4+ 0	0.1404	0.49	Q V				
4+ 5	0.1438	0.49	Q V				
4+10	0.1472	0.50	Q V				
4+15	0.1506	0.50	Q V				
4+20	0.1541	0.50	Q V				
4+25	0.1575	0.50	|Q V				
4+30	0.1610	0.50	|Q V				
4+35	0.1645	0.50	|Q V				
4+40	0.1679	0.51	|Q V				
4+45	0.1714	0.51	|Q V				
4+50	0.1749	0.51	|Q V				
4+55	0.1785	0.51	|Q V				
5+ 0	0.1820	0.51	|Q V				
5+ 5	0.1855	0.51	|Q V				
5+10	0.1891	0.52	|Q V				
5+15	0.1927	0.52	|Q V				
5+20	0.1962	0.52	|Q V				
5+25	0.1998	0.52	|Q V				
5+30	0.2034	0.52	|Q V				
5+35	0.2071	0.53	|Q V				
5+40	0.2107	0.53	|Q V				
5+45	0.2143	0.53	|Q V				
5+50	0.2180	0.53	|Q V				
5+55	0.2217	0.53	|Q V				
6+ 0	0.2254	0.54	|Q V				
6+ 5	0.2291	0.54	|Q V				
6+10	0.2328	0.54	|Q V				
6+15	0.2365	0.54	|Q V				

6+20	0.2402	0.54	|Q	V	|	|	|
6+25	0.2440	0.55	|Q	V	|	|	|
6+30	0.2478	0.55	|Q	V	|	|	|
6+35	0.2516	0.55	|Q	V	|	|	|
6+40	0.2554	0.55	|Q	V	|	|	|
6+45	0.2592	0.55	|Q	V	|	|	|
6+50	0.2630	0.56	|Q	V	|	|	|
6+55	0.2669	0.56	|Q	V	|	|	|
7+ 0	0.2708	0.56	|Q	V	|	|	|
7+ 5	0.2746	0.56	|Q	V	|	|	|
7+10	0.2786	0.57	|Q	V	|	|	|
7+15	0.2825	0.57	|Q	V	|	|	|
7+20	0.2864	0.57	|Q	V	|	|	|
7+25	0.2904	0.57	|Q	V	|	|	|
7+30	0.2943	0.58	|Q	V	|	|	|
7+35	0.2983	0.58	|Q	V	|	|	|
7+40	0.3023	0.58	|Q	V	|	|	|
7+45	0.3064	0.58	|Q	V	|	|	|
7+50	0.3104	0.59	|Q	V	|	|	|
7+55	0.3145	0.59	|Q	V	|	|	|
8+ 0	0.3185	0.59	|Q	V	|	|	|
8+ 5	0.3227	0.60	|Q	V	|	|	|
8+10	0.3268	0.60	|Q	V	|	|	|
8+15	0.3309	0.60	|Q	V	|	|	|
8+20	0.3351	0.60	|Q	V	|	|	|
8+25	0.3393	0.61	|Q	V	|	|	|
8+30	0.3435	0.61	|Q	V	|	|	|
8+35	0.3477	0.61	|Q	V	|	|	|
8+40	0.3519	0.62	|Q	V	|	|	|
8+45	0.3562	0.62	|Q	V	|	|	|
8+50	0.3605	0.62	|Q	V	|	|	|
8+55	0.3648	0.63	|Q	V	|	|	|
9+ 0	0.3691	0.63	|Q	V	|	|	|
9+ 5	0.3735	0.63	|Q	V	|	|	|
9+10	0.3779	0.64	|Q	V	|	|	|
9+15	0.3823	0.64	|Q	V	|	|	|
9+20	0.3867	0.64	|Q	V	|	|	|
9+25	0.3912	0.65	|Q	V	|	|	|
9+30	0.3957	0.65	|Q	V	|	|	|
9+35	0.4002	0.65	|Q	V	|	|	|
9+40	0.4047	0.66	|Q	V	|	|	|
9+45	0.4093	0.66	|Q	V	|	|	|
9+50	0.4139	0.67	|Q	V	|	|	|
9+55	0.4185	0.67	|Q	V	|	|	|
10+ 0	0.4231	0.67	|Q	V	|	|	|
10+ 5	0.4278	0.68	|Q	V	|	|	|
10+10	0.4325	0.68	|Q	V	|	|	|
10+15	0.4373	0.69	|Q	V	|	|	|
10+20	0.4420	0.69	|Q	V	|	|	|
10+25	0.4468	0.70	|Q	V	|	|	|

10+30	0.4517	0.70	Q	V			
10+35	0.4565	0.71	Q	V			
10+40	0.4614	0.71	Q	V			
10+45	0.4664	0.72	Q	V			
10+50	0.4713	0.72	Q	V			
10+55	0.4763	0.73	Q	V			
11+ 0	0.4814	0.73	Q	V			
11+ 5	0.4864	0.74	Q	V			
11+10	0.4916	0.74	Q	V			
11+15	0.4967	0.75	Q	V			
11+20	0.5019	0.75	Q	V			
11+25	0.5071	0.76	Q	V			
11+30	0.5124	0.77	Q	V			
11+35	0.5178	0.77	Q	V			
11+40	0.5231	0.78	Q	V			
11+45	0.5285	0.79	Q	V			
11+50	0.5340	0.79	Q	V			
11+55	0.5395	0.80	Q	V			
12+ 0	0.5451	0.81	Q	V			
12+ 5	0.5507	0.81	Q	V			
12+10	0.5562	0.81	Q	V			
12+15	0.5617	0.79	Q	V			
12+20	0.5671	0.78	Q	V			
12+25	0.5725	0.79	Q	V			
12+30	0.5779	0.79	Q	V			
12+35	0.5834	0.79	Q	V			
12+40	0.5889	0.80	Q	V			
12+45	0.5944	0.81	Q	V			
12+50	0.6001	0.81	Q	V			
12+55	0.6057	0.82	Q	V			
13+ 0	0.6115	0.83	Q	V			
13+ 5	0.6173	0.84	Q	V			
13+10	0.6231	0.85	Q	V			
13+15	0.6291	0.87	Q	V			
13+20	0.6351	0.88	Q	V			
13+25	0.6413	0.89	Q	V			
13+30	0.6475	0.90	Q	V			
13+35	0.6538	0.92	Q	V			
13+40	0.6602	0.93	Q	V			
13+45	0.6667	0.95	Q	V			
13+50	0.6734	0.96	Q	V			
13+55	0.6801	0.98	Q	V			
14+ 0	0.6870	1.00	Q	V			
14+ 5	0.6940	1.02	Q	V			
14+10	0.7012	1.04	Q	V			
14+15	0.7085	1.06	Q	V			
14+20	0.7159	1.08	Q	V			
14+25	0.7235	1.11	Q	V			
14+30	0.7313	1.13	Q	V			
14+35	0.7393	1.16	Q	V			

14+40	0.7475	1.19	Q		V			
14+45	0.7560	1.22	Q		V			
14+50	0.7646	1.26	Q		V			
14+55	0.7736	1.30	Q		V			
15+ 0	0.7828	1.34	Q		V			
15+ 5	0.7924	1.39	Q		V			
15+10	0.8022	1.44	Q		V			
15+15	0.8125	1.50	Q		V			
15+20	0.8233	1.56	Q		V			
15+25	0.8344	1.62	Q		V			
15+30	0.8455	1.61	Q		V			
15+35	0.8558	1.50	Q		V			
15+40	0.8660	1.48	Q		V			
15+45	0.8767	1.55	Q		V			
15+50	0.8883	1.69	Q		V			
15+55	0.9016	1.93	Q		V			
16+ 0	0.9179	2.37	Q		V			
16+ 5	0.9437	3.74	Q		V			
16+10	0.9917	6.97		Q	V			
16+15	1.0650	10.65			Q	V		
16+20	1.1162	7.43		Q		V		
16+25	1.1502	4.94		Q		V		
16+30	1.1767	3.84		Q		V		
16+35	1.1992	3.27		Q		V		
16+40	1.2191	2.89		Q		V		
16+45	1.2365	2.53		Q		V		
16+50	1.2521	2.25		Q		V		
16+55	1.2662	2.05		Q		V		
17+ 0	1.2790	1.86	Q			V		
17+ 5	1.2908	1.71	Q			V		
17+10	1.3016	1.57	Q			V		
17+15	1.3115	1.44	Q			V		
17+20	1.3206	1.32	Q			V		
17+25	1.3293	1.26	Q			V		
17+30	1.3377	1.22	Q			V		
17+35	1.3457	1.17	Q			V		
17+40	1.3532	1.08	Q			V		
17+45	1.3601	1.00	Q			V		
17+50	1.3665	0.93	Q			V		
17+55	1.3727	0.90	Q			V		
18+ 0	1.3787	0.87	Q			V		
18+ 5	1.3845	0.85	Q			V		
18+10	1.3903	0.84	Q			V		
18+15	1.3960	0.84	Q			V		
18+20	1.4018	0.84	Q			V		
18+25	1.4075	0.83	Q			V		
18+30	1.4131	0.81	Q			V		
18+35	1.4186	0.80	Q			V		
18+40	1.4240	0.79	Q			V		
18+45	1.4294	0.78	Q			V		

18+50	1.4347	0.77	Q				V
18+55	1.4399	0.75	Q				V
19+ 0	1.4450	0.74	Q				V
19+ 5	1.4500	0.73	Q				V
19+10	1.4550	0.72	Q				V
19+15	1.4599	0.71	Q				V
19+20	1.4648	0.70	Q				V
19+25	1.4696	0.69	Q				V
19+30	1.4743	0.69	Q				V
19+35	1.4790	0.68	Q				V
19+40	1.4836	0.67	Q				V
19+45	1.4881	0.66	Q				V
19+50	1.4926	0.65	Q				V
19+55	1.4971	0.65	Q				V
20+ 0	1.5015	0.64	Q				V
20+ 5	1.5058	0.63	Q				V
20+10	1.5102	0.63	Q				V
20+15	1.5144	0.62	Q				V
20+20	1.5186	0.61	Q				V
20+25	1.5228	0.61	Q				V
20+30	1.5269	0.60	Q				V
20+35	1.5310	0.59	Q				V
20+40	1.5351	0.59	Q				V
20+45	1.5391	0.58	Q				V
20+50	1.5431	0.58	Q				V
20+55	1.5470	0.57	Q				V
21+ 0	1.5510	0.57	Q				V
21+ 5	1.5548	0.56	Q				V
21+10	1.5587	0.56	Q				V
21+15	1.5625	0.55	Q				V
21+20	1.5663	0.55	Q				V
21+25	1.5700	0.55	Q				V
21+30	1.5738	0.54	Q				V
21+35	1.5775	0.54	Q				V
21+40	1.5811	0.53	Q				V
21+45	1.5848	0.53	Q				V
21+50	1.5884	0.52	Q				V
21+55	1.5920	0.52	Q				V
22+ 0	1.5955	0.52	Q				V
22+ 5	1.5991	0.51	Q				V
22+10	1.6026	0.51	Q				V
22+15	1.6061	0.51	Q				V
22+20	1.6095	0.50	Q				V
22+25	1.6130	0.50	Q				V
22+30	1.6164	0.50	Q				V
22+35	1.6198	0.49	Q				V
22+40	1.6232	0.49	Q				V
22+45	1.6265	0.49	Q				V
22+50	1.6299	0.48	Q				V
22+55	1.6332	0.48	Q				V

23+ 0	1.6365	0.48	Q				V
23+ 5	1.6397	0.48	Q				V
23+10	1.6430	0.47	Q				V
23+15	1.6462	0.47	Q				V
23+20	1.6495	0.47	Q				V
23+25	1.6526	0.46	Q				V
23+30	1.6558	0.46	Q				V
23+35	1.6590	0.46	Q				V
23+40	1.6621	0.46	Q				V
23+45	1.6653	0.45	Q				V
23+50	1.6684	0.45	Q				V
23+55	1.6715	0.45	Q				V
24+ 0	1.6746	0.45	Q				V
24+ 5	1.6775	0.43	Q				V
24+10	1.6801	0.37	Q				V
24+15	1.6818	0.25	Q				V
24+20	1.6830	0.17	Q				V
24+25	1.6838	0.12	Q				V
24+30	1.6844	0.09	Q				V

Appendix F – Basin Routing Analysis

- Basin Summary Table

Basin Requirements		
Storm Event	Max Flow Allowed (CFS)	Required Retention (CF)
10-Year	22.22	98,340
100-Year	27.89*	98,340

Basin Summary			
Drainage Area	10-Year Max Flow (CFS)	100-Year Max Flow (CFS)	Provided Onsite Retention (CF)
DA B and C (Basin 1 and CMP)	0.00	0.00	-
DA A (Basin 2 and CMP)	0.00	0.00	-
Total	0.00	0.00	348,521

Note: * Calculated Using Data for 25-Year Storm Event

Basin 1 (DA B and C)						
Elevation (ft)	Surface Area (SF)	Depth (ft)	Basin Volume (CF)	CMP Volume (CF)	Volume (ac-ft)	Outflow (cfs)
3588.00*	3,588	0.0	0	348,521	8.00	0.00
3589.00	3,589	1.0	7,045	348,521	8.16	0.00
3590.00**	3,590	2.0	15,410	348,521	8.35	0.00
3591.00***	3,591	3.0	25,167	348,521	8.58	0.00

Basin 2 (DA A)						
Elevation (ft)	Surface Area (SF)	Depth (ft)	Basin Volume (CF)	CMP Volume (CF)	Volume (ac-ft)	Outflow (cfs)
3588.00*	3,596	0.0	0	348,521	8.00	0.00
3589.00	3,597	1.0	6,964	348,521	8.16	0.00
3590.00**	3,598	2.0	15,271	348,521	8.35	0.00
3591.00***	3,599	3.0	24,994	348,521	8.57	0.00

Note: * Bottom of Basin w/ 4.0' of Engineered Soil with 35% Porosity

** Retention Volume

*** Top of Basin

**** The same underground CMP is shared between Basins 1 and 2

Summary Table			
Storm Event	Storm Volume	Volume Retained****	Max Flow Out (CFS)
10-Year	182,860	379,202	0.00
100-Year	342,639	379,202	0.00

Drawdown Calculations

Area A Basin 2

WQMP Form 4.3-3

2	0.9	in/hr	
3	2	Factor of Safety	
4	0.45	in/hr	3.6
5	96	hr	
6	3	ft	
7	3		
8	6961.21	sf	
9	4	ft	
10	0.35		
11	0	ft	
12	0		
13	3		DCV 5,929
14	31,412		530%

DCV	5,929	CF
1	104,677	SF
2	0.81	
3	0.61	
4	0.458	IN
5	0.567	IN
6	48	HR
C2=	1.582	24 hr
	1.963	48 hr

Design Capture Volume

Site Area

Imperviousness of Site

Runoff Coefficient (Rc)

1hr 2Yr Rainfall

Mean 6-hr Precipitation

Drawdown Time

Valley

1.4807

Desert

1.2371

Area B+C Basin 1

WQMP Form 4.3-3

2	0.7	in/hr	
3	2	Factor of Safety	
4	0.35	in/hr	2.8
5	96	hr	
6	3	ft	
7	3		
8	7044.87	sf	
9	4	ft	
10	0.35		
11	0	ft	
12	0		
13	3		DCV 38,147
14	31,614		83%

DCV	38,147	CF
1	673,436	SF
2	0.81	
3	0.61	
4	0.458	IN
5	0.567	IN
6	48	HR
C2=	1.582	24 hr
	1.963	48 hr

Design Capture Volume

Site Area

Imperviousness of Site

Runoff Coefficient (Rc)

1hr 2Yr Rainfall

Mean 6-hr Precipitation

Drawdown Time

Valley

1.4807

Desert

1.2371

Combined DCV
44,076

NOAA ATLAS-14 RAINFALL DATA			
	2 YR	10 YR	100 YR
1 HR	0.458	0.785	1.31
6 HR	1.12	1.82	3.05
24 HR	2.11	3.63	6.31

	Basin 1	Infiltration	Basin 2	Infiltration
	Drawdown	0.7 in/hr	Drawdown	0.9 in/hr
Drawdown (hr)	IN	FT	IN	FT
24	8.4	0.7	10.8	0.9
48	16.8	1.4	21.6	1.8
72	25.2	2.1	32.4	2.7
96	33.6	2.8	43.2	3.6

* Drawdown value selected: 1.4 FT

* 48 HR Drawdown Volume = 1.4 * Surface Area

Truck Dock CMP Infiltration		
Infiltration	8.77	in/hr
	35.07	ft

	CMP Footprint (+6 for stone)	VOL HOLD	Surface Area (SF)	48 HR Drawdown (CF)	V100	Leftover Volume
1	730 x 116	348,521	84,680	2,969,445	342,639	
						-2,626,806
	total	348,521				-2,626,806
	Basin 1	25,167	7,045	9,863		
	Basin 2	24,994	6,961	9,746		
	total	398,681	98,686	2,989,054	122,371	-2,646,415

-31.3 FT of water left in chamber after 96 HR

Appendix G – Hydraulic Analysis (Prepared in Final Engineering)

- Weir Calculations
- Pipe Sizing Calculations
- Catch Basin Calculations

Appendix H – Reference Documents

- Precipitation Data
- Hydrologic Soil Map
- Infiltration Report



NOAA Atlas 14, Volume 6, Version 2
Location name: Hesperia, California, USA*
Latitude: 34.4168°, Longitude: -117.3926°
Elevation: 3607.28 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps_&_aerials](#)

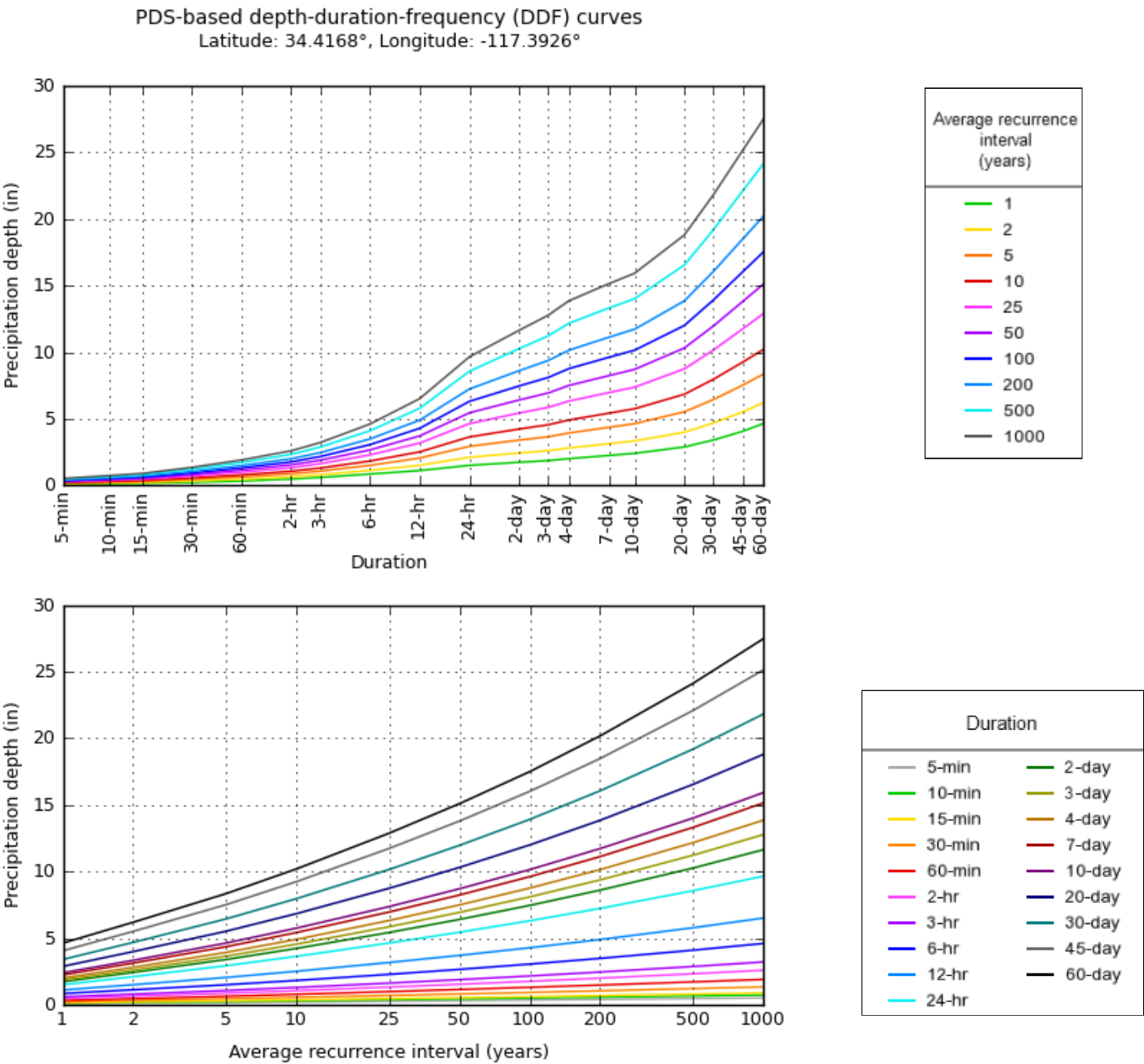
PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.087 (0.072-0.106)	0.124 (0.102-0.151)	0.172 (0.142-0.211)	0.212 (0.173-0.262)	0.267 (0.211-0.341)	0.310 (0.240-0.404)	0.354 (0.267-0.473)	0.400 (0.294-0.550)	0.464 (0.327-0.665)	0.514 (0.350-0.762)
10-min	0.125 (0.103-0.152)	0.177 (0.147-0.217)	0.247 (0.203-0.302)	0.304 (0.248-0.375)	0.383 (0.303-0.489)	0.444 (0.344-0.579)	0.507 (0.383-0.678)	0.573 (0.421-0.788)	0.664 (0.468-0.953)	0.736 (0.501-1.09)
15-min	0.151 (0.125-0.184)	0.214 (0.177-0.262)	0.298 (0.246-0.366)	0.367 (0.300-0.454)	0.463 (0.366-0.591)	0.537 (0.416-0.700)	0.613 (0.463-0.820)	0.693 (0.509-0.953)	0.804 (0.566-1.15)	0.890 (0.606-1.32)
30-min	0.228 (0.189-0.278)	0.324 (0.268-0.396)	0.451 (0.371-0.552)	0.555 (0.454-0.686)	0.699 (0.553-0.893)	0.811 (0.628-1.06)	0.927 (0.700-1.24)	1.05 (0.769-1.44)	1.21 (0.855-1.74)	1.35 (0.915-2.00)
60-min	0.323 (0.267-0.394)	0.458 (0.379-0.560)	0.637 (0.525-0.781)	0.785 (0.642-0.970)	0.989 (0.782-1.26)	1.15 (0.888-1.50)	1.31 (0.990-1.75)	1.48 (1.09-2.04)	1.72 (1.21-2.46)	1.90 (1.30-2.82)
2-hr	0.473 (0.391-0.577)	0.641 (0.530-0.784)	0.869 (0.716-1.07)	1.06 (0.867-1.31)	1.33 (1.05-1.70)	1.54 (1.19-2.01)	1.76 (1.33-2.36)	2.00 (1.47-2.75)	2.33 (1.64-3.34)	2.59 (1.76-3.85)
3-hr	0.596 (0.494-0.728)	0.797 (0.659-0.974)	1.07 (0.882-1.31)	1.30 (1.06-1.61)	1.63 (1.29-2.08)	1.89 (1.46-2.46)	2.16 (1.63-2.89)	2.46 (1.81-3.38)	2.87 (2.02-4.12)	3.21 (2.19-4.77)
6-hr	0.849 (0.702-1.04)	1.12 (0.929-1.37)	1.50 (1.24-1.84)	1.82 (1.49-2.25)	2.28 (1.81-2.92)	2.66 (2.06-3.47)	3.05 (2.31-4.08)	3.48 (2.56-4.79)	4.10 (2.89-5.87)	4.60 (3.13-6.83)
12-hr	1.11 (0.918-1.35)	1.51 (1.24-1.84)	2.05 (1.69-2.51)	2.51 (2.05-3.10)	3.17 (2.51-4.06)	3.71 (2.87-4.84)	4.28 (3.23-5.72)	4.90 (3.60-6.73)	5.78 (4.07-8.29)	6.51 (4.43-9.66)
24-hr	1.50 (1.33-1.73)	2.11 (1.87-2.43)	2.93 (2.59-3.39)	3.63 (3.18-4.24)	4.64 (3.93-5.58)	5.45 (4.52-6.70)	6.31 (5.11-7.94)	7.23 (5.70-9.37)	8.56 (6.47-11.6)	9.65 (7.05-13.5)
2-day	1.73 (1.54-2.00)	2.43 (2.15-2.80)	3.40 (3.00-3.93)	4.23 (3.70-4.93)	5.43 (4.60-6.54)	6.41 (5.32-7.88)	7.46 (6.04-9.40)	8.61 (6.78-11.1)	10.3 (7.76-13.9)	11.6 (8.50-16.3)
3-day	1.86 (1.65-2.14)	2.61 (2.31-3.00)	3.65 (3.22-4.21)	4.55 (3.98-5.30)	5.86 (4.96-7.05)	6.94 (5.76-8.53)	8.10 (6.56-10.2)	9.37 (7.38-12.1)	11.2 (8.49-15.2)	12.8 (9.33-17.8)
4-day	2.00 (1.78-2.31)	2.81 (2.49-3.24)	3.93 (3.47-4.54)	4.91 (4.30-5.72)	6.33 (5.36-7.62)	7.50 (6.22-9.22)	8.76 (7.10-11.0)	10.1 (7.99-13.1)	12.2 (9.20-16.4)	13.9 (10.1-19.4)
7-day	2.25 (1.99-2.59)	3.13 (2.77-3.61)	4.36 (3.85-5.04)	5.42 (4.75-6.32)	6.97 (5.90-8.39)	8.24 (6.84-10.1)	9.62 (7.79-12.1)	11.1 (8.76-14.4)	13.3 (10.1-18.0)	15.1 (11.1-21.2)
10-day	2.40 (2.13-2.77)	3.34 (2.95-3.85)	4.63 (4.09-5.35)	5.75 (5.04-6.70)	7.37 (6.25-8.88)	8.71 (7.23-10.7)	10.1 (8.22-12.8)	11.7 (9.24-15.2)	14.0 (10.6-18.9)	15.9 (11.6-22.2)
20-day	2.89 (2.56-3.32)	3.99 (3.53-4.60)	5.52 (4.87-6.38)	6.84 (5.99-7.97)	8.74 (7.41-10.5)	10.3 (8.56-12.7)	12.0 (9.72-15.1)	13.8 (10.9-17.9)	16.5 (12.5-22.3)	18.8 (13.7-26.3)
30-day	3.40 (3.02-3.92)	4.68 (4.14-5.40)	6.45 (5.69-7.45)	7.96 (6.98-9.28)	10.2 (8.61-12.2)	12.0 (9.93-14.7)	13.9 (11.3-17.5)	16.1 (12.7-20.8)	19.2 (14.5-25.9)	21.8 (15.9-30.5)
45-day	4.06 (3.60-4.67)	5.51 (4.88-6.35)	7.51 (6.63-8.68)	9.24 (8.09-10.8)	11.7 (9.95-14.1)	13.8 (11.4-17.0)	16.0 (13.0-20.2)	18.5 (14.6-23.9)	22.1 (16.7-29.8)	25.1 (18.4-35.1)
60-day	4.63 (4.11-5.33)	6.19 (5.48-7.14)	8.34 (7.37-9.64)	10.2 (8.93-11.9)	12.9 (10.9-15.5)	15.1 (12.5-18.6)	17.5 (14.2-22.0)	20.2 (15.9-26.1)	24.1 (18.2-32.6)	27.5 (20.1-38.4)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).
 Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.
 Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical



Maps & aerials

Small scale terrain



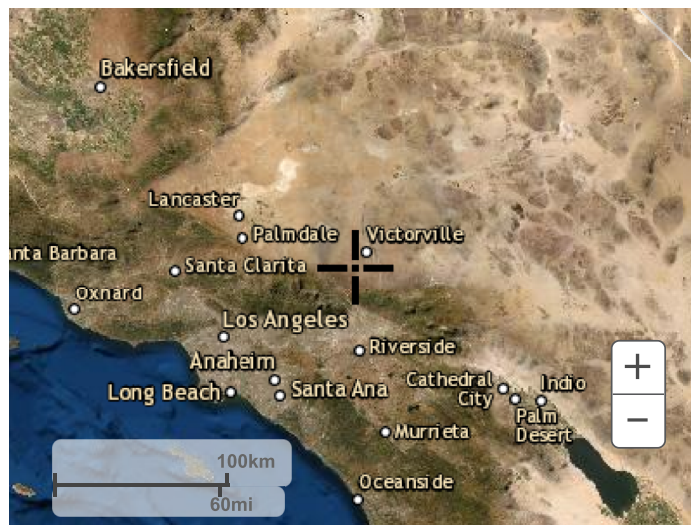
Large scale terrain



Large scale map



Large scale aerial

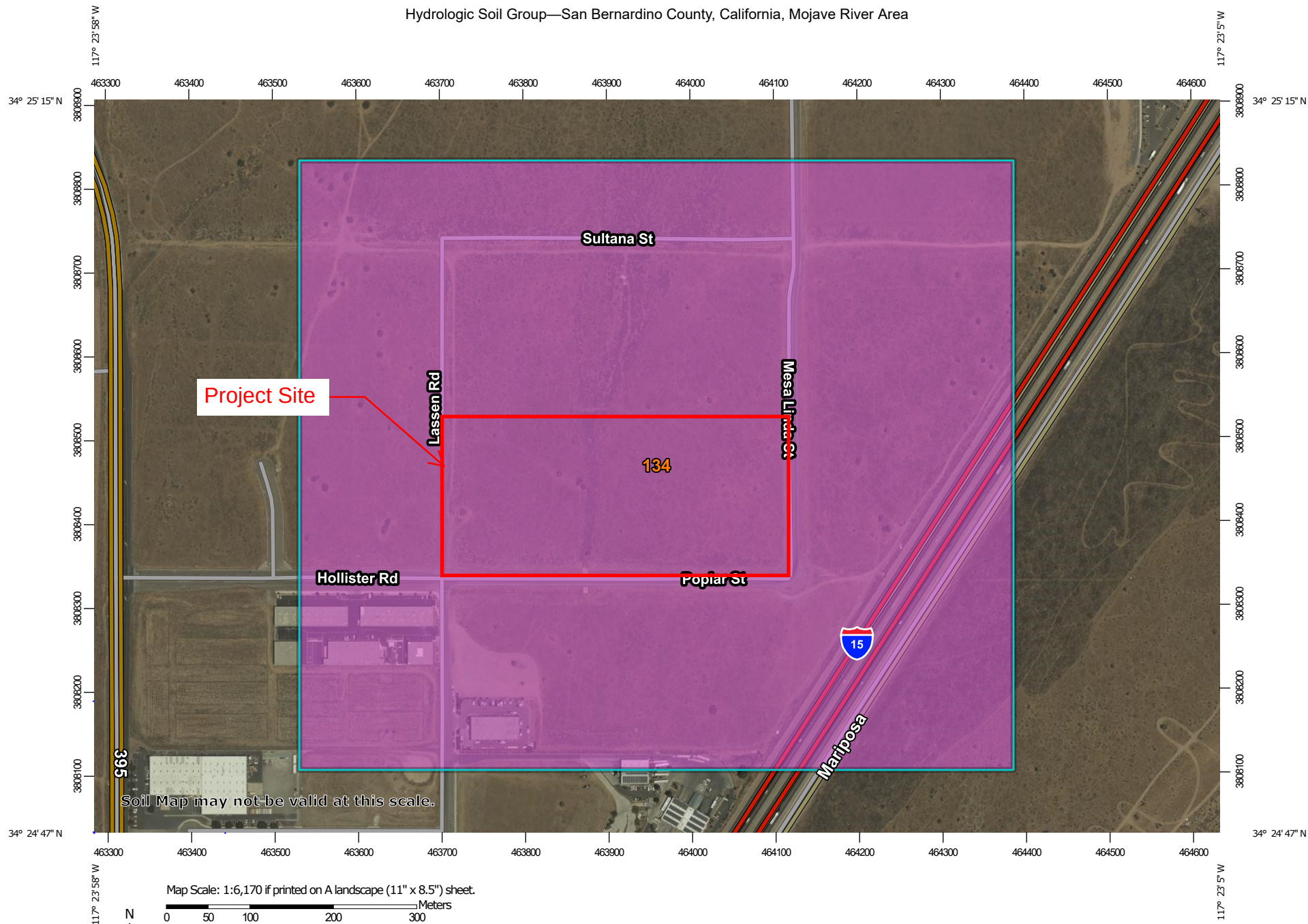


[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

Hydrologic Soil Group—San Bernardino County, California, Mojave River Area



Map Scale: 1:6,170 if printed on A landscape (11" x 8.5") sheet.
 0 50 100 200 300 Meters
 0 250 500 1000 1500 Feet
 Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

10/1/2021
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area
 Survey Area Data: Version 13, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2019—Jul 8, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
134	HESPERIA LOAMY FINE SAND, 2 TO 5 PERCENT SLOPES	A	154.3	100.0%
Totals for Area of Interest			154.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix H – Reference Documents

- Infiltration Report

April 7, 2022

Covington Development Group, Inc.
3 Corporate Plaza, Suite 230
Newport Beach, California 92660



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

Attention: Mr. Michael Di Sano
Sr. Director - Entitlements

Project No.: **22G134-2**

Subject: **Results of Additional Infiltration Testing**
Poplar 18 Industrial Park
NWC Poplar Street and Mesa Linda Street
Hesperia, California

References: Geotechnical Investigation, Poplar 18 Industrial Park, NWC Poplar Street and Mesa Linda Street, Hesperia, California, prepared by Southern California Geotechnical, Inc. (SCG) for Covington Development Group, Inc., SCG Project No. 22G134-1R, dated April 7, 2022.

Mr. Di Sano:

In accordance with your request, we have conducted additional infiltration testing at the subject site. We are pleased to present this report summarizing the results of the infiltration testing and our design recommendations.

Scope of Services

The scope of services performed for this project was in general accordance with our Proposal No. 22P126, dated January 24, 2022. The scope of services included site reconnaissance, subsurface exploration, field and laboratory testing, and engineering analysis to determine the infiltration rates of the on-site soils. The infiltration testing was performed in general accordance with ASTM Test Method D-3385-03, Standard Test Method for Infiltration Rate of Soils in Field Using Double Ring Infiltrometer.

Site and Project Description

The subject site is located at the northwest corner of Poplar Street and Mesa Linda Street in Hesperia, California. The site is bounded to the north by vacant land, to the west by the proposed alignment of Lassen Road, to the south by Poplar Street and to the east by Mesa Linda Street. The general location of the site is illustrated on the Site Location Map, included as Plate 1 of this report.

The site consists of a rectangular-shaped parcel, 17.87± acres in size which is vacant and undeveloped. Ground surface cover consists of exposed soils with moderate native brush and shrub growth, and the site is sparsely populated with Joshua trees. Occasional scattered trash debris are present throughout the site. A small drainage course, about 1 to 3± feet in depth, is present in the center of the site, trending in the north-south direction.

Numerous dirt roads are present in various locations throughout the site, generally trending east-west. A dirt road trending north-south is also present along the east property line of the site.

Detailed topographic information was not available at the time of this report. Based on visual observations made at the time of the subsurface investigation and from elevation data obtained from Google Earth, the overall site topography generally slopes downward to the northeast at a gradient less than 2± percent. The highest elevation on the site is located in the southwestern area of the site, and the minimum site elevation is located in the northeastern region of the site. There was estimated to be an elevation differential of about 22± feet across the site.

Proposed Development

A conceptual site plan, prepared by RGA Office of Architectural Design (RGA), indicates that the site will be developed with one (1) new warehouse identified as Building 1. The building will be located in the central area of the site and will be 414,700± ft² in size. The building will be constructed with dock-high doors along most of the north building wall. The building will be surrounded by asphaltic concrete pavements in the automobile parking and drive areas and Portland cement concrete pavements in the truck court area. Several landscape planters and concrete flatwork will be included throughout the site.

The proposed development will use on-site storm water infiltration. Based on conversations with representatives of Westland Group, Inc (WGI), the project civil engineer, the infiltration system will consist of three (3) infiltration systems, identified as Infiltration System "A" through Infiltration System "C", located in the northern areas of the site. Two basins will be located in the northwest and northeast corners of the site and the below-grade chambers will be located in the north-central area of the basin. The bottoms of the systems are expected to be approximately 12± feet below the existing site grades.

Concurrent Study

SCG performed a concurrent study at the subject site, referenced above. As part of this study, seven (7) borings were advanced to depths of 15 to 30± feet below the existing site grades. The borings encountered younger alluvial soils at the ground surface at all of the boring locations extending to a depth of 2½ to 5½± feet below the existing site grades. These soils consist of loose to medium dense silty fine sands, fine to coarse sands, fine sandy silts and fine to coarse sandy silts. At greater depths, older alluvium was encountered at all of the boring locations extending to the maximum depth explored of 30± feet. The older alluvium consists of medium dense to very dense fine to medium sands, fine to coarse sands, and fine to coarse sandy silts. The older alluvial soils were generally weakly cemented.

Free water was not encountered during the drilling of any of the borings. Based on the lack of any water within the borings and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of 30± feet at the time of the subsurface exploration.

Subsurface Exploration

Scope of Exploration

The subsurface exploration for the infiltration testing consisted of three (3) backhoe-excavated trenches, extending to a depth of 12± feet below existing site grades. The trenches were logged during excavation by a member of our staff. The approximate locations of the infiltration trenches (identified as I-1 through I-3) are indicated on the Infiltration Test Location Plan, enclosed as Plate 2 of this report.

Geotechnical Conditions

Native younger alluvial soils were encountered at the ground surface of all three (3) infiltration trench locations, extending to depths ranging from 3 to 4± feet below existing site grades. The younger alluvium consists of loose to medium dense fine to medium sandy silts and silty fine to coarse sands.

Older alluvial soils were encountered beneath the younger alluvium, extending to at least the maximum explored depth of 12± feet below existing site grades. The older alluvium consisted of medium to dense silty fine to medium sands, silty fine to coarse sands, and gravelly fine to coarse sands. The Trench Logs, which illustrate the conditions encountered at each of the trench locations, are included with this report.

Groundwater

Groundwater was not encountered at any of the infiltration test locations. Based on the lack of any water within the trenches, and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of the maximum explored depth of 12± feet below existing grades.

As part of our research, we also reviewed recent groundwater data available for wells within the vicinity of the site. Recent water level data was obtained from the California Department of Water Resources website, <http://www.water.ca.gov/waterdatalibrary/>. The nearest monitoring well with available records in this database is located approximately 4,400± feet northwest of the site. Water level readings within this monitoring well indicate a groundwater level of 600± feet below the ground surface in October 2020.

Infiltration Testing

We understand that the results of the testing will be used to prepare a preliminary design for the storm water infiltration system that will be used at the subject site. As previously mentioned, the infiltration testing was performed in general accordance with ASTM Test Method D-3385-03, Standard Test Method for Infiltration Rate of Soils in Field Using Double Ring Infiltrometer.

Two stainless steel infiltration rings were used for the infiltration testing. The outer infiltration ring is 2 feet in diameter and 20 inches in height. The inner infiltration ring is 1 foot in diameter and 20 inches in height. At the test locations, the outer ring was driven 3± inches into the soil at

the base of each trench. The inner ring was centered inside the outer ring and subsequently driven 3± inches into the soil at the base of the trench. The rings were driven into the soil using a ten-pound sledge hammer. The soil surrounding the wall of the infiltration rings was only slightly disturbed during the driving process.

Infiltration Testing Procedure

Infiltration testing was performed at all of the trench locations. The infiltration testing consisted of filling the inner ring and the annular space (the space between the inner and outer rings) with water, approximately 3 to 4 inches above the soil. To prevent the flow of water from one ring to the other, the water level in both the inner ring and the annular space between the rings was maintained using constant-head float valves. The volume of water that was added to maintain a constant head in the inner ring and the annular space during each time interval was determined and recorded. A cap was placed over the rings to minimize the evaporation of water during the tests.

The schedule for readings was determined based on the observed soil type at the base of each backhoe-excavated trench. Based on the existing soil conditions at the trench locations, the volumetric measurements were made at 15-minute intervals at all of the infiltration test locations. The water volume measurements are presented on the spreadsheets enclosed with this report. The infiltration rates for each of the timed intervals are also tabulated on these spreadsheets.

The infiltration rates for the infiltration tests are calculated in centimeters per hour and then converted to inches per hour. The rates are summarized below:

<u>Infiltration Test No.</u>	<u>Depth (feet)</u>	<u>Soil Description</u>	<u>Infiltration Rate (inches/hour)</u>
I-1	12	Light Brown Silty fine to coarse Sand	0.9
I-2	12	Brown Silty fine to coarse Sand, trace fine Gravel	0.7
I-3	12	Light Brown Silty fine to coarse Sand	1.0

Laboratory Testing

Moisture Content

The moisture contents for selected soil samples within the trenches were determined in accordance with ASTM D-2216 and are expressed as a percentage of the dry weight. These test results are presented on the Trench Logs in Plates B-1 through B-3 of this report.

Grain Size Analysis

The grain size distribution of selected soils collected from the base of each infiltration test trench has been determined using a range of wire mesh screens. These tests were performed in general accordance with ASTM D-422 and/or ASTM D-1140. The weight of the portion of the sample retained on each screen is recorded and the percentage finer or coarser of the total weight is calculated. The results of the grainsize analysis are presented on Plates C-1 and C-3 of this report.

Design Recommendations

Three (3) infiltration tests were performed at the subject site. As noted above, the calculated infiltration rates at the infiltration test locations are 0.7 and 1.0 inches per hour. Based on the results of infiltration tests, we recommend the following:

Infiltration System	Infiltration System Location	Infiltration System Type	Infiltration Rate (inches/hour)
"A"	Northwest	Basin	0.9
"B"	North-Central	Chamber	0.7
"C"	Northeast	Basin	1.0

We recommend that a representative from the geotechnical engineer be on-site during the construction of the proposed infiltration system to identify the soil classification at the base of the infiltration basin or chamber bottom. It should be confirmed that the soils at the base of the proposed infiltration system corresponds with those presented in this report to ensure that the performance of the system will be consistent with the rates reported herein.

The design of the proposed storm water infiltration system should be performed by the project civil engineer, in accordance with the City of Hesperia and/or County of San Bernardino guidelines. However, it is recommended that the systems be constructed so as to facilitate removal of silt and clay, or other deleterious materials from any water that may enter the system. The presence of such materials would decrease the effective infiltration rates. **It is recommended that the project civil engineer apply an appropriate factor of safety. The infiltration rate recommended above is based on the assumption that only clean water will be introduced to the subsurface profile. Any fines, debris, or organic materials could significantly impact the infiltration rate.** It should be noted that the recommended infiltration rate is based on infiltration testing at three (3) discrete locations, and the overall infiltration rate of the storm water infiltration system could vary considerably.

Infiltration Rate Considerations

The infiltration rate presented herein was determined in accordance with the San Bernardino County guidelines and is considered valid only for the time and place of the actual test. Varying subsurface conditions will exist in other areas of the site, which could alter the recommended infiltration rates presented above. The infiltration rates will decline over time between maintenance cycles as silt or clay particles accumulate on the BMP surface. The infiltration rate is highly dependent upon a number of factors, including density, silt and clay content, grainsize

distribution throughout the range of particle sizes, and particle shape. Small changes in these factors can cause large changes in the infiltration rates.

Infiltration rates are based on unsaturated flow. As water is introduced into soils by infiltration, the soils become saturated and the wetting front advances from the unsaturated zone to the saturated zone. Once the soils become saturated, infiltration rates become zero, and water can only move through soils by hydraulic conductivity at a rate determined by pressure head and soil permeability. Changes in soil moisture content will affect the infiltration rate. Infiltration rates should be expected to decrease until the soils become saturated. Soil permeability values will then govern groundwater movement. Permeability values may be on the order of 10 to 20 times less than infiltration rates. The system designer should incorporate adequate factors of safety and allow for overflow design into appropriate traditional storm drain systems, which would transport storm water off-site.

Construction Considerations

The infiltration rates presented in this report are specific to the tested locations and tested depths. Infiltration rates can be significantly reduced if the soils are exposed to excessive disturbance or compaction during construction. Compaction of the soils at the bottom of the infiltration system can significantly reduce the infiltration ability of the basins. Therefore, the subgrade soils within proposed infiltration system areas should not be over-excavated, undercut or compacted in any significant manner. **It is recommended that a note to this effect be added to the project plans and/or specifications.**

We recommend that a representative from the geotechnical engineer be on-site during the construction of the proposed infiltration systems to identify the soil classification at the base of each system. It should be confirmed that the soils at the base of the proposed infiltration systems correspond with those presented in this report to ensure that the performance of the systems will be consistent with the rates reported herein.

We recommend that scrapers and other rubber-tired heavy equipment not be operated on the basin bottom, or at levels lower than 2 feet above the bottom of the system, particularly within basins. As such, the bottom 24 inches of the infiltration systems should be excavated with non-rubber-tired equipment, such as excavators.

Basin Maintenance

The proposed project may include infiltration basins. Water flowing into these basins will carry some level of sediment. Wind-blown sediments and erosion of the basin side walls will also contribute to sediment deposition at the bottom of the basin. This layer has the potential to significantly reduce the infiltration rate of the basin subgrade soils. Therefore, a formal basin maintenance program should be established to ensure that these silt and clay deposits are removed from the basin on a regular basis. Appropriate vegetation on the basin sidewalls and bottom may reduce erosion and sediment deposition.

Basin maintenance should also include measures to prevent animal burrows, and to repair any burrows or damage caused by such. Animal burrows in the basin sidewalls can significantly increase the risk of erosion and piping failures.

Infiltration Chamber Maintenance

The proposed project may include infiltration chambers. Water flowing into these chambers will carry some level of sediment. This layer has the potential to significantly reduce the infiltration rate of the chamber subgrade soils. Therefore, a formal chamber maintenance program should be established to ensure that these silt and clay deposits are removed from the chamber on a regular basis.

Location of Infiltration Systems

The use of on-site storm water infiltration systems carries a risk of creating adverse geotechnical conditions. Increasing the moisture content of the soil can cause the soil to lose internal shear strength and increase its compressibility, resulting in a change in the designed engineering properties. Overlying structures and pavements in the infiltration area could potentially be damaged due to saturation of the subgrade soils. **The proposed infiltration systems for this site should be located at least 25 feet away from any structures, including retaining walls.** Even with this provision of locating the infiltration system at least 25 feet from the building(s), it is possible that infiltrating water into the subsurface soils could have an adverse effect on the proposed or existing structures. It should also be noted that utility trenches which happen to collect storm water can also serve as conduits to transmit storm water toward the structure, depending on the slope of the utility trench. Therefore, consideration should also be given to the proposed locations of underground utilities which may pass near the proposed infiltration system.

The infiltration system designer should also give special consideration to the effect that the proposed infiltration systems may have on nearby subterranean structures, open excavations, or descending slopes. In particular, infiltration systems should not be located near the crest of descending slopes, particularly where the slopes are comprised of granular soils. Such systems will require specialized design and analysis to evaluate the potential for slope instability, piping failures and other phenomena that typically apply to earthen dam design. This type of analysis is beyond the scope of this infiltration test report, but these factors should be considered by the infiltration system designer when locating the infiltration systems.

General Comments

This report has been prepared as an instrument of service for use by the client in order to aid in the evaluation of this property and to assist the architects and engineers in the design and preparation of the project plans and specifications. This report may be provided to the contractor(s) and other design consultants to disclose information relative to the project. However, this report is not intended to be utilized as a specification in and of itself, without appropriate interpretation by the project architect, structural engineer, and/or civil engineer. The design of the infiltration system is the responsibility of the civil engineer. The role of the geotechnical engineer is limited to determination of infiltration rate only. By using the design infiltration rates contained herein, the civil engineer agrees to indemnify, defend, and hold harmless the geotechnical engineer for all aspects of the design and performance of the infiltration

system. The reproduction and distribution of this report must be authorized by the client and Southern California Geotechnical, Inc. Furthermore, any reliance on this report by an unauthorized third party is at such party's sole risk, and we accept no responsibility for damage or loss which may occur. The analysis of this site was based on a subsurface profile interpolated from limited discrete soil samples. While the materials encountered in the project area are considered to be representative of the total area, some variations should be expected between trench locations and testing depths. If the conditions encountered during construction vary significantly from those detailed herein, we should be contacted immediately to determine if the conditions alter the recommendations contained herein.

This report has been based on assumed or provided characteristics of the proposed development. It is recommended that the owner, client, architect, structural engineer, and civil engineer carefully review these assumptions to ensure that they are consistent with the characteristics of the proposed development. If discrepancies exist, they should be brought to our attention to verify that they do not affect the conclusions and recommendations contained herein. We also recommend that the project plans and specifications be submitted to our office for review to verify that our recommendations have been correctly interpreted. The analysis, conclusions, and recommendations contained within this report have been promulgated in accordance with generally accepted professional geotechnical engineering practice. No other warranty is implied or expressed.

Closure

We sincerely appreciate the opportunity to be of service on this project. We look forward to providing additional consulting services during the course of the project. If we may be of further assistance in any manner, please contact our office.

Respectfully Submitted,

SOUTHERN CALIFORNIA GEOTECHNICAL, INC.



Ryan Bremer
Staff Geologist

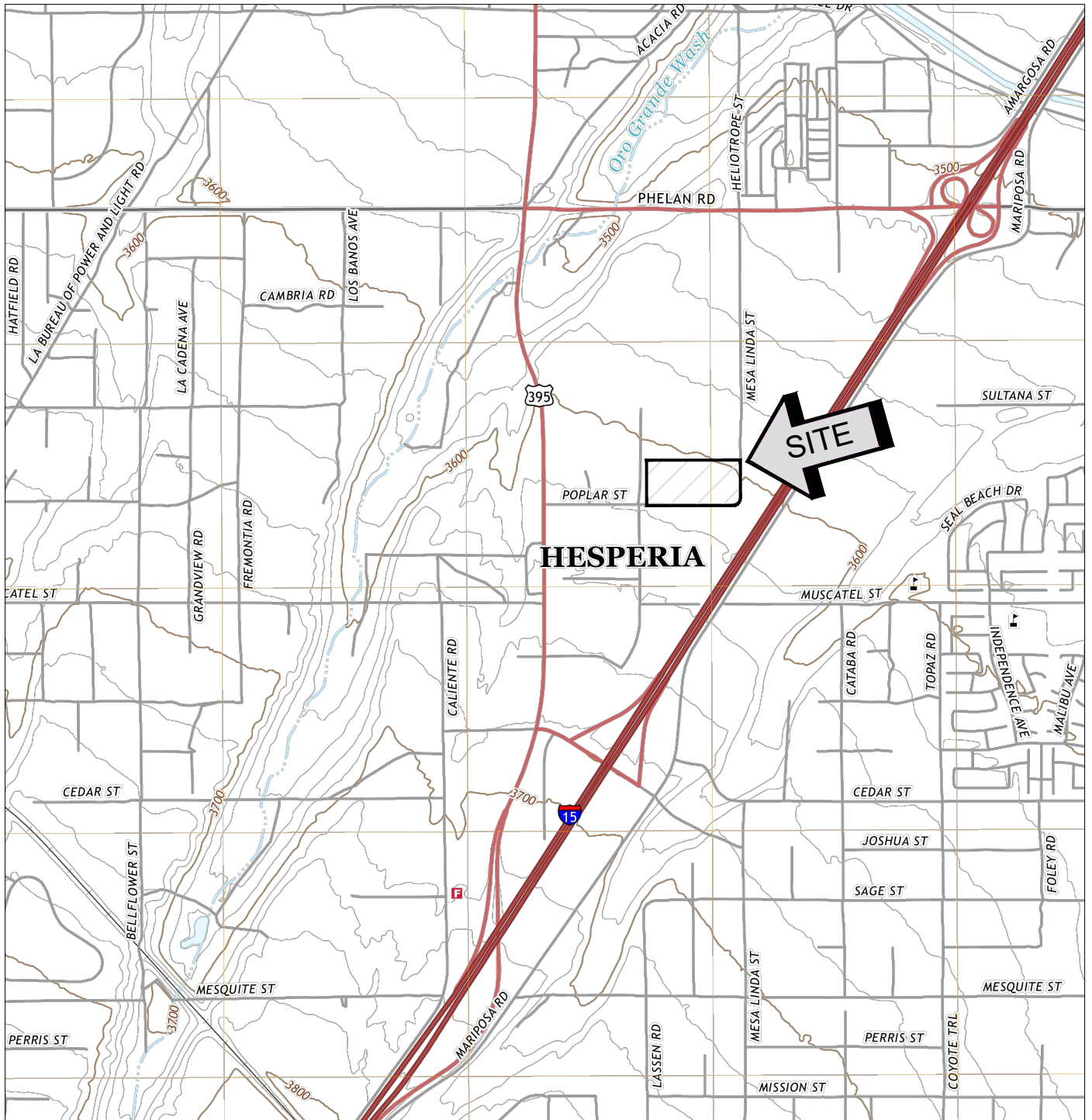


Robert G. Trazo, GE 2655
Principal Engineer



Distribution: (1) Addressee

Enclosures: Plate 1 - Site Location Map
Plate 2 - Infiltration Test Location Plan
Trench Log Legend and Logs (5 pages)
Infiltration Test Results Spreadsheets (3 pages)
Grain Size Distribution Graphs (3 pages)



SOURCE: USGS TOPOGRAPHIC MAP OF THE
BALDY MESA QUADRANGLE, RIVERSIDE COUNTY,
CALIFORNIA, 2021.



SITE LOCATION MAP

PROPOSED POPLAR 18
HESPERIA, CALIFORNIA

SCALE: 1" = 2000'

DRAWN: MD

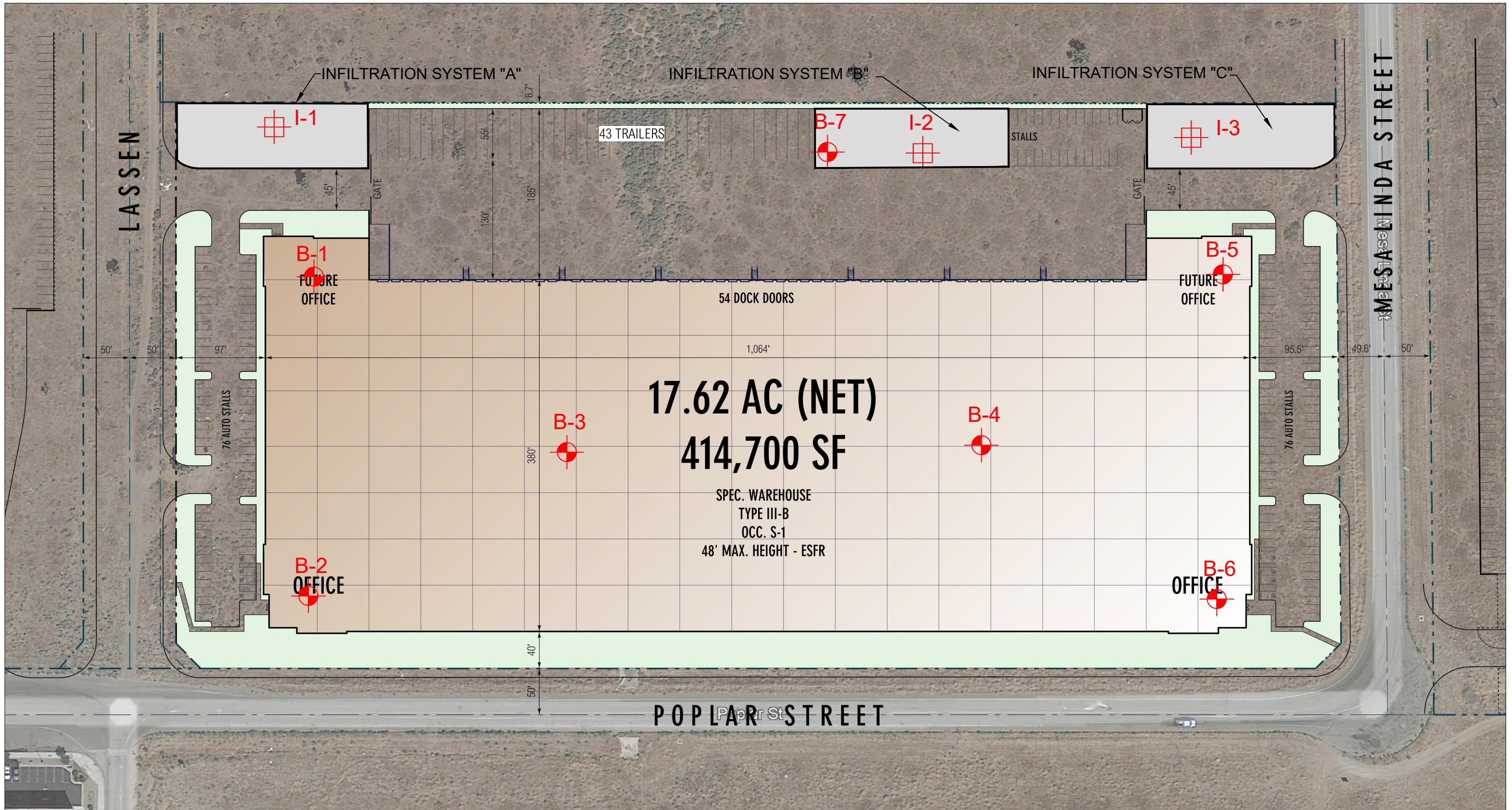
CHKD: DN

SCG PROJECT
22G134-2

PLATE 1



SOUTHERN
CALIFORNIA
GEOTECHNICAL



GEOTECHNICAL LEGEND

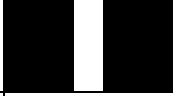
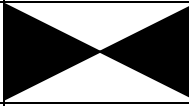
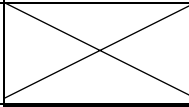
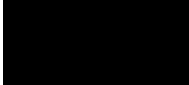
-  APPROXIMATE INFILTRATION LOCATION
-  APPROXIMATE BORING LOCATION
(SCG PROJECT NO. 22G134-1)
-  SITE BOUNDARY
-  PROPOSED INFILTRATION SYSTEM



NOTE: CONCEPTUAL SITE PLAN PREPARED BY RGA ARCHITECTS.
AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH.

INFILTRATION LOCATION PLAN	
PROPOSED POPLAR 18	
HESPERIA, CALIFORNIA	
SCALE: 1" = 100'	
DRAWN: MD	
CHKD: DN	
SCG PROJECT 22G134-2	
PLATE 2	SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH LOG LEGEND

SAMPLE TYPE	GRAPHICAL SYMBOL	SAMPLE DESCRIPTION
AUGER		SAMPLE COLLECTED FROM AUGER CUTTINGS, NO FIELD MEASUREMENT OF SOIL STRENGTH. (DISTURBED)
CORE		ROCK CORE SAMPLE: TYPICALLY TAKEN WITH A DIAMOND-TIPPED CORE BARREL. TYPICALLY USED ONLY IN HIGHLY CONSOLIDATED BEDROCK.
GRAB		SOIL SAMPLE TAKEN WITH NO SPECIALIZED EQUIPMENT, SUCH AS FROM A STOCKPILE OR THE GROUND SURFACE. (DISTURBED)
CS		CALIFORNIA SAMPLER: 2-1/2 INCH I.D. SPLIT BARREL SAMPLER, LINED WITH 1-INCH HIGH BRASS RINGS. DRIVEN WITH SPT HAMMER. (RELATIVELY UNDISTURBED)
NSR		NO RECOVERY: THE SAMPLING ATTEMPT DID NOT RESULT IN RECOVERY OF ANY SIGNIFICANT SOIL OR ROCK MATERIAL.
SPT		STANDARD PENETRATION TEST: SAMPLER IS A 1.4 INCH INSIDE DIAMETER SPLIT BARREL, DRIVEN 18 INCHES WITH THE SPT HAMMER. (DISTURBED)
SH		SHELBY TUBE: TAKEN WITH A THIN WALL SAMPLE TUBE, PUSHED INTO THE SOIL AND THEN EXTRACTED. (UNDISTURBED)
VANE		VANE SHEAR TEST: SOIL STRENGTH OBTAINED USING A 4 BLADED SHEAR DEVICE. TYPICALLY USED IN SOFT CLAYS-NO SAMPLE RECOVERED.

COLUMN DESCRIPTIONS

DEPTH:

Distance in feet below the ground surface.

SAMPLE:

Sample Type as depicted above.

BLOW COUNT:

Number of blows required to advance the sampler 12 inches using a 140 lb hammer with a 30-inch drop. 50/3" indicates penetration refusal (>50 blows) at 3 inches. WH indicates that the weight of the hammer was sufficient to push the sampler 6 inches or more.

POCKET PEN.:

Approximate shear strength of a cohesive soil sample as measured by pocket penetrometer.

GRAPHIC LOG:

Graphic Soil Symbol as depicted on the following page.

DRY DENSITY:

Dry density of an undisturbed or relatively undisturbed sample in lbs/ft³.

MOISTURE CONTENT:

Moisture content of a soil sample, expressed as a percentage of the dry weight.

LIQUID LIMIT:

The moisture content above which a soil behaves as a liquid.

PLASTIC LIMIT:

The moisture content above which a soil behaves as a plastic.

PASSING #200 SIEVE:

The percentage of the sample finer than the #200 standard sieve.

UNCONFINED SHEAR:

The shear strength of a cohesive soil sample, as measured in the unconfined state.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS



FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	
SURFACE ELEVATION: --- MSL												
5					YOUNGER ALLUVIUM: Light Brown Silty fine to medium Sand, trace coarse Sand, trace fine root fibers, medium dense-damp							
					OLDER ALLUVIUM: Light Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel, slightly porous, dense-dry							
					Light Brown Gravelly fine to coarse Sand, trace Silt, medium dense-dry							
10					Light Brown Silty fine to coarse Sand, medium dense-dry		2					
Trench Terminated at 12'												

TBL 22G134-2.GPJ SOCALGEO.GDT 4/8/22



JOB NO.: 22G134-2					EXCAVATION DATE: 3/2/22					WATER DEPTH: Dry						
PROJECT: Poplar 18 Industrial Park					EXCAVATION METHOD: Backhoe					CAVE DEPTH: ---						
LOCATION: Hesperia, California					LOGGED BY: Caleb Brackett					READING TAKEN: At Completion						
FIELD RESULTS										LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION					DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					SURFACE ELEVATION: --- MSL											
5					YOUNGER ALLUVIUM: Light Brown fine to medium Sandy Silt, trace fine root fibers, loose-damp											
					Light Brown Silty fine to medium Sand, trace coarse Sand, medium dense-dry											
10					OLDER ALLUVIUM: Brown Silty fine to coarse Sand, trace fine Gravel, well cemented, dense to very dense-dry											
											2					
					Trench Terminated at 12'											

TBL 22G134-2.GPJ SOCALGEO.GDT 4/8/22



JOB NO.: 22G134-2					EXCAVATION DATE: 3/2/22					WATER DEPTH: Dry				
PROJECT: Poplar 18 Industrial Park					EXCAVATION METHOD: Backhoe					CAVE DEPTH: ---				
LOCATION: Hesperia, California					LOGGED BY: Caleb Brackett					READING TAKEN: At Completion				
FIELD RESULTS					DESCRIPTION	LABORATORY RESULTS						COMMENTS		
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG		DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)			
					SURFACE ELEVATION: --- MSL									
					<u>YOUNGER ALLUVIUM:</u> Light Brown Silty fine to medium Sand, trace fine root fibers, trace fine Gravel, loose to medium dense-damp									
5					<u>OLDER ALLUVIUM:</u> Light Brown Silty fine to coarse Sand, dense-dry									
10							2							
					Trench Terminated at 12'									

TBL 22G134-2.GPJ SOCALGEO.GDT 4/8/22

INFILTRATION CALCULATIONS

Project Name	Poplar 18 Industrial Park
Project Location	Hesperia, California
Project Number	22G134-2
Engineer	Caleb Brackett

Infiltration Test No I-1

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	8:00 AM	15	0	1250	0	2900	6.85	5.30	2.70	2.09
	Final	8:15 AM	15	1250		2900					
2	Initial	8:15 AM	15	0	650	0	2500	3.56	4.57	1.40	1.80
	Final	8:30 AM	30	650		2500					
3	Initial	8:30 AM	15	0	500	0	1400	2.74	2.56	1.08	1.01
	Final	8:45 AM	45	500		1400					
4	Initial	8:45 AM	15	0	400	0	1400	2.19	2.56	0.86	1.01
	Final	9:00 AM	60	400		1400					
5	Initial	9:00 AM	15	0	400	0	1300	2.19	2.38	0.86	0.94
	Final	9:15 AM	75	400		1300					
6	Initial	9:15 AM	15	0	400	0	1500	2.19	2.74	0.86	1.08
	Final	9:30 AM	90	400		1500					

INFILTRATION CALCULATIONS

Project Name	Poplar 18 Industrial Park
Project Location	Hesperia, California
Project Number	22G134-2
Engineer	Caleb Brackett

Infiltration Test No I-2

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	10:00 AM	15	0	350	0	3400	1.92	6.21	0.76	2.45
	Final	10:15 AM	15	350		3400					
2	Initial	10:15 AM	15	0	950	0	1600	5.21	2.92	2.05	1.15
	Final	10:30 AM	30	950		1600					
3	Initial	10:30 AM	15	0	1050	0	2000	5.76	3.65	2.27	1.44
	Final	10:45 AM	45	1050		2000					
4	Initial	10:45 AM	15	0	300	0	2200	1.64	4.02	0.65	1.58
	Final	11:00 AM	60	300		2200					
5	Initial	11:00 AM	15	0	300	0	1100	1.64	2.01	0.65	0.79
	Final	11:15 AM	75	300		1100					
6	Initial	11:15 AM	15	0	350	0	1300	1.92	2.38	0.76	0.94
	Final	11:30 AM	90	350		1300					
7	Initial	11:30 AM	15	0	300	0	1200	1.64	2.19	0.65	0.86
	Final	11:45 AM	105	300		1200					

INFILTRATION CALCULATIONS

Project Name	Poplar 18 Industrial Park
Project Location	Hesperia, California
Project Number	22G134-2
Engineer	Caleb Brackett

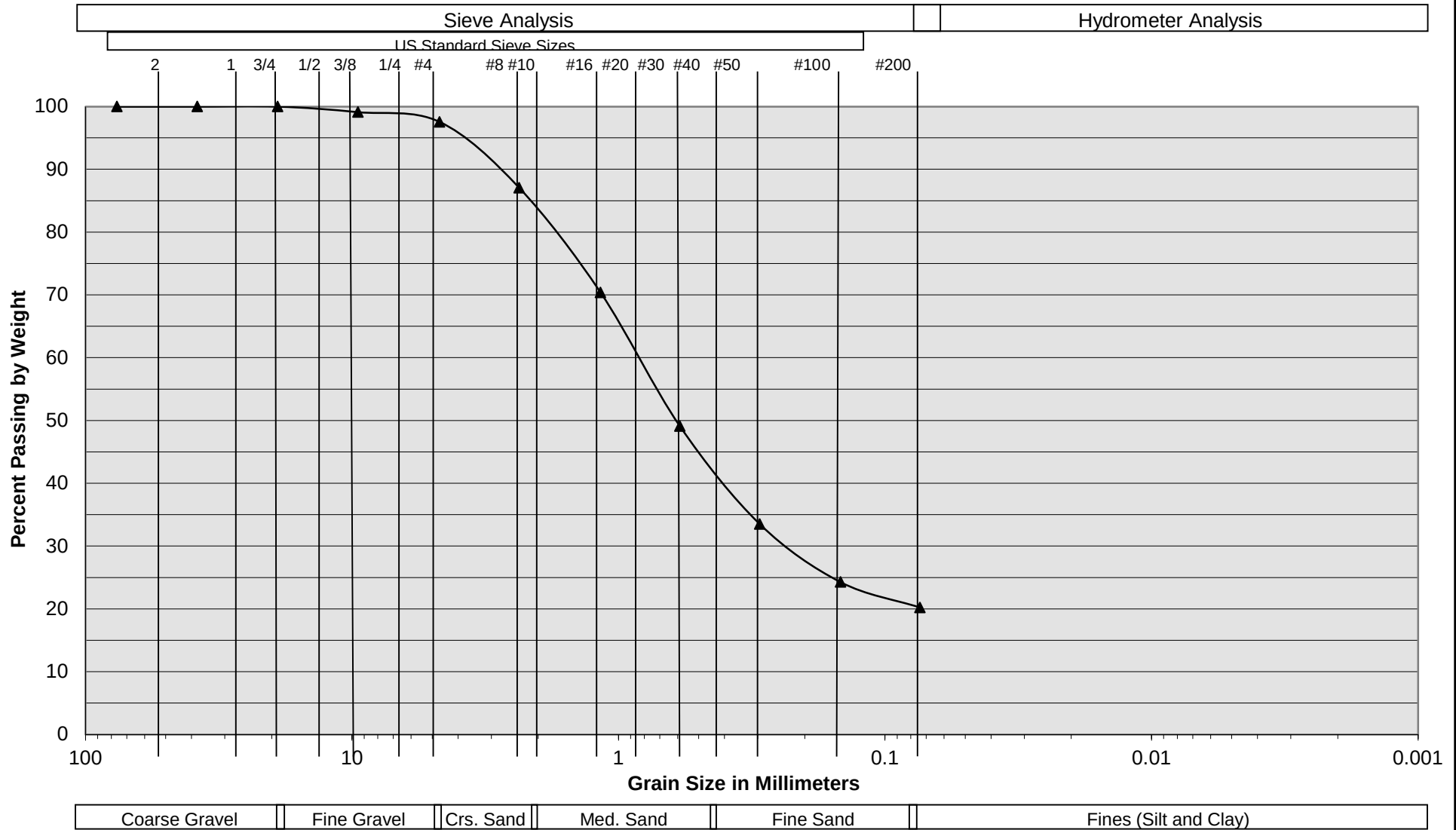
Infiltration Test No I-3

Constants			
	Diameter (ft)	Area (ft ²)	Area (cm ²)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval Elapsed (min)	Flow Readings				Infiltration Rates			
				Inner Ring (ml)	Ring Flow (cm ³)	Annular Ring (ml)	Space Flow (cm ³)	Inner Ring* (cm/hr)	Annular Space* (cm/hr)	Inner Ring* (in/hr)	Annular Space* (in/hr)
1	Initial	12:00 PM	15	0	750	0	3800	4.11	6.94	1.62	2.73
	Final	12:15 PM	15	750		3800					
2	Initial	12:15 PM	15	0	650	0	3500	3.56	6.40	1.40	2.52
	Final	12:30 PM	30	650		3500					
3	Initial	12:30 PM	15	0	550	0	3100	3.02	5.66	1.19	2.23
	Final	12:45 PM	45	550		3100					
4	Initial	12:45 PM	15	0	500	0	2700	2.74	4.93	1.08	1.94
	Final	1:00 PM	60	500		2700					
5	Initial	1:00 PM	15	0	450	0	2200	2.47	4.02	0.97	1.58
	Final	1:15 PM	75	450		2200					
6	Initial	1:15 PM	15	0	450	0	1900	2.47	3.47	0.97	1.37
	Final	1:30 PM	90	450		1900					

Grain Size Distribution



Sample Description	I-1 @ 12'
Soil Classification	OLDER ALLUVIUM: Light Brown Silty fine to coarse Sand
Poplar 18 Industrial Park Hesperia, California Project No. 22G134-2 PLATE C- 1	 SOUTHERN CALIFORNIA GEOTECHNICAL <i>A California Corporation</i>

Grain Size Distribution



Sample Description

I-2 @ 12'

Soil Classification

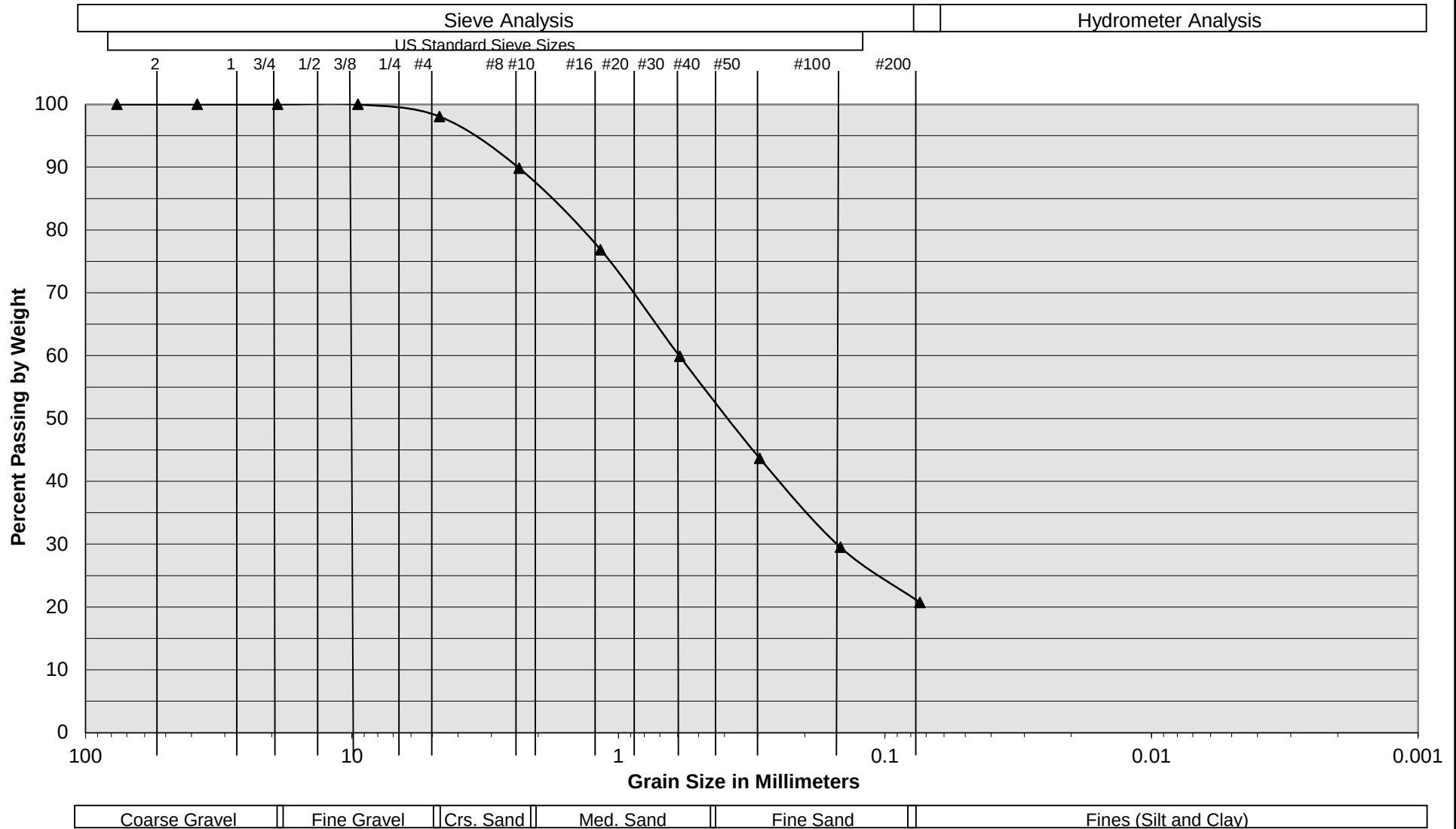
OLDER ALLUVIUM: Light Brown Silty fine to coarse Sand, trace fine Gravel

Poplar 18 Industrial Park
Hesperia, California
Project No. 22G134-2
PLATE C- 2



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

Grain Size Distribution



Sample Description	I-3 @ 12'
Soil Classification	OLDER ALLUVIUM: Light Brown Silty fine to coarse Sand
Poplar 18 Industrial Park Hesperia, California Project No. 22G134-2 PLATE C- 3	 SOUTHERN CALIFORNIA GEOTECHNICAL <i>A California Corporation</i>

Appendix G-2

Preliminary Water Quality Management Plan

MOJAVE RIVER WATERSHED

Preliminary Water Quality Management Plan

For:

Poplar 18 Industrial Park

PARCEL MAP NO. XXX

Prepared for:

Covington Development Group, Inc

3 Corporate Plaza, Suite 230

Newport Beach, CA 92660

(949) 706-8614

Prepared by:

WestLAND Group

4150 Concours, Suite 100

Ontario, CA 91764

(909) 989-9789

Submittal Date: 02/18/2022

Revision No. and Date: 1 - 05/20/2022

Revision No. and Date: Insert No and Current Revision Date

Revision No. and Date: Insert No and Current Revision Date

Revision No. and Date: Insert No and Current Revision Date

Revision No. and Date: Insert No and Current Revision Date

Final Approval Date: _____

Project Owner's Certification

This Mojave River Watershed Water Quality Management Plan (WQMP) has been prepared for Covington Development Group, Inc by WestLAND Group. The WQMP is intended to comply with the requirements of the City of Hesperia and the Phase II Small MS4 General Permit for the Mojave River Watershed. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the Phase II Small MS4 Permit and the intent of San Bernardino County (unincorporated areas of Phelan, Oak Hills, Spring Valley Lake and Victorville) and the incorporated cities of Hesperia and Victorville and the Town of Apple Valley. Once the undersigned transfers its interest in the property, its successors in interest and the city/county/town shall be notified of the transfer. The new owner will be informed of its responsibility under this WQMP. A copy of the approved WQMP shall be available on the subject site in perpetuity.

"I certify under a penalty of law that the provisions (implementation, operation, maintenance, and funding) of the WQMP have been accepted and that the plan will be transferred to future successors."

Project Data			
Permit/Application Number(s):	TBD	Grading Permit Number(s):	TBD
Tract/Parcel Map Number(s):	TBD	Building Permit Number(s):	TBD
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			
Owner's Signature			
Owner Name: Michael Di Sano			
Title	Senior Director		
Company	Covington Development Group, Inc		
Address	3 Corporate Plaza, Suite 230		
Email	mdisano@covingtongroupinc.com		
Telephone #	(949) 706-8614		
Signature		Date	

Preparer's Certification

Project Data			
Permit/Application Number(s):	TBD	Grading Permit Number(s):	TBD
Tract/Parcel Map Number(s):	TBD	Building Permit Number(s):	TBD
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan were prepared under my oversight and meet the requirements of the California State Water Resources Control Board Order No. 2013-0001-DWQ.

Engineer: Glenn Chung, PE QSD		PE Stamp Below
Title	Executive Vice President/Principal	
Company	Westland Group, Inc.	
Address	4150 Concoors, Suite 100, Ontario CA 91764	
Email	gchung@westlandgroup.net	
Telephone #	(909) 989-9789	
Signature		
Date		

Table of Contents

Section I Introduction

Section 1 Discretionary Permits	1-1
Section 2 Project Description.....	2-1
2.1 Project Information.....	2-1
2.2 Property Ownership / Management	2-2
2.3 Potential Stormwater Pollutants	2-3
2.4 Water Quality Credits	2-4
Section 3 Site and Watershed Description.....	3-1
Section 4 Best Management Practices.....	4-1
4.1 Source Control and Site Design BMPs	4-1
4.1.1 Source Control BMPs.....	4-1
4.1.2 Site Design BMPs	4-6
4.2 Treatment BMPs	4-7
4.3 Project Conformance Analysis	4-12
4.3.1 Site Design BMP	4-14
4.3.2 Infiltration BMP	4-16
4.3.4 Biotreatment BMP	4-19
4.3.5 Conformance Summary.....	4-23
4.3.6 Hydromodification Control BMP	4-24
4.4 Alternative Compliance Plan (if applicable).....	4-25
Section 5 Inspection & Maintenance Responsibility Post Construction BMPs	5-1
Section 6 Site Plan and Drainage Plan	6-1
6.1. Site Plan and Drainage Plan.....	6-1
6.2 Electronic Data Submittal.....	6-1

Forms

Form 1-1 Project Information	1-1
Form 2.1-1 Description of Proposed Project.....	2-1
Form 2.2-1 Property Ownership/Management	2-2
Form 2.3-1 Pollutants of Concern	2-3
Form 2.4-1 Water Quality Credits	2-4
Form 3-1 Site Location and Hydrologic Features.....	3-1
Form 3-2 Hydrologic Characteristics.....	3-2
Form 3-3 Watershed Description	3-3
Form 4.1-1 Non-Structural Source Control BMP	4-2
Form 4.1-2 Structural Source Control BMP.....	4-4
Form 4.1-3 Site Design Practices Checklist.....	4-6
Form 4.2-1 LID BMP Performance Criteria for Design Capture Volume.....	4-7
Form 4.2-2 Summary of Hydromodification Assessment	4-8
Form 4.2-3 Hydromodification Assessment for Runoff Volume.....	4-9
Form 4.2-4 Hydromodification Assessment for Time of Concentration.....	4-10

Form 4.2-5 Hydromodification Assessment for Peak Runoff	4-11
Form 4.3-1 Infiltration BMP Feasibility.....	4-13
Form 4.3-2 Site Design BMP	4-14
Form 4.3-3 Infiltration LID BMP	4-17
Form 4.3-4 Selection and Evaluation of Biotreatment BMP	4-19
Form 4.3-5 Volume Based Biotreatment – Bioretention and Planter Boxes w/Underdrains ..	4-20
Form 4.3-6 Volume Based Biotreatment- Constructed Wetlands and Extended Detention ...	4-21
Form 4.3-7 Flow Based Biotreatment.....	4-22
Form 4.3-8 Conformance Summary and Alternative Compliance Volume Estimate	4-23
Form 4.3-9 Hydromodification Control BMP	4-24
Form 5-1 BMP Inspection and Maintenance.....	5-1

Section 6.1: Attachment A

- Project Site Boundary
- Pre-Development Condition PWQMP Exhibit
- Post-Development Condition PWQMP Exhibit

Section 6.1: Attachment B

- BMP & LID Device Detail
 - o Underground CMP Detention System
 - o Hydrodynamic Separator

Section 6.2: CD (for Final Engineering)

Section 6.3:

- O&M Plans
- Maintenance Agreements for BMP (for Final Engineering)

Section 6.4: Attachment A – Education Materials (for Final Engineering)

Section 6.4: Attachment B – Preliminary WQMP (for Final Engineering)

Section 6.4: Attachment B - Geotechnical Report (for Final Engineering)

Section 6.5: Calculations

A.

- WAP Report
- Precipitation Data
- Hydrologic Soil Map

B

- 10-Year Rational Method

C

- 10-Year Unit Hydrograph Method

D

- 10-Year Basin Analysis

Section I – Introduction

This WQMP template has been prepared specifically for the Phase II Small MS4 General Permit in the Mojave River Watershed. This location is within the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB). This document should not be confused with the WQMP template for the Santa Ana Phase I area of San Bernardino County.

WQMP preparers must refer to the MS4 Permit for the Mojave Watershed WQMP template and Technical Guidance (TGD) document found at: <http://cms.sbcounty.gov/dpw/Land/NPDES.aspx> to find pertinent arid region and Mojave River Watershed specific references and requirements.

Section 1 Discretionary Permit(s)

Form 1-1 Project Information					
Project Name		Poplar 18 Industrial Park			
Project Owner Contact Name:		Michael Di Sano			
Mailing Address:	3 Corporate Plaza, Suite 230	E-mail Address:	mdisano@covingtongroupinc.com	Telephone:	(949) 706-8614
Permit/Application Number(s):		Tract/Parcel Map Number(s):			
Additional Information/Comments:					
Description of Project:		The project site is located on the northwest corner of the intersection between Mesa Linda Street and Poplar Street and measures to be approximately 17.86 acres. The project site is currently vacant, undeveloped land with poor coverage. The soils have a hydrologic soil group classification of "A", and the site topography shows that stormwater runoff sheet flows to the northeast where it will naturally evaporate and infiltrate into the soil. See the exhibit for the Pre-Development conditions in Appendix A for more information. The proposed site will be an industrial development with one industrial building, parking areas, loading areas, drive aisles, and landscape areas. Stormwater runoff will be collected by nearby catch basins and conveyed to the proposed above ground basins and underground CMP via a storm drain system. Prior to entering the storm drain system, runoff will first be pretreated via filter inserts placed on the catch basins. Further downstream within the storm drain system, the runoff will be further pretreated via a hydrodynamic separator CDS unit prior to entering the underground CMP system. The site proposes one above ground basin to the west and one above ground basin and underground CMP detention system to the east. After pretreatment, runoff will be routed to the designated infiltration/detention BMP. Runoff in Drainage Area A will be routed to the above ground basin to the northwest along with the Underground CMP where it will collect and infiltrate into the soil. Runoff from Drainage Areas B and C will be routed into the same underground infiltration CMP and the above ground basin to the northeast. The basins are sized and designed to prevent flooding from a 100-year storm while also accommodating the required retention volume for water quality purposes. For this project, the basins are designed to capture the entire volume generated from a 100-year storm even meaning that no runoff will be discharged off site. For more information, please refer to the WQMP exhibit in Section 6.1.			

MOJAVE RIVER WATERSHED Water Quality Management Plan (WQMP)

Provide summary of Conceptual WQMP conditions (if previously submitted and approved). Attach complete copy.	N/A
--	------------

Section 2 Project Description

2.1 Project Information

The WQMP shall provide the information listed below. The information provided for Conceptual/Preliminary WQMP should give sufficient detail to identify the major proposed site design and LID BMPs and other anticipated water quality features that impact site planning. Final Project WQMP must specifically identify all BMP incorporated into the final site design and provide other detailed information as described herein.

The purpose of this information is to help determine the applicable development category, pollutants of concern, watershed description, and long term maintenance responsibilities for the project, and any applicable water quality credits. This information will be used in conjunction with the information in Section 3, Site Description, to establish the performance criteria and to select the LID BMP or other BMP for the project or other alternative programs that the project will participate in, which are described in Section 4.

2.1.1 Project Sizing Categorization

If the Project is greater than 5,000 square feet, and not on the excluded list as found on Section 1.4 of the TGD, the Project is a Regulated Development Project.

If the Project is creating and/or replacing greater than 2,500 square feet but less than 5,000 square feet of impervious surface area, then it is considered a Site Design Only project. This criterion is applicable to all development types including detached single family homes that create and/or replace greater than 2,500 square feet of impervious area and are not part of a larger plan of development.

Form 2.1-1 Description of Proposed Project

1 Regulated Development Project Category (Select all that apply):

☒ #1 New development involving the creation of 5,000 ft ² or more of impervious surface collectively over entire site	☐ #2 Significant re-development involving the addition or replacement of 5,000 ft ² or more of impervious surface on an already developed site	☐ #3 Road Project – any road, sidewalk, or bicycle lane project that creates greater than 5,000 square feet of contiguous impervious surface	☐ #4 LUPs – linear underground/overhead projects that has a discrete location with 5,000 sq. ft. or more new constructed impervious surface
--	--	---	--

☐ Site Design Only (Project Total Square Feet > 2,500 but < 5,000 sq.ft.) Will require source control Site Design Measures. Use the "PCMP" Template. Do not use this WQMP Template.

2 Project Area (ft ²):	778,113	3 Number of Dwelling Units:		4 SIC Code:	
---	---------	------------------------------------	--	--------------------	--

5 Is Project going to be phased? Yes ☐ No ☒ If yes, ensure that the WQMP evaluates each phase as a distinct DA, requiring LID BMPs to address runoff at time of completion.

2.2 Property Ownership/Management

Describe the ownership/management of all portions of the project and site. State whether any infrastructure will transfer to public agencies (City, County, Caltrans, etc.) after project completion. State if a homeowners or property owners association will be formed and be responsible for the long-term maintenance of project stormwater facilities. Describe any lot-level stormwater features that will be the responsibility of individual property owners.

Form 2.2-1 Property Ownership/Management

Describe property ownership/management responsible for long-term maintenance of WQMP stormwater facilities:

Maintenance of the WQMP facilities will be the sole responsibility of the property owner:

Covington Development Group, Inc
3 Corporate Plaza, Suite 230
Newport Beach, CA 92660
Contact: Michael Di Sano
Phone: (949) 706-8614

The owner may choose to contract the appropriate employers for the maintenance of stormwater to whom will provide the proper equipment if the current owners do not have the proper equipment and/or knowledge to do so.

Any future property owner(s) whom will succeed Poplar 18 Industrial Park as the entity responsible for long term maintenance.

No infrastructure will be transferred to a public agency after completion. Refer to Section 5 of this WQMP report for detailed maintenance activities.

2.3 Potential Stormwater Pollutants

Best Management Practices (BMP) measures for pollutant generating activities and sources shall be designed consistent with recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment (or an equivalent manual). Pollutant generating activities must be considered when determining the overall pollutants of concern for the Project as presented in Form 2.3-1.

Determine and describe expected stormwater pollutants of concern based on land uses and site activities (refer to Table 3-2 in the TGD for WQMP).

Form 2.3-1 Pollutants of Concern			
Pollutant	Please check: E=Expected, N=Not Expected		Additional Information and Comments
Pathogens (Bacterial / Virus)	E ☒	N ☐	Wild Bird and Pet Waste, Garbage
Nutrients - Phosphorous	E ☒	N ☐	Fertilizers, Food Waste, & Garbage
Nutrients - Nitrogen	E ☒	N ☐	Fertilizer & Waste
Noxious Aquatic Plants	E ☐	N ☒	The proposed development does not include any areas where water will be standing long enough to allow the growth of aquatic plants.
Sediment	E ☒	N ☐	Driveways, Rooftops, Sidewalks, Paved areas & landscape
Metals	E ☒	N ☐	Cars, Trucks & Parking Areas
Oil and Grease	E ☒	N ☐	Leaking Vehicles & Parking Areas
Trash/Debris	E ☒	N ☐	Poorly managed Trash Container & Parking area
Pesticides / Herbicides	E ☒	N ☐	Landscape Area
Organic Compounds	E ☒	N ☐	Cars & Trucks
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	
Other:	E ☐	N ☐	

Section 3 Site and Watershed Description

Describe the project site conditions that will facilitate the selection of BMPs through an analysis of the physical conditions and limitations of the site and its receiving waters. Identify distinct drainage areas (DA) that collect flow from a portion of the site and describe how runoff from each DA (and sub-watershed Drainage Management Areas (DMAs)) is conveyed to the site outlet(s). Refer to Section 3.2 in the TGD for WQMP. The form below is provided as an example. Then complete Forms 3.2 and 3.3 for each DA on the project site. ***If the project has more than one drainage area for stormwater management, then complete additional versions of these forms for each DA / outlet. A map presenting the DMAs must be included as an appendix to the WQMP document.***

Form 3-1 Site Location and Hydrologic Features			
Site coordinates take GPS measurement at approximate center of site	Latitude 34.4168°	Longitude -117.3926°	Thomas Bros Map page 4475
1 San Bernardino County climatic region: ☒ Desert			
2 Does the site have more than one drainage area (DA): Yes ☒ No ☐ If no, proceed to Form 3-2. If yes, then use this form to show a conceptual schematic describing DMAs and hydrologic feature connecting DMAs to the site outlet(s). An example is provided below that can be modified for proposed project or a drawing clearly showing DMA and flow routing may be attached			
<pre> graph LR DA_A[DA A] --> Basin_2[Basin 2] DA_B[DA B] --> Basin_2 DA_B --> Basin_1[Basin 1] DA_C[DA C] --> Basin_1 Basin_2 --> CMP[Underground CMP] Basin_1 --> CMP </pre>			
Conveyance	Briefly describe on-site drainage features to convey runoff that is not retained within a DMA		
DA1 DMA C flows to DA1 DMA A	Ex. Bioretention overflow to vegetated bioswale with 4' bottom width, 5:1 side slopes and bed slope of 0.01. Conveys runoff for 1000' through DMA 1 to existing catch basin on SE corner of property		
DA A to Basin 2	Runoff sheet flows into the nearest catch basin and routed into the above ground basin, Basin 2 and underground CMP infiltration system.		
DA B/C to Basin 1	Runoff sheet flows into the nearest catch basin and routed into the underground CMP infiltration system and above ground basin, Basin 1.		
DA C to Basin 2			

Form 3-2 Existing Hydrologic Characteristics for Drainage Area 1				
For Drainage Area 1's sub-watershed DMA, provide the following characteristics	DA A	DA B		
1 DMA drainage area (ft ²)	418,622	359,491		
2 Existing site impervious area (ft ²)	0	0		
3 Antecedent moisture condition <i>For desert areas, use http://www.sbcounty.gov/dpw/floodcontrol/pdf/20100412_map.pdf</i>	AMC II	AMC II		
4 Hydrologic soil group <i>Refer to County Hydrology Manual Addendum for Arid Regions – http://www.sbcounty.gov/dpw/floodcontrol/pdf/20100412_addendum.pdf</i>	A	A		
5 Longest flowpath length (ft)	848	630		
6 Longest flowpath slope (ft/ft)	0.0200	0.0191		
7 Current land cover type(s) <i>Select from Fig C-3 of Hydrology Manual</i>	Grass, Annual or Perennial (Undeveloped)	Grass, Annual or Perennial (Undeveloped)		
8 Pre-developed pervious area condition: <i>Based on the extent of wet season vegetated cover good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating</i>	Poor	Poor		

Form 3-3 Watershed Description for Drainage Area	
Receiving waters Refer to SWRCB site: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml	Mojave River (Mojave Forks Reservoir outlet to Upper Narrows) Deep Creek (San Bernardino County) Oro Grande Wash Owner: SBCFCD
Applicable TMDLs http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml	Mojave River (Mojave Forks Reservoir outlet to Upper Narrows) N/A Deep Creek (San Bernardino County) N/A Oro Grande Wash N/A
303(d) listed impairments http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml	Mojave River (Mojave Forks Reservoir outlet to Upper Narrows) Fluoride Deep Creek (San Bernardino County) N/A Oro Grande Wash N/A
Environmentally Sensitive Areas (ESA) Refer to Watershed Mapping Tool – http://sbcounty.permitrack.com/WAP	Environmentally Sensitive Areas within 200': DESERT TORTOISE HABITAT CAT 3
Hydromodification Assessment	☒ Yes Complete Hydromodification Assessment. Include Forms 4.2-2 through Form 4.2-5 and Hydromodification BMP Form 4.3-9 in submittal ☐ No

Section 4 Best Management Practices (BMP)

4.1 Source Control BMPs and Site Design BMP Measures

The information and data in this section are required for both Regulated Development and Site Design Only Projects. Source Control BMPs and Site Design BMP Measures are the basis of site-specific pollution management.

4.1.1 Source Control BMPs

Non-structural and structural source control BMP are required to be incorporated into all new development and significant redevelopment projects. Form 4.1-1 and 4.1-2 are used to describe specific source control BMPs used in the WQMP or to explain why a certain BMP is not applicable. Table 7-3 of the TGD for WQMP provides a list of applicable source control BMP for projects with specific types of potential pollutant sources or activities. The source control BMP in this table must be implemented for projects with these specific types of potential pollutant sources or activities.

The preparers of this WQMP have reviewed the source control BMP requirements for new development and significant redevelopment projects. The preparers have also reviewed the specific BMP required for project as specified in Forms 4.1-1 and 4.1-2. All applicable non-structural and structural source control BMP shall be implemented in the project.

The identified list of source control BMPs correspond to the CASQA Stormwater BMP Handbook for New Development and Redevelopment.

Form 4.1-1 Non-Structural Source Control BMPs				
Identifier	Name	Check One		Describe BMP Implementation OR, if not applicable, state reason
		Included	Not Applicable	
N1	Education of Property Owners, Tenants and Occupants on Stormwater BMPs	☒	☐	The current owner/developer and future owners and their POA shall be familiar with the contents of this WQMP and County & City ordinances and brochures and furnish copies of these documents to all future property owners.
N2	Activity Restrictions	☒	☐	Property owners and their tenants or occupants shall not be allowed to discharge chemicals, chemical residues, wastewater or other prohibited discharges listed in the City stormwater Ordinance, to the outside, paved areas of the site; or store chemicals or other pollutant sources in a non-spill contained or covered facilities as stipulated in the CC&Rs.
N3	Landscape Management BMPs	☒	☐	The POA and their landscape maintenance contractor shall inspect the irrigation system plant health and erosion problems after each landscape procedure and shall report all repairs and problems to the POA. All routine landscaping maintenance.
N4	BMP Maintenance	☒	☐	The POA shall inspect for standing water in the water retention/infiltration basins, 48 hours after storm events. BMP maintenance shall be performed per the schedule in Form 5-1, as needed to restore free drainage.
N5	Title 22 CCR Compliance (How development will comply)	☒	☐	The POA will file appropriate hazardous material disclosures, if any storage is conducted, and must comply with all Title 22 CCR, Chapter 29 regulations.
N6	Local Water Quality Ordinances	☒	☐	The POA shall ensure that all maintenance activities at the site comply with the City of Hesperia's Stormwater Ordinance, through the implementation of BMPs.
N7	Spill Contingency Plan	☒	☐	Building operators shall prepare specific plans based on materials on site for the cleanup of spills. Plans shall mandate stock piling of cleanup materials, notification of agencies, disposal, documentation, ect.
N8	Underground Storage Tank Compliance	☐	☒	There are no underground storage tanks at this site.
N9	Hazardous Materials Disclosure Compliance	☐	☒	The current owner and the future POA shall prohibit the storage of hazardous materials.

Form 4.1-1 Non-Structural Source Control BMPs				
Identifier	Name	Check One		Describe BMP Implementation OR, if not applicable, state reason
		Included	Not Applicable	
N10	Uniform Fire Code Implementation	☒	☐	The current owners or the future POA shall require all fire code requirements to be implemented at this project site.
N11	Litter/Debris Control Program	☒	☐	The property owners, POA and their contractor shall pick up litter and sweep and clean the existing trash enclosure weekly. The trash enclosure is designed to divert all flows around the dumpsters and shall be roofed. The HOA shall contract with a refuse company to have the dumpsters emptied on a weekly basis, at a minimum.
N12	Employee Training	☒	☐	The POA shall require all maintenance contractors to train their employees in stormwater BMP implementation.
N13	Housekeeping of Loading Docks	☒	☐	Dock areas shall be swept regularly with litter control and cleanup procedures eliminating the use of water.
N14	Catch Basin Inspection Program	☒	☐	The on-site catch basins shall be inspected monthly during the rainy season (October-May) and before and after each storm to ensure proper operation. The HOA shall contract with a qualified landscape contractor to inspect and clean out accumulation of trash, litter and sediment and check for evidence of illegal dumping of waste materials into on-site drains.
N15	Vacuum Sweeping of Private Streets and Parking Lots	☒	☐	The paved areas and common open areas of the project site shall be swept and cleaned weekly by the POA's contractor
N16	Other Non-structural Measures for Public Agency Projects	☐	☒	This development is not part of a Public Agency Project.
N17	Comply with all other applicable NPDES permits	☒	☐	The developer of this site shall comply with all BMP implementation requirements of the City of Hesperia for Stormwater discharges during construction of this project and shall file for a permit coverage under the Statewide General Construction Stormwater Permit, prior to beginning construction/grading activities at this site. Following occupancy, owners, tenants, and POA shall comply with SB County MS4 Permit requirements, enforced by the City of Hesperia.

Form 4.1-2 Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, If not applicable, state reason
		Included	Not Applicable	
S1	Provide storm drain system stencilling and signage (CASQA New Development BMP Handbook SD-13)	☒	☐	A painted message "No Dumping-Drains to River" shall be placed on each catch basin by developer. The message shall be inspected annually & repainted as necessary by the POA.
S2	Design and construct outdoor material storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD-34)	☐	☒	This development does not include the storage of materials outdoors.
S3	Design and construct trash and waste storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD-32)	☒	☐	Stormwater flows are diverted away from the trash enclosure. All dumpsters shall have working lids which shall be kept closed, at all times. Trash enclosure shall comply with CASQA SD-32 and shall have doors and a solid roof.
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control (Statewide Model Landscape Ordinance; CASQA New Development BMP Handbook SD-12)	☒	☐	The irrigation system will include devices to prevent low head drainage, overspray and run off through the use of pressure regulating devices, check valves, rain shutoff valves, flow sensors, pressure drop sensors, proper spacing, low precipitation emission devices and ET or weather-based controllers. Landscape and irrigation shall be consistent with the State Model Water Efficient landscape Ordinance and the City of Ontario landscape Development Standards. Plants installed will be arranged according to similar hydrozones and meet the required water budget for the site. Shade trees shall be used to intercept rainwater and reduce heat gain on paving.
S5	Finish grade of landscaped areas at a minimum of 1-2 inches below top of curb, sidewalk, or pavement	☒	☐	All landscaped areas shall comply with depressed grading requirements by finish grading to a minimum of 1" below pavement grades or top-of-curb.
S6	Protect slopes and channels and provide energy dissipation (CASQA New Development BMP Handbook SD-10)	☒	☐	All slopes shall be hard lined, rip-rapped or vegetated to provide erosion protection and prevent sediment transport
S7	Covered dock areas (CASQA New Development BMP Handbook SD-31)	☐	☒	Unloading of truck trailers at docks will occur under cover of the building. It is not feasible to cover the entire loading area as it would be cost prohibitive. Project will incorporate dock high rollup doors and sweeping activities at the outside of the building.
S8	Covered maintenance bays with spill containment plans (CASQA New Development BMP Handbook SD-31)	☐	☒	Maintenance bays are not proposed as a part of this development, and no maintenance activities will be allowed on site.

MOJAVE RIVER WATERSHED Water Quality Management Plan (WQMP)

S9	Vehicle wash areas with spill containment plans (CASQA New Development BMP Handbook SD-33)	☐	☒	Vehicle wash areas are not provided as part of this development.
S10	Covered outdoor processing areas (CASQA New Development BMP Handbook SD-36)	☐	☒	Outdoor processing is not associated with the proposed development.
Form 4.1-2 Structural Source Control BMPs				
Identifier	Name	Check One		Describe BMP Implementation OR, If not applicable, state reason
		Included	Not Applicable	
S11	Equipment wash areas with spill containment plans (CASQA New Development BMP Handbook SD-33)	☐	☒	Outdoor equipment is not associated with the proposed development.
S12	Fueling areas (CASQA New Development BMP Handbook SD-30)	☐	☒	Fueling areas are not included as part of this development.
S13	Hillside landscaping (CASQA New Development BMP Handbook SD-10)	☐	☒	No hillsides will require re-vegetation as part of the proposed development.
S14	Wash water control for food preparation areas	☐	☒	The proposed development does not include food preparation areas.
S15	Community car wash racks (CASQA New Development BMP Handbook SD-33)	☐	☒	The proposed development does not include community car wash areas

4.1.2 Site Design BMPs

As part of the planning phase of a project, the site design practices associated with new LID requirements in the Phase II Small MS4 Permit must be considered. Site design BMP measures can result in smaller Design Capture Volume (DCV) to be managed by both LID and hydromodification control BMPs by reducing runoff generation.

As is stated in the Permit, it is necessary to evaluate site conditions such as soil type(s), existing vegetation and flow paths will influence the overall site design.

Describe site design and drainage plan including:

- A narrative of site design practices utilized or rationale for not using practices
- A narrative of how site plan incorporates preventive site design practices
- Include an attached Site Plan layout which shows how preventative site design practices are included in WQMP

Refer to Section 5.2 of the TGD for WQMP for more details.

Form 4.1-3 Site Design Practices Checklist
Site Design Practices <i>If yes, explain how preventative site design practice is addressed in project site plan. If no, other LID BMPs must be selected to meet targets</i>
Minimize impervious areas: Yes ☒ No ☐ Explanation: Impervious areas will be minimized to the maximum extent practicable. The proposed development requires large areas for loading docks and building foot prints.
Maximize natural infiltration capacity; Including improvement and maintenance of soil: Yes ☒ No ☐ Explanation: All pervious areas will be below adjacent impervious areas to maximize natural infiltration, and the project site utilizes subsurface infiltration basins.
Preserve existing drainage patterns and time of concentration: Yes ☐ No ☒ Explanation: Post-development has different travel distance, surface roughness and time concentration from the existing condition.
Disconnect impervious areas. Including rerouting of rooftop drainage pipes to drain stormwater to storage or infiltration BMPs instead of to storm drain : Yes ☒ No ☐ Explanation: Most areas are run through landscape areas prior to entering the storm drain system. Roof area will be conveyed through adjacent landscaping, where feasible.
Use of Porous Pavement.: Yes ☐ No ☒ Explanation: The project does not propose areas with porous pavement.
Protect existing vegetation and sensitive areas: Yes ☐ No ☒ Explanation: Native vegetation has been mostly removed by agricultural activities, and the existing undeveloped area will not be preserved.
Re-vegetate disturbed areas. Including planting and preservation of drought tolerant vegetation. : Yes ☒ No ☐ Explanation: Any areas that are disturbed will be stabilized prior to project completion.

Minimize unnecessary compaction in stormwater retention/infiltration basin/trench areas: Yes ☒ No ☐ Explanation: Landscaping areas will be staked off after rough grading has been completed to prevent excessive compaction, the areas in which the subsurface basins are to be constructed will minimize compaction.
Utilize naturalized/rock-lined drainage swales in place of underground piping or imperviously lined swales: Yes ☐ No ☒ Explanation: The project does not incorporate naturalized/ rock-lined drainage swales in place of underground piping.
Stake off areas that will be used for landscaping to minimize compaction during construction : Yes ☒ No ☐ Explanation: Landscaping areas will be staked off after rough grading has been completed to prevent excessive compaction.
Use of Rain Barrels and Cisterns, Including the use of on-site water collection systems.: Yes ☐ No ☒ Explanation: The project does not incorporate rain barrels and cisterns.
Stream Setbacks. Includes a specified distance from an adjacent stream: : Yes ☐ No ☒ Explanation: There are no streams adjacent to the property.

It is noted that, in the Phase II Small MS4 Permit, site design elements for green roofs and vegetative swales are required. Due to the local climatology in the Mojave River Watershed, proactive measures are taken to maximize the amount of drought tolerant vegetation. It is not practical in this region to have green roofs or vegetative swales. As part of site design the project proponent should utilize locally recommended vegetation types for landscaping. Typical landscaping recommendations are found in following local references:

San Bernardino County Special Districts:

Guide to High Desert Landscaping -

<http://www.specialdistricts.org/Modules/ShowDocument.aspx?documentid=795>

Recommended High-Desert Plants -

<http://www.specialdistricts.org/modules/showdocument.aspx?documentid=553>

Mojave Water Agency:

Desert Ranch: <http://www.mojavewater.org/files/desertranchgardenprototype.pdf>

Summertree: <http://www.mojavewater.org/files/Summertree-Native-Plant-Brochure.pdf>

Thornless Garden: <http://www.mojavewater.org/files/thornlessgardenprototype.pdf>

Mediterranean Garden: <http://www.mojavewater.org/files/mediterraneangardenprototype.pdf>

Lush and Efficient Garden: <http://www.mojavewater.org/files/lushandefficientgardenprototype.pdf>

Alliance for Water Awareness and Conservation (AWAC) outdoor tips – <http://hdawac.org/save-outdoors.html>

4.2 Treatment BMPs

After implementation and design of both Source Control BMPs and Site Design BMP measures, any remaining runoff from impervious DMAs must be directed to one or more on-site, treatment BMPs (LID or biotreatment) designed to infiltrate, evapotranspire, and/or bioretain the amount of runoff specified in Permit Section E.12.e (ii)(c) Numeric Sizing Criteria for Storm Water Retention and Treatment.

4.2.1 Project Specific Hydrology Characterization

The purpose of this section of the Project WQMP is to establish targets for post-development hydrology based on performance criteria specified in Section E.12.e.ii.c and Section E.12.f of the Phase II Small MS4 Permit. These targets include runoff volume for water quality control (referred to as LID design capture volume), and runoff volume, time of concentration, and peak runoff for protection from hydromodification.

If the project has more than one outlet for stormwater runoff, then complete additional versions of these forms for each DA / outlet.

It is noted that in the Phase II Small MS4 Permit jurisdictions, the LID BMP Design Capture Volume criteria is based on the 2-year rain event. The hydromodification performance criterion is based on the 10-year rain event.

Methods applied in the following forms include:

- For LID BMP Design Capture Volume (DCV), San Bernardino County requires use of the P_6 method (Form 4.2-1) For pre- and post-development hydrologic calculation, San Bernardino County requires the use of the Rational Method (San Bernardino County Hydrology Manual Section D). Forms 4.2-2 through Form 4.2-5 calculate hydrologic variables including runoff volume, time of concentration, and peak runoff from the project site pre- and post-development using the Hydrology Manual Rational Method approach. For projects greater than 640 acres (1.0 mi²), the Rational Method and these forms should not be used. For such projects, the Unit Hydrograph Method (San Bernardino County Hydrology Manual Section E) shall be applied for hydrologic calculations for hydromodification performance criteria.

Refer to Section 4 in the TGD for WQMP for detailed guidance and instructions.

Form 4.2-1 LID BMP Performance Criteria for Design Capture Volume (DA 1)		
¹ Project area DA 1 (ft ²): 104,677	² Imperviousness after applying preventative site design practices (Imp%): 81	³ Runoff Coefficient (Rc): 0.61 $R_c = 0.858(\text{Imp}\%)^{\wedge}3 - 0.78(\text{Imp}\%)^{\wedge}2 + 0.774(\text{Imp}\%) + 0.04$
⁴ Determine 1-hour rainfall depth for a 2-year return period P _{2yr-1hr} (in): 0.458 http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html		
⁵ Compute P ₆ , Mean 6-hr Precipitation (inches): 0.57 $P_6 = \text{Item 4} * C_1$, where C_1 is a function of site climatic region specified in Form 3-1 Item 1 (Desert = 1.2371)		
⁶ Drawdown Rate Use 48 hours as the default condition. Selection and use of the 24 hour drawdown time condition is subject to approval by the local jurisdiction. The necessary BMP footprint is a function of drawdown time. While shorter drawdown times reduce the performance criteria for LID BMP design capture volume, the depth of water that can be stored is also reduced.		24-hrs ☐ 48-hrs ☒
⁷ Compute design capture volume, DCV (ft ³): 5,929 $\text{DCV} = 1/12 * [\text{Item 1} * \text{Item 3} * \text{Item 5} * C_2]$, where C_2 is a function of drawdown rate (24-hr = 1.582; 48-hr = 1.963) Compute separate DCV for each outlet from the project site per schematic drawn in Form 3-1 Item 2		

Form 4.2-1 LID BMP Performance Criteria for Design Capture Volume (DA 2)		
¹ Project area DA 1 (ft ²): 673,436	² Imperviousness after applying preventative site design practices (Imp%): 81	³ Runoff Coefficient (Rc): 0.61 $R_c = 0.858(\text{Imp}\%)^{\wedge}3 - 0.78(\text{Imp}\%)^{\wedge}2 + 0.774(\text{Imp}\%) + 0.04$
⁴ Determine 1-hour rainfall depth for a 2-year return period P _{2yr-1hr} (in): 0.458 http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html		
⁵ Compute P ₆ , Mean 6-hr Precipitation (inches): 0.57 $P_6 = \text{Item 4} * C_1$, where C_1 is a function of site climatic region specified in Form 3-1 Item 1 (Desert = 1.2371)		
⁶ Drawdown Rate Use 48 hours as the default condition. Selection and use of the 24 hour drawdown time condition is subject to approval by the local jurisdiction. The necessary BMP footprint is a function of drawdown time. While shorter drawdown times reduce the performance criteria for LID BMP design capture volume, the depth of water that can be stored is also reduced.		24-hrs ☐ 48-hrs ☒
⁷ Compute design capture volume, DCV (ft ³): 38,147 $\text{DCV} = 1/12 * [\text{Item 1} * \text{Item 3} * \text{Item 5} * C_2]$, where C_2 is a function of drawdown rate (24-hr = 1.582; 48-hr = 1.963) Compute separate DCV for each outlet from the project site per schematic drawn in Form 3-1 Item 2		

Form 4.2-2 Summary of Hydromodification Assessment (Entire Site)			
Is the change in post- and pre- condition flows captured on-site? : Yes ☒ No ☐ If "Yes", then complete Hydromodification assessment of site hydrology for 10yr storm event using Forms 4.2-3 through 4.2-5 and insert results below (<i>Forms 4.2-3 through 4.2-5 may be replaced by computer software analysis based on the San Bernardino County Hydrology Manual- Addendum 1</i>) If "No," then proceed to Section 4.3 BMP Selection and Sizing			
Condition	Runoff Volume (ft ³)	Time of Concentration (min)	Peak Runoff (cfs)
Pre-developed	¹ 75,376 <i>Form 4.2-3 Item 12</i>	² 16.22 <i>Form 4.2-4 Item 13</i>	³ 19.88 <i>Form 4.2-5 Item 10</i>
Post-developed	⁴ 182,860 <i>Form 4.2-3 Item 13</i>	⁵ 5.42 <i>Form 4.2-4 Item 14</i>	⁶ 46.76 <i>Form 4.2-5 Item 14</i>
Difference	⁷ 107,484 <i>Item 4 – Item 1</i>	⁸ 10.80 <i>Item 2 – Item 5</i>	⁹ 26.88 <i>Item 6 – Item 3</i>
Difference (as % of pre-developed)	¹⁰ 143% <i>Item 7 / Item 1</i>	¹¹ 67% <i>Item 8 / Item 2</i>	¹² 135% <i>Item 9 / Item 3</i>

Civil D is a computer software analysis that that can be utilized to assess HCOC and replace Forms 4.2-3 through 4.2-5. The methodology for the program is based off of the San Bernardino County Hydrology Manual. An HCOC summary is provided below and the calculations can be found in Section 6.5.

HCOC Calculation Summary Table	
	10-Year, 24-Hour Runoff Volume (CF)
Pre-Development Condition	75,376
Post-Development Condition	182,860
HCOC Required Volume <i>0.95*(Post-Development) – Pre-Development</i>	98,341
DCV <i>Form 4.2-1</i>	44,076
Notes	Since the HCOC Required Volume is greater than the DCV, the HCOC Required Volume will be used for the BMP design

4.3 BMP Selection and Sizing

Complete the following forms for each project site DA to document that the proposed treatment (LID/Bioretenention) BMPs conform to the project DCV developed to meet performance criteria specified in the Phase II Small MS4 Permit (WQMP Template Section 4.2). For the LID DCV, the forms are ordered according to hierarchy of BMP selection as required by the Phase II Small MS4 Permit (see Section 5.3 in the TGD for WQMP). The forms compute the following for on-site LID BMP:

- Site Design Measures (Form 4.3-2)
- Retention and Infiltration BMPs (Form 4.3-3) or
- Biotreatment BMPs (Form 4.3-4).

Please note that the selected BMPs may also be used as dual purpose for on-site, hydromodification mitigation and management.

At the end of each form, additional fields facilitate the determination of the extent of mitigation provided by the specific BMP category, allowing for use of the next category of BMP in the hierarchy, if necessary.

The first step in the analysis, using Section 5.3.2 of the TGD for WQMP, is to complete Forms 4.3-1 and 4.3-3) to determine if retention and infiltration BMPs are infeasible for the project. For each feasibility criterion in Form 4.3-1, if the answer is “Yes,” provide all study findings that includes relevant calculations, maps, data sources, etc. used to make the determination of infeasibility.

Next, complete Form 4.3-2 to determine the feasibility of applicable Site Design BMPs, and, if their implementation is feasible, the extent of mitigation of the DCV.

If no site constraints exist that would limit the type of BMP to be implemented in a DA, evaluate the use of combinations of LID BMPs, including all applicable Site Design BMPs to maximize on-site retention of the DCV. If no combination of BMP can mitigate the entire DCV, implement the single BMP type, or combination of BMP types, that maximizes on-site retention of the DCV within the minimum effective area.

If the combination of site design, retention and/or infiltration BMPs is unable to mitigate the entire DCV, then the remainder of the volume-based performance criteria that cannot be achieved with site design, retention and/or infiltration BMPs must be managed through biotreatment BMPs. If biotreatment BMPs are used, then they must be sized to provide equivalent effectiveness based on Template Section 4.3.4.

4.3.1 Exceptions to Requirements for Bioretention Facilities

Contingent on a demonstration that use of bioretention or a facility of equivalent effectiveness is infeasible, other types of biotreatment or media filters (such as tree-box-type biofilters or in-vault media filters) may be used for the following categories of Regulated Projects:

- 1) Projects creating or replacing an acre or less of impervious area, and located in a designated pedestrian-oriented commercial district (i.e., smart growth projects), and having at least 85% of the entire project site covered by permanent structures;
- 2) Facilities receiving runoff solely from existing (pre-project) impervious areas; and
- 3) Historic sites, structures or landscapes that cannot alter their original configuration in order to maintain their historic integrity.

Form 4.3-1 Infiltration BMP Feasibility (DA 1)

Feasibility Criterion – Complete evaluation for each DA on the Project Site

¹ Would infiltration BMP pose significant risk for groundwater related concerns?

Yes ☐ No ☒

Refer to Section 5.3.2.1 of the TGD for WQMP

If Yes, Provide basis: (attach)

² Would installation of infiltration BMP significantly increase the risk of geotechnical hazards?

Yes ☐ No ☒

(Yes, if the answer to any of the following questions is yes, as established by a geotechnical expert):

- The location is less than 50 feet away from slopes steeper than 15 percent
- The location is less than ten feet from building foundations or an alternative setback.
- A study certified by a geotechnical professional or an available watershed study determines that stormwater infiltration would result in significantly increased risks of geotechnical hazards.

If Yes, Provide basis: (attach)

³ Would infiltration of runoff on a Project site violate downstream water rights?

Yes ☐ No ☒

If Yes, Provide basis: (attach)

⁴ Is proposed infiltration facility located on hydrologic soil group (HSG) D soils or does the site geotechnical investigation indicate presence of soil characteristics, which support categorization as D soils?

Yes ☐ No ☒

If Yes, Provide basis: (attach)

⁵ Is the design infiltration rate, after accounting for safety factor of 2.0, below proposed facility less than 0.3 in/hr (accounting for soil amendments)?

Yes ☐ No ☒

If Yes, Provide basis: (attach)

⁶ Would on-site infiltration or reduction of runoff over pre-developed conditions be partially or fully inconsistent with watershed management strategies as defined in the WAP, or impair beneficial uses?

Yes ☐ No ☒

See Section 3.5 of the TGD for WQMP and WAP

If Yes, Provide basis: (attach)

⁷ Any answer from Item 1 through Item 3 is "Yes":

Yes ☐ No ☒

If yes, infiltration of any volume is not feasible onsite. Proceed to Form 4.3-4, Selection and Evaluation of Biotreatment BMP.

If no, then proceed to Item 8 below.

⁸ Any answer from Item 4 through Item 6 is "Yes":

Yes ☐ No ☒

If yes, infiltration is permissible but is not required to be considered. Proceed to Form 4.3-2, Site Design BMP.

If no, then proceed to Item 9, below.

⁹ All answers to Item 1 through Item 6 are "No":

Infiltration of the full DCV is potentially feasible, LID infiltration BMP must be designed to infiltrate the full DCV to the MEP.

Proceed to Form 4.3-2, Site Design BMPs.

4.3.2 Site Design BMP

Section E.12.e. of the Small Phase II MS4 Permit emphasizes the use of LID preventative measures; and the use of Site Design Measures reduces the portion of the DCV that must be addressed in downstream BMPs. Therefore, all applicable Site Design Measures shall be provided except where they are mutually exclusive with each other, or with other BMPs. Mutual exclusivity may result from overlapping BMP footprints such that either would be potentially feasible by itself, but both could not be implemented. Please note that while there are no numeric standards regarding the use of Site Design BMPs. If a project cannot feasibly meet BMP sizing requirements or cannot fully address hydromodification, feasibility of all applicable Site Design BMPs must be part of demonstrating that the BMP system has been designed to retain the maximum feasible portion of the DCV. Complete Form 4.3-2 to identify and calculate estimated retention volume from implementing site design BMP. Refer to Section 5.4 in the TGD for more detailed guidance.

Form 4.3-2 Site Design BMPs (DA 1)			
1 Implementation of Impervious Area Dispersion BMP (i.e. routing runoff from impervious to pervious areas), excluding impervious areas planned for routing to on-lot infiltration BMP: Yes ☐ No ☒ If yes, complete Items 2-5; If no, proceed to Item 6	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type (Use additional forms for more BMPs)
2 Total impervious area draining to pervious area (ft ²)			
3 Ratio of pervious area receiving runoff to impervious area			
4 Retention volume achieved from impervious area dispersion (ft ³) $V = \text{Item 2} * \text{Item 3} * (0.5/12)$, assuming retention of 0.5 inches of runoff			
5 Sum of retention volume achieved from impervious area dispersion (ft ³): $V_{\text{retention}} = \text{Sum of Item 4 for all BMPs}$			
6 Implementation of Localized On-lot Infiltration BMPs (e.g. on-lot rain gardens): Yes ☐ No ☒ If yes, complete Items 7-13 for aggregate of all on-lot infiltration BMP in each DA; If no, proceed to Item 14	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type (Use additional forms for more BMPs)
7 Ponding surface area (ft ²)			
8 Ponding depth (ft) (min. 0.5 ft.)			
9 Surface area of amended soil/gravel (ft ²)			
10 Average depth of amended soil/gravel (ft) (min. 1 ft.)			
11 Average porosity of amended soil/gravel			
12 Retention volume achieved from on-lot infiltration (ft ³) $V_{\text{retention}} = (\text{Item 7} * \text{Item 8}) + (\text{Item 9} * \text{Item 10} * \text{Item 11})$			

Form 4.3-2 Site Design BMPs (DA 1)

13 Runoff volume retention from on-lot infiltration (ft³): $V_{\text{retention}} = \text{Sum of Item 12 for all BMPs}$

Form 4.3-2 cont. Site Design BMPs (DA 1)

14 Implementation of Street Trees: Yes ☐ No ☒
If yes, complete Items 14-18. If no, proceed to Item 19

DA DMA
BMP Type

DA DMA
BMP Type

DA DMA
BMP Type
(Use additional forms
for more BMPs)

15 Number of Street Trees

16 Average canopy cover over impervious area (ft²)

17 Runoff volume retention from street trees (ft³)
 $V_{\text{retention}} = \text{Item 15} * \text{Item 16} * (0.05/12)$ assume runoff retention of 0.05 inches

18 Runoff volume retention from street tree BMPs (ft³): $V_{\text{retention}} = \text{Sum of Item 17 for all BMPs}$

19 Total Retention Volume from Site Design BMPs: $\text{Sum of Items 5, 13 and 18}$

4.3.3 Infiltration BMPs

Use Form 4.3-3 to compute on-site retention of runoff from proposed retention and infiltration BMPs. Volume retention estimates are sensitive to the percolation rate used, which determines the amount of runoff that can be infiltrated within the specified drawdown time. The infiltration safety factor reduces field measured percolation to account for potential inaccuracy associated with field measurements, declining BMP performance over time, and compaction during construction. Appendix C of the TGD for WQMP provides guidance on estimating an appropriate safety factor to use in Form 4.3-3.

If site constraints limit the use of BMPs to a single type and implementation of retention and infiltration BMPs mitigate no more than 40% of the DCV, then they are considered infeasible and the Project Proponent may evaluate the effectiveness of BMPs lower in the LID hierarchy of use (Section 5.5 of the TGD for WQMP)

If implementation of infiltrations BMPs is feasible as determined using Form 4.3-1, then LID infiltration BMPs shall be implemented to the MEP (section 4.1 of the TGD for WQMP).

4.3.3.1 Allowed Variations for Special Site Conditions

The bioretention system design parameters of this Section may be adjusted for the following special site conditions:

- 1) Facilities located within 10 feet of structures or other potential geotechnical hazards established by the geotechnical expert for the project may incorporate an impervious cutoff wall between the bioretention facility and the structure or other geotechnical hazard.
- 2) Facilities with documented high concentrations of pollutants in underlying soil or groundwater, facilities located where infiltration could contribute to a geotechnical hazard, and facilities located on elevated plazas or other structures may incorporate an impervious liner and may locate the underdrain discharge at the bottom of the subsurface drainage/storage layer (this configuration is commonly known as a “flow-through planter”).
- 3) Facilities located in areas of high groundwater, highly infiltrative soils or where connection of underdrain to a surface drain or to a subsurface storm drain are infeasible, may omit the underdrain.
- 4) Facilities serving high-risk areas such as fueling stations, truck stops, auto repairs, and heavy industrial sites may be required to provide adequate pretreatment to address pollutants of concern unless these high-risk areas are isolated from storm water runoff or bioretention areas with no chance of spill migration.

Form 4.3-3 Infiltration LID BMP - including underground BMPs (DA 1)

1 Remaining LID DCV not met by site design BMP (ft³): 44,076 $V_{unmet} = \text{Form 4.2-1 Item 7} - \text{Form 4.3-2 Item 19}$

BMP Type Use columns to the right to compute runoff volume retention from proposed infiltration BMP (select BMP from Table 5-4 in TGD for WQMP) - Use additional forms for more BMPs	DA A1 DMA 1 BMP Type Infiltration Basin	DA B1 DMA 1 BMP Type Infiltration Basin	DA B1 DMA 1 BMP Type Infiltration CMP (Use additional forms for more BMPs)
--	---	---	---

2 Infiltration rate of underlying soils (in/hr) See Section 5.4.2 and Appendix C of the TGD for WQMP for minimum requirements for assessment methods	0.7	0.9	8.77
--	-----	-----	------

3 Infiltration safety factor See TGD Section 5.4.2 and Appendix D	2	2	2
---	---	---	---

4 Design percolation rate (in/hr) $P_{design} = \text{Item 2} / \text{Item 3}$	0.35	0.45	4.38
--	------	------	------

5 Ponded water drawdown time (hr) Copy Item 6 in Form 4.2-1	96	96	48
---	----	----	----

6 Maximum ponding depth (ft) BMP specific, see Table 5-4 of the TGD for WQMP for BMP design details	4	4	12
---	---	---	----

7 Ponding Depth (ft) $d_{BMP} = \text{Minimum of } (1/12 * \text{Item 4} * \text{Item 5}) \text{ or Item 6}$	4	4	12
--	---	---	----

8 Infiltrating surface area, SA_{BMP} (ft ²) the lesser of the area needed for infiltration of full DCV or minimum space requirements from Table 5.7 of the TGD for WQMP	7045	6961	84,680
--	------	------	--------

9 Amended soil depth, d_{media} (ft) Only included in certain BMP types, see Table 5-4 in the TGD for WQMP for reference to BMP design details	4	4	N/A
--	---	---	-----

10 Amended soil porosity	0.35	0.35	N/A
--------------------------	------	------	-----

11 Gravel depth, d_{media} (ft) Only included in certain BMP types, see Table 5-4 of the TGD for WQMP for BMP design details	N/A	N/A	0.5
--	-----	-----	-----

12 Gravel porosity	N/A	N/A	0.40
--------------------	-----	-----	------

13 Duration of storm as basin is filling (hrs) Typical ~ 3hrs	3	3	N/A
---	---	---	-----

14 Above Ground Retention Volume (ft ³) $V_{retention} = \text{Item 8} * [\text{Item 7} + (\text{Item 9} * \text{Item 10}) + (\text{Item 11} * \text{Item 12}) + (\text{Item 13} * (\text{Item 4} / 12))]$	31,614	31,412	N/A
--	--------	--------	-----

15 Underground Retention Volume (ft ³) Volume determined using manufacturer's specifications and calculations	N/A	N/A	348,521
---	-----	-----	---------

16 Total Retention Volume from LID Infiltration BMPs: 411,547 (Sum of Items 14 and 15 for all infiltration BMP included in plan)

17 Fraction of DCV achieved with infiltration BMP: 100% $\text{Retention\%} = \text{Item 16} / \text{Form 4.2-1 Item 7}$

18 Is full LID DCV retained onsite with combination of hydrologic source control and LID retention/infiltration BMPs? Yes ☒ No ☐
If yes, demonstrate conformance using Form 4.3-10; If no, then reduce Item 3, Factor of Safety to 2.0 and increase Item 8, Infiltrating Surface Area, such that the portion of the site area used for retention and infiltration BMPs equals or exceeds the minimum effective area thresholds (Table 5-7 of the TGD for WQMP) for the applicable category of development and repeat all above calculations.

4.3.4 Biotreatment BMP

Biotreatment BMPs may be considered if the full LID DCV cannot be met by maximizing retention and infiltration. A key consideration when using biotreatment BMP is the effectiveness of the proposed BMP in addressing the pollutants of concern for the project (see Table 5-5 of the TGD for WQMP).

Use Form 4.3-4 to summarize the potential for volume based and/or flow based biotreatment options to biotreat the remaining unmet LID DCV. Biotreatment computations are included as follows:

- Use Form 4.3-5 to compute biotreatment in small volume based biotreatment BMP (e.g. bioretention w/underdrains);
- Use Form 4.3-6 to compute biotreatment in large volume based biotreatment BMP (e.g. constructed wetlands);
- Use Form 4.3-7 to compute sizing criteria for flow-based biotreatment BMP (e.g. bioswales)

Form 4.3-4 Selection and Evaluation of Biotreatment BMP (DA 1)			
1 Remaining LID DCV not met by site design , or infiltration, BMP for potential biotreatment (ft ³): <i>Form 4.2-1 Item 7 - Form 4.3-2 Item 19 – Form 4.3-3 Item 16</i>		List pollutants of concern <i>Copy from Form 2.3-1.</i>	
2 Biotreatment BMP Selected <i>(Select biotreatment BMP(s) necessary to ensure all pollutants of concern are addressed through Unit Operations and Processes, described in Table 5-5 of the TGD for WQMP)</i>	Volume-based biotreatment <i>Use Forms 4.3-5 and 4.3-6 to compute treated volume</i>		Flow-based biotreatment <i>Use Form 4.3-7 to compute treated flow</i>
	☐ Bioretention with underdrain ☐ Planter box with underdrain ☐ Constructed wetlands ☐ Wet extended detention ☐ Dry extended detention		☐ Vegetated swale ☐ Vegetated filter strip ☐ Proprietary biotreatment
3 Volume biotreated in volume based biotreatment BMP (ft ³): <i>Form 4.3-5 Item 15 + Form 4.3-6 Item 13</i>	4 Compute remaining LID DCV with implementation of volume based biotreatment BMP (ft ³): <i>Item 1 – Item 3</i>		5 Remaining fraction of LID DCV for sizing flow based biotreatment BMP: % <i>Item 4 / Item 1</i>
6 Flow-based biotreatment BMP capacity provided (cfs): <i>Use Figure 5-2 of the TGD for WQMP to determine flow capacity required to provide biotreatment of remaining percentage of unmet LID DCV (Item 5), for the project's precipitation zone (Form 3-1 Item 1)</i>			
7 Metrics for MEP determination: • Provided a WQMP with the portion of site area used for suite of LID BMP equal to minimum thresholds in Table 5-7 of the TGD for WQMP for the proposed category of development: ☐ <i>If maximized on-site retention BMPs is feasible for partial capture, then LID BMP implementation must be optimized to retain and infiltrate the maximum portion of the DCV possible within the prescribed minimum effective area. The remaining portion of the DCV shall then be mitigated using biotreatment BMP.</i>			

4.3.5 Conformance Summary

Complete Form 4.3-8 to demonstrate how on-site LID DCV is met with proposed site design, infiltration, and/or biotreatment BMP. The bottom line of the form is used to describe the basis for infeasibility determination for on-site LID BMP to achieve full LID DCV, and provides methods for computing remaining volume to be addressed in an alternative compliance plan. If the project has more than one outlet, then complete additional versions of this form for each outlet.

Form 4.3-8 Conformance Summary and Alternative Compliance Volume Estimate (DA 1)	
1	Total LID DCV for the Project DA-1 (ft ³): 44,076 <i>Copy Item 7 in Form 4.2-1</i>
2	On-site retention with site design BMP (ft ³): N/A <i>Copy Item 18 in Form 4.3-2</i>
3	On-site retention with LID infiltration BMP (ft ³): 411,547 <i>Copy Item 16 in Form 4.3-3</i>
4	On-site biotreatment with volume based biotreatment BMP (ft ³): N/A <i>Copy Item 3 in Form 4.3-4</i>
5	Flow capacity provided by flow based biotreatment BMP (cfs): N/A <i>Copy Item 6 in Form 4.3-4</i>
6	LID BMP performance criteria are achieved if answer to any of the following is "Yes": - Full retention of LID DCV with site design or infiltration BMP: Yes ☒ No ☐ <i>If yes, sum of Items 2, 3, and 4 is greater than Item 1</i> - Combination of on-site retention BMPs for a portion of the LID DCV and volume-based biotreatment BMP that address all pollutants of concern for the remaining LID DCV: Yes ☐ No ☒ <i>If yes, a) sum of Items 2, 3, 4, and 5 is greater than Item 1, and Items 2, 3 and 4 are maximized; or b) Item 6 is greater than Form 4.3-5 Item 6 and Items 2, 3 and 4 are maximized</i> - On-site retention and infiltration is determined to be infeasible; therefore biotreatment BMP provides biotreatment for all pollutants of concern for full LID DCV: Yes ☐ No ☒ <i>If yes, Form 4.3-1 Items 7 and 8 were both checked yes</i>
7	If the LID DCV is not achieved by any of these means, then the project may be allowed to develop an alternative compliance plan. Check box that describes the scenario which caused the need for alternative compliance: - Combination of Site Design, retention and infiltration, , and biotreatment BMPs provide less than full LID DCV capture: ☐ <i>Checked yes if Form 4.3-4 Item 7 is checked yes, Form 4.3-4 Item 6 is zero, and sum of Items 2, 3, 4, and 5 is less than Item 1. If so, apply water quality credits and calculate volume for alternative compliance, $V_{alt} = (Item\ 1 - Item\ 2 - Item\ 3 - Item\ 4 - Item\ 5) * (100 - Form\ 2.4-1\ Item\ 2)\%$</i> - Facilities, or a combination of facilities, of a different design than in Section E.12.e.(ii)(f) may be permitted if all of the following Phase II Small MS4 General Permit 2013-0001-DWQ 55 February 5, 2013 measures of equivalent effectiveness are demonstrated: 1) Equal or greater amount of runoff infiltrated or evapotranspired; ☐ 2) Equal or lower pollutant concentrations in runoff that is discharged after biotreatment; ☐ 3) Equal or greater protection against shock loadings and spills; ☐ 4) Equal or greater accessibility and ease of inspection and maintenance. ☐

4.3.6 Hydromodification Control BMP

Use Form 4.3-9 to compute the remaining runoff volume retention, after Site Design BMPs are implemented, needed to address hydromodification, and the increase in time of concentration and decrease in peak runoff necessary to meet targets for protection of waterbodies with a potential hydromodification. Describe the proposed hydromodification treatment control BMP. Section 5.6 of the TGD for WQMP provides additional details on selection and evaluation of hydromodification control BMP.

Form 4.3-9 Hydromodification Control BMPs (DA 1)	
1 Volume reduction needed for hydromodification performance criteria (ft ³): 5,401 <i>(Form 4.2-2 Item 4 * 0.95) – Form 4.2-2 Item 1</i>	2 On-site retention with site design and infiltration, BMP (ft ³): 411,547 <i>Sum of Form 4.3-8 Items 2, 3, and 4. Evaluate option to increase implementation of on-site retention in Forms 4.3-2, 4.3-3, and 4.3-4 in excess of LID DCV toward achieving hydromodification volume reduction</i>
3 Remaining volume for hydromodification volume capture (ft ³): 0 <i>Item 1 – Item 2</i>	4 Volume capture provided by incorporating additional on-site BMPs (ft ³): N/A
5 Is Form 4.2-2 Item 11 less than or equal to 5%: Yes ☐ No ☒ <i>If yes, hydromodification performance criteria is achieved. If no, select one or more mitigation options below:</i> - Demonstrate increase in time of concentration achieved by proposed LID site design, LID BMP, and additional on-site BMP ☒ - Increase time of concentration by preserving pre-developed flow path and/or increase travel time by reducing slope and increasing cross-sectional area and roughness for proposed on-site conveyance facilities ☐	
6 Form 4.2-2 Item 12 less than or equal to 5%: Yes ☐ No ☒ <i>If yes, hydromodification performance criteria is achieved. If no, select one or more mitigation options below:</i> Demonstrate reduction in peak runoff achieved by proposed LID site design, LID BMPs, and additional on-site retention BMPs ☒	

Since there was no remaining volume necessary for HCOC mitigation, additional on-site BMPs are not necessary for this project. Basin design and analysis has been implemented to show the decrease in the peak runoff and increase in the time of concentration. The table on the following page provides a summary of the volumes, time of concentration, and peak runoff after taking into account the BMPs. See Section 6.5 for calculations and basin analysis for the 10-year storm.

HCOC Calculation Summary Table			
	10-Year Time of Concentration (Min)	10-Year Peak Runoff (cfs)	10-Year, 24-Hour Runoff Volume (CF)
Pre-Development Condition	16.22	19.88	75,376
Post-Development Condition without BMPs	5.42	46.76	182,860
Post-Development Condition with BMPs	16 hours, 5 minutes (Retention Volume)	0.59	202,074 (Retention Volume)
HCOC Requirement <i>0.95*(Post-Development) – Pre-Development</i>	9.99 (Additional time that must be provided)	24.54 (Runoff reduction)	98,406 (Required Retention)
Notes	The basin retains the entire water quality volume before releasing runoff offsite. For a 10-year storm event, the water quality volume was calculated to be met at 16 hours, 5 minutes.	To comply with HCOC requirements, the allowable flow rate for a 10-year storm is 46.76 – 24.54 = 22.22 cfs	To comply with HCOC requirements, 98,406 CF will need to be retained onsite. The proposed BMPs will retain a total of 343,010 CF.

4.4 Alternative Compliance Plan (if applicable)

Describe an alternative compliance plan (if applicable) for projects not fully able to infiltrate, or biotreat the DCV via on-site LID practices. A project proponent must develop an alternative compliance plan to address the remainder of the LID DCV. Depending on project type some projects may qualify for water quality credits that can be applied to reduce the DCV that must be treated prior to development of an alternative compliance plan (see Form 2.4-1, Water Quality Credits). Form 4.3-9 Item 8 includes instructions on how to apply water quality credits when computing the DCV that must be met through alternative compliance.

Alternative Designs — Facilities, or a combination of facilities, of a different design than in Permit Section E.12.e.(ii)(f) may be permitted if all of the following measures of equivalent effectiveness are demonstrated:

- 1) Equal or greater amount of runoff infiltrated or evapotranspired;
- 2) Equal or lower pollutant concentrations in runoff that is discharged after biotreatment;
- 3) Equal or greater protection against shock loadings and spills;
- 4) Equal or greater accessibility and ease of inspection and maintenance.

The Project Proponent will need to obtain written approval for an alternative design from the Lahontan Regional Water Board Executive Officer (see Section 6 of the TGD for WQMP).

Section 5 Inspection and Maintenance Responsibility for Post Construction BMP

All BMPs included as part of the project WQMP are required to be maintained through regular scheduled inspection and maintenance (refer to Section 8, Post Construction BMP Requirements, in the TGD for WQMP). Fully complete Form 5-1 summarizing all BMP included in the WQMP. Attach additional forms as needed. The WQMP shall also include a detailed Operation and Maintenance Plan for all BMP and a Maintenance Agreement. The Maintenance Agreement must also be attached to the WQMP.

Note that at time of Project construction completion, the Maintenance Agreement must be completed, signed, notarized and submitted to the County Stormwater Department

Form 5-1 BMP Inspection and Maintenance (use additional forms as necessary)			
BMP	Reponsible Party(s)	Inspection/ Maintenance Activities Required	Minimum Frequency of Activities
Onsite storm drain catch basins and piping	Property Owner	Onsite catch basins shall be inspected quarterly for debris buildup and evidence of illegal dumping and shall be cleaned whenever debris/sediment accumulates. Removal can be accomplished by vac-truck or other equally effective method.	Quarterly
Hydrodynamic Separator	Property Owner	Visual inspection and debris removed quarterly per manufactures recommendations	Quarterly
Above ground infiltration/detention basins	Property Owner	Inspections and maintenance by owners contracted maintenance staff to ensure that water infiltrates into the subsurface completely in 48 hours or less. Visual inspection, landscape maintenance, debris removal and erosion damage repair.	Monthly and within 48 hours following a significant storm event to verify there is no standing water.
Underground Infiltration System	Property Owner	Regular inspections of system to observe sediment build up and infiltration capacity. Cleaning of accumulated trash, debris, and sediment as determined by inspections. Cleaning is recommended during dry weather. See manufacturer recommendations for additional maintenance activities.	Monthly and within 48 hours following a significant storm event to verify there is no standing water in the chambers.

MOJAVE RIVER WATERSHED Water Quality Management Plan (WQMP)

Landscape Maintenance	Property Owner	Maintain landscape area vegetation, slope protection and grades, adjacent to hardscape and prevent discharges of landscape maintenance waste into storm drains.	Weekly
Litter Control	Property Owner	Maintain roofed waste collection areas and vacuum-sweep drive aisles and parking areas to remove potential stormwater contamination before anticipated storm events.	Weekly/Monthly
Anti-Dumping Stenciling & Signage	Property Owner	Visual inspection and replacement of damaged or illegible stenciling and signage over on-site catch basins	Annually
Irrigation System	Property Owner	Check and repair the irrigation system. Verify there are no leaks or runoff from landscaped areas. Adjust irrigation heads and system run times as necessary to prevent overwater of vegetation, overspray or run-off from landscape areas and to ensure the health and aesthetic quality of the landscape.	Weekly
Loading Docks	Property Owner	Sweep and clear debris from dock areas to remove potential stormwater contaminants prior to anticipated storms.	Weekly
Catch Basin Filter Inserts	Property Owner	Visual inspect filter for debris buildup. Removal can be accomplished by vac-truck or other equally effective method. See manufacturer recommendations for additional maintenance activities.	Quarterly and within 48 hours following a significant storm event

Section 6 WQMP Attachments

6.1. Site Plan and Drainage Plan

Section 6.1: Attachment A

- Project Site Boundary
- Pre-Development Condition PWQMP Exhibit
- Post-Development Condition PWQMP Exhibit
-

Section 6.1: Attachment B

- BMP & LID Device Detail
 - o Underground CMP Detention System
 - o Hydrodynamic Separator

6.2 Electronic Data Submittal

Section 6.2: CD (for Final Engineering)

6.3 Post Construction

Section 6.3:

- O&M Plans
- Maintenance Agreements for BMP (for Final Engineering)

6.4 Other Supporting Documentation

Section 6.4: Attachment A – Education Materials (for Final Engineering)

Section 6.4: Attachment B – Preliminary WQMP (for Final Engineering)

Section 6.4: Attachment B - Geotechnical Report (for Final Engineering)

6.5 Calculations

Section 6.5: Calculations

A

- WAP Report
- Precipitation Data
- Hydrologic Soil Map

B

- 10-Year Rational Method

C

- 10-Year Unit Hydrograph Method

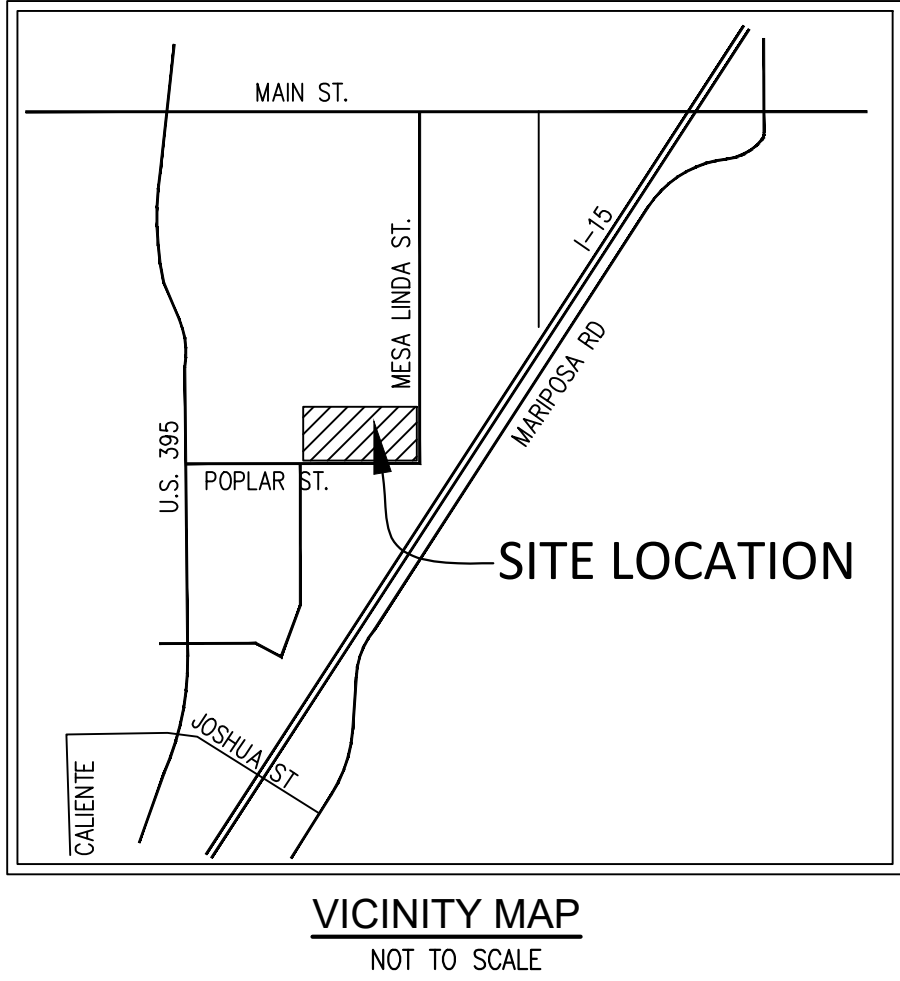
D

- 10-Year Basin Analysis

SECTION 6.1: ATTACHMENT A

Project Site Boundary
Pre-Development Condition PWQMP Exhibit
Post-Development Condition PWQMP Exhibit

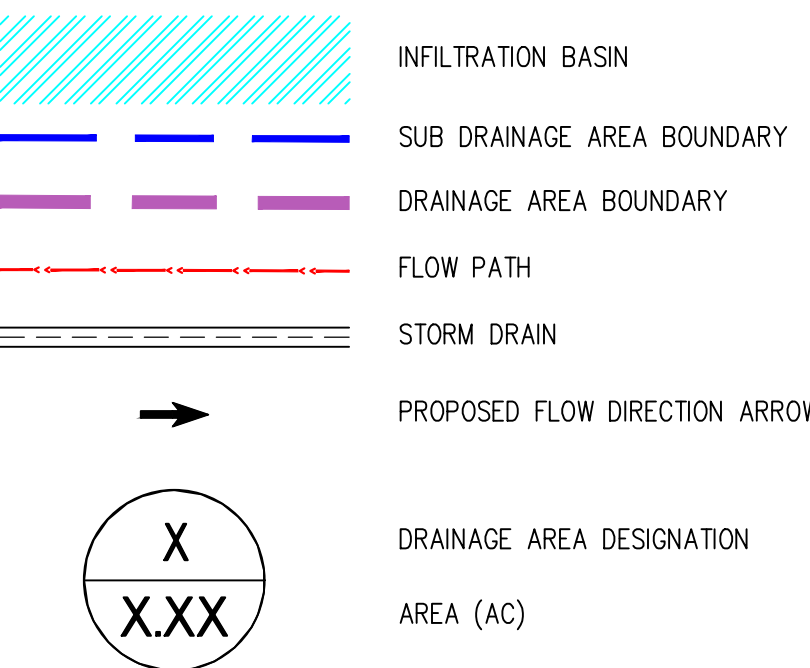
CITY OF HESPERIA
WQMP EXHIBIT
FOR
POPLAR 18 INDUSTRIAL
PARK



HYDROLOGY INFORMATION

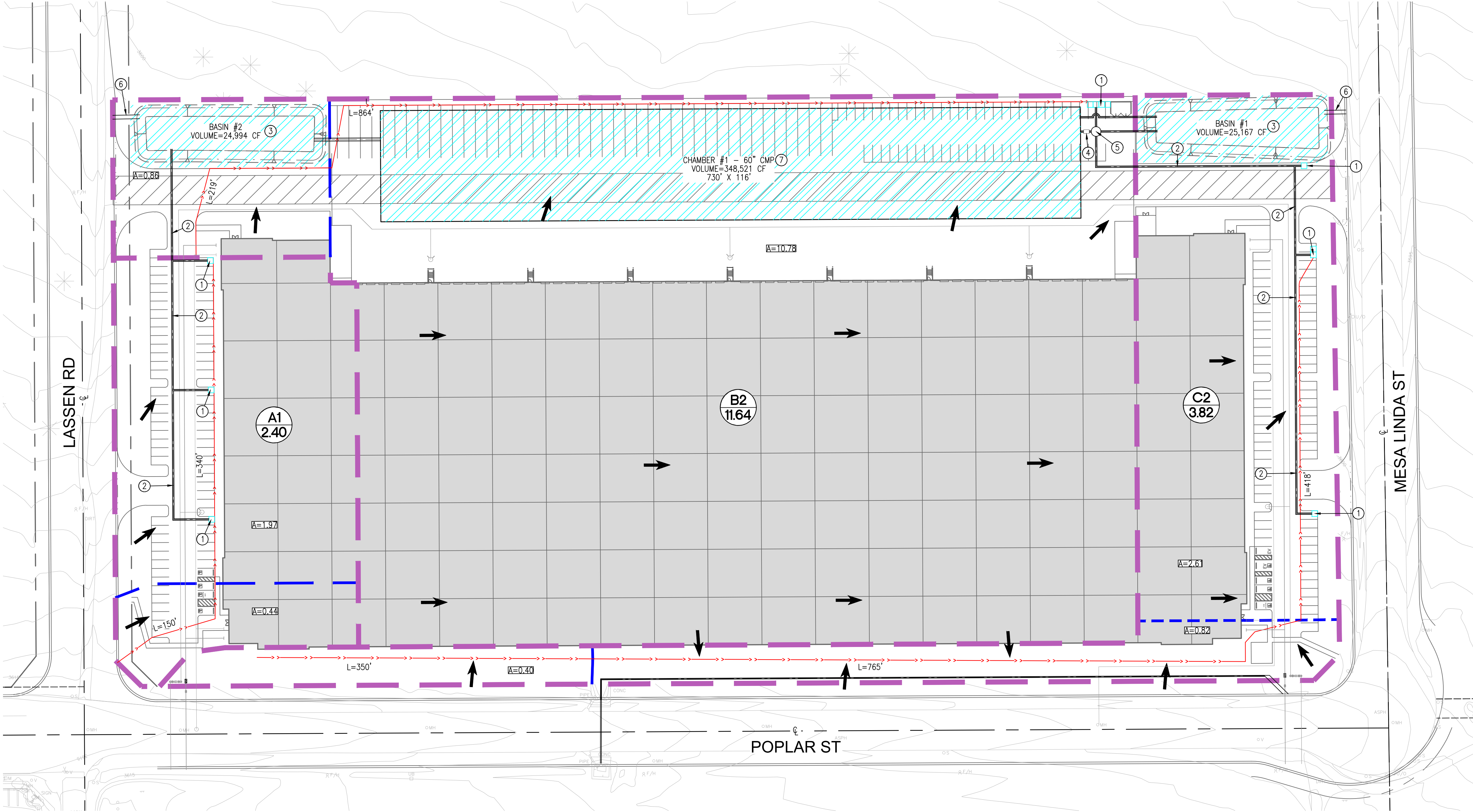
SITE AREA: 17.86 ACRE
SOIL GROUP: A (NRCS WEB SOIL SURVEY)
IMPERVIOUS: 81%
ISOHYETALS: 1.31" (100-YEAR 1 HOUR)
0.785" (10-YEAR 1 HOUR)
CN NUMBER: 67 (SOIL GROUP A)
FREQUENCY: 100 YEAR (FOR STORM DRAIN DESIGN)
10 YEAR (FOR STORMWATER QUALITY)
METHOD: SAN BERNARDINO COUNTY HYDROLOGY MANUAL

LEGEND:

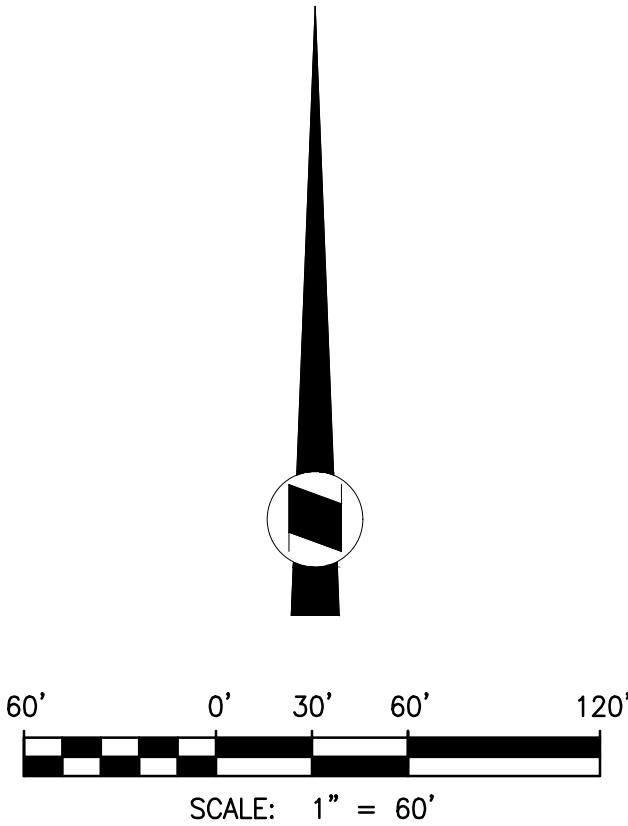


DRAINAGE NOTES:

- 1 PROPOSED CATCH BASIN WITH FILTER INSERT
- 2 PROPOSED STORM DRAIN PIPE PRIVATE MAINTAINED
- 3 PROPOSED BMP - ABOVE GROUND DETENTION BASIN
- 4 PROPOSED BMP - HYDRODYNAMIC SEPARATOR
- 5 DIVERSION STRUCTURE
- 6 EMERGENCY SPILLWAY
- 7 UNDERGROUND CMP STRUCTURE



HYDROLOGY SUMMARY							
DRAINAGE AREA No.	TRIBUTARY AREA (AC)	IMPERVIOUS RATIO	RUNOFF COEFFICIENT	DCV (CF)	HYDROMODIFICATION VOLUME TO RETAIN (CF)	100-YEAR VOLUME (CF)	TOTAL RETENTION VOLUME (CF)
A	2.40	0.81	0.61	-	98,341	342,639	24,994 (BASIN 2)
B	11.64	0.81	0.61	-			25,167 (BASIN 1)
C	3.82	0.81	0.61	-			348,521 (UNDERGROUND CMP)
TOTAL	17.86	0.81	0.61	44,076			398,681



PREPARED BY:
WestLAND
Group, Inc. Land Surveyors • Civil Engineers • GIS
4150 CONCOURS, ONTARIO, CA 91764
PHONE: (909) 989-9789 FAX: (909) 989-9660
JOB NO: 2021-352

POPLAR 18 INDUSTRIAL PARK
WMQP EXHIBIT
CITY OF HESPERIA

DATE: SEP 2022
SHEET
1
OF 1

SECTION 6.1: ATTACHMENT B

BMP & LID Device Detail

SECTION 6.1: ATTACHMENT B.1

Underground CMP Detention System

PROJECT SUMMARY

CALCULATION DETAILS

- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,967 lf.

STORAGE SUMMARY

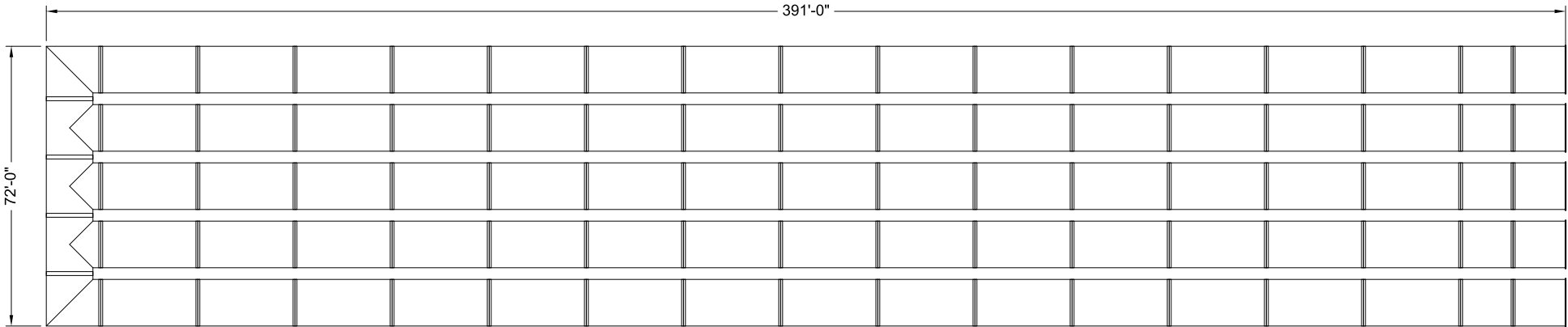
- STORAGE VOLUME REQUIRED = 294,130 cf.
- PIPE STORAGE VOLUME = 222,462 cf.
- BACKFILL STORAGE VOLUME = 72,038 cf.
- TOTAL STORAGE PROVIDED = 294,501 cf.

PIPE DETAILS

- DIAMETER = 144 IN.
- CORRUGATION = 5x1
- GAGE = 14
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS

- WIDTH AT ENDS = 36 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 36 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 22⅔" x 1½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 40'

C:\EXPORT\TEMPLATES\CMP_1_V5.DWG 10/18/2019 10:02 AM

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.		
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.		
DATE	REVISION DESCRIPTION	BY

CONTECH

ENGINEERED SOLUTIONS LLC

www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH

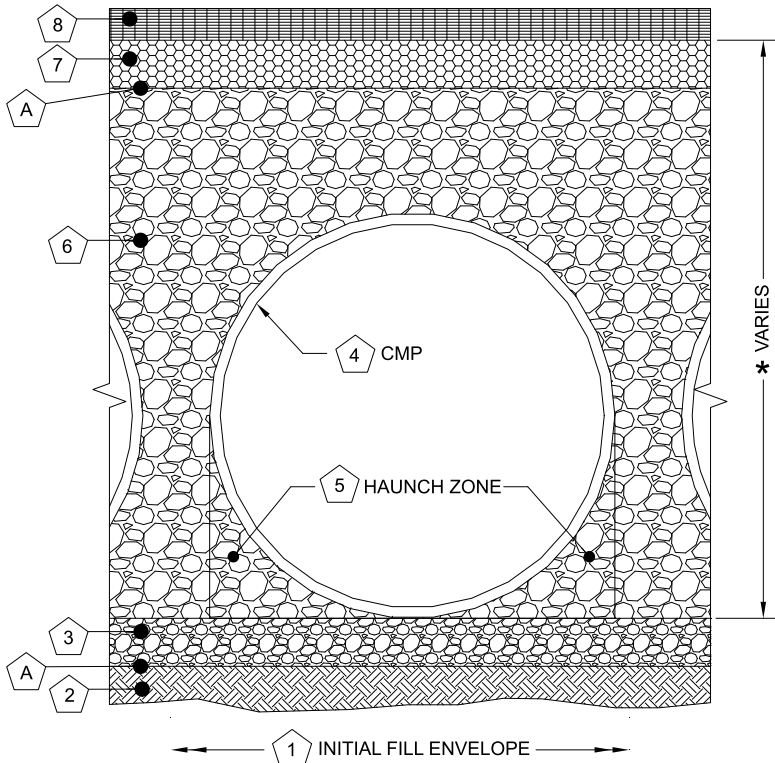
CMP DETENTION SYSTEMS

CONTECH
DYODS
DRAWING

DYO13636 2021-325 Poplar St
2021-352 Poplar 144" CMP #1
Hesperia, CA
DETENTION SYSTEM

PROJECT No.: 8562	SEQ. No.: 13636	DATE: 2/18/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

C:\EXPORT\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM



1 MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEERING JUDGEMENT.

FOUNDATION/BEDDING PREPARATION

2 PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER.

5 HAUNCH ZONE MATERIAL SHALL BE PLACED AND UNIFORMLY COMPACTED WITHOUT SOFT SPOTS.

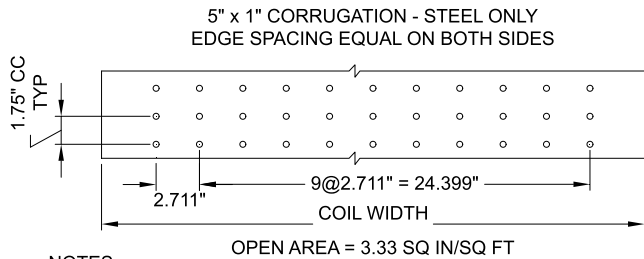
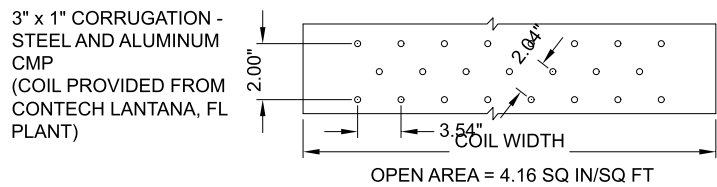
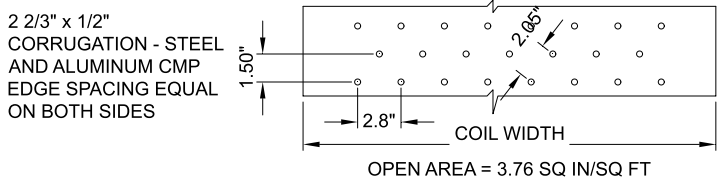
BACKFILL

MATERIAL SHALL BE PLACED IN 8"-10" MAXIMUM LIFTS. INADEQUATE COMPACTION CAN LEAD TO EXCESSIVE DEFLECTIONS WITHIN THE SYSTEM AND SETTLEMENT OF THE SOILS OVER THE SYSTEM. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO-LIFT DIFFERENTIAL BETWEEN THE SIDES OF ANY PIPE IN THE SYSTEM AT ALL TIMES DURING THE BACKFILL PROCESS. BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON ANY PIPES IN THE SYSTEM.

EQUIPMENT USED TO PLACE AND COMPACT THE BACKFILL SHALL BE OF A SIZE AND TYPE SO AS NOT TO DISTORT, DAMAGE, OR DISPLACE THE PIPE. ATTENTION MUST BE GIVEN TO PROVIDING ADEQUATE MINIMUM COVER FOR SUCH EQUIPMENT. MAINTAIN BALANCED LOADING ON ALL PIPES IN THE SYSTEM DURING ALL SUCH OPERATIONS.

OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS. REFER TO TYPICAL BACKFILL DETAIL FOR MATERIAL REQUIRED.

Infiltration Systems - CMP Infiltration & CMP Perforated Drainage Pipe			
Material Location	Description	Material Designation	Designation
Rigid or Flexible Pavement (if applicable)			
Road Base (if applicable)			
Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types. Wrap the trench only.
Backfill	Infiltration pipe systems have a pipe perforation sized of 3/8" diameter. An open graded, free draining stone, with a particle size of 1/2" - 2 1/2" diameter is recommended.	AASHTO M 145-A-1 or AASHTO M 43 - 3, 4	Material shall be worked into the pipe haunches by means of shovel-slicing, rodding, air-tamper, vibratory rod, or other effective methods. Compaction of all placed fill material is necessary and shall be considered adequate when no further yielding of the material is observed under the compactor, or under foot, and the Project Engineer or his representative is satisfied with the level of compaction"
Bedding Stone	Well graded granular bedding material w/maximum particle size of 3"	AASHTO M43 - 3,357,4,467, 5, 56, 57	For soil aggregates larger than 3/8" a dedicated bedding layer is not required for CMP. Pipe may be placed on the trench bottom comprised of native suitable well graded & granular material. For Arch pipes it is recommended to be shaped to a relatively flat bottom or fine-grade the foundation to a slight v-shape. Soil aggregates less than 3/8" and unsuitable material should be over-excavated and re-placed with a 4"-6" layer of well graded & granular stone per the material designation.
Geotextile Layer	None	None	Contech does not recommend geotextiles be placed under the invert of Infiltration systems due to the propensity for geotextiles to clog over time.
Note: The listed AASHTO designations are for gradation only. The stone must also be angular and clean.			

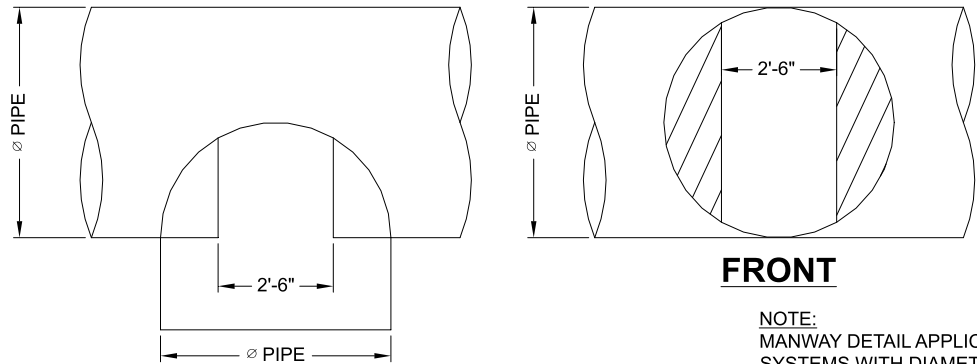


NOTES:

- PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
- PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.
- ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- ALL HOLES $\varnothing$ 3/8".

TYPICAL PERFORATION DETAIL

SCALE: N.T.S.



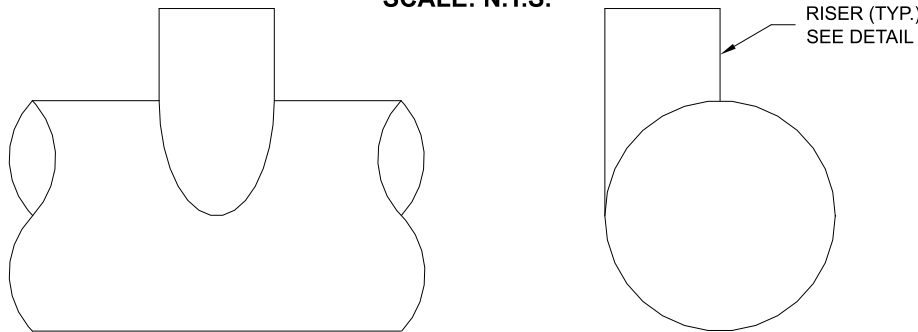
FRONT

NOTE: MANWAY DETAIL APPLICABLE FOR CMP SYSTEMS WITH DIAMETERS 48" AND LARGER. MANWAYS MAY BE REQUIRED ON SMALLER SYSTEMS DEPENDING ON ACTUAL SITE SPECIFIC CONDITIONS.

PLAN

TYPICAL MANWAY DETAIL

SCALE: N.T.S.



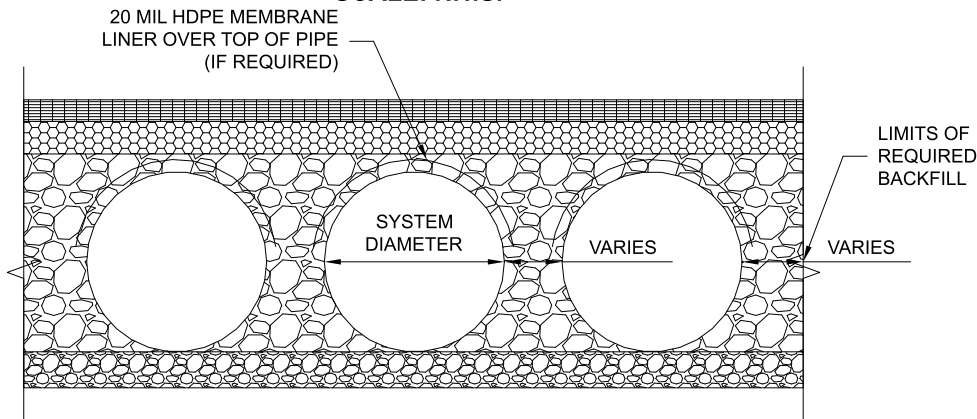
ELEVATION

END

NOTE: LADDERS ARE OPTIONAL AND ARE NOT REQUIRED FOR ALL SYSTEMS.

TYPICAL RISER DETAIL

SCALE: N.T.S.



TYPICAL SECTION VIEW

LINER OVER ROWS

SCALE: N.T.S.

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, AN HDPE MEMBRANE LINER IS RECOMMENDED WITH THE SYSTEM. THE IMPERMEABLE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY



ENGINEERED SOLUTIONS LLC

www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122 513-645-7000 513-645-7993 FAX



CMP DETENTION SYSTEMS

CONTECH
DYODS
DRAWING

DYO13636 2021-325 Poplar St
2021-352 Poplar 144" CMP #1
Hesperia, CA
DETENTION SYSTEM

PROJECT No.: 8562	SEQ. No.: 13636	DATE: 2/18/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D2		

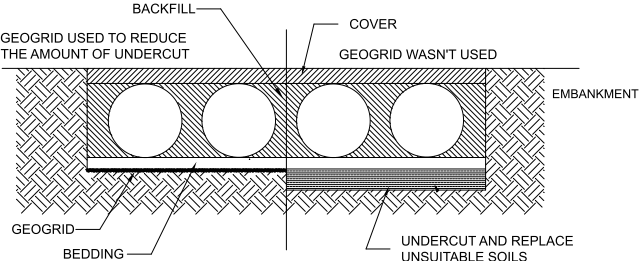
CMP DETENTION INSTALLATION GUIDE

PROPER INSTALLATION OF A FLEXIBLE UNDERGROUND DETENTION SYSTEM WILL ENSURE LONG-TERM PERFORMANCE. THE CONFIGURATION OF THESE SYSTEMS OFTEN REQUIRES SPECIAL CONSTRUCTION PRACTICES THAT DIFFER FROM CONVENTIONAL FLEXIBLE PIPE CONSTRUCTION. CONTECH ENGINEERED SOLUTIONS STRONGLY SUGGESTS SCHEDULING A PRE-CONSTRUCTION MEETING WITH YOUR LOCAL SALES ENGINEER TO DETERMINE IF ADDITIONAL MEASURES, NOT COVERED IN THIS GUIDE, ARE APPROPRIATE FOR YOUR SITE.

FOUNDATION

CONSTRUCT A FOUNDATION THAT CAN SUPPORT THE DESIGN LOADING APPLIED BY THE PIPE AND ADJACENT BACKFILL WEIGHT AS WELL AS MAINTAIN ITS INTEGRITY DURING CONSTRUCTION.

IF SOFT OR UNSUITABLE SOILS ARE ENCOUNTERED, REMOVE THE POOR SOILS DOWN TO A SUITABLE DEPTH AND THEN BUILD UP TO THE APPROPRIATE ELEVATION WITH A COMPETENT BACKFILL MATERIAL. THE STRUCTURAL FILL MATERIAL GRADATION SHOULD NOT ALLOW THE MIGRATION OF FINES, WHICH CAN CAUSE SETTLEMENT OF THE DETENTION SYSTEM OR PAVEMENT ABOVE. IF THE STRUCTURAL FILL MATERIAL IS NOT COMPATIBLE WITH THE UNDERLYING SOILS AN ENGINEERING FABRIC SHOULD BE USED AS A SEPARATOR. IN SOME CASES, USING A STIFF REINFORCING GEOGRID REDUCES OVER EXCAVATION AND REPLACEMENT FILL QUANTITIES.

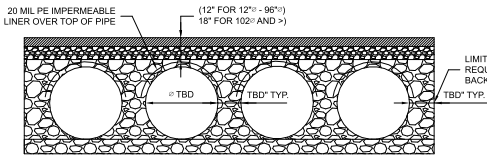


GRADE THE FOUNDATION SUBGRADE TO A UNIFORM OR SLIGHTLY SLOPING GRADE. IF THE SUBGRADE IS CLAY OR RELATIVELY NON-POROUS AND THE CONSTRUCTION SEQUENCE WILL LAST FOR AN EXTENDED PERIOD OF TIME, IT IS BEST TO SLOPE THE GRADE TO ONE END OF THE SYSTEM. THIS WILL ALLOW EXCESS WATER TO DRAIN QUICKLY, PREVENTING SATURATION OF THE SUBGRADE.

GEOMEMBRANE BARRIER

A SITE'S RESISTIVITY MAY CHANGE OVER TIME WHEN VARIOUS TYPES OF SALTING AGENTS ARE USED, SUCH AS ROAD SALTS FOR DEICING AGENTS. IF SALTING AGENTS ARE USED ON OR NEAR THE PROJECT SITE, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM THE USE OF SUCH AGENTS INCLUDING PREMATURE CORROSION AND REDUCED ACTUAL SERVICE LIFE.

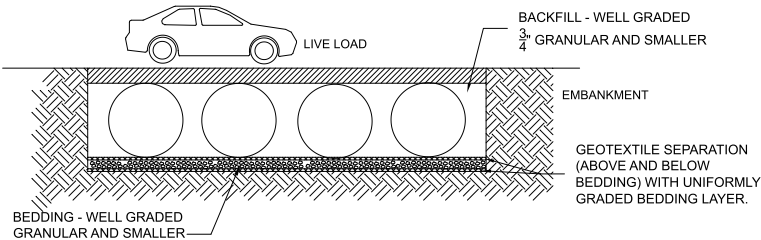
THE PROJECT'S ENGINEER OF RECORD IS TO EVALUATE WHETHER SALTING AGENTS WILL BE USED ON OR NEAR THE PROJECT SITE, AND USE HIS/HER BEST JUDGEMENT TO DETERMINE IF ANY ADDITIONAL PROTECTIVE MEASURES ARE REQUIRED. BELOW IS A TYPICAL DETAIL SHOWING THE PLACEMENT OF A GEOMEMBRANE BARRIER FOR PROJECTS WHERE SALTING AGENTS ARE USED ON OR NEAR THE PROJECT SITE.



IN-SITU TRENCH WALL

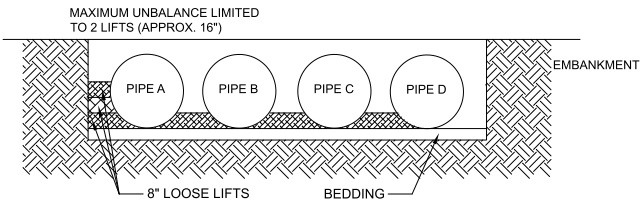
IF EXCAVATION IS REQUIRED, THE TRENCH WALL NEEDS TO BE CAPABLE OF SUPPORTING THE LOAD THAT THE PIPE SHEDS AS THE SYSTEM IS LOADED. IF SOILS ARE NOT CAPABLE OF SUPPORTING THESE LOADS, THE PIPE CAN DEFLECT. PERFORM A SIMPLE SOIL PRESSURE CHECK USING THE APPLIED LOADS TO DETERMINE THE LIMITS OF EXCAVATION BEYOND THE SPRING LINE OF THE OUTER MOST PIPES.

IN MOST CASES THE REQUIREMENTS FOR A SAFE WORK ENVIRONMENT AND PROPER BACKFILL PLACEMENT AND COMPACTION TAKE CARE OF THIS CONCERN.



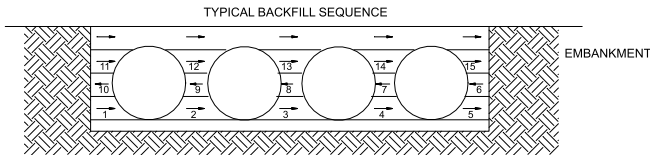
BACKFILL PLACEMENT

MATERIAL SHALL BE WORKED INTO THE PIPE HAUNCHES BY MEANS OF SHOVEL-SLICING, RODDING, AIR TAMPER, VIBRATORY ROD, OR OTHER EFFECTIVE METHODS.

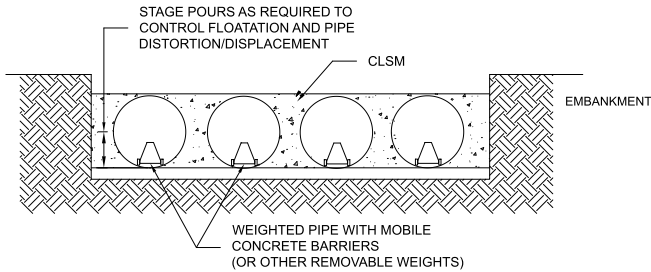


IF AASHTO T99 PROCEDURES ARE DETERMINED INFEASIBLE BY THE GEOTECHNICAL ENGINEER OF RECORD, COMPACTION IS CONSIDERED ADEQUATE WHEN NO FURTHER YIELDING OF THE MATERIAL IS OBSERVED UNDER THE COMPACTOR, OR UNDER FOOT, AND THE GEOTECHNICAL ENGINEER OF RECORD (OR REPRESENTATIVE THEREOF) IS SATISFIED WITH THE LEVEL OF COMPACTION.

FOR LARGE SYSTEMS, CONVEYOR SYSTEMS, BACKHOES WITH LONG REACHES OR DRAGLINES WITH STONE BUCKETS MAY BE USED TO PLACE BACKFILL. ONCE MINIMUM COVER FOR CONSTRUCTION LOADING ACROSS THE ENTIRE WIDTH OF THE SYSTEM IS REACHED, ADVANCE THE EQUIPMENT TO THE END OF THE RECENTLY PLACED FILL, AND BEGIN THE SEQUENCE AGAIN UNTIL THE SYSTEM IS COMPLETELY BACKFILLED. THIS TYPE OF CONSTRUCTION SEQUENCE PROVIDES ROOM FOR STOCKPILED BACKFILL DIRECTLY BEHIND THE BACKHOE, AS WELL AS THE MOVEMENT OF CONSTRUCTION TRAFFIC. MATERIAL STOCKPILES ON TOP OF THE BACKFILLED DETENTION SYSTEM SHOULD BE LIMITED TO 8- TO 10- FEET HIGH AND MUST PROVIDE BALANCED LOADING ACROSS ALL BARRELS. TO DETERMINE THE PROPER COVER OVER THE PIPES TO ALLOW THE MOVEMENT OF CONSTRUCTION EQUIPMENT SEE TABLE 1, OR CONTACT YOUR LOCAL CONTECH SALES ENGINEER.



WHEN FLOWABLE FILL IS USED, YOU MUST PREVENT PIPE FLOATATION. TYPICALLY, SMALL LIFTS ARE PLACED BETWEEN THE PIPES AND THEN ALLOWED TO SET-UP PRIOR TO THE PLACEMENT OF THE NEXT LIFT. THE ALLOWABLE THICKNESS OF THE CLSM LIFT IS A FUNCTION OF A PROPER BALANCE BETWEEN THE UPLIFT FORCE OF THE CLSM, THE OPPOSING WEIGHT OF THE PIPE, AND THE EFFECT OF OTHER RESTRAINING MEASURES. THE PIPE CAN CARRY LIMITED FLUID PRESSURE WITHOUT PIPE DISTORTION OR DISPLACEMENT, WHICH ALSO AFFECTS THE CLSM LIFT THICKNESS. YOUR LOCAL CONTECH SALES ENGINEER CAN HELP DETERMINE THE PROPER LIFT THICKNESS.

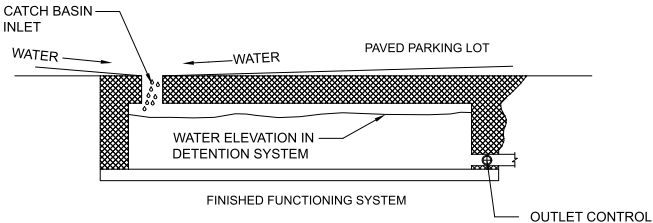


CONSTRUCTION LOADING

TYPICALLY, THE MINIMUM COVER SPECIFIED FOR A PROJECT ASSUMES H-20 LIVE LOAD. BECAUSE CONSTRUCTION LOADS OFTEN EXCEED DESIGN LIVE LOADS, INCREASED TEMPORARY MINIMUM COVER REQUIREMENTS ARE NECESSARY. SINCE CONSTRUCTION EQUIPMENT VARIES FROM JOB TO JOB, IT IS BEST TO ADDRESS EQUIPMENT SPECIFIC MINIMUM COVER REQUIREMENTS WITH YOUR LOCAL CONTECH SALES ENGINEER DURING YOUR PRE-CONSTRUCTION MEETING.

ADDITIONAL CONSIDERATIONS

BECAUSE MOST SYSTEMS ARE CONSTRUCTED BELOW-GRADE, RAINFALL CAN RAPIDLY FILL THE EXCAVATION; POTENTIALLY CAUSING FLOATATION AND MOVEMENT OF THE PREVIOUSLY PLACED PIPES. TO HELP MITIGATE POTENTIAL PROBLEMS, IT IS BEST TO START THE INSTALLATION AT THE DOWNSTREAM END WITH THE OUTLET ALREADY CONSTRUCTED TO ALLOW A ROUTE FOR THE WATER TO ESCAPE. TEMPORARY DIVERSION MEASURES MAY BE REQUIRED FOR HIGH FLOWS DUE TO THE RESTRICTED NATURE OF THE OUTLET PIPE.



CMP DETENTION SYSTEM INSPECTION AND MAINTENANCE

UNDERGROUND STORMWATER DETENTION AND INFILTRATION SYSTEMS MUST BE INSPECTED AND MAINTAINED AT REGULAR INTERVALS FOR PURPOSES OF PERFORMANCE AND LONGEVITY.

INSPECTION

INSPECTION IS THE KEY TO EFFECTIVE MAINTENANCE OF CMP DETENTION SYSTEMS AND IS EASILY PERFORMED. CONTECH RECOMMENDS ONGOING, ANNUAL INSPECTIONS. SITES WITH HIGH TRASH LOAD OR SMALL OUTLET CONTROL ORIFICES MAY NEED MORE FREQUENT INSPECTIONS. THE RATE AT WHICH THE SYSTEM COLLECTS POLLUTANTS WILL DEPEND MORE ON SITE SPECIFIC ACTIVITIES RATHER THAN THE SIZE OR CONFIGURATION OF THE SYSTEM.

INSPECTIONS SHOULD BE PERFORMED MORE OFTEN IN EQUIPMENT WASHDOWN AREAS, IN CLIMATES WHERE SANDING AND/OR SALTING OPERATIONS TAKE PLACE, AND IN OTHER VARIOUS INSTANCES IN WHICH ONE WOULD EXPECT HIGHER ACCUMULATIONS OF SEDIMENT OR ABRASIVE/ CORROSIVE CONDITIONS. A RECORD OF EACH INSPECTION IS TO BE MAINTAINED FOR THE LIFE OF THE SYSTEM

MAINTENANCE

CMP DETENTION SYSTEMS SHOULD BE CLEANED WHEN AN INSPECTION REVEALS ACCUMULATED SEDIMENT OR TRASH IS CLOGGING THE DISCHARGE ORIFICE.

ACCUMULATED SEDIMENT AND TRASH CAN TYPICALLY BE EVACUATED THROUGH THE MANHOLE OVER THE OUTLET ORIFICE. IF MAINTENANCE IS NOT PERFORMED AS RECOMMENDED, SEDIMENT AND TRASH MAY ACCUMULATE IN FRONT OF THE OUTLET ORIFICE. MANHOLE COVERS SHOULD BE SECURELY SEATED FOLLOWING CLEANING ACTIVITIES. CONTECH SUGGESTS THAT ALL SYSTEMS BE DESIGNED WITH AN ACCESS/INSPECTION MANHOLE SITUATED AT OR NEAR THE INLET AND THE OUTLET ORIFICE. SHOULD IT BE NECESSARY TO GET INSIDE THE SYSTEM TO PERFORM MAINTENANCE ACTIVITIES, ALL APPROPRIATE PRECAUTIONS REGARDING CONFINED SPACE ENTRY AND OSHA REGULATIONS SHOULD BE FOLLOWED.

ANNUAL INSPECTIONS ARE BEST PRACTICE FOR ALL UNDERGROUND SYSTEMS. DURING THIS INSPECTION, IF EVIDENCE OF SALTING/DE-ICING AGENTS IS OBSERVED WITHIN THE SYSTEM, IT IS BEST PRACTICE FOR THE SYSTEM TO BE RINSED, INCLUDING ABOVE THE SPRING LINE SOON AFTER THE SPRING THAW AS PART OF THE MAINTENANCE PROGRAM FOR THE SYSTEM.

MAINTAINING AN UNDERGROUND DETENTION OR INFILTRATION SYSTEM IS EASIEST WHEN THERE IS NO FLOW ENTERING THE SYSTEM. FOR THIS REASON, IT IS A GOOD IDEA TO SCHEDULE THE CLEANOUT DURING DRY WEATHER.

THE FOREGOING INSPECTION AND MAINTENANCE EFFORTS HELP ENSURE UNDERGROUND PIPE SYSTEMS USED FOR STORMWATER STORAGE CONTINUE TO FUNCTION AS INTENDED BY IDENTIFYING RECOMMENDED REGULAR INSPECTION AND MAINTENANCE PRACTICES. INSPECTION AND MAINTENANCE RELATED TO THE STRUCTURAL INTEGRITY OF THE PIPE OR THE SOUNDNESS OF PIPE JOINT CONNECTIONS IS BEYOND THE SCOPE OF THIS GUIDE.

C:\EXPORT\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.			
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.			
DATE	REVISION DESCRIPTION	BY	

CONTECH

ENGINEERED SOLUTIONS LLC

www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH

CMP DETENTION SYSTEMS

CONTECH
DYODS
DRAWING

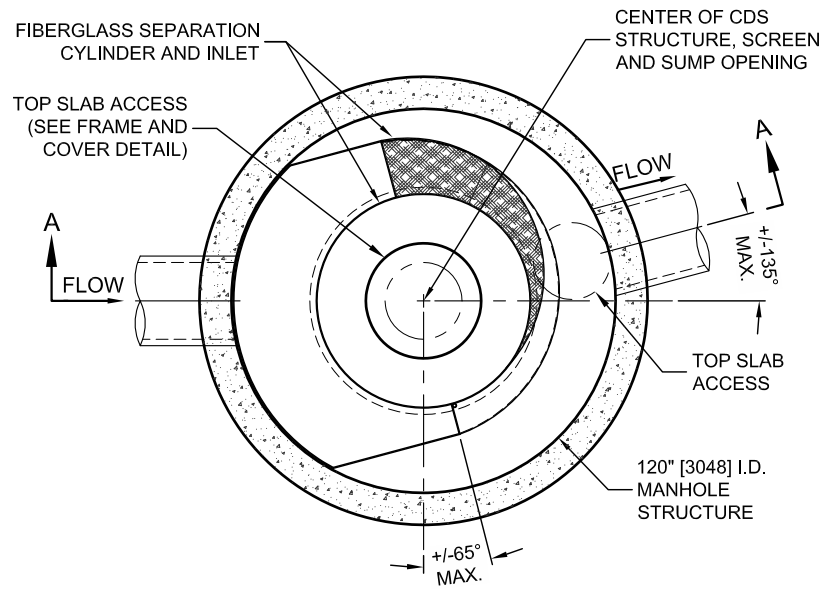
DYO13636 2021-325 Poplar St
2021-352 Poplar 144" CMP #1
Hesperia, CA
DETENTION SYSTEM

PROJECT No.: 8562	SEQ. No.: 13636	DATE: 2/18/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.:		D4

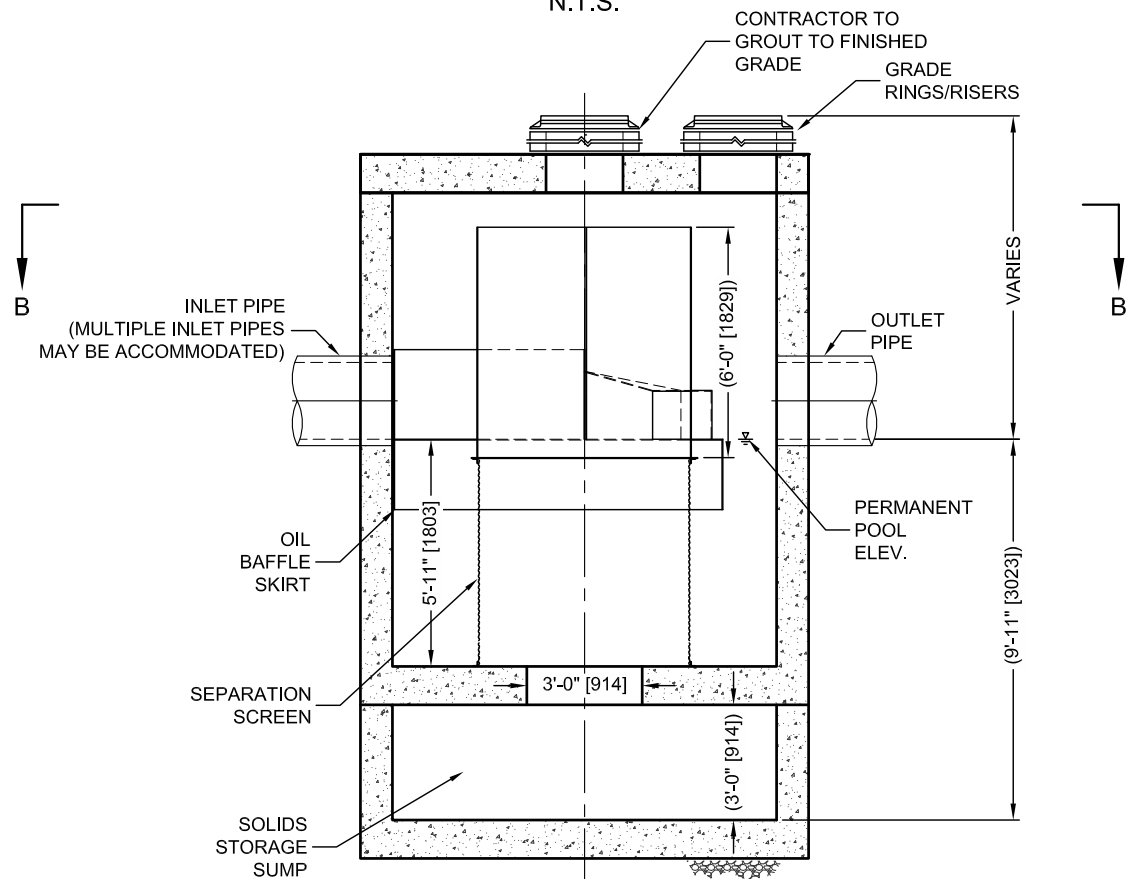
SECTION 6.1: ATTACHMENT B.2

Hydrodynamic Separator

C:\USERS\SCHLACHER\DESKTOP\CDS DETAILS 180 MICRON SIZING\ACAD\CDS5653-10-C-DTL.DWG 5/19/2014 5:38 PM



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.



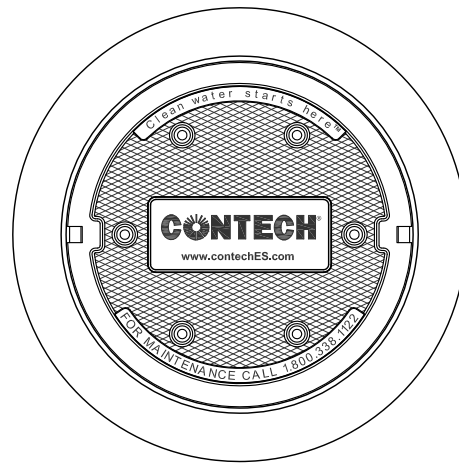
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 6,788,840; 6,841,722; 6,911,595; 6,981,763; RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

CDS5653-10-C DESIGN NOTES

THE STANDARD CDS5653-10-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET HS20 (AASHTO M 306) AND BE CAST WITH THE CONTECH LOGO.
- IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH
ENGINEERED SOLUTIONS LLC

www.contechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122 513-645-7000 513-645-7993 FAX

CDS5653-10-C
INLINE CDS
STANDARD DETAIL

SECTION 6.2

CD

(Prepared in Final Engineering)

SECTION 6.3

O&M Plans
Maintenance Agreements for BMP
(Prepared in Final Engineering)

SECTION 6.4: ATTACHMENT A

Education Materials
(Prepared in Final Engineering)

SECTION 6.4: ATTACHMENT B

Preliminary WQMP
(Prepared in Final Engineering)

SECTION 6.4: ATTACHMENT C

Geotechnical Report
(Prepared in Final Engineering)

SECTION 6.5: Calculations

WAP Report
Precipitation Data
Hydrologic Soil Map
10-Year Rational Method
10-Year Unit Hydrograph Method
10-Year Basin Analysis

SECTION 6.5: Attachment A

WAP Report
Precipitation Data
Hydrologic Soil Map



WQMP Project Report

County of San Bernardino Stormwater Program

Santa Ana River Watershed Geodatabase

Friday, October 01, 2021

Note: The information provided in this report and on the Stormwater Geodatabase for the County of San Bernardino Stormwater Program is intended to provide basic guidance in the preparation of the applicant's Water Quality Management Plan (WQMP) and should not be relied upon without independent verification.

Project Site Parcel Number(s):	306462101, 306464134, 306458104, 306458103, 306458101, 306463101, 306459117, 306458102, 306460107, 306457113, 306458105, 306459113, 306459112
Project Site Acreage:	182.211
HCOC Exempt Area:	No
Closest Receiving Waters: (Applicant to verify based on local drainage facilities and topography.)	System Number - Facility Name - Oro Grande Wash Owner - SBCFCD
Closest channel segment's susceptibility to Hydromodification:	EHM
Highest downstream hydromodification susceptibility:	NULL
Is this drainage segment subject to TMDLs?	No
Are there downstream drainage segments subject to TMDLs?	No
Is this drainage segment a 303d listed stream?	No
Are there 303d listed streams downstream?	No
Are there unlined downstream waterbodies?	No
Project Site Onsite Soil Group(s):	B
Environmentally Sensitive Areas within 200':	DESERT TORTOISE HABITAT CAT 3
Groundwater Depth (FT):	No data available
Parcels with potential septic tanks within 1000':	Yes
Known Groundwater Contamination Plumes within 1000':	No
Studies and Reports Related to Project Site:	



NOAA Atlas 14, Volume 6, Version 2
Location name: Hesperia, California, USA*
Latitude: 34.4168°, Longitude: -117.3926°
Elevation: 3607.28 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps_&_aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.087 (0.072-0.106)	0.124 (0.102-0.151)	0.172 (0.142-0.211)	0.212 (0.173-0.262)	0.267 (0.211-0.341)	0.310 (0.240-0.404)	0.354 (0.267-0.473)	0.400 (0.294-0.550)	0.464 (0.327-0.665)	0.514 (0.350-0.762)
10-min	0.125 (0.103-0.152)	0.177 (0.147-0.217)	0.247 (0.203-0.302)	0.304 (0.248-0.375)	0.383 (0.303-0.489)	0.444 (0.344-0.579)	0.507 (0.383-0.678)	0.573 (0.421-0.788)	0.664 (0.468-0.953)	0.736 (0.501-1.09)
15-min	0.151 (0.125-0.184)	0.214 (0.177-0.262)	0.298 (0.246-0.366)	0.367 (0.300-0.454)	0.463 (0.366-0.591)	0.537 (0.416-0.700)	0.613 (0.463-0.820)	0.693 (0.509-0.953)	0.804 (0.566-1.15)	0.890 (0.606-1.32)
30-min	0.228 (0.189-0.278)	0.324 (0.268-0.396)	0.451 (0.371-0.552)	0.555 (0.454-0.686)	0.699 (0.553-0.893)	0.811 (0.628-1.06)	0.927 (0.700-1.24)	1.05 (0.769-1.44)	1.21 (0.855-1.74)	1.35 (0.915-2.00)
60-min	0.323 (0.267-0.394)	0.458 (0.379-0.560)	0.637 (0.525-0.781)	0.785 (0.642-0.970)	0.989 (0.782-1.26)	1.15 (0.888-1.50)	1.31 (0.990-1.75)	1.48 (1.09-2.04)	1.72 (1.21-2.46)	1.90 (1.30-2.82)
2-hr	0.473 (0.391-0.577)	0.641 (0.530-0.784)	0.869 (0.716-1.07)	1.06 (0.867-1.31)	1.33 (1.05-1.70)	1.54 (1.19-2.01)	1.76 (1.33-2.36)	2.00 (1.47-2.75)	2.33 (1.64-3.34)	2.59 (1.76-3.85)
3-hr	0.596 (0.494-0.728)	0.797 (0.659-0.974)	1.07 (0.882-1.31)	1.30 (1.06-1.61)	1.63 (1.29-2.08)	1.89 (1.46-2.46)	2.16 (1.63-2.89)	2.46 (1.81-3.38)	2.87 (2.02-4.12)	3.21 (2.19-4.77)
6-hr	0.849 (0.702-1.04)	1.12 (0.929-1.37)	1.50 (1.24-1.84)	1.82 (1.49-2.25)	2.28 (1.81-2.92)	2.66 (2.06-3.47)	3.05 (2.31-4.08)	3.48 (2.56-4.79)	4.10 (2.89-5.87)	4.60 (3.13-6.83)
12-hr	1.11 (0.918-1.35)	1.51 (1.24-1.84)	2.05 (1.69-2.51)	2.51 (2.05-3.10)	3.17 (2.51-4.06)	3.71 (2.87-4.84)	4.28 (3.23-5.72)	4.90 (3.60-6.73)	5.78 (4.07-8.29)	6.51 (4.43-9.66)
24-hr	1.50 (1.33-1.73)	2.11 (1.87-2.43)	2.93 (2.59-3.39)	3.63 (3.18-4.24)	4.64 (3.93-5.58)	5.45 (4.52-6.70)	6.31 (5.11-7.94)	7.23 (5.70-9.37)	8.56 (6.47-11.6)	9.65 (7.05-13.5)
2-day	1.73 (1.54-2.00)	2.43 (2.15-2.80)	3.40 (3.00-3.93)	4.23 (3.70-4.93)	5.43 (4.60-6.54)	6.41 (5.32-7.88)	7.46 (6.04-9.40)	8.61 (6.78-11.1)	10.3 (7.76-13.9)	11.6 (8.50-16.3)
3-day	1.86 (1.65-2.14)	2.61 (2.31-3.00)	3.65 (3.22-4.21)	4.55 (3.98-5.30)	5.86 (4.96-7.05)	6.94 (5.76-8.53)	8.10 (6.56-10.2)	9.37 (7.38-12.1)	11.2 (8.49-15.2)	12.8 (9.33-17.8)
4-day	2.00 (1.78-2.31)	2.81 (2.49-3.24)	3.93 (3.47-4.54)	4.91 (4.30-5.72)	6.33 (5.36-7.62)	7.50 (6.22-9.22)	8.76 (7.10-11.0)	10.1 (7.99-13.1)	12.2 (9.20-16.4)	13.9 (10.1-19.4)
7-day	2.25 (1.99-2.59)	3.13 (2.77-3.61)	4.36 (3.85-5.04)	5.42 (4.75-6.32)	6.97 (5.90-8.39)	8.24 (6.84-10.1)	9.62 (7.79-12.1)	11.1 (8.76-14.4)	13.3 (10.1-18.0)	15.1 (11.1-21.2)
10-day	2.40 (2.13-2.77)	3.34 (2.95-3.85)	4.63 (4.09-5.35)	5.75 (5.04-6.70)	7.37 (6.25-8.88)	8.71 (7.23-10.7)	10.1 (8.22-12.8)	11.7 (9.24-15.2)	14.0 (10.6-18.9)	15.9 (11.6-22.2)
20-day	2.89 (2.56-3.32)	3.99 (3.53-4.60)	5.52 (4.87-6.38)	6.84 (5.99-7.97)	8.74 (7.41-10.5)	10.3 (8.56-12.7)	12.0 (9.72-15.1)	13.8 (10.9-17.9)	16.5 (12.5-22.3)	18.8 (13.7-26.3)
30-day	3.40 (3.02-3.92)	4.68 (4.14-5.40)	6.45 (5.69-7.45)	7.96 (6.98-9.28)	10.2 (8.61-12.2)	12.0 (9.93-14.7)	13.9 (11.3-17.5)	16.1 (12.7-20.8)	19.2 (14.5-25.9)	21.8 (15.9-30.5)
45-day	4.06 (3.60-4.67)	5.51 (4.88-6.35)	7.51 (6.63-8.68)	9.24 (8.09-10.8)	11.7 (9.95-14.1)	13.8 (11.4-17.0)	16.0 (13.0-20.2)	18.5 (14.6-23.9)	22.1 (16.7-29.8)	25.1 (18.4-35.1)
60-day	4.63 (4.11-5.33)	6.19 (5.48-7.14)	8.34 (7.37-9.64)	10.2 (8.93-11.9)	12.9 (10.9-15.5)	15.1 (12.5-18.6)	17.5 (14.2-22.0)	20.2 (15.9-26.1)	24.1 (18.2-32.6)	27.5 (20.1-38.4)

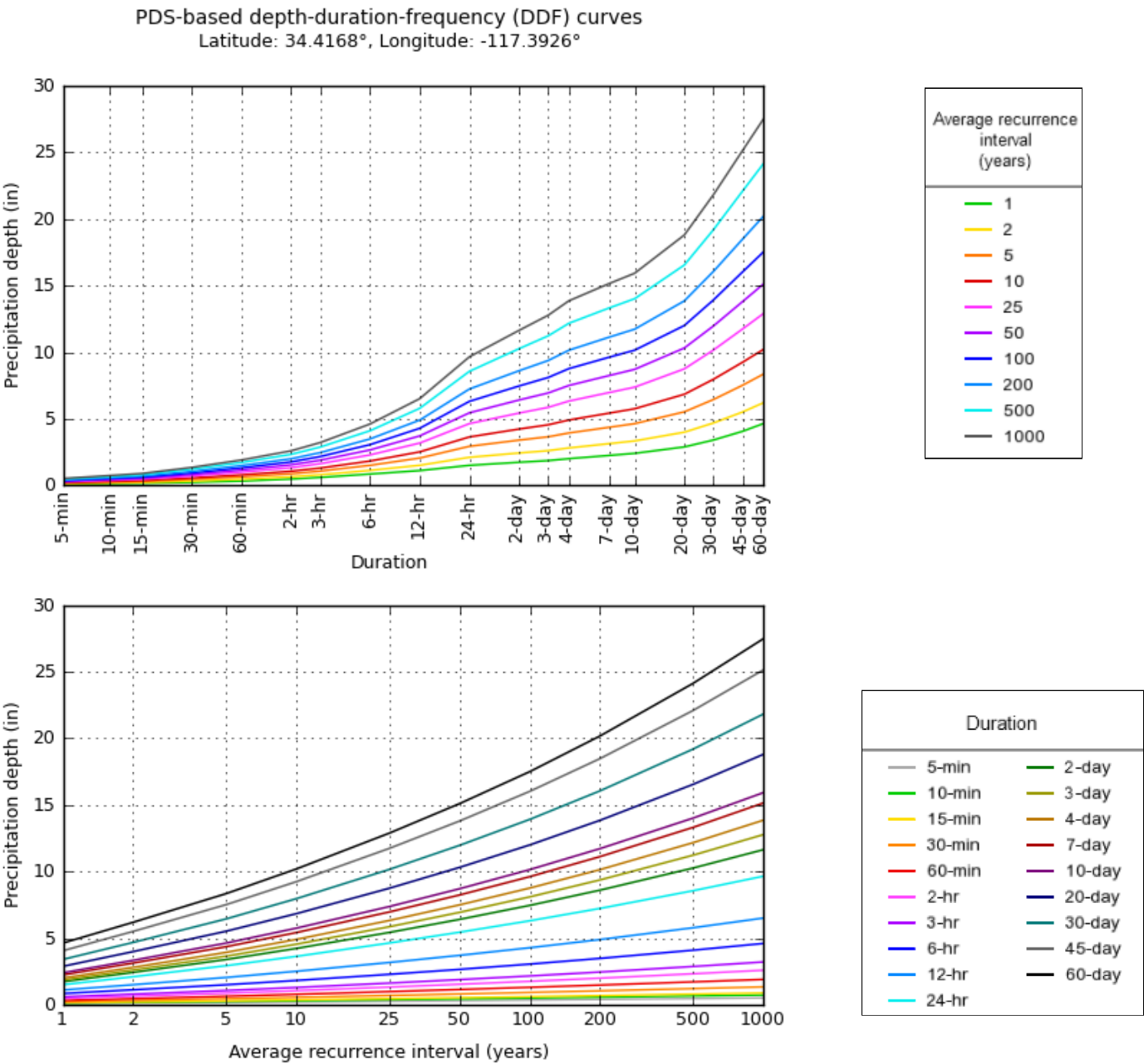
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical



NOAA Atlas 14, Volume 6, Version 2

Created (GMT): Wed Sep 22 19:25:31 2021

[Back to Top](#)

Maps & aerials

Small scale terrain



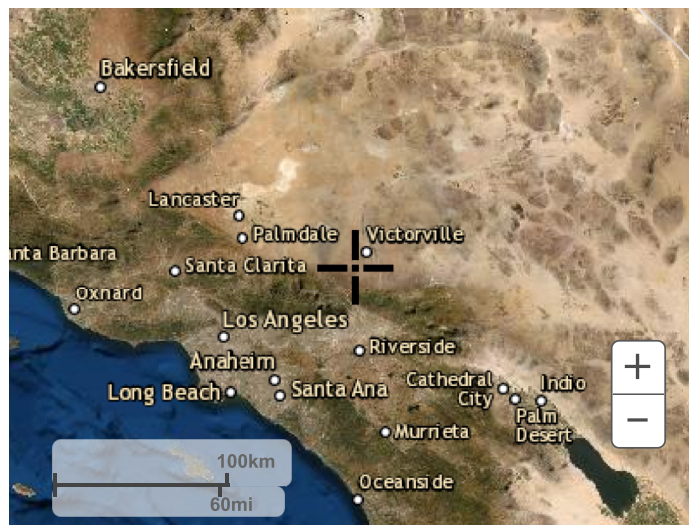
Large scale terrain



Large scale map



Large scale aerial

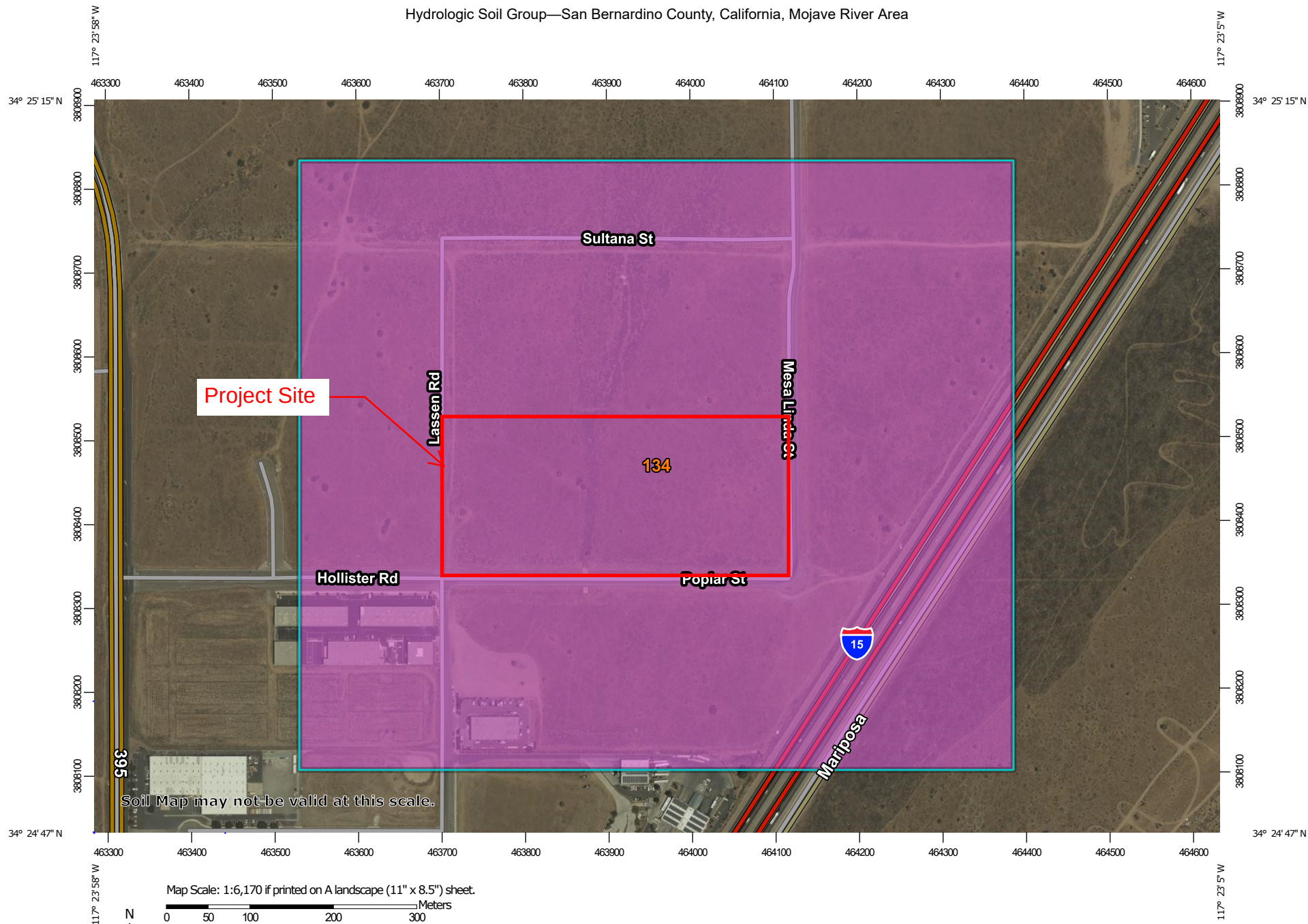


[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

Hydrologic Soil Group—San Bernardino County, California, Mojave River Area



Map Scale: 1:6,170 if printed on A landscape (11" x 8.5") sheet.
 0 50 100 200 300 Meters
 0 250 500 1000 1500 Feet
 Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

10/1/2021
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area
 Survey Area Data: Version 13, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2019—Jul 8, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
134	HESPERIA LOAMY FINE SAND, 2 TO 5 PERCENT SLOPES	A	154.3	100.0%
Totals for Area of Interest			154.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

SECTION 6.5: Attachment B.1

10-Year Rational Method Pre-Development Conditions

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1
Rational Hydrology Study Date: 10/01/21

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 10 YR
MGUBBAREINER 2021-09-27
-

Program License Serial Number 6277

***** Hydrology Study Control Information *****

Rational hydrology study storm event year is 10.0
Computed rainfall intensity:
Storm year = 10.00 1 hour rainfall = 0.785 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 2

+++++
Process from Point/Station 1.100 to Point/Station 1.200
**** INITIAL AREA EVALUATION ****

Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.578(In/Hr)
Initial subarea data:
Initial area flow distance = 341.380(Ft.)
Top (of initial area) elevation = 3615.000(Ft.)
Bottom (of initial area) elevation = 3608.040(Ft.)
Difference in elevation = 6.960(Ft.)
Slope = 0.02039 s(%)= 2.04
 $TC = k(0.779)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 17.499 min.
Rainfall intensity = 1.860(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.620
Subarea runoff = 0.819(CFS)
Total initial stream area = 0.710(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.578(In/Hr)

Process from Point/Station 1.200 to Point/Station 1.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.573(Ft.), Average velocity = 3.241(Ft/s)
!!Warning: Water is above left or right bank elevations
***** Irregular Channel Data *****

Information entered for subchannel number 1 :
Point number 'X' coordinate 'Y' coordinate
1 0.00 0.50
2 2.50 0.00
3 5.00 0.50
Manning's 'N' friction factor = 0.030

Sub-Channel flow = 5.235(CFS)
' ' flow top width = 5.000(Ft.)
' ' velocity= 3.241(Ft/s)
' ' area = 1.615(Sq.Ft)
' ' Froude number = 1.005

Upstream point elevation = 3608.040(Ft.)
Downstream point elevation = 3598.000(Ft.)
Flow length = 506.390(Ft.)
Travel time = 2.60 min.
Time of concentration = 20.10 min.
Depth of flow = 0.573(Ft.)
Average velocity = 3.241(Ft/s)
Total irregular channel flow = 5.235(CFS)
Irregular channel normal depth above invert elev. = 0.573(Ft.)
Average velocity of channel(s) = 3.241(Ft/s)
!!Warning: Water is above left or right bank elevations
Adding area flow to channel
Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.578(In/Hr)
Rainfall intensity = 1.688(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.592
Subarea runoff = 8.776(CFS) for 8.900(Ac.)
Total runoff = 9.595(CFS)
Effective area this stream = 9.61(Ac.)
Total Study Area (Main Stream No. 1) = 9.61(Ac.)
Area averaged Fm value = 0.578(In/Hr)
Depth of flow = 0.715(Ft.), Average velocity = 4.130(Ft/s)
!!Warning: Water is above left or right bank elevations

```

+++++
Process from Point/Station      2.100 to Point/Station      2.200
**** INITIAL AREA EVALUATION ****

```

```

Soil classification AP and SCS  values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000      Max loss rate(Fm)=      0.578(In/Hr)
Initial subarea data:
Initial area flow distance = 199.840(Ft.)
Top (of initial area) elevation = 3607.300(Ft.)
Bottom (of initial area) elevation = 3603.240(Ft.)
Difference in elevation = 4.060(Ft.)
Slope = 0.02032 s(%)= 2.03
TC = k(0.779)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 14.135 min.
Rainfall intensity = 2.160(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.659
Subarea runoff = 2.519(CFS)
Total initial stream area = 1.770(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.578(In/Hr)

```

```

+++++
Process from Point/Station      2.200 to Point/Station      2.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

```

```

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.623(Ft.), Average velocity = 3.448(Ft/s)
!!Warning: Water is above left or right bank elevations
***** Irregular Channel Data *****

```

```

Information entered for subchannel number 1 :
Point number      'X' coordinate      'Y' coordinate
      1              0.00              0.50
      2              2.50              0.00
      3              5.00              0.50
Manning's 'N' friction factor = 0.030

```

```

Sub-Channel flow = 6.428(CFS)
'      '      flow top width = 5.000(Ft.)
'      '      velocity= 3.448(Ft/s)
'      '      area = 1.864(Sq.Ft)
'      '      Froude number = 0.995

```

```

Upstream point elevation = 3603.240(Ft.)
Downstream point elevation = 3595.260(Ft.)

```


Flow length = 430.480(Ft.)
Travel time = 2.08 min.
Time of concentration = 16.22 min.
Depth of flow = 0.623(Ft.)
Average velocity = 3.448(Ft/s)
Total irregular channel flow = 6.428(CFS)
Irregular channel normal depth above invert elev. = 0.623(Ft.)
Average velocity of channel(s) = 3.448(Ft/s)
!!Warning: Water is above left or right bank elevations
Adding area flow to channel
Soil classification AP and SCS values input by user
USER INPUT of soil data for subarea
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.578(In/Hr)
Rainfall intensity = 1.962(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.635
Subarea runoff = 7.765(CFS) for 6.490(Ac.)
Total runoff = 10.284(CFS)
Effective area this stream = 8.26(Ac.)
Total Study Area (Main Stream No. 1) = 17.87(Ac.)
Area averaged Fm value = 0.578(In/Hr)
Depth of flow = 0.744(Ft.), Average velocity = 4.161(Ft/s)
!!Warning: Water is above left or right bank elevations
End of computations, Total Study Area = 17.87 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged SCS curve number = 67.0

SECTION 6.5: Attachment B.2

10-Year Rational Method Post-Development Conditions

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1
Rational Hydrology Study Date: 09/27/21

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 10 YR
MGUBBAREINER 2021-09-27
-

Program License Serial Number 6277

***** Hydrology Study Control Information *****

Rational hydrology study storm event year is 10.0
Computed rainfall intensity:
Storm year = 10.00 1 hour rainfall = 0.785 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 2

↑

+++++
Process from Point/Station 1.100 to Point/Station 1.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Initial subarea data:
Initial area flow distance = 150.000(Ft.)
Top (of initial area) elevation = 3614.400(Ft.)
Bottom (of initial area) elevation = 3607.070(Ft.)
Difference in elevation = 7.330(Ft.)
Slope = 0.04887 s(%)= 4.89
 $TC = k(0.304)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 4.126 min.
Rainfall intensity = 5.114(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.883

Subarea runoff = 1.986(CFS)
Total initial stream area = 0.440(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.098(In/Hr)

↑

+++++
Process from Point/Station 1.200 to Point/Station 1.300
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3607.070(Ft.)
Downstream point elevation = 3604.700(Ft.)
Channel length thru subarea = 339.930(Ft.)
Channel base width = 3.000(Ft.)
Slope or 'Z' of left channel bank = 1.000
Slope or 'Z' of right channel bank = 1.000
Estimated mean flow rate at midpoint of channel = 5.504(CFS)
Manning's 'N' = 0.013
Maximum depth of channel = 1.500(Ft.)
Flow(q) thru subarea = 5.504(CFS)
Depth of flow = 0.373(Ft.), Average velocity = 4.374(Ft/s)
Channel flow top width = 3.746(Ft.)
Flow Velocity = 4.37(Ft/s)
Travel time = 1.30 min.
Time of concentration = 5.42 min.
Critical depth = 0.445(Ft.)
Adding area flow to channel
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Rainfall intensity = 4.224(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.879
Subarea runoff = 6.964(CFS) for 1.970(Ac.)
Total runoff = 8.950(CFS)
Effective area this stream = 2.41(Ac.)
Total Study Area (Main Stream No. 1) = 2.41(Ac.)
Area averaged Fm value = 0.098(In/Hr)
Depth of flow = 0.498(Ft.), Average velocity = 5.139(Ft/s)
Critical depth = 0.609(Ft.)

↑

+++++
Process from Point/Station 1.300 to Point/Station 1.400

**** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3604.700(Ft.)
Downstream point/station elevation = 3595.170(Ft.)
Pipe length = 114.65(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 8.950(CFS)
Given pipe size = 1.50(In.)
NOTE: Normal flow is pressure flow in user selected pipe size.
The approximate hydraulic grade line above the pipe invert is
486347.902(Ft.) at the headworks or inlet of the pipe(s)
Pipe friction loss = 473969.207(Ft.)
Minor friction loss = 12388.225(Ft.) K-factor = 1.50
Pipe flow velocity = 729.29(Ft/s)
Travel time through pipe = 0.00 min.
Time of concentration (TC) = 5.42 min.

↑

+++++
Process from Point/Station 2.100 to Point/Station 2.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Initial subarea data:
Initial area flow distance = 219.190(Ft.)
Top (of initial area) elevation = 3604.730(Ft.)
Bottom (of initial area) elevation = 3600.990(Ft.)
Difference in elevation = 3.740(Ft.)
Slope = 0.01706 s(%)= 1.71
TC = $k(0.304)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 5.926 min.
Rainfall intensity = 3.968(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.878
Subarea runoff = 2.996(CFS)
Total initial stream area = 0.860(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.098(In/Hr)

↑

+++++
Process from Point/Station 2.200 to Point/Station 2.300
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3600.990(Ft.)
 Downstream point elevation = 3595.400(Ft.)
 Channel length thru subarea = 863.780(Ft.)
 Channel base width = 3.000(Ft.)
 Slope or 'Z' of left channel bank = 1.000
 Slope or 'Z' of right channel bank = 1.000
 Estimated mean flow rate at midpoint of channel = 17.516(CFS)
 Manning's 'N' = 0.013
 Maximum depth of channel = 1.500(Ft.)
 Flow(q) thru subarea = 17.516(CFS)
 Depth of flow = 0.754(Ft.), Average velocity = 6.185(Ft/s)
 Channel flow top width = 4.509(Ft.)
 Flow Velocity = 6.19(Ft/s)
 Travel time = 2.33 min.
 Time of concentration = 8.25 min.
 Critical depth = 0.914(Ft.)
 Adding area flow to channel
 COMMERCIAL subarea type
 Decimal fraction soil group A = 1.000
 Decimal fraction soil group B = 0.000
 Decimal fraction soil group C = 0.000
 Decimal fraction soil group D = 0.000
 SCS curve number for soil(AMC 2) = 32.00
 Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
 Rainfall intensity = 3.147(In/Hr) for a 10.0 year storm
 Effective runoff coefficient used for area,(total area with modified
 rational method)(Q=KCIA) is C = 0.872
 Subarea runoff = 28.949(CFS) for 10.780(Ac.)
 Total runoff = 31.945(CFS)
 Effective area this stream = 11.64(Ac.)
 Total Study Area (Main Stream No. 1) = 14.05(Ac.)
 Area averaged Fm value = 0.098(In/Hr)
 Depth of flow = 1.064(Ft.), Average velocity = 7.385(Ft/s)
 Critical depth = 1.313(Ft.)

↑

++++++
 Process from Point/Station 2.300 to Point/Station 2.400
 **** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3595.400(Ft.)
 Downstream point/station elevation = 3587.000(Ft.)
 Pipe length = 62.61(Ft.) Manning's N = 0.013
 No. of pipes = 1 Required pipe flow = 31.945(CFS)
 Given pipe size = 1.50(In.)
 NOTE: Normal flow is pressure flow in user selected pipe size.
 The approximate hydraulic grade line above the pipe invert is
 3455420.510(Ft.) at the headworks or inlet of the pipe(s)
 Pipe friction loss = 3297599.744(Ft.)

Minor friction loss = 157829.166(Ft.) K-factor = 1.50
Pipe flow velocity = 2603.10(Ft/s)
Travel time through pipe = 0.00 min.
Time of concentration (TC) = 8.25 min.

↑

+++++
Process from Point/Station 3.100 to Point/Station 3.200
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
Initial subarea data:
Initial area flow distance = 350.000(Ft.)
Top (of initial area) elevation = 3607.030(Ft.)
Bottom (of initial area) elevation = 3603.500(Ft.)
Difference in elevation = 3.530(Ft.)
Slope = 0.01009 s(%)= 1.01
TC = $k(0.304)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$
Initial area time of concentration = 7.939 min.
Rainfall intensity = 3.234(In/Hr) for a 10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.873
Subarea runoff = 1.129(CFS)
Total initial stream area = 0.400(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.098(In/Hr)

↑

+++++
Process from Point/Station 3.200 to Point/Station 3.300
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.532(Ft.), Average velocity = 1.410(Ft/s)
***** Irregular Channel Data *****

Information entered for subchannel number 1 :
Point number 'X' coordinate 'Y' coordinate
1 0.00 3.00
2 15.00 0.00
3 40.00 8.50
Manning's 'N' friction factor = 0.025

Sub-Channel flow = 1.582(CFS)
 ' ' flow top width = 4.222(Ft.)
 ' ' velocity= 1.410(Ft/s)
 ' ' area = 1.122(Sq.Ft)
 ' ' Froude number = 0.482

Upstream point elevation = 3603.500(Ft.)
 Downstream point elevation = 3600.870(Ft.)
 Flow length = 764.880(Ft.)
 Travel time = 9.04 min.
 Time of concentration = 16.98 min.
 Depth of flow = 0.532(Ft.)
 Average velocity = 1.410(Ft/s)
 Total irregular channel flow = 1.582(CFS)
 Irregular channel normal depth above invert elev. = 0.532(Ft.)
 Average velocity of channel(s) = 1.410(Ft/s)

Adding area flow to channel
 COMMERCIAL subarea type
 Decimal fraction soil group A = 1.000
 Decimal fraction soil group B = 0.000
 Decimal fraction soil group C = 0.000
 Decimal fraction soil group D = 0.000
 SCS curve number for soil(AMC 2) = 32.00
 Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
 Rainfall intensity = 1.899(In/Hr) for a 10.0 year storm
 Effective runoff coefficient used for area,(total area with modified
 rational method)(Q=KCIA) is C = 0.854
 Subarea runoff = 0.849(CFS) for 0.820(Ac.)
 Total runoff = 1.978(CFS)
 Effective area this stream = 1.22(Ac.)
 Total Study Area (Main Stream No. 1) = 15.27(Ac.)
 Area averaged Fm value = 0.098(In/Hr)
 Depth of flow = 0.578(Ft.), Average velocity = 1.491(Ft/s)

↑

+++++
 Process from Point/Station 3.300 to Point/Station 3.400
 **** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 3600.870(Ft.)
 Downstream point elevation = 3594.720(Ft.)
 Channel length thru subarea = 418.150(Ft.)
 Channel base width = 3.000(Ft.)
 Slope or 'Z' of left channel bank = 1.000
 Slope or 'Z' of right channel bank = 1.000
 Estimated mean flow rate at midpoint of channel = 3.962(CFS)
 Manning's 'N' = 0.013
 Maximum depth of channel = 1.500(Ft.)
 Flow(q) thru subarea = 3.962(CFS)

Depth of flow = 0.245(Ft.), Average velocity = 4.981(Ft/s)
 Channel flow top width = 3.490(Ft.)
 Flow Velocity = 4.98(Ft/s)
 Travel time = 1.40 min.
 Time of concentration = 18.38 min.
 Critical depth = 0.363(Ft.)
 Adding area flow to channel
 COMMERCIAL subarea type
 Decimal fraction soil group A = 1.000
 Decimal fraction soil group B = 0.000
 Decimal fraction soil group C = 0.000
 Decimal fraction soil group D = 0.000
 SCS curve number for soil(AMC 2) = 32.00
 Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.098(In/Hr)
 Rainfall intensity = 1.797(In/Hr) for a 10.0 year storm
 Effective runoff coefficient used for area,(total area with modified
 rational method)(Q=KCIA) is C = 0.851
 Subarea runoff = 3.879(CFS) for 2.610(Ac.)
 Total runoff = 5.857(CFS)
 Effective area this stream = 3.83(Ac.)
 Total Study Area (Main Stream No. 1) = 17.88(Ac.)
 Area averaged Fm value = 0.098(In/Hr)
 Depth of flow = 0.310(Ft.), Average velocity = 5.712(Ft/s)
 Critical depth = 0.465(Ft.)

↑

++++++
 Process from Point/Station 3.400 to Point/Station 3.500
 **** PIPEFLOW TRAVEL TIME (User specified size) ****

Upstream point/station elevation = 3594.720(Ft.)
 Downstream point/station elevation = 3587.000(Ft.)
 Pipe length = 75.93(Ft.) Manning's N = 0.013
 No. of pipes = 1 Required pipe flow = 5.857(CFS)
 Given pipe size = 1.50(In.)
 NOTE: Normal flow is pressure flow in user selected pipe size.
 The approximate hydraulic grade line above the pipe invert is
 139729.709(Ft.) at the headworks or inlet of the pipe(s)
 Pipe friction loss = 134431.979(Ft.)
 Minor friction loss = 5305.450(Ft.) K-factor = 1.50
 Pipe flow velocity = 477.26(Ft/s)
 Travel time through pipe = 0.00 min.
 Time of concentration (TC) = 18.38 min.
 End of computations, Total Study Area = 17.88 (Ac.)
 The following figures may
 be used for a unit hydrograph study of the same area.
 Note: These figures do not consider reduced effective area
 effects caused by confluences in the rational equation.

Area averaged pervious area fraction(A_p) = 0.100
Area averaged SCS curve number = 32.0

SECTION 6.5: Attachment C.1

10-Year Unit Hydrograph Pre-Development Conditions

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 10/01/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 10 YR UNIT HYDROGRAPH SUBAREA A
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
9.61	1	0.79

Rainfall data for year 10		
9.61	6	1.82

Rainfall data for year 10		
9.61	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
67.0	67.0	9.61	1.000	0.578	1.000	0.578

Area-averaged adjusted loss rate Fm (In/Hr) = 0.578

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
9.61	1.000	67.0	67.0	4.93	0.255

Area-averaged catchment yield fraction, Y = 0.255

Area-averaged low loss fraction, Yb = 0.745

User entry of time of concentration = 0.335 (hours)

+++++

Watershed area = 9.61(Ac.)

Catchment Lag time = 0.268 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 31.0945

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.578(In/Hr)

Average low loss rate fraction (Yb) = 0.745 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.372(In)

Computed peak 30-minute rainfall = 0.638(In)

Specified peak 1-hour rainfall = 0.785(In)

Computed peak 3-hour rainfall = 1.315(In)

Specified peak 6-hour rainfall = 1.820(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 9.61(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000	Adjusted rainfall = 0.372(In)
-------------------------	-------------------------------

30-minute factor = 1.000	Adjusted rainfall = 0.637(In)
--------------------------	-------------------------------

1-hour factor = 1.000	Adjusted rainfall = 0.785(In)
-----------------------	-------------------------------

3-hour factor = 1.000	Adjusted rainfall = 1.315(In)
-----------------------	-------------------------------

6-hour factor = 1.000	Adjusted rainfall = 1.820(In)
-----------------------	-------------------------------

24-hour factor = 1.000	Adjusted rainfall = 3.630(In)
------------------------	-------------------------------

U n i t H y d r o g r a p h

+++++

Interval	'S' Graph	Unit Hydrograph
----------	-----------	-----------------

Number	Mean values	((CFS))

	(K =	116.22 (CFS))
1	1.861	2.163
2	10.156	9.641
3	33.083	26.646
4	54.196	24.538
5	65.695	13.364
6	73.121	8.630
7	78.475	6.222
8	82.466	4.639
9	85.667	3.720
10	88.293	3.053
11	90.271	2.298
12	91.956	1.958
13	93.399	1.677
14	94.572	1.364
15	95.595	1.188
16	96.431	0.972
17	97.134	0.817
18	97.683	0.637
19	98.052	0.430
20	98.379	0.379
21	98.749	0.430
22	99.122	0.434
23	99.474	0.409
24	99.692	0.253
25	99.886	0.226
26	100.000	0.132

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3723	0.3723
2	0.4584	0.0861
3	0.5177	0.0593
4	0.5643	0.0467
5	0.6034	0.0391
6	0.6373	0.0339
7	0.6675	0.0302
8	0.6948	0.0273
9	0.7198	0.0250
10	0.7429	0.0231
11	0.7644	0.0215
12	0.7846	0.0202
13	0.8147	0.0301
14	0.8436	0.0289
15	0.8713	0.0278
16	0.8982	0.0268
17	0.9241	0.0259

18	0.9492	0.0251
19	0.9737	0.0244
20	0.9974	0.0237
21	1.0205	0.0231
22	1.0431	0.0225
23	1.0651	0.0220
24	1.0866	0.0215
25	1.1076	0.0210
26	1.1282	0.0206
27	1.1484	0.0202
28	1.1682	0.0198
29	1.1876	0.0194
30	1.2066	0.0191
31	1.2254	0.0187
32	1.2438	0.0184
33	1.2619	0.0181
34	1.2797	0.0178
35	1.2972	0.0175
36	1.3145	0.0173
37	1.3315	0.0170
38	1.3483	0.0168
39	1.3648	0.0165
40	1.3812	0.0163
41	1.3973	0.0161
42	1.4132	0.0159
43	1.4288	0.0157
44	1.4443	0.0155
45	1.4597	0.0153
46	1.4748	0.0151
47	1.4898	0.0150
48	1.5046	0.0148
49	1.5192	0.0146
50	1.5337	0.0145
51	1.5480	0.0143
52	1.5622	0.0142
53	1.5762	0.0140
54	1.5901	0.0139
55	1.6038	0.0138
56	1.6174	0.0136
57	1.6309	0.0135
58	1.6443	0.0134
59	1.6576	0.0132
60	1.6707	0.0131
61	1.6837	0.0130
62	1.6966	0.0129
63	1.7094	0.0128
64	1.7221	0.0127
65	1.7346	0.0126
66	1.7471	0.0125
67	1.7595	0.0124

68	1.7718	0.0123
69	1.7840	0.0122
70	1.7960	0.0121
71	1.8080	0.0120
72	1.8199	0.0119
73	1.8325	0.0125
74	1.8449	0.0125
75	1.8573	0.0124
76	1.8696	0.0123
77	1.8818	0.0122
78	1.8940	0.0121
79	1.9060	0.0121
80	1.9180	0.0120
81	1.9299	0.0119
82	1.9417	0.0118
83	1.9535	0.0118
84	1.9652	0.0117
85	1.9768	0.0116
86	1.9883	0.0115
87	1.9998	0.0115
88	2.0112	0.0114
89	2.0226	0.0114
90	2.0339	0.0113
91	2.0451	0.0112
92	2.0563	0.0112
93	2.0674	0.0111
94	2.0784	0.0110
95	2.0894	0.0110
96	2.1003	0.0109
97	2.1112	0.0109
98	2.1220	0.0108
99	2.1327	0.0108
100	2.1434	0.0107
101	2.1541	0.0106
102	2.1647	0.0106
103	2.1752	0.0105
104	2.1857	0.0105
105	2.1962	0.0104
106	2.2066	0.0104
107	2.2169	0.0103
108	2.2272	0.0103
109	2.2374	0.0102
110	2.2476	0.0102
111	2.2578	0.0102
112	2.2679	0.0101
113	2.2780	0.0101
114	2.2880	0.0100
115	2.2979	0.0100
116	2.3079	0.0099
117	2.3178	0.0099

118	2.3276	0.0098
119	2.3374	0.0098
120	2.3472	0.0098
121	2.3569	0.0097
122	2.3666	0.0097
123	2.3762	0.0096
124	2.3858	0.0096
125	2.3954	0.0096
126	2.4049	0.0095
127	2.4144	0.0095
128	2.4238	0.0094
129	2.4333	0.0094
130	2.4426	0.0094
131	2.4520	0.0093
132	2.4613	0.0093
133	2.4705	0.0093
134	2.4798	0.0092
135	2.4890	0.0092
136	2.4981	0.0092
137	2.5073	0.0091
138	2.5164	0.0091
139	2.5254	0.0091
140	2.5345	0.0090
141	2.5435	0.0090
142	2.5524	0.0090
143	2.5614	0.0089
144	2.5703	0.0089
145	2.5792	0.0089
146	2.5880	0.0088
147	2.5968	0.0088
148	2.6056	0.0088
149	2.6143	0.0088
150	2.6231	0.0087
151	2.6318	0.0087
152	2.6404	0.0087
153	2.6491	0.0086
154	2.6577	0.0086
155	2.6663	0.0086
156	2.6748	0.0086
157	2.6833	0.0085
158	2.6918	0.0085
159	2.7003	0.0085
160	2.7087	0.0084
161	2.7172	0.0084
162	2.7256	0.0084
163	2.7339	0.0084
164	2.7423	0.0083
165	2.7506	0.0083
166	2.7589	0.0083
167	2.7671	0.0083

168	2.7754	0.0082
169	2.7836	0.0082
170	2.7918	0.0082
171	2.7999	0.0082
172	2.8081	0.0081
173	2.8162	0.0081
174	2.8243	0.0081
175	2.8324	0.0081
176	2.8404	0.0080
177	2.8484	0.0080
178	2.8565	0.0080
179	2.8644	0.0080
180	2.8724	0.0080
181	2.8803	0.0079
182	2.8882	0.0079
183	2.8961	0.0079
184	2.9040	0.0079
185	2.9119	0.0078
186	2.9197	0.0078
187	2.9275	0.0078
188	2.9353	0.0078
189	2.9430	0.0078
190	2.9508	0.0077
191	2.9585	0.0077
192	2.9662	0.0077
193	2.9739	0.0077
194	2.9816	0.0077
195	2.9892	0.0076
196	2.9968	0.0076
197	3.0044	0.0076
198	3.0120	0.0076
199	3.0196	0.0076
200	3.0271	0.0075
201	3.0347	0.0075
202	3.0422	0.0075
203	3.0497	0.0075
204	3.0571	0.0075
205	3.0646	0.0075
206	3.0720	0.0074
207	3.0794	0.0074
208	3.0868	0.0074
209	3.0942	0.0074
210	3.1016	0.0074
211	3.1089	0.0073
212	3.1163	0.0073
213	3.1236	0.0073
214	3.1309	0.0073
215	3.1382	0.0073
216	3.1454	0.0073
217	3.1527	0.0072

218	3.1599	0.0072
219	3.1671	0.0072
220	3.1743	0.0072
221	3.1815	0.0072
222	3.1886	0.0072
223	3.1958	0.0071
224	3.2029	0.0071
225	3.2100	0.0071
226	3.2171	0.0071
227	3.2242	0.0071
228	3.2313	0.0071
229	3.2383	0.0071
230	3.2454	0.0070
231	3.2524	0.0070
232	3.2594	0.0070
233	3.2664	0.0070
234	3.2733	0.0070
235	3.2803	0.0070
236	3.2872	0.0069
237	3.2942	0.0069
238	3.3011	0.0069
239	3.3080	0.0069
240	3.3149	0.0069
241	3.3217	0.0069
242	3.3286	0.0069
243	3.3354	0.0068
244	3.3423	0.0068
245	3.3491	0.0068
246	3.3559	0.0068
247	3.3627	0.0068
248	3.3695	0.0068
249	3.3762	0.0068
250	3.3830	0.0067
251	3.3897	0.0067
252	3.3964	0.0067
253	3.4031	0.0067
254	3.4098	0.0067
255	3.4165	0.0067
256	3.4232	0.0067
257	3.4298	0.0067
258	3.4364	0.0066
259	3.4431	0.0066
260	3.4497	0.0066
261	3.4563	0.0066
262	3.4629	0.0066
263	3.4695	0.0066
264	3.4760	0.0066
265	3.4826	0.0066
266	3.4891	0.0065
267	3.4956	0.0065

268	3.5021	0.0065
269	3.5086	0.0065
270	3.5151	0.0065
271	3.5216	0.0065
272	3.5281	0.0065
273	3.5345	0.0065
274	3.5410	0.0064
275	3.5474	0.0064
276	3.5538	0.0064
277	3.5602	0.0064
278	3.5666	0.0064
279	3.5730	0.0064
280	3.5794	0.0064
281	3.5857	0.0064
282	3.5921	0.0063
283	3.5984	0.0063
284	3.6048	0.0063
285	3.6111	0.0063
286	3.6174	0.0063
287	3.6237	0.0063
288	3.6300	0.0063

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0063	0.0047	0.0016
2	0.0063	0.0047	0.0016
3	0.0063	0.0047	0.0016
4	0.0063	0.0047	0.0016
5	0.0063	0.0047	0.0016
6	0.0064	0.0047	0.0016
7	0.0064	0.0048	0.0016
8	0.0064	0.0048	0.0016
9	0.0064	0.0048	0.0016
10	0.0064	0.0048	0.0016
11	0.0065	0.0048	0.0016
12	0.0065	0.0048	0.0016
13	0.0065	0.0048	0.0017
14	0.0065	0.0048	0.0017
15	0.0065	0.0049	0.0017
16	0.0065	0.0049	0.0017
17	0.0066	0.0049	0.0017
18	0.0066	0.0049	0.0017
19	0.0066	0.0049	0.0017
20	0.0066	0.0049	0.0017
21	0.0066	0.0049	0.0017
22	0.0067	0.0050	0.0017
23	0.0067	0.0050	0.0017
24	0.0067	0.0050	0.0017

25	0.0067	0.0050	0.0017
26	0.0067	0.0050	0.0017
27	0.0068	0.0050	0.0017
28	0.0068	0.0050	0.0017
29	0.0068	0.0051	0.0017
30	0.0068	0.0051	0.0017
31	0.0068	0.0051	0.0017
32	0.0069	0.0051	0.0017
33	0.0069	0.0051	0.0018
34	0.0069	0.0051	0.0018
35	0.0069	0.0052	0.0018
36	0.0069	0.0052	0.0018
37	0.0070	0.0052	0.0018
38	0.0070	0.0052	0.0018
39	0.0070	0.0052	0.0018
40	0.0070	0.0052	0.0018
41	0.0071	0.0053	0.0018
42	0.0071	0.0053	0.0018
43	0.0071	0.0053	0.0018
44	0.0071	0.0053	0.0018
45	0.0072	0.0053	0.0018
46	0.0072	0.0054	0.0018
47	0.0072	0.0054	0.0018
48	0.0072	0.0054	0.0018
49	0.0073	0.0054	0.0018
50	0.0073	0.0054	0.0019
51	0.0073	0.0055	0.0019
52	0.0073	0.0055	0.0019
53	0.0074	0.0055	0.0019
54	0.0074	0.0055	0.0019
55	0.0074	0.0055	0.0019
56	0.0074	0.0055	0.0019
57	0.0075	0.0056	0.0019
58	0.0075	0.0056	0.0019
59	0.0075	0.0056	0.0019
60	0.0075	0.0056	0.0019
61	0.0076	0.0057	0.0019
62	0.0076	0.0057	0.0019
63	0.0076	0.0057	0.0019
64	0.0077	0.0057	0.0020
65	0.0077	0.0057	0.0020
66	0.0077	0.0058	0.0020
67	0.0078	0.0058	0.0020
68	0.0078	0.0058	0.0020
69	0.0078	0.0058	0.0020
70	0.0078	0.0059	0.0020
71	0.0079	0.0059	0.0020
72	0.0079	0.0059	0.0020
73	0.0080	0.0059	0.0020
74	0.0080	0.0059	0.0020

75	0.0080	0.0060	0.0020
76	0.0080	0.0060	0.0020
77	0.0081	0.0060	0.0021
78	0.0081	0.0061	0.0021
79	0.0082	0.0061	0.0021
80	0.0082	0.0061	0.0021
81	0.0082	0.0061	0.0021
82	0.0083	0.0062	0.0021
83	0.0083	0.0062	0.0021
84	0.0083	0.0062	0.0021
85	0.0084	0.0063	0.0021
86	0.0084	0.0063	0.0021
87	0.0085	0.0063	0.0022
88	0.0085	0.0063	0.0022
89	0.0086	0.0064	0.0022
90	0.0086	0.0064	0.0022
91	0.0086	0.0064	0.0022
92	0.0087	0.0065	0.0022
93	0.0087	0.0065	0.0022
94	0.0088	0.0065	0.0022
95	0.0088	0.0066	0.0022
96	0.0088	0.0066	0.0023
97	0.0089	0.0066	0.0023
98	0.0089	0.0067	0.0023
99	0.0090	0.0067	0.0023
100	0.0090	0.0067	0.0023
101	0.0091	0.0068	0.0023
102	0.0091	0.0068	0.0023
103	0.0092	0.0069	0.0023
104	0.0092	0.0069	0.0024
105	0.0093	0.0069	0.0024
106	0.0093	0.0070	0.0024
107	0.0094	0.0070	0.0024
108	0.0094	0.0070	0.0024
109	0.0095	0.0071	0.0024
110	0.0096	0.0071	0.0024
111	0.0096	0.0072	0.0025
112	0.0097	0.0072	0.0025
113	0.0098	0.0073	0.0025
114	0.0098	0.0073	0.0025
115	0.0099	0.0074	0.0025
116	0.0099	0.0074	0.0025
117	0.0100	0.0075	0.0026
118	0.0101	0.0075	0.0026
119	0.0102	0.0076	0.0026
120	0.0102	0.0076	0.0026
121	0.0103	0.0077	0.0026
122	0.0103	0.0077	0.0026
123	0.0104	0.0078	0.0027
124	0.0105	0.0078	0.0027

125	0.0106	0.0079	0.0027
126	0.0106	0.0079	0.0027
127	0.0108	0.0080	0.0027
128	0.0108	0.0081	0.0028
129	0.0109	0.0081	0.0028
130	0.0110	0.0082	0.0028
131	0.0111	0.0083	0.0028
132	0.0112	0.0083	0.0028
133	0.0113	0.0084	0.0029
134	0.0114	0.0085	0.0029
135	0.0115	0.0086	0.0029
136	0.0115	0.0086	0.0029
137	0.0117	0.0087	0.0030
138	0.0118	0.0088	0.0030
139	0.0119	0.0089	0.0030
140	0.0120	0.0089	0.0030
141	0.0121	0.0090	0.0031
142	0.0122	0.0091	0.0031
143	0.0124	0.0092	0.0032
144	0.0125	0.0093	0.0032
145	0.0119	0.0089	0.0030
146	0.0120	0.0089	0.0031
147	0.0122	0.0091	0.0031
148	0.0123	0.0092	0.0031
149	0.0125	0.0093	0.0032
150	0.0126	0.0094	0.0032
151	0.0128	0.0095	0.0033
152	0.0129	0.0096	0.0033
153	0.0131	0.0098	0.0033
154	0.0132	0.0099	0.0034
155	0.0135	0.0101	0.0034
156	0.0136	0.0102	0.0035
157	0.0139	0.0104	0.0035
158	0.0140	0.0105	0.0036
159	0.0143	0.0107	0.0036
160	0.0145	0.0108	0.0037
161	0.0148	0.0110	0.0038
162	0.0150	0.0112	0.0038
163	0.0153	0.0114	0.0039
164	0.0155	0.0116	0.0039
165	0.0159	0.0118	0.0040
166	0.0161	0.0120	0.0041
167	0.0165	0.0123	0.0042
168	0.0168	0.0125	0.0043
169	0.0173	0.0129	0.0044
170	0.0175	0.0131	0.0045
171	0.0181	0.0135	0.0046
172	0.0184	0.0137	0.0047
173	0.0191	0.0142	0.0049
174	0.0194	0.0145	0.0049

175	0.0202	0.0150	0.0051
176	0.0206	0.0154	0.0052
177	0.0215	0.0160	0.0055
178	0.0220	0.0164	0.0056
179	0.0231	0.0172	0.0059
180	0.0237	0.0177	0.0060
181	0.0251	0.0187	0.0064
182	0.0259	0.0193	0.0066
183	0.0278	0.0207	0.0071
184	0.0289	0.0215	0.0073
185	0.0202	0.0151	0.0051
186	0.0215	0.0161	0.0055
187	0.0250	0.0186	0.0064
188	0.0273	0.0203	0.0069
189	0.0339	0.0253	0.0086
190	0.0391	0.0291	0.0099
191	0.0593	0.0442	0.0151
192	0.0861	0.0482	0.0379
193	0.3723	0.0482	0.3241
194	0.0467	0.0348	0.0119
195	0.0302	0.0225	0.0077
196	0.0231	0.0172	0.0059
197	0.0301	0.0224	0.0077
198	0.0268	0.0200	0.0068
199	0.0244	0.0182	0.0062
200	0.0225	0.0168	0.0057
201	0.0210	0.0157	0.0054
202	0.0198	0.0147	0.0050
203	0.0187	0.0140	0.0048
204	0.0178	0.0133	0.0045
205	0.0170	0.0127	0.0043
206	0.0163	0.0122	0.0042
207	0.0157	0.0117	0.0040
208	0.0151	0.0113	0.0039
209	0.0146	0.0109	0.0037
210	0.0142	0.0106	0.0036
211	0.0138	0.0103	0.0035
212	0.0134	0.0100	0.0034
213	0.0130	0.0097	0.0033
214	0.0127	0.0095	0.0032
215	0.0124	0.0092	0.0032
216	0.0121	0.0090	0.0031
217	0.0125	0.0094	0.0032
218	0.0123	0.0092	0.0031
219	0.0121	0.0090	0.0031
220	0.0118	0.0088	0.0030
221	0.0116	0.0087	0.0030
222	0.0114	0.0085	0.0029
223	0.0112	0.0084	0.0029
224	0.0110	0.0082	0.0028

225	0.0109	0.0081	0.0028
226	0.0107	0.0080	0.0027
227	0.0105	0.0079	0.0027
228	0.0104	0.0077	0.0026
229	0.0102	0.0076	0.0026
230	0.0101	0.0075	0.0026
231	0.0100	0.0074	0.0025
232	0.0098	0.0073	0.0025
233	0.0097	0.0072	0.0025
234	0.0096	0.0072	0.0024
235	0.0095	0.0071	0.0024
236	0.0094	0.0070	0.0024
237	0.0093	0.0069	0.0024
238	0.0092	0.0068	0.0023
239	0.0091	0.0068	0.0023
240	0.0090	0.0067	0.0023
241	0.0089	0.0066	0.0023
242	0.0088	0.0065	0.0022
243	0.0087	0.0065	0.0022
244	0.0086	0.0064	0.0022
245	0.0085	0.0064	0.0022
246	0.0084	0.0063	0.0021
247	0.0084	0.0062	0.0021
248	0.0083	0.0062	0.0021
249	0.0082	0.0061	0.0021
250	0.0081	0.0061	0.0021
251	0.0081	0.0060	0.0021
252	0.0080	0.0060	0.0020
253	0.0079	0.0059	0.0020
254	0.0079	0.0059	0.0020
255	0.0078	0.0058	0.0020
256	0.0077	0.0058	0.0020
257	0.0077	0.0057	0.0020
258	0.0076	0.0057	0.0019
259	0.0076	0.0056	0.0019
260	0.0075	0.0056	0.0019
261	0.0075	0.0056	0.0019
262	0.0074	0.0055	0.0019
263	0.0073	0.0055	0.0019
264	0.0073	0.0054	0.0019
265	0.0072	0.0054	0.0018
266	0.0072	0.0054	0.0018
267	0.0071	0.0053	0.0018
268	0.0071	0.0053	0.0018
269	0.0071	0.0053	0.0018
270	0.0070	0.0052	0.0018
271	0.0070	0.0052	0.0018
272	0.0069	0.0052	0.0018
273	0.0069	0.0051	0.0017
274	0.0068	0.0051	0.0017

275	0.0068	0.0051	0.0017
276	0.0067	0.0050	0.0017
277	0.0067	0.0050	0.0017
278	0.0067	0.0050	0.0017
279	0.0066	0.0049	0.0017
280	0.0066	0.0049	0.0017
281	0.0066	0.0049	0.0017
282	0.0065	0.0049	0.0017
283	0.0065	0.0048	0.0016
284	0.0064	0.0048	0.0016
285	0.0064	0.0048	0.0016
286	0.0064	0.0048	0.0016
287	0.0063	0.0047	0.0016
288	0.0063	0.0047	0.0016

 Total soil rain loss = 2.46(In)
 Total effective rainfall = 1.17(In)
 Peak flow rate in flood hydrograph = 10.19(CFS)

+++++

24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
-----------	--------------	--------	---	-----	------	------	------

0+ 5	0.0000	0.00	Q
0+10	0.0002	0.02	Q
0+15	0.0006	0.06	Q
0+20	0.0013	0.10	Q
0+25	0.0021	0.12	Q
0+30	0.0031	0.14	Q
0+35	0.0041	0.15	Q
0+40	0.0051	0.15	Q
0+45	0.0062	0.16	Q
0+50	0.0074	0.17	Q
0+55	0.0086	0.17	Q
1+ 0	0.0098	0.17	Q
1+ 5	0.0110	0.18	Q
1+10	0.0122	0.18	Q
1+15	0.0135	0.18	Q
1+20	0.0148	0.18	Q
1+25	0.0160	0.19	Q
1+30	0.0173	0.19	Q
1+35	0.0186	0.19	Q
1+40	0.0199	0.19	Q
1+45	0.0213	0.19	Q

1+50	0.0226	0.19	Q
1+55	0.0239	0.19	QV
2+ 0	0.0253	0.19	QV
2+ 5	0.0266	0.20	QV
2+10	0.0280	0.20	QV
2+15	0.0293	0.20	QV
2+20	0.0307	0.20	QV
2+25	0.0321	0.20	QV
2+30	0.0334	0.20	QV
2+35	0.0348	0.20	QV
2+40	0.0362	0.20	QV
2+45	0.0376	0.20	QV
2+50	0.0389	0.20	QV
2+55	0.0403	0.20	QV
3+ 0	0.0417	0.20	QV
3+ 5	0.0431	0.20	QV
3+10	0.0445	0.20	QV
3+15	0.0459	0.20	QV
3+20	0.0474	0.21	Q V
3+25	0.0488	0.21	Q V
3+30	0.0502	0.21	Q V
3+35	0.0516	0.21	Q V
3+40	0.0530	0.21	Q V
3+45	0.0545	0.21	Q V
3+50	0.0559	0.21	Q V
3+55	0.0574	0.21	Q V
4+ 0	0.0588	0.21	Q V
4+ 5	0.0603	0.21	Q V
4+10	0.0617	0.21	Q V
4+15	0.0632	0.21	Q V
4+20	0.0647	0.21	Q V
4+25	0.0661	0.21	Q V
4+30	0.0676	0.21	Q V
4+35	0.0691	0.22	Q V
4+40	0.0706	0.22	Q V
4+45	0.0721	0.22	Q V
4+50	0.0736	0.22	Q V
4+55	0.0751	0.22	Q V
5+ 0	0.0766	0.22	Q V
5+ 5	0.0781	0.22	Q V
5+10	0.0797	0.22	Q V
5+15	0.0812	0.22	Q V
5+20	0.0827	0.22	Q V
5+25	0.0843	0.22	Q V
5+30	0.0858	0.22	Q V
5+35	0.0874	0.23	Q V
5+40	0.0889	0.23	Q V
5+45	0.0905	0.23	Q V
5+50	0.0921	0.23	Q V
5+55	0.0936	0.23	Q V

6+ 0	0.0952	0.23	Q	V				
6+ 5	0.0968	0.23	Q	V				
6+10	0.0984	0.23	Q	V				
6+15	0.1000	0.23	Q	V				
6+20	0.1016	0.23	Q	V				
6+25	0.1032	0.23	Q	V				
6+30	0.1049	0.24	Q	V				
6+35	0.1065	0.24	Q	V				
6+40	0.1081	0.24	Q	V				
6+45	0.1098	0.24	Q	V				
6+50	0.1114	0.24	Q	V				
6+55	0.1131	0.24	Q	V				
7+ 0	0.1147	0.24	Q	V				
7+ 5	0.1164	0.24	Q	V				
7+10	0.1181	0.24	Q	V				
7+15	0.1198	0.25	Q	V				
7+20	0.1215	0.25	Q	V				
7+25	0.1232	0.25	Q	V				
7+30	0.1249	0.25	Q	V				
7+35	0.1266	0.25	Q	V				
7+40	0.1283	0.25	Q	V				
7+45	0.1301	0.25	Q	V				
7+50	0.1318	0.25	Q	V				
7+55	0.1336	0.25	Q	V				
8+ 0	0.1353	0.26	Q	V				
8+ 5	0.1371	0.26	Q	V				
8+10	0.1389	0.26	Q	V				
8+15	0.1407	0.26	Q	V				
8+20	0.1425	0.26	Q	V				
8+25	0.1443	0.26	Q	V				
8+30	0.1461	0.26	Q	V				
8+35	0.1479	0.27	Q	V				
8+40	0.1498	0.27	Q	V				
8+45	0.1516	0.27	Q	V				
8+50	0.1535	0.27	Q	V				
8+55	0.1553	0.27	Q	V				
9+ 0	0.1572	0.27	Q	V				
9+ 5	0.1591	0.27	Q	V				
9+10	0.1610	0.28	Q	V				
9+15	0.1629	0.28	Q	V				
9+20	0.1648	0.28	Q	V				
9+25	0.1667	0.28	Q	V				
9+30	0.1687	0.28	Q	V				
9+35	0.1706	0.28	Q	V				
9+40	0.1726	0.29	Q	V				
9+45	0.1746	0.29	Q	V				
9+50	0.1766	0.29	Q	V				
9+55	0.1786	0.29	Q	V				
10+ 0	0.1806	0.29	Q	V				
10+ 5	0.1826	0.29	Q	V				

10+10	0.1847	0.30	Q	V				
10+15	0.1867	0.30	Q	V				
10+20	0.1888	0.30	Q	V				
10+25	0.1909	0.30	Q	V				
10+30	0.1930	0.31	Q	V				
10+35	0.1951	0.31	Q	V				
10+40	0.1972	0.31	Q	V				
10+45	0.1994	0.31	Q	V				
10+50	0.2016	0.31	Q	V				
10+55	0.2037	0.32	Q	V				
11+ 0	0.2059	0.32	Q	V				
11+ 5	0.2081	0.32	Q	V				
11+10	0.2104	0.32	Q	V				
11+15	0.2126	0.33	Q	V				
11+20	0.2149	0.33	Q	V				
11+25	0.2172	0.33	Q	V				
11+30	0.2195	0.33	Q	V				
11+35	0.2218	0.34	Q	V				
11+40	0.2241	0.34	Q	V				
11+45	0.2265	0.34	Q	V				
11+50	0.2289	0.35	Q	V				
11+55	0.2313	0.35	Q	V				
12+ 0	0.2337	0.35	Q	V				
12+ 5	0.2362	0.36	Q	V				
12+10	0.2387	0.36	Q	V				
12+15	0.2411	0.36	Q	V				
12+20	0.2436	0.36	Q	V				
12+25	0.2460	0.36	Q	V				
12+30	0.2485	0.36	Q	V				
12+35	0.2510	0.36	Q	V				
12+40	0.2535	0.37	Q	V				
12+45	0.2560	0.37	Q	V				
12+50	0.2586	0.37	Q	V				
12+55	0.2612	0.38	Q	V				
13+ 0	0.2638	0.38	Q	V				
13+ 5	0.2665	0.39	Q	V				
13+10	0.2692	0.39	Q	V				
13+15	0.2719	0.40	Q	V				
13+20	0.2747	0.40	Q	V				
13+25	0.2775	0.41	Q	V				
13+30	0.2804	0.41	Q	V				
13+35	0.2833	0.42	Q	V				
13+40	0.2862	0.43	Q	V				
13+45	0.2892	0.43	Q	V				
13+50	0.2922	0.44	Q	V				
13+55	0.2953	0.45	Q	V				
14+ 0	0.2985	0.46	Q	V				
14+ 5	0.3017	0.47	Q	V				
14+10	0.3049	0.47	Q	V				
14+15	0.3083	0.48	Q	V				

14+20	0.3117	0.49	Q		V			
14+25	0.3152	0.51	Q		V			
14+30	0.3187	0.52	Q		V			
14+35	0.3224	0.53	Q		V			
14+40	0.3261	0.54	Q		V			
14+45	0.3299	0.56	Q		V			
14+50	0.3339	0.57	Q		V			
14+55	0.3380	0.59	Q		V			
15+ 0	0.3421	0.61	Q		V			
15+ 5	0.3465	0.63	Q		V			
15+10	0.3510	0.65	Q		V			
15+15	0.3556	0.68	Q		V			
15+20	0.3605	0.71	Q		V			
15+25	0.3655	0.73	Q		V			
15+30	0.3706	0.74	Q		V			
15+35	0.3755	0.71	Q		V			
15+40	0.3803	0.69	Q		V			
15+45	0.3851	0.71	Q		V			
15+50	0.3904	0.76	Q		V			
15+55	0.3962	0.85	Q		V			
16+ 0	0.4034	1.04	Q		V			
16+ 5	0.4176	2.08	Q		V			
16+10	0.4516	4.93		Q	V			
16+15	0.5218	10.19			Q	V		
16+20	0.5853	9.22			Q	V		
16+25	0.6232	5.50		Q		V		
16+30	0.6497	3.84		Q		V		
16+35	0.6704	3.00		Q		V		
16+40	0.6872	2.45		Q		V		
16+45	0.7017	2.09		Q		V		
16+50	0.7142	1.82		Q		V		
16+55	0.7247	1.52		Q		V		
17+ 0	0.7341	1.37	Q			V		
17+ 5	0.7426	1.23	Q			V		
17+10	0.7501	1.10	Q			V		
17+15	0.7570	1.00	Q			V		
17+20	0.7633	0.90	Q			V		
17+25	0.7689	0.82	Q			V		
17+30	0.7740	0.74	Q			V		
17+35	0.7785	0.65	Q			V		
17+40	0.7827	0.62	Q			V		
17+45	0.7870	0.62	Q			V		
17+50	0.7911	0.60	Q			V		
17+55	0.7950	0.57	Q			V		
18+ 0	0.7985	0.51	Q			V		
18+ 5	0.8018	0.48	Q			V		
18+10	0.8049	0.44	Q			V		
18+15	0.8076	0.39	Q			V		
18+20	0.8102	0.38	Q			V		
18+25	0.8128	0.38	Q			V		

18+30	0.8154	0.37	Q				V
18+35	0.8179	0.36	Q				V
18+40	0.8203	0.36	Q				V
18+45	0.8227	0.35	Q				V
18+50	0.8251	0.34	Q				V
18+55	0.8274	0.34	Q				V
19+ 0	0.8297	0.33	Q				V
19+ 5	0.8320	0.33	Q				V
19+10	0.8342	0.32	Q				V
19+15	0.8364	0.32	Q				V
19+20	0.8385	0.31	Q				V
19+25	0.8407	0.31	Q				V
19+30	0.8427	0.30	Q				V
19+35	0.8448	0.30	Q				V
19+40	0.8468	0.30	Q				V
19+45	0.8489	0.29	Q				V
19+50	0.8508	0.29	Q				V
19+55	0.8528	0.28	Q				V
20+ 0	0.8547	0.28	Q				V
20+ 5	0.8566	0.28	Q				V
20+10	0.8585	0.27	Q				V
20+15	0.8604	0.27	Q				V
20+20	0.8623	0.27	Q				V
20+25	0.8641	0.27	Q				V
20+30	0.8659	0.26	Q				V
20+35	0.8677	0.26	Q				V
20+40	0.8695	0.26	Q				V
20+45	0.8712	0.25	Q				V
20+50	0.8730	0.25	Q				V
20+55	0.8747	0.25	Q				V
21+ 0	0.8764	0.25	Q				V
21+ 5	0.8781	0.25	Q				V
21+10	0.8797	0.24	Q				V
21+15	0.8814	0.24	Q				V
21+20	0.8830	0.24	Q				V
21+25	0.8847	0.24	Q				V
21+30	0.8863	0.23	Q				V
21+35	0.8879	0.23	Q				V
21+40	0.8895	0.23	Q				V
21+45	0.8911	0.23	Q				V
21+50	0.8926	0.23	Q				V
21+55	0.8942	0.23	Q				V
22+ 0	0.8957	0.22	Q				V
22+ 5	0.8973	0.22	Q				V
22+10	0.8988	0.22	Q				V
22+15	0.9003	0.22	Q				V
22+20	0.9018	0.22	Q				V
22+25	0.9033	0.22	Q				V
22+30	0.9047	0.21	Q				V
22+35	0.9062	0.21	Q				V

22+40	0.9077	0.21	Q				V
22+45	0.9091	0.21	Q				V
22+50	0.9105	0.21	Q				V
22+55	0.9120	0.21	Q				V
23+ 0	0.9134	0.21	Q				V
23+ 5	0.9148	0.20	Q				V
23+10	0.9162	0.20	Q				V
23+15	0.9176	0.20	Q				V
23+20	0.9190	0.20	Q				V
23+25	0.9203	0.20	Q				V
23+30	0.9217	0.20	Q				V
23+35	0.9231	0.20	Q				V
23+40	0.9244	0.20	Q				V
23+45	0.9258	0.19	Q				V
23+50	0.9271	0.19	Q				V
23+55	0.9284	0.19	Q				V
24+ 0	0.9297	0.19	Q				V

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 10/01/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
PREDEVELOPED 10 YR UNIT HYDROGRAPH SUBAREA B
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
8.25	1	0.79

Rainfall data for year 10		
8.25	6	1.82

Rainfall data for year 10		
8.25	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
67.0	67.0	8.25	1.000	0.578	1.000	0.578

Area-averaged adjusted loss rate Fm (In/Hr) = 0.578

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
8.25	1.000	67.0	67.0	4.93	0.255

Area-averaged catchment yield fraction, Y = 0.255

Area-averaged low loss fraction, Yb = 0.745

User entry of time of concentration = 0.270 (hours)

+++++

Watershed area = 8.25(Ac.)

Catchment Lag time = 0.216 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 38.5802

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.578(In/Hr)

Average low loss rate fraction (Yb) = 0.745 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.375(In)

Computed peak 30-minute rainfall = 0.642(In)

Specified peak 1-hour rainfall = 0.790(In)

Computed peak 3-hour rainfall = 1.318(In)

Specified peak 6-hour rainfall = 1.820(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 8.25(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000	Adjusted rainfall = 0.375(In)
-------------------------	-------------------------------

30-minute factor = 1.000	Adjusted rainfall = 0.641(In)
--------------------------	-------------------------------

1-hour factor = 1.000	Adjusted rainfall = 0.790(In)
-----------------------	-------------------------------

3-hour factor = 1.000	Adjusted rainfall = 1.318(In)
-----------------------	-------------------------------

6-hour factor = 1.000	Adjusted rainfall = 1.820(In)
-----------------------	-------------------------------

24-hour factor = 1.000	Adjusted rainfall = 3.630(In)
------------------------	-------------------------------

Unit Hydrograph

+++++

Interval	'S' Graph	Unit Hydrograph
----------	-----------	-----------------

Number	Mean values	((CFS))

	(K =	99.77 (CFS))
1	2.595	2.589
2	17.110	14.482
3	47.025	29.847
4	64.168	17.104
5	73.585	9.396
6	79.873	6.274
7	84.321	4.438
8	87.824	3.495
9	90.350	2.521
10	92.386	2.031
11	94.047	1.658
12	95.367	1.317
13	96.438	1.068
14	97.275	0.835
15	97.884	0.608
16	98.288	0.403
17	98.739	0.450
18	99.202	0.462
19	99.584	0.381
20	99.827	0.243
21	100.000	0.173

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3747	0.3747
2	0.4613	0.0866
3	0.5210	0.0597
4	0.5680	0.0470
5	0.6073	0.0393
6	0.6414	0.0341
7	0.6718	0.0304
8	0.6992	0.0275
9	0.7244	0.0251
10	0.7477	0.0233
11	0.7693	0.0217
12	0.7897	0.0203
13	0.8197	0.0300
14	0.8485	0.0288
15	0.8762	0.0277
16	0.9030	0.0268
17	0.9289	0.0259
18	0.9540	0.0251
19	0.9783	0.0243
20	1.0020	0.0237
21	1.0250	0.0230
22	1.0475	0.0225

23	1.0694	0.0219
24	1.0908	0.0214
25	1.1118	0.0210
26	1.1323	0.0205
27	1.1524	0.0201
28	1.1721	0.0197
29	1.1914	0.0193
30	1.2104	0.0190
31	1.2291	0.0186
32	1.2474	0.0183
33	1.2654	0.0180
34	1.2831	0.0177
35	1.3006	0.0175
36	1.3178	0.0172
37	1.3347	0.0169
38	1.3514	0.0167
39	1.3678	0.0165
40	1.3841	0.0162
41	1.4001	0.0160
42	1.4159	0.0158
43	1.4315	0.0156
44	1.4469	0.0154
45	1.4621	0.0152
46	1.4772	0.0150
47	1.4920	0.0149
48	1.5067	0.0147
49	1.5213	0.0145
50	1.5357	0.0144
51	1.5499	0.0142
52	1.5640	0.0141
53	1.5779	0.0139
54	1.5917	0.0138
55	1.6054	0.0137
56	1.6189	0.0135
57	1.6323	0.0134
58	1.6456	0.0133
59	1.6587	0.0132
60	1.6718	0.0130
61	1.6847	0.0129
62	1.6975	0.0128
63	1.7102	0.0127
64	1.7228	0.0126
65	1.7353	0.0125
66	1.7477	0.0124
67	1.7599	0.0123
68	1.7721	0.0122
69	1.7842	0.0121
70	1.7962	0.0120
71	1.8081	0.0119
72	1.8200	0.0118

73	1.8325	0.0125
74	1.8450	0.0125
75	1.8573	0.0124
76	1.8696	0.0123
77	1.8818	0.0122
78	1.8940	0.0121
79	1.9060	0.0121
80	1.9180	0.0120
81	1.9299	0.0119
82	1.9417	0.0118
83	1.9535	0.0118
84	1.9652	0.0117
85	1.9768	0.0116
86	1.9883	0.0115
87	1.9998	0.0115
88	2.0112	0.0114
89	2.0226	0.0114
90	2.0339	0.0113
91	2.0451	0.0112
92	2.0563	0.0112
93	2.0674	0.0111
94	2.0784	0.0110
95	2.0894	0.0110
96	2.1003	0.0109
97	2.1112	0.0109
98	2.1220	0.0108
99	2.1327	0.0108
100	2.1434	0.0107
101	2.1541	0.0106
102	2.1647	0.0106
103	2.1752	0.0105
104	2.1857	0.0105
105	2.1962	0.0104
106	2.2066	0.0104
107	2.2169	0.0103
108	2.2272	0.0103
109	2.2374	0.0102
110	2.2476	0.0102
111	2.2578	0.0102
112	2.2679	0.0101
113	2.2780	0.0101
114	2.2880	0.0100
115	2.2980	0.0100
116	2.3079	0.0099
117	2.3178	0.0099
118	2.3276	0.0098
119	2.3374	0.0098
120	2.3472	0.0098
121	2.3569	0.0097
122	2.3666	0.0097

123	2.3762	0.0096
124	2.3858	0.0096
125	2.3954	0.0096
126	2.4049	0.0095
127	2.4144	0.0095
128	2.4239	0.0094
129	2.4333	0.0094
130	2.4426	0.0094
131	2.4520	0.0093
132	2.4613	0.0093
133	2.4706	0.0093
134	2.4798	0.0092
135	2.4890	0.0092
136	2.4981	0.0092
137	2.5073	0.0091
138	2.5164	0.0091
139	2.5254	0.0091
140	2.5345	0.0090
141	2.5435	0.0090
142	2.5524	0.0090
143	2.5614	0.0089
144	2.5703	0.0089
145	2.5792	0.0089
146	2.5880	0.0088
147	2.5968	0.0088
148	2.6056	0.0088
149	2.6144	0.0088
150	2.6231	0.0087
151	2.6318	0.0087
152	2.6404	0.0087
153	2.6491	0.0086
154	2.6577	0.0086
155	2.6663	0.0086
156	2.6748	0.0086
157	2.6833	0.0085
158	2.6918	0.0085
159	2.7003	0.0085
160	2.7088	0.0084
161	2.7172	0.0084
162	2.7256	0.0084
163	2.7339	0.0084
164	2.7423	0.0083
165	2.7506	0.0083
166	2.7589	0.0083
167	2.7671	0.0083
168	2.7754	0.0082
169	2.7836	0.0082
170	2.7918	0.0082
171	2.8000	0.0082
172	2.8081	0.0081

173	2.8162	0.0081
174	2.8243	0.0081
175	2.8324	0.0081
176	2.8404	0.0080
177	2.8485	0.0080
178	2.8565	0.0080
179	2.8644	0.0080
180	2.8724	0.0080
181	2.8803	0.0079
182	2.8883	0.0079
183	2.8961	0.0079
184	2.9040	0.0079
185	2.9119	0.0078
186	2.9197	0.0078
187	2.9275	0.0078
188	2.9353	0.0078
189	2.9431	0.0078
190	2.9508	0.0077
191	2.9585	0.0077
192	2.9662	0.0077
193	2.9739	0.0077
194	2.9816	0.0077
195	2.9892	0.0076
196	2.9968	0.0076
197	3.0044	0.0076
198	3.0120	0.0076
199	3.0196	0.0076
200	3.0271	0.0075
201	3.0347	0.0075
202	3.0422	0.0075
203	3.0497	0.0075
204	3.0571	0.0075
205	3.0646	0.0075
206	3.0720	0.0074
207	3.0795	0.0074
208	3.0869	0.0074
209	3.0942	0.0074
210	3.1016	0.0074
211	3.1090	0.0073
212	3.1163	0.0073
213	3.1236	0.0073
214	3.1309	0.0073
215	3.1382	0.0073
216	3.1454	0.0073
217	3.1527	0.0072
218	3.1599	0.0072
219	3.1671	0.0072
220	3.1743	0.0072
221	3.1815	0.0072
222	3.1886	0.0072

223	3.1958	0.0071
224	3.2029	0.0071
225	3.2100	0.0071
226	3.2171	0.0071
227	3.2242	0.0071
228	3.2313	0.0071
229	3.2383	0.0071
230	3.2454	0.0070
231	3.2524	0.0070
232	3.2594	0.0070
233	3.2664	0.0070
234	3.2733	0.0070
235	3.2803	0.0070
236	3.2872	0.0069
237	3.2942	0.0069
238	3.3011	0.0069
239	3.3080	0.0069
240	3.3149	0.0069
241	3.3218	0.0069
242	3.3286	0.0069
243	3.3355	0.0068
244	3.3423	0.0068
245	3.3491	0.0068
246	3.3559	0.0068
247	3.3627	0.0068
248	3.3695	0.0068
249	3.3762	0.0068
250	3.3830	0.0067
251	3.3897	0.0067
252	3.3964	0.0067
253	3.4031	0.0067
254	3.4098	0.0067
255	3.4165	0.0067
256	3.4232	0.0067
257	3.4298	0.0067
258	3.4364	0.0066
259	3.4431	0.0066
260	3.4497	0.0066
261	3.4563	0.0066
262	3.4629	0.0066
263	3.4695	0.0066
264	3.4760	0.0066
265	3.4826	0.0066
266	3.4891	0.0065
267	3.4956	0.0065
268	3.5022	0.0065
269	3.5087	0.0065
270	3.5151	0.0065
271	3.5216	0.0065
272	3.5281	0.0065

273	3.5345	0.0065
274	3.5410	0.0064
275	3.5474	0.0064
276	3.5538	0.0064
277	3.5602	0.0064
278	3.5666	0.0064
279	3.5730	0.0064
280	3.5794	0.0064
281	3.5858	0.0064
282	3.5921	0.0063
283	3.5984	0.0063
284	3.6048	0.0063
285	3.6111	0.0063
286	3.6174	0.0063
287	3.6237	0.0063
288	3.6300	0.0063

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0063	0.0047	0.0016
2	0.0063	0.0047	0.0016
3	0.0063	0.0047	0.0016
4	0.0063	0.0047	0.0016
5	0.0063	0.0047	0.0016
6	0.0064	0.0047	0.0016
7	0.0064	0.0048	0.0016
8	0.0064	0.0048	0.0016
9	0.0064	0.0048	0.0016
10	0.0064	0.0048	0.0016
11	0.0065	0.0048	0.0016
12	0.0065	0.0048	0.0016
13	0.0065	0.0048	0.0017
14	0.0065	0.0048	0.0017
15	0.0065	0.0049	0.0017
16	0.0065	0.0049	0.0017
17	0.0066	0.0049	0.0017
18	0.0066	0.0049	0.0017
19	0.0066	0.0049	0.0017
20	0.0066	0.0049	0.0017
21	0.0066	0.0049	0.0017
22	0.0067	0.0050	0.0017
23	0.0067	0.0050	0.0017
24	0.0067	0.0050	0.0017
25	0.0067	0.0050	0.0017
26	0.0067	0.0050	0.0017
27	0.0068	0.0050	0.0017
28	0.0068	0.0050	0.0017
29	0.0068	0.0051	0.0017

30	0.0068	0.0051	0.0017
31	0.0068	0.0051	0.0017
32	0.0069	0.0051	0.0017
33	0.0069	0.0051	0.0018
34	0.0069	0.0051	0.0018
35	0.0069	0.0052	0.0018
36	0.0069	0.0052	0.0018
37	0.0070	0.0052	0.0018
38	0.0070	0.0052	0.0018
39	0.0070	0.0052	0.0018
40	0.0070	0.0052	0.0018
41	0.0071	0.0053	0.0018
42	0.0071	0.0053	0.0018
43	0.0071	0.0053	0.0018
44	0.0071	0.0053	0.0018
45	0.0072	0.0053	0.0018
46	0.0072	0.0054	0.0018
47	0.0072	0.0054	0.0018
48	0.0072	0.0054	0.0018
49	0.0073	0.0054	0.0018
50	0.0073	0.0054	0.0019
51	0.0073	0.0055	0.0019
52	0.0073	0.0055	0.0019
53	0.0074	0.0055	0.0019
54	0.0074	0.0055	0.0019
55	0.0074	0.0055	0.0019
56	0.0074	0.0055	0.0019
57	0.0075	0.0056	0.0019
58	0.0075	0.0056	0.0019
59	0.0075	0.0056	0.0019
60	0.0075	0.0056	0.0019
61	0.0076	0.0057	0.0019
62	0.0076	0.0057	0.0019
63	0.0076	0.0057	0.0019
64	0.0077	0.0057	0.0020
65	0.0077	0.0057	0.0020
66	0.0077	0.0058	0.0020
67	0.0078	0.0058	0.0020
68	0.0078	0.0058	0.0020
69	0.0078	0.0058	0.0020
70	0.0078	0.0059	0.0020
71	0.0079	0.0059	0.0020
72	0.0079	0.0059	0.0020
73	0.0080	0.0059	0.0020
74	0.0080	0.0059	0.0020
75	0.0080	0.0060	0.0020
76	0.0080	0.0060	0.0020
77	0.0081	0.0060	0.0021
78	0.0081	0.0061	0.0021
79	0.0082	0.0061	0.0021

80	0.0082	0.0061	0.0021
81	0.0082	0.0061	0.0021
82	0.0083	0.0062	0.0021
83	0.0083	0.0062	0.0021
84	0.0083	0.0062	0.0021
85	0.0084	0.0063	0.0021
86	0.0084	0.0063	0.0021
87	0.0085	0.0063	0.0022
88	0.0085	0.0063	0.0022
89	0.0086	0.0064	0.0022
90	0.0086	0.0064	0.0022
91	0.0086	0.0064	0.0022
92	0.0087	0.0065	0.0022
93	0.0087	0.0065	0.0022
94	0.0088	0.0065	0.0022
95	0.0088	0.0066	0.0022
96	0.0088	0.0066	0.0023
97	0.0089	0.0066	0.0023
98	0.0089	0.0067	0.0023
99	0.0090	0.0067	0.0023
100	0.0090	0.0067	0.0023
101	0.0091	0.0068	0.0023
102	0.0091	0.0068	0.0023
103	0.0092	0.0069	0.0023
104	0.0092	0.0069	0.0024
105	0.0093	0.0069	0.0024
106	0.0093	0.0070	0.0024
107	0.0094	0.0070	0.0024
108	0.0094	0.0070	0.0024
109	0.0095	0.0071	0.0024
110	0.0096	0.0071	0.0024
111	0.0096	0.0072	0.0025
112	0.0097	0.0072	0.0025
113	0.0098	0.0073	0.0025
114	0.0098	0.0073	0.0025
115	0.0099	0.0074	0.0025
116	0.0099	0.0074	0.0025
117	0.0100	0.0075	0.0026
118	0.0101	0.0075	0.0026
119	0.0102	0.0076	0.0026
120	0.0102	0.0076	0.0026
121	0.0103	0.0077	0.0026
122	0.0103	0.0077	0.0026
123	0.0104	0.0078	0.0027
124	0.0105	0.0078	0.0027
125	0.0106	0.0079	0.0027
126	0.0106	0.0079	0.0027
127	0.0108	0.0080	0.0027
128	0.0108	0.0081	0.0028
129	0.0109	0.0081	0.0028

130	0.0110	0.0082	0.0028
131	0.0111	0.0083	0.0028
132	0.0112	0.0083	0.0028
133	0.0113	0.0084	0.0029
134	0.0114	0.0085	0.0029
135	0.0115	0.0086	0.0029
136	0.0115	0.0086	0.0029
137	0.0117	0.0087	0.0030
138	0.0118	0.0088	0.0030
139	0.0119	0.0089	0.0030
140	0.0120	0.0089	0.0030
141	0.0121	0.0090	0.0031
142	0.0122	0.0091	0.0031
143	0.0124	0.0092	0.0032
144	0.0125	0.0093	0.0032
145	0.0118	0.0088	0.0030
146	0.0119	0.0089	0.0030
147	0.0121	0.0090	0.0031
148	0.0122	0.0091	0.0031
149	0.0124	0.0092	0.0032
150	0.0125	0.0093	0.0032
151	0.0127	0.0095	0.0032
152	0.0128	0.0095	0.0033
153	0.0130	0.0097	0.0033
154	0.0132	0.0098	0.0033
155	0.0134	0.0100	0.0034
156	0.0135	0.0101	0.0034
157	0.0138	0.0103	0.0035
158	0.0139	0.0104	0.0035
159	0.0142	0.0106	0.0036
160	0.0144	0.0107	0.0037
161	0.0147	0.0110	0.0037
162	0.0149	0.0111	0.0038
163	0.0152	0.0113	0.0039
164	0.0154	0.0115	0.0039
165	0.0158	0.0118	0.0040
166	0.0160	0.0119	0.0041
167	0.0165	0.0123	0.0042
168	0.0167	0.0124	0.0042
169	0.0172	0.0128	0.0044
170	0.0175	0.0130	0.0044
171	0.0180	0.0134	0.0046
172	0.0183	0.0137	0.0047
173	0.0190	0.0141	0.0048
174	0.0193	0.0144	0.0049
175	0.0201	0.0150	0.0051
176	0.0205	0.0153	0.0052
177	0.0214	0.0160	0.0055
178	0.0219	0.0163	0.0056
179	0.0230	0.0172	0.0059

180	0.0237	0.0176	0.0060
181	0.0251	0.0187	0.0064
182	0.0259	0.0193	0.0066
183	0.0277	0.0207	0.0071
184	0.0288	0.0215	0.0073
185	0.0203	0.0152	0.0052
186	0.0217	0.0162	0.0055
187	0.0251	0.0187	0.0064
188	0.0275	0.0205	0.0070
189	0.0341	0.0255	0.0087
190	0.0393	0.0293	0.0100
191	0.0597	0.0445	0.0152
192	0.0866	0.0482	0.0384
193	0.3747	0.0482	0.3265
194	0.0470	0.0350	0.0120
195	0.0304	0.0226	0.0077
196	0.0233	0.0173	0.0059
197	0.0300	0.0224	0.0076
198	0.0268	0.0199	0.0068
199	0.0243	0.0181	0.0062
200	0.0225	0.0167	0.0057
201	0.0210	0.0156	0.0053
202	0.0197	0.0147	0.0050
203	0.0186	0.0139	0.0047
204	0.0177	0.0132	0.0045
205	0.0169	0.0126	0.0043
206	0.0162	0.0121	0.0041
207	0.0156	0.0116	0.0040
208	0.0150	0.0112	0.0038
209	0.0145	0.0108	0.0037
210	0.0141	0.0105	0.0036
211	0.0137	0.0102	0.0035
212	0.0133	0.0099	0.0034
213	0.0129	0.0096	0.0033
214	0.0126	0.0094	0.0032
215	0.0123	0.0092	0.0031
216	0.0120	0.0089	0.0031
217	0.0125	0.0094	0.0032
218	0.0123	0.0092	0.0031
219	0.0121	0.0090	0.0031
220	0.0118	0.0088	0.0030
221	0.0116	0.0087	0.0030
222	0.0114	0.0085	0.0029
223	0.0112	0.0084	0.0029
224	0.0110	0.0082	0.0028
225	0.0109	0.0081	0.0028
226	0.0107	0.0080	0.0027
227	0.0105	0.0079	0.0027
228	0.0104	0.0077	0.0026
229	0.0102	0.0076	0.0026

230	0.0101	0.0075	0.0026
231	0.0100	0.0074	0.0025
232	0.0098	0.0073	0.0025
233	0.0097	0.0072	0.0025
234	0.0096	0.0072	0.0024
235	0.0095	0.0071	0.0024
236	0.0094	0.0070	0.0024
237	0.0093	0.0069	0.0024
238	0.0092	0.0068	0.0023
239	0.0091	0.0068	0.0023
240	0.0090	0.0067	0.0023
241	0.0089	0.0066	0.0023
242	0.0088	0.0065	0.0022
243	0.0087	0.0065	0.0022
244	0.0086	0.0064	0.0022
245	0.0085	0.0064	0.0022
246	0.0084	0.0063	0.0021
247	0.0084	0.0062	0.0021
248	0.0083	0.0062	0.0021
249	0.0082	0.0061	0.0021
250	0.0081	0.0061	0.0021
251	0.0081	0.0060	0.0021
252	0.0080	0.0060	0.0020
253	0.0079	0.0059	0.0020
254	0.0079	0.0059	0.0020
255	0.0078	0.0058	0.0020
256	0.0077	0.0058	0.0020
257	0.0077	0.0057	0.0020
258	0.0076	0.0057	0.0019
259	0.0076	0.0056	0.0019
260	0.0075	0.0056	0.0019
261	0.0075	0.0056	0.0019
262	0.0074	0.0055	0.0019
263	0.0073	0.0055	0.0019
264	0.0073	0.0054	0.0019
265	0.0072	0.0054	0.0018
266	0.0072	0.0054	0.0018
267	0.0071	0.0053	0.0018
268	0.0071	0.0053	0.0018
269	0.0071	0.0053	0.0018
270	0.0070	0.0052	0.0018
271	0.0070	0.0052	0.0018
272	0.0069	0.0052	0.0018
273	0.0069	0.0051	0.0017
274	0.0068	0.0051	0.0017
275	0.0068	0.0051	0.0017
276	0.0067	0.0050	0.0017
277	0.0067	0.0050	0.0017
278	0.0067	0.0050	0.0017
279	0.0066	0.0049	0.0017

280	0.0066	0.0049	0.0017
281	0.0066	0.0049	0.0017
282	0.0065	0.0049	0.0017
283	0.0065	0.0048	0.0016
284	0.0064	0.0048	0.0016
285	0.0064	0.0048	0.0016
286	0.0064	0.0048	0.0016
287	0.0063	0.0047	0.0016
288	0.0063	0.0047	0.0016

 Total soil rain loss = 2.46(In)
 Total effective rainfall = 1.17(In)
 Peak flow rate in flood hydrograph = 10.94(CFS)

+++++
 24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0000	0.00	Q				
0+10	0.0002	0.03	Q				
0+15	0.0007	0.08	Q				
0+20	0.0014	0.10	Q				
0+25	0.0023	0.12	Q				
0+30	0.0031	0.13	Q				
0+35	0.0041	0.14	Q				
0+40	0.0050	0.14	Q				
0+45	0.0061	0.15	Q				
0+50	0.0071	0.15	Q				
0+55	0.0081	0.15	Q				
1+ 0	0.0092	0.16	Q				
1+ 5	0.0103	0.16	Q				
1+10	0.0114	0.16	Q				
1+15	0.0125	0.16	Q				
1+20	0.0136	0.16	Q				
1+25	0.0147	0.16	Q				
1+30	0.0159	0.16	Q				
1+35	0.0170	0.17	Q				
1+40	0.0181	0.17	Q				
1+45	0.0193	0.17	Q				
1+50	0.0204	0.17	QV				
1+55	0.0216	0.17	QV				
2+ 0	0.0227	0.17	QV				
2+ 5	0.0239	0.17	QV				
2+10	0.0251	0.17	QV				

2+15	0.0262	0.17	QV
2+20	0.0274	0.17	QV
2+25	0.0286	0.17	QV
2+30	0.0298	0.17	QV
2+35	0.0310	0.17	QV
2+40	0.0321	0.17	QV
2+45	0.0333	0.17	QV
2+50	0.0345	0.17	QV
2+55	0.0357	0.17	QV
3+ 0	0.0369	0.17	QV
3+ 5	0.0381	0.17	QV
3+10	0.0393	0.18	QV
3+15	0.0405	0.18	Q V
3+20	0.0418	0.18	Q V
3+25	0.0430	0.18	Q V
3+30	0.0442	0.18	Q V
3+35	0.0454	0.18	Q V
3+40	0.0467	0.18	Q V
3+45	0.0479	0.18	Q V
3+50	0.0491	0.18	Q V
3+55	0.0504	0.18	Q V
4+ 0	0.0516	0.18	Q V
4+ 5	0.0529	0.18	Q V
4+10	0.0541	0.18	Q V
4+15	0.0554	0.18	Q V
4+20	0.0567	0.18	Q V
4+25	0.0579	0.18	Q V
4+30	0.0592	0.19	Q V
4+35	0.0605	0.19	Q V
4+40	0.0618	0.19	Q V
4+45	0.0631	0.19	Q V
4+50	0.0644	0.19	Q V
4+55	0.0657	0.19	Q V
5+ 0	0.0670	0.19	Q V
5+ 5	0.0683	0.19	Q V
5+10	0.0696	0.19	Q V
5+15	0.0709	0.19	Q V
5+20	0.0722	0.19	Q V
5+25	0.0736	0.19	Q V
5+30	0.0749	0.19	Q V
5+35	0.0762	0.19	Q V
5+40	0.0776	0.19	Q V
5+45	0.0789	0.20	Q V
5+50	0.0803	0.20	Q V
5+55	0.0816	0.20	Q V
6+ 0	0.0830	0.20	Q V
6+ 5	0.0844	0.20	Q V
6+10	0.0857	0.20	Q V
6+15	0.0871	0.20	Q V
6+20	0.0885	0.20	Q V

6+25	0.0899	0.20	Q	V				
6+30	0.0913	0.20	Q	V				
6+35	0.0927	0.20	Q	V				
6+40	0.0941	0.20	Q	V				
6+45	0.0955	0.21	Q	V				
6+50	0.0969	0.21	Q	V				
6+55	0.0984	0.21	Q	V				
7+ 0	0.0998	0.21	Q	V				
7+ 5	0.1013	0.21	Q	V				
7+10	0.1027	0.21	Q	V				
7+15	0.1042	0.21	Q	V				
7+20	0.1056	0.21	Q	V				
7+25	0.1071	0.21	Q	V				
7+30	0.1086	0.21	Q	V				
7+35	0.1100	0.22	Q	V				
7+40	0.1115	0.22	Q	V				
7+45	0.1130	0.22	Q	V				
7+50	0.1145	0.22	Q	V				
7+55	0.1160	0.22	Q	V				
8+ 0	0.1176	0.22	Q	V				
8+ 5	0.1191	0.22	Q	V				
8+10	0.1206	0.22	Q	V				
8+15	0.1222	0.22	Q	V				
8+20	0.1237	0.23	Q	V				
8+25	0.1253	0.23	Q	V				
8+30	0.1268	0.23	Q	V				
8+35	0.1284	0.23	Q	V				
8+40	0.1300	0.23	Q	V				
8+45	0.1316	0.23	Q	V				
8+50	0.1332	0.23	Q	V				
8+55	0.1348	0.23	Q	V				
9+ 0	0.1364	0.24	Q	V				
9+ 5	0.1381	0.24	Q	V				
9+10	0.1397	0.24	Q	V				
9+15	0.1413	0.24	Q	V				
9+20	0.1430	0.24	Q	V				
9+25	0.1447	0.24	Q	V				
9+30	0.1463	0.24	Q	V				
9+35	0.1480	0.25	Q	V				
9+40	0.1497	0.25	Q	V				
9+45	0.1514	0.25	Q	V				
9+50	0.1532	0.25	Q	V				
9+55	0.1549	0.25	Q	V				
10+ 0	0.1566	0.25	Q	V				
10+ 5	0.1584	0.25	Q	V				
10+10	0.1601	0.26	Q	V				
10+15	0.1619	0.26	Q	V				
10+20	0.1637	0.26	Q	V				
10+25	0.1655	0.26	Q	V				
10+30	0.1673	0.26	Q	V				

10+35	0.1692	0.27	Q	V				
10+40	0.1710	0.27	Q	V				
10+45	0.1728	0.27	Q	V				
10+50	0.1747	0.27	Q	V				
10+55	0.1766	0.27	Q	V				
11+ 0	0.1785	0.28	Q	V				
11+ 5	0.1804	0.28	Q	V				
11+10	0.1823	0.28	Q	V				
11+15	0.1843	0.28	Q	V				
11+20	0.1862	0.28	Q	V				
11+25	0.1882	0.29	Q	V				
11+30	0.1902	0.29	Q	V				
11+35	0.1922	0.29	Q	V				
11+40	0.1943	0.29	Q	V				
11+45	0.1963	0.30	Q	V				
11+50	0.1984	0.30	Q	V				
11+55	0.2004	0.30	Q	V				
12+ 0	0.2026	0.31	Q	V				
12+ 5	0.2047	0.31	Q	V				
12+10	0.2068	0.31	Q	V				
12+15	0.2089	0.31	Q	V				
12+20	0.2110	0.30	Q	V				
12+25	0.2131	0.31	Q	V				
12+30	0.2152	0.31	Q	V				
12+35	0.2174	0.31	Q	V				
12+40	0.2195	0.31	Q	V				
12+45	0.2217	0.32	Q	V				
12+50	0.2239	0.32	Q	V				
12+55	0.2262	0.32	Q	V				
13+ 0	0.2284	0.33	Q	V				
13+ 5	0.2307	0.33	Q	V				
13+10	0.2330	0.34	Q	V				
13+15	0.2354	0.34	Q	V				
13+20	0.2378	0.35	Q	V				
13+25	0.2402	0.35	Q	V				
13+30	0.2427	0.36	Q	V				
13+35	0.2452	0.36	Q	V				
13+40	0.2477	0.37	Q	V				
13+45	0.2503	0.38	Q	V				
13+50	0.2529	0.38	Q	V				
13+55	0.2556	0.39	Q	V				
14+ 0	0.2583	0.40	Q	V				
14+ 5	0.2611	0.40	Q	V				
14+10	0.2639	0.41	Q	V				
14+15	0.2668	0.42	Q	V				
14+20	0.2698	0.43	Q	V				
14+25	0.2728	0.44	Q	V				
14+30	0.2759	0.45	Q	V				
14+35	0.2791	0.46	Q	V				
14+40	0.2823	0.47	Q	V				

14+45	0.2857	0.49	Q		V			
14+50	0.2891	0.50	|Q		V			
14+55	0.2927	0.52	|Q		V			
15+ 0	0.2964	0.53	|Q		V			
15+ 5	0.3002	0.55	|Q		V			
15+10	0.3041	0.57	|Q		V			
15+15	0.3082	0.60	|Q		V			
15+20	0.3125	0.62	|Q		V			
15+25	0.3170	0.65	|Q		V			
15+30	0.3214	0.64	|Q		V			
15+35	0.3255	0.60	|Q		V			
15+40	0.3296	0.59	|Q		V			
15+45	0.3339	0.63	|Q		V			
15+50	0.3386	0.68	|Q		V			
15+55	0.3440	0.78	|Q		V			
16+ 0	0.3508	0.99	|Q		V			
16+ 5	0.3665	2.27	|Q	Q	V			
16+10	0.4109	6.44			Q	V		
16+15	0.4862	10.94				Q	V	
16+20	0.5322	6.68			Q		V	
16+25	0.5600	4.03		Q			V	
16+30	0.5800	2.91		Q			V	
16+35	0.5958	2.29		Q			V	
16+40	0.6090	1.92		Q			V	
16+45	0.6197	1.56		Q			V	
16+50	0.6290	1.34		Q			V	
16+55	0.6371	1.18		Q			V	
17+ 0	0.6441	1.03		Q			V	
17+ 5	0.6504	0.91	|Q				V	
17+10	0.6559	0.80	|Q				V	
17+15	0.6607	0.70	|Q				V	
17+20	0.6649	0.61	|Q				V	
17+25	0.6690	0.60	|Q				V	
17+30	0.6731	0.59	|Q				V	
17+35	0.6768	0.54	|Q				V	
17+40	0.6800	0.48	Q				V	
17+45	0.6830	0.43	Q				V	
17+50	0.6855	0.37	Q				V	
17+55	0.6880	0.35	Q				V	
18+ 0	0.6903	0.34	Q				V	
18+ 5	0.6926	0.33	Q				V	
18+10	0.6949	0.33	Q				V	
18+15	0.6971	0.33	Q				V	
18+20	0.6993	0.32	Q				V	
18+25	0.7015	0.32	Q				V	
18+30	0.7036	0.31	Q				V	
18+35	0.7057	0.30	Q				V	
18+40	0.7078	0.30	Q				V	
18+45	0.7098	0.29	Q				V	
18+50	0.7118	0.29	Q				V	

18+55	0.7138	0.28	Q				V
19+ 0	0.7157	0.28	Q				V
19+ 5	0.7176	0.28	Q				V
19+10	0.7195	0.27	Q				V
19+15	0.7213	0.27	Q				V
19+20	0.7231	0.26	Q				V
19+25	0.7249	0.26	Q				V
19+30	0.7267	0.26	Q				V
19+35	0.7285	0.25	Q				V
19+40	0.7302	0.25	Q				V
19+45	0.7319	0.25	Q				V
19+50	0.7336	0.24	Q				V
19+55	0.7352	0.24	Q				V
20+ 0	0.7369	0.24	Q				V
20+ 5	0.7385	0.24	Q				V
20+10	0.7401	0.23	Q				V
20+15	0.7417	0.23	Q				V
20+20	0.7433	0.23	Q				V
20+25	0.7448	0.23	Q				V
20+30	0.7463	0.22	Q				V
20+35	0.7479	0.22	Q				V
20+40	0.7494	0.22	Q				V
20+45	0.7509	0.22	Q				V
20+50	0.7523	0.21	Q				V
20+55	0.7538	0.21	Q				V
21+ 0	0.7553	0.21	Q				V
21+ 5	0.7567	0.21	Q				V
21+10	0.7581	0.21	Q				V
21+15	0.7595	0.21	Q				V
21+20	0.7609	0.20	Q				V
21+25	0.7623	0.20	Q				V
21+30	0.7637	0.20	Q				V
21+35	0.7651	0.20	Q				V
21+40	0.7664	0.20	Q				V
21+45	0.7678	0.20	Q				V
21+50	0.7691	0.19	Q				V
21+55	0.7704	0.19	Q				V
22+ 0	0.7717	0.19	Q				V
22+ 5	0.7730	0.19	Q				V
22+10	0.7743	0.19	Q				V
22+15	0.7756	0.19	Q				V
22+20	0.7769	0.19	Q				V
22+25	0.7782	0.18	Q				V
22+30	0.7794	0.18	Q				V
22+35	0.7807	0.18	Q				V
22+40	0.7819	0.18	Q				V
22+45	0.7831	0.18	Q				V
22+50	0.7844	0.18	Q				V
22+55	0.7856	0.18	Q				V
23+ 0	0.7868	0.18	Q				V

23+ 5	0.7880	0.17	Q				V
23+10	0.7892	0.17	Q				V
23+15	0.7904	0.17	Q				V
23+20	0.7915	0.17	Q				V
23+25	0.7927	0.17	Q				V
23+30	0.7939	0.17	Q				V
23+35	0.7950	0.17	Q				V
23+40	0.7962	0.17	Q				V
23+45	0.7973	0.17	Q				V
23+50	0.7985	0.17	Q				V
23+55	0.7996	0.16	Q				V
24+ 0	0.8007	0.16	Q				V

SECTION 6.5: Attachment C.2

10-Year Unit Hydrograph Post-Development Conditions

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 10 Y UNIT HYDROGRAPH SUBAREA A
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
2.40	1	0.79

Rainfall data for year 10		
2.40	6	2.28

Rainfall data for year 10		
2.40	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	32.0	2.40	1.000	0.978	0.190	0.186

Area-averaged adjusted loss rate Fm (In/Hr) = 0.186

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
0.46	0.190	32.0	32.0	18.15	0.000
1.94	0.810	98.0	98.0	0.20	0.936

Area-averaged catchment yield fraction, Y = 0.758

Area-averaged low loss fraction, Yb = 0.242

User entry of time of concentration = 0.090 (hours)

+++++

Watershed area = 2.40(Ac.)

Catchment Lag time = 0.072 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 115.3562

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.186(In/Hr)

Average low loss rate fraction (Yb) = 0.242 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.372(In)

Computed peak 30-minute rainfall = 0.638(In)

Specified peak 1-hour rainfall = 0.785(In)

Computed peak 3-hour rainfall = 1.509(In)

Specified peak 6-hour rainfall = 2.280(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 2.40(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.372(In)

30-minute factor = 1.000 Adjusted rainfall = 0.638(In)

1-hour factor = 1.000 Adjusted rainfall = 0.785(In)

3-hour factor = 1.000 Adjusted rainfall = 1.509(In)

6-hour factor = 1.000 Adjusted rainfall = 2.280(In)

24-hour factor = 1.000 Adjusted rainfall = 3.630(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

	(K =	29.02 (CFS))
1	22.126	6.422
2	72.427	14.600
3	87.424	4.353
4	93.882	1.874
5	97.167	0.954
6	98.718	0.450
7	100.000	0.372

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3724	0.3724
2	0.4585	0.0861
3	0.5178	0.0593
4	0.5645	0.0467
5	0.6036	0.0391
6	0.6375	0.0339
7	0.6677	0.0302
8	0.6950	0.0273
9	0.7200	0.0250
10	0.7431	0.0231
11	0.7647	0.0216
12	0.7849	0.0202
13	0.8232	0.0383
14	0.8603	0.0371
15	0.8964	0.0361
16	0.9315	0.0351
17	0.9657	0.0342
18	0.9991	0.0334
19	1.0318	0.0327
20	1.0638	0.0320
21	1.0951	0.0313
22	1.1259	0.0307
23	1.1561	0.0302
24	1.1857	0.0297
25	1.2149	0.0292
26	1.2436	0.0287
27	1.2718	0.0282
28	1.2997	0.0278
29	1.3271	0.0274
30	1.3541	0.0270
31	1.3808	0.0267
32	1.4072	0.0263
33	1.4332	0.0260
34	1.4589	0.0257
35	1.4843	0.0254

36	1.5094	0.0251
37	1.5342	0.0248
38	1.5587	0.0245
39	1.5830	0.0243
40	1.6070	0.0240
41	1.6308	0.0238
42	1.6544	0.0236
43	1.6777	0.0233
44	1.7008	0.0231
45	1.7237	0.0229
46	1.7464	0.0227
47	1.7689	0.0225
48	1.7912	0.0223
49	1.8133	0.0221
50	1.8352	0.0219
51	1.8570	0.0218
52	1.8786	0.0216
53	1.9000	0.0214
54	1.9212	0.0213
55	1.9423	0.0211
56	1.9633	0.0209
57	1.9841	0.0208
58	2.0047	0.0206
59	2.0252	0.0205
60	2.0456	0.0204
61	2.0658	0.0202
62	2.0859	0.0201
63	2.1058	0.0200
64	2.1256	0.0198
65	2.1453	0.0197
66	2.1649	0.0196
67	2.1844	0.0195
68	2.2037	0.0193
69	2.2230	0.0192
70	2.2421	0.0191
71	2.2611	0.0190
72	2.2800	0.0189
73	2.2906	0.0106
74	2.3010	0.0105
75	2.3114	0.0104
76	2.3217	0.0103
77	2.3319	0.0102
78	2.3420	0.0101
79	2.3521	0.0100
80	2.3620	0.0099
81	2.3719	0.0099
82	2.3817	0.0098
83	2.3914	0.0097
84	2.4010	0.0096
85	2.4105	0.0096

86	2.4200	0.0095
87	2.4294	0.0094
88	2.4388	0.0093
89	2.4480	0.0093
90	2.4572	0.0092
91	2.4663	0.0091
92	2.4754	0.0091
93	2.4844	0.0090
94	2.4933	0.0089
95	2.5022	0.0089
96	2.5110	0.0088
97	2.5197	0.0087
98	2.5284	0.0087
99	2.5370	0.0086
100	2.5456	0.0086
101	2.5541	0.0085
102	2.5626	0.0085
103	2.5710	0.0084
104	2.5793	0.0083
105	2.5876	0.0083
106	2.5959	0.0082
107	2.6041	0.0082
108	2.6122	0.0081
109	2.6203	0.0081
110	2.6283	0.0080
111	2.6363	0.0080
112	2.6443	0.0079
113	2.6522	0.0079
114	2.6600	0.0079
115	2.6678	0.0078
116	2.6756	0.0078
117	2.6833	0.0077
118	2.6910	0.0077
119	2.6986	0.0076
120	2.7062	0.0076
121	2.7137	0.0075
122	2.7212	0.0075
123	2.7287	0.0075
124	2.7361	0.0074
125	2.7435	0.0074
126	2.7508	0.0073
127	2.7581	0.0073
128	2.7654	0.0073
129	2.7726	0.0072
130	2.7798	0.0072
131	2.7870	0.0072
132	2.7941	0.0071
133	2.8012	0.0071
134	2.8082	0.0070
135	2.8152	0.0070

136	2.8222	0.0070
137	2.8292	0.0069
138	2.8361	0.0069
139	2.8430	0.0069
140	2.8498	0.0068
141	2.8566	0.0068
142	2.8634	0.0068
143	2.8701	0.0067
144	2.8769	0.0067
145	2.8835	0.0067
146	2.8902	0.0067
147	2.8968	0.0066
148	2.9034	0.0066
149	2.9100	0.0066
150	2.9165	0.0065
151	2.9230	0.0065
152	2.9295	0.0065
153	2.9360	0.0065
154	2.9424	0.0064
155	2.9488	0.0064
156	2.9552	0.0064
157	2.9615	0.0063
158	2.9678	0.0063
159	2.9741	0.0063
160	2.9804	0.0063
161	2.9866	0.0062
162	2.9928	0.0062
163	2.9990	0.0062
164	3.0052	0.0062
165	3.0113	0.0061
166	3.0174	0.0061
167	3.0235	0.0061
168	3.0295	0.0061
169	3.0356	0.0060
170	3.0416	0.0060
171	3.0476	0.0060
172	3.0536	0.0060
173	3.0595	0.0059
174	3.0654	0.0059
175	3.0713	0.0059
176	3.0772	0.0059
177	3.0830	0.0059
178	3.0889	0.0058
179	3.0947	0.0058
180	3.1005	0.0058
181	3.1062	0.0058
182	3.1120	0.0057
183	3.1177	0.0057
184	3.1234	0.0057
185	3.1291	0.0057

186	3.1348	0.0057
187	3.1404	0.0056
188	3.1460	0.0056
189	3.1516	0.0056
190	3.1572	0.0056
191	3.1628	0.0056
192	3.1683	0.0055
193	3.1739	0.0055
194	3.1794	0.0055
195	3.1849	0.0055
196	3.1903	0.0055
197	3.1958	0.0055
198	3.2012	0.0054
199	3.2066	0.0054
200	3.2120	0.0054
201	3.2174	0.0054
202	3.2228	0.0054
203	3.2281	0.0053
204	3.2334	0.0053
205	3.2387	0.0053
206	3.2440	0.0053
207	3.2493	0.0053
208	3.2546	0.0053
209	3.2598	0.0052
210	3.2650	0.0052
211	3.2702	0.0052
212	3.2754	0.0052
213	3.2806	0.0052
214	3.2858	0.0052
215	3.2909	0.0051
216	3.2960	0.0051
217	3.3011	0.0051
218	3.3062	0.0051
219	3.3113	0.0051
220	3.3164	0.0051
221	3.3214	0.0050
222	3.3265	0.0050
223	3.3315	0.0050
224	3.3365	0.0050
225	3.3415	0.0050
226	3.3465	0.0050
227	3.3514	0.0050
228	3.3564	0.0049
229	3.3613	0.0049
230	3.3662	0.0049
231	3.3711	0.0049
232	3.3760	0.0049
233	3.3809	0.0049
234	3.3857	0.0049
235	3.3906	0.0048

236	3.3954	0.0048
237	3.4002	0.0048
238	3.4050	0.0048
239	3.4098	0.0048
240	3.4146	0.0048
241	3.4194	0.0048
242	3.4241	0.0048
243	3.4289	0.0047
244	3.4336	0.0047
245	3.4383	0.0047
246	3.4430	0.0047
247	3.4477	0.0047
248	3.4524	0.0047
249	3.4571	0.0047
250	3.4617	0.0047
251	3.4663	0.0046
252	3.4710	0.0046
253	3.4756	0.0046
254	3.4802	0.0046
255	3.4848	0.0046
256	3.4894	0.0046
257	3.4939	0.0046
258	3.4985	0.0046
259	3.5030	0.0045
260	3.5076	0.0045
261	3.5121	0.0045
262	3.5166	0.0045
263	3.5211	0.0045
264	3.5256	0.0045
265	3.5300	0.0045
266	3.5345	0.0045
267	3.5390	0.0045
268	3.5434	0.0044
269	3.5478	0.0044
270	3.5522	0.0044
271	3.5566	0.0044
272	3.5610	0.0044
273	3.5654	0.0044
274	3.5698	0.0044
275	3.5742	0.0044
276	3.5785	0.0044
277	3.5829	0.0043
278	3.5872	0.0043
279	3.5915	0.0043
280	3.5958	0.0043
281	3.6001	0.0043
282	3.6044	0.0043
283	3.6087	0.0043
284	3.6130	0.0043
285	3.6173	0.0043

286	3.6215	0.0043
287	3.6258	0.0042
288	3.6300	0.0042

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0042	0.0010	0.0032
2	0.0042	0.0010	0.0032
3	0.0043	0.0010	0.0032
4	0.0043	0.0010	0.0032
5	0.0043	0.0010	0.0033
6	0.0043	0.0010	0.0033
7	0.0043	0.0010	0.0033
8	0.0043	0.0010	0.0033
9	0.0044	0.0011	0.0033
10	0.0044	0.0011	0.0033
11	0.0044	0.0011	0.0033
12	0.0044	0.0011	0.0033
13	0.0044	0.0011	0.0033
14	0.0044	0.0011	0.0034
15	0.0045	0.0011	0.0034
16	0.0045	0.0011	0.0034
17	0.0045	0.0011	0.0034
18	0.0045	0.0011	0.0034
19	0.0045	0.0011	0.0034
20	0.0045	0.0011	0.0034
21	0.0046	0.0011	0.0035
22	0.0046	0.0011	0.0035
23	0.0046	0.0011	0.0035
24	0.0046	0.0011	0.0035
25	0.0046	0.0011	0.0035
26	0.0046	0.0011	0.0035
27	0.0047	0.0011	0.0035
28	0.0047	0.0011	0.0035
29	0.0047	0.0011	0.0036
30	0.0047	0.0011	0.0036
31	0.0047	0.0011	0.0036
32	0.0048	0.0012	0.0036
33	0.0048	0.0012	0.0036
34	0.0048	0.0012	0.0036
35	0.0048	0.0012	0.0037
36	0.0048	0.0012	0.0037
37	0.0049	0.0012	0.0037
38	0.0049	0.0012	0.0037
39	0.0049	0.0012	0.0037
40	0.0049	0.0012	0.0037
41	0.0049	0.0012	0.0037
42	0.0050	0.0012	0.0038

43	0.0050	0.0012	0.0038
44	0.0050	0.0012	0.0038
45	0.0050	0.0012	0.0038
46	0.0050	0.0012	0.0038
47	0.0051	0.0012	0.0038
48	0.0051	0.0012	0.0039
49	0.0051	0.0012	0.0039
50	0.0051	0.0012	0.0039
51	0.0052	0.0013	0.0039
52	0.0052	0.0013	0.0039
53	0.0052	0.0013	0.0040
54	0.0052	0.0013	0.0040
55	0.0053	0.0013	0.0040
56	0.0053	0.0013	0.0040
57	0.0053	0.0013	0.0040
58	0.0053	0.0013	0.0040
59	0.0054	0.0013	0.0041
60	0.0054	0.0013	0.0041
61	0.0054	0.0013	0.0041
62	0.0055	0.0013	0.0041
63	0.0055	0.0013	0.0042
64	0.0055	0.0013	0.0042
65	0.0055	0.0013	0.0042
66	0.0056	0.0013	0.0042
67	0.0056	0.0014	0.0042
68	0.0056	0.0014	0.0043
69	0.0057	0.0014	0.0043
70	0.0057	0.0014	0.0043
71	0.0057	0.0014	0.0043
72	0.0057	0.0014	0.0044
73	0.0058	0.0014	0.0044
74	0.0058	0.0014	0.0044
75	0.0059	0.0014	0.0044
76	0.0059	0.0014	0.0045
77	0.0059	0.0014	0.0045
78	0.0059	0.0014	0.0045
79	0.0060	0.0015	0.0045
80	0.0060	0.0015	0.0046
81	0.0061	0.0015	0.0046
82	0.0061	0.0015	0.0046
83	0.0061	0.0015	0.0046
84	0.0062	0.0015	0.0047
85	0.0062	0.0015	0.0047
86	0.0062	0.0015	0.0047
87	0.0063	0.0015	0.0048
88	0.0063	0.0015	0.0048
89	0.0064	0.0015	0.0048
90	0.0064	0.0015	0.0048
91	0.0065	0.0016	0.0049
92	0.0065	0.0016	0.0049

93	0.0065	0.0016	0.0050
94	0.0066	0.0016	0.0050
95	0.0066	0.0016	0.0050
96	0.0067	0.0016	0.0050
97	0.0067	0.0016	0.0051
98	0.0067	0.0016	0.0051
99	0.0068	0.0016	0.0052
100	0.0068	0.0017	0.0052
101	0.0069	0.0017	0.0052
102	0.0069	0.0017	0.0053
103	0.0070	0.0017	0.0053
104	0.0070	0.0017	0.0053
105	0.0071	0.0017	0.0054
106	0.0072	0.0017	0.0054
107	0.0072	0.0018	0.0055
108	0.0073	0.0018	0.0055
109	0.0073	0.0018	0.0056
110	0.0074	0.0018	0.0056
111	0.0075	0.0018	0.0057
112	0.0075	0.0018	0.0057
113	0.0076	0.0018	0.0057
114	0.0076	0.0018	0.0058
115	0.0077	0.0019	0.0058
116	0.0078	0.0019	0.0059
117	0.0079	0.0019	0.0059
118	0.0079	0.0019	0.0060
119	0.0080	0.0019	0.0061
120	0.0080	0.0019	0.0061
121	0.0081	0.0020	0.0062
122	0.0082	0.0020	0.0062
123	0.0083	0.0020	0.0063
124	0.0083	0.0020	0.0063
125	0.0085	0.0020	0.0064
126	0.0085	0.0021	0.0065
127	0.0086	0.0021	0.0065
128	0.0087	0.0021	0.0066
129	0.0088	0.0021	0.0067
130	0.0089	0.0021	0.0067
131	0.0090	0.0022	0.0068
132	0.0091	0.0022	0.0069
133	0.0092	0.0022	0.0070
134	0.0093	0.0022	0.0070
135	0.0094	0.0023	0.0071
136	0.0095	0.0023	0.0072
137	0.0096	0.0023	0.0073
138	0.0097	0.0024	0.0074
139	0.0099	0.0024	0.0075
140	0.0099	0.0024	0.0075
141	0.0101	0.0025	0.0077
142	0.0102	0.0025	0.0077

143	0.0104	0.0025	0.0079
144	0.0105	0.0025	0.0079
145	0.0189	0.0046	0.0143
146	0.0190	0.0046	0.0144
147	0.0192	0.0047	0.0146
148	0.0193	0.0047	0.0147
149	0.0196	0.0047	0.0148
150	0.0197	0.0048	0.0149
151	0.0200	0.0048	0.0151
152	0.0201	0.0049	0.0152
153	0.0204	0.0049	0.0154
154	0.0205	0.0050	0.0155
155	0.0208	0.0050	0.0158
156	0.0209	0.0051	0.0159
157	0.0213	0.0051	0.0161
158	0.0214	0.0052	0.0162
159	0.0218	0.0053	0.0165
160	0.0219	0.0053	0.0166
161	0.0223	0.0054	0.0169
162	0.0225	0.0054	0.0170
163	0.0229	0.0055	0.0174
164	0.0231	0.0056	0.0175
165	0.0236	0.0057	0.0178
166	0.0238	0.0058	0.0180
167	0.0243	0.0059	0.0184
168	0.0245	0.0059	0.0186
169	0.0251	0.0061	0.0190
170	0.0254	0.0061	0.0192
171	0.0260	0.0063	0.0197
172	0.0263	0.0064	0.0200
173	0.0270	0.0066	0.0205
174	0.0274	0.0066	0.0208
175	0.0282	0.0068	0.0214
176	0.0287	0.0069	0.0217
177	0.0297	0.0072	0.0225
178	0.0302	0.0073	0.0229
179	0.0313	0.0076	0.0238
180	0.0320	0.0077	0.0242
181	0.0334	0.0081	0.0253
182	0.0342	0.0083	0.0259
183	0.0361	0.0087	0.0273
184	0.0371	0.0090	0.0281
185	0.0202	0.0049	0.0153
186	0.0216	0.0052	0.0163
187	0.0250	0.0061	0.0189
188	0.0273	0.0066	0.0207
189	0.0339	0.0082	0.0257
190	0.0391	0.0095	0.0296
191	0.0593	0.0144	0.0449
192	0.0861	0.0155	0.0706

193	0.3724	0.0155	0.3570
194	0.0467	0.0113	0.0354
195	0.0302	0.0073	0.0229
196	0.0231	0.0056	0.0175
197	0.0383	0.0093	0.0290
198	0.0351	0.0085	0.0266
199	0.0327	0.0079	0.0248
200	0.0307	0.0074	0.0233
201	0.0292	0.0071	0.0221
202	0.0278	0.0067	0.0211
203	0.0267	0.0065	0.0202
204	0.0257	0.0062	0.0195
205	0.0248	0.0060	0.0188
206	0.0240	0.0058	0.0182
207	0.0233	0.0057	0.0177
208	0.0227	0.0055	0.0172
209	0.0221	0.0054	0.0168
210	0.0216	0.0052	0.0164
211	0.0211	0.0051	0.0160
212	0.0206	0.0050	0.0156
213	0.0202	0.0049	0.0153
214	0.0198	0.0048	0.0150
215	0.0195	0.0047	0.0147
216	0.0191	0.0046	0.0145
217	0.0106	0.0026	0.0080
218	0.0103	0.0025	0.0078
219	0.0100	0.0024	0.0076
220	0.0098	0.0024	0.0074
221	0.0096	0.0023	0.0072
222	0.0093	0.0023	0.0071
223	0.0091	0.0022	0.0069
224	0.0089	0.0022	0.0068
225	0.0087	0.0021	0.0066
226	0.0086	0.0021	0.0065
227	0.0084	0.0020	0.0064
228	0.0082	0.0020	0.0062
229	0.0081	0.0020	0.0061
230	0.0079	0.0019	0.0060
231	0.0078	0.0019	0.0059
232	0.0077	0.0019	0.0058
233	0.0075	0.0018	0.0057
234	0.0074	0.0018	0.0056
235	0.0073	0.0018	0.0055
236	0.0072	0.0017	0.0055
237	0.0071	0.0017	0.0054
238	0.0070	0.0017	0.0053
239	0.0069	0.0017	0.0052
240	0.0068	0.0016	0.0051
241	0.0067	0.0016	0.0051
242	0.0066	0.0016	0.0050

243	0.0065	0.0016	0.0049
244	0.0064	0.0016	0.0049
245	0.0063	0.0015	0.0048
246	0.0063	0.0015	0.0047
247	0.0062	0.0015	0.0047
248	0.0061	0.0015	0.0046
249	0.0060	0.0015	0.0046
250	0.0060	0.0014	0.0045
251	0.0059	0.0014	0.0045
252	0.0058	0.0014	0.0044
253	0.0058	0.0014	0.0044
254	0.0057	0.0014	0.0043
255	0.0056	0.0014	0.0043
256	0.0056	0.0014	0.0042
257	0.0055	0.0013	0.0042
258	0.0055	0.0013	0.0041
259	0.0054	0.0013	0.0041
260	0.0054	0.0013	0.0041
261	0.0053	0.0013	0.0040
262	0.0053	0.0013	0.0040
263	0.0052	0.0013	0.0039
264	0.0052	0.0012	0.0039
265	0.0051	0.0012	0.0039
266	0.0051	0.0012	0.0038
267	0.0050	0.0012	0.0038
268	0.0050	0.0012	0.0038
269	0.0049	0.0012	0.0037
270	0.0049	0.0012	0.0037
271	0.0048	0.0012	0.0037
272	0.0048	0.0012	0.0036
273	0.0048	0.0012	0.0036
274	0.0047	0.0011	0.0036
275	0.0047	0.0011	0.0036
276	0.0047	0.0011	0.0035
277	0.0046	0.0011	0.0035
278	0.0046	0.0011	0.0035
279	0.0045	0.0011	0.0034
280	0.0045	0.0011	0.0034
281	0.0045	0.0011	0.0034
282	0.0044	0.0011	0.0034
283	0.0044	0.0011	0.0033
284	0.0044	0.0011	0.0033
285	0.0043	0.0011	0.0033
286	0.0043	0.0010	0.0033
287	0.0043	0.0010	0.0032
288	0.0043	0.0010	0.0032

 Total soil rain loss = 0.80(In)
 Total effective rainfall = 2.83(In)

Peak flow rate in flood hydrograph = 5.88(CFS)

+++++

24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0001		0.02	Q				
0+10	0.0006		0.07	Q				
0+15	0.0012		0.08	Q				
0+20	0.0018		0.09	Q				
0+25	0.0024		0.09	Q				
0+30	0.0030		0.09	Q				
0+35	0.0037		0.09	Q				
0+40	0.0044		0.09	Q				
0+45	0.0050		0.10	Q				
0+50	0.0057		0.10	Q				
0+55	0.0063		0.10	Q				
1+ 0	0.0070		0.10	Q				
1+ 5	0.0077		0.10	Q				
1+10	0.0083		0.10	Q				
1+15	0.0090		0.10	Q				
1+20	0.0097		0.10	Q				
1+25	0.0103		0.10	Q				
1+30	0.0110		0.10	Q				
1+35	0.0117		0.10	Q				
1+40	0.0124		0.10	Q				
1+45	0.0131		0.10	Q				
1+50	0.0138		0.10	Q				
1+55	0.0145		0.10	QV				
2+ 0	0.0151		0.10	QV				
2+ 5	0.0158		0.10	QV				
2+10	0.0165		0.10	QV				
2+15	0.0172		0.10	QV				
2+20	0.0180		0.10	QV				
2+25	0.0187		0.10	QV				
2+30	0.0194		0.10	QV				
2+35	0.0201		0.10	QV				
2+40	0.0208		0.10	QV				
2+45	0.0215		0.10	QV				
2+50	0.0222		0.10	QV				
2+55	0.0230		0.11	QV				
3+ 0	0.0237		0.11	QV				
3+ 5	0.0244		0.11	QV				
3+10	0.0252		0.11	QV				
3+15	0.0259		0.11	QV				

3+20	0.0266	0.11	QV				
3+25	0.0274	0.11	QV				
3+30	0.0281	0.11	QV				
3+35	0.0289	0.11	Q V				
3+40	0.0296	0.11	Q V				
3+45	0.0304	0.11	Q V				
3+50	0.0312	0.11	Q V				
3+55	0.0319	0.11	Q V				
4+ 0	0.0327	0.11	Q V				
4+ 5	0.0335	0.11	Q V				
4+10	0.0342	0.11	Q V				
4+15	0.0350	0.11	Q V				
4+20	0.0358	0.11	Q V				
4+25	0.0366	0.11	Q V				
4+30	0.0374	0.11	Q V				
4+35	0.0382	0.12	Q V				
4+40	0.0390	0.12	Q V				
4+45	0.0398	0.12	Q V				
4+50	0.0406	0.12	Q V				
4+55	0.0414	0.12	Q V				
5+ 0	0.0422	0.12	Q V				
5+ 5	0.0430	0.12	Q V				
5+10	0.0438	0.12	Q V				
5+15	0.0447	0.12	Q V				
5+20	0.0455	0.12	Q V				
5+25	0.0463	0.12	Q V				
5+30	0.0472	0.12	Q V				
5+35	0.0480	0.12	Q V				
5+40	0.0488	0.12	Q V				
5+45	0.0497	0.12	Q V				
5+50	0.0506	0.12	Q V				
5+55	0.0514	0.12	Q V				
6+ 0	0.0523	0.13	Q V				
6+ 5	0.0532	0.13	Q V				
6+10	0.0540	0.13	Q V				
6+15	0.0549	0.13	Q V				
6+20	0.0558	0.13	Q V				
6+25	0.0567	0.13	Q V				
6+30	0.0576	0.13	Q V				
6+35	0.0585	0.13	Q V				
6+40	0.0594	0.13	Q V				
6+45	0.0603	0.13	Q V				
6+50	0.0612	0.13	Q V				
6+55	0.0621	0.13	Q V				
7+ 0	0.0631	0.13	Q V				
7+ 5	0.0640	0.14	Q V				
7+10	0.0649	0.14	Q V				
7+15	0.0659	0.14	Q V				
7+20	0.0668	0.14	Q V				
7+25	0.0678	0.14	Q V				

7+30	0.0687	0.14	Q	V				
7+35	0.0697	0.14	Q	V				
7+40	0.0707	0.14	Q	V				
7+45	0.0717	0.14	Q	V				
7+50	0.0726	0.14	Q	V				
7+55	0.0736	0.14	Q	V				
8+ 0	0.0746	0.15	Q	V				
8+ 5	0.0757	0.15	Q	V				
8+10	0.0767	0.15	Q	V				
8+15	0.0777	0.15	Q	V				
8+20	0.0787	0.15	Q	V				
8+25	0.0798	0.15	Q	V				
8+30	0.0808	0.15	Q	V				
8+35	0.0818	0.15	Q	V				
8+40	0.0829	0.15	Q	V				
8+45	0.0840	0.15	Q	V				
8+50	0.0850	0.16	Q	V				
8+55	0.0861	0.16	Q	V				
9+ 0	0.0872	0.16	Q	V				
9+ 5	0.0883	0.16	Q	V				
9+10	0.0894	0.16	Q	V				
9+15	0.0905	0.16	Q	V				
9+20	0.0917	0.16	Q	V				
9+25	0.0928	0.16	Q	V				
9+30	0.0940	0.17	Q	V				
9+35	0.0951	0.17	Q	V				
9+40	0.0963	0.17	Q	V				
9+45	0.0974	0.17	Q	V				
9+50	0.0986	0.17	Q	V				
9+55	0.0998	0.17	Q	V				
10+ 0	0.1010	0.18	Q	V				
10+ 5	0.1023	0.18	Q	V				
10+10	0.1035	0.18	Q	V				
10+15	0.1047	0.18	Q	V				
10+20	0.1060	0.18	Q	V				
10+25	0.1072	0.18	Q	V				
10+30	0.1085	0.19	Q	V				
10+35	0.1098	0.19	Q	V				
10+40	0.1111	0.19	Q	V				
10+45	0.1124	0.19	Q	V				
10+50	0.1137	0.19	Q	V				
10+55	0.1151	0.19	Q	V				
11+ 0	0.1164	0.20	Q	V				
11+ 5	0.1178	0.20	Q	V				
11+10	0.1192	0.20	Q	V				
11+15	0.1206	0.20	Q	V				
11+20	0.1220	0.21	Q	V				
11+25	0.1234	0.21	Q	V				
11+30	0.1249	0.21	Q	V				
11+35	0.1264	0.21	Q	V				

11+40	0.1279	0.22	Q	V				
11+45	0.1294	0.22	Q	V				
11+50	0.1309	0.22	Q	V				
11+55	0.1324	0.22	Q	V				
12+ 0	0.1340	0.23	Q	V				
12+ 5	0.1359	0.27	|Q	V				
12+10	0.1384	0.36	|Q	V				
12+15	0.1411	0.39	|Q	V				
12+20	0.1439	0.41	|Q	V				
12+25	0.1468	0.42	|Q	V				
12+30	0.1497	0.43	|Q	V				
12+35	0.1527	0.43	|Q	V				
12+40	0.1557	0.44	|Q	V				
12+45	0.1588	0.44	|Q	V				
12+50	0.1618	0.45	|Q	V				
12+55	0.1649	0.45	|Q	V				
13+ 0	0.1681	0.46	|Q	V				
13+ 5	0.1712	0.46	|Q	V				
13+10	0.1745	0.47	|Q	V				
13+15	0.1777	0.47	|Q	V				
13+20	0.1810	0.48	|Q	V				
13+25	0.1843	0.48	|Q	V				
13+30	0.1877	0.49	|Q	V				
13+35	0.1911	0.49	|Q	V				
13+40	0.1945	0.50	|Q	V				
13+45	0.1980	0.51	|Q	V				
13+50	0.2015	0.52	|Q	V				
13+55	0.2051	0.52	|Q	V				
14+ 0	0.2088	0.53	|Q	V				
14+ 5	0.2125	0.54	|Q	V				
14+10	0.2163	0.55	|Q	V				
14+15	0.2201	0.56	|Q	V				
14+20	0.2240	0.57	|Q	V				
14+25	0.2280	0.58	|Q	V				
14+30	0.2321	0.59	|Q	V				
14+35	0.2362	0.60	|Q	V				
14+40	0.2405	0.62	|Q	V				
14+45	0.2448	0.63	|Q	V				
14+50	0.2493	0.65	|Q	V				
14+55	0.2538	0.66	|Q	V				
15+ 0	0.2585	0.68	|Q	V				
15+ 5	0.2634	0.70	|Q	V				
15+10	0.2684	0.73	|Q	V				
15+15	0.2735	0.75	|Q	V				
15+20	0.2789	0.78	|Q	V				
15+25	0.2839	0.72	|Q	V				
15+30	0.2877	0.55	|Q	V				
15+35	0.2913	0.53	|Q	V				
15+40	0.2951	0.56	|Q	V				
15+45	0.2994	0.62	|Q	V				

15+50	0.3044	0.72	Q		V		
15+55	0.3106	0.90	Q		V		
16+ 0	0.3197	1.32	Q		V		
16+ 5	0.3446	3.62		Q	V		
16+10	0.3851	5.88			Q	V	
16+15	0.4017	2.42		Q		V	
16+20	0.4111	1.37	Q			V	
16+25	0.4180	1.00	Q			V	
16+30	0.4244	0.93	Q			V	
16+35	0.4305	0.88	Q			V	
16+40	0.4354	0.72	Q			V	
16+45	0.4401	0.68	Q			V	
16+50	0.4446	0.65	Q			V	
16+55	0.4489	0.62	Q			V	
17+ 0	0.4530	0.60	Q			V	
17+ 5	0.4570	0.57	Q			V	
17+10	0.4608	0.55	Q			V	
17+15	0.4645	0.53	Q			V	
17+20	0.4680	0.52	Q			V	
17+25	0.4715	0.50	Q			V	
17+30	0.4749	0.49	Q			V	
17+35	0.4782	0.48	Q			V	
17+40	0.4814	0.47	Q			V	
17+45	0.4846	0.46	Q			V	
17+50	0.4876	0.45	Q			V	
17+55	0.4907	0.44	Q			V	
18+ 0	0.4936	0.43	Q			V	
18+ 5	0.4963	0.38	Q			V	
18+10	0.4982	0.28	Q			V	
18+15	0.5000	0.25	Q			V	
18+20	0.5016	0.23	Q			V	
18+25	0.5031	0.22	Q			V	
18+30	0.5046	0.21	Q			V	
18+35	0.5060	0.21	Q			V	
18+40	0.5074	0.20	Q			V	
18+45	0.5088	0.20	Q			V	
18+50	0.5101	0.19	Q			V	
18+55	0.5114	0.19	Q			V	
19+ 0	0.5127	0.19	Q			V	
19+ 5	0.5139	0.18	Q			V	
19+10	0.5152	0.18	Q			V	
19+15	0.5164	0.18	Q			V	
19+20	0.5176	0.17	Q			V	
19+25	0.5187	0.17	Q			V	
19+30	0.5199	0.17	Q			V	
19+35	0.5210	0.16	Q			V	
19+40	0.5221	0.16	Q			V	
19+45	0.5232	0.16	Q			V	
19+50	0.5243	0.16	Q			V	
19+55	0.5254	0.15	Q			V	

20+ 0	0.5264	0.15	Q				V
20+ 5	0.5274	0.15	Q				V
20+10	0.5285	0.15	Q				V
20+15	0.5295	0.15	Q				V
20+20	0.5304	0.14	Q				V
20+25	0.5314	0.14	Q				V
20+30	0.5324	0.14	Q				V
20+35	0.5333	0.14	Q				V
20+40	0.5343	0.14	Q				V
20+45	0.5352	0.13	Q				V
20+50	0.5361	0.13	Q				V
20+55	0.5370	0.13	Q				V
21+ 0	0.5379	0.13	Q				V
21+ 5	0.5388	0.13	Q				V
21+10	0.5397	0.13	Q				V
21+15	0.5406	0.13	Q				V
21+20	0.5414	0.12	Q				V
21+25	0.5423	0.12	Q				V
21+30	0.5431	0.12	Q				V
21+35	0.5439	0.12	Q				V
21+40	0.5448	0.12	Q				V
21+45	0.5456	0.12	Q				V
21+50	0.5464	0.12	Q				V
21+55	0.5472	0.12	Q				V
22+ 0	0.5480	0.11	Q				V
22+ 5	0.5488	0.11	Q				V
22+10	0.5495	0.11	Q				V
22+15	0.5503	0.11	Q				V
22+20	0.5511	0.11	Q				V
22+25	0.5518	0.11	Q				V
22+30	0.5526	0.11	Q				V
22+35	0.5533	0.11	Q				V
22+40	0.5540	0.11	Q				V
22+45	0.5548	0.11	Q				V
22+50	0.5555	0.11	Q				V
22+55	0.5562	0.10	Q				V
23+ 0	0.5569	0.10	Q				V
23+ 5	0.5576	0.10	Q				V
23+10	0.5583	0.10	Q				V
23+15	0.5590	0.10	Q				V
23+20	0.5597	0.10	Q				V
23+25	0.5604	0.10	Q				V
23+30	0.5611	0.10	Q				V
23+35	0.5618	0.10	Q				V
23+40	0.5624	0.10	Q				V
23+45	0.5631	0.10	Q				V
23+50	0.5638	0.10	Q				V
23+55	0.5644	0.10	Q				V
24+ 0	0.5651	0.09	Q				V
24+ 5	0.5656	0.07	Q				V

24+10	0.5657	0.03	Q	|	|	|	V|
24+15	0.5658	0.01	Q	|	|	|	V|
24+20	0.5659	0.01	Q	|	|	|	V|
24+25	0.5659	0.00	Q	|	|	|	V|
24+30	0.5659	0.00	Q	|	|	|	V

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 10 YR UNIT HYDROGRAPH SUBAREA B
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
11.64	1	0.79

Rainfall data for year 10		
11.64	6	2.28

Rainfall data for year 10		
11.64	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	32.0	11.64	1.000	0.978	0.190	0.186

Area-averaged adjusted loss rate Fm (In/Hr) = 0.186

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
2.21	0.190	32.0	32.0	18.15	0.000
9.43	0.810	98.0	98.0	0.20	0.936

Area-averaged catchment yield fraction, Y = 0.758

Area-averaged low loss fraction, Yb = 0.242

User entry of time of concentration = 0.138 (hours)

+++++

Watershed area = 11.64(Ac.)

Catchment Lag time = 0.110 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 75.7576

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.186(In/Hr)

Average low loss rate fraction (Yb) = 0.242 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.372(In)

Computed peak 30-minute rainfall = 0.638(In)

Specified peak 1-hour rainfall = 0.785(In)

Computed peak 3-hour rainfall = 1.509(In)

Specified peak 6-hour rainfall = 2.280(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 11.64(Ac.) (Ref: fig. E-4)

5-minute factor = 0.999 Adjusted rainfall = 0.372(In)

30-minute factor = 0.999 Adjusted rainfall = 0.637(In)

1-hour factor = 0.999 Adjusted rainfall = 0.785(In)

3-hour factor = 1.000 Adjusted rainfall = 1.509(In)

6-hour factor = 1.000 Adjusted rainfall = 2.280(In)

24-hour factor = 1.000 Adjusted rainfall = 3.630(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

	(K = 140.77 (CFS))	
1	9.432	13.278
2	54.666	63.676
3	76.153	30.248
4	85.629	13.340
5	91.034	7.608
6	94.436	4.789
7	96.655	3.123
8	97.962	1.840
9	98.827	1.218
10	99.611	1.103
11	100.000	0.548

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3723	0.3723
2	0.4583	0.0861
3	0.5176	0.0593
4	0.5643	0.0467
5	0.6033	0.0391
6	0.6373	0.0339
7	0.6674	0.0302
8	0.6947	0.0273
9	0.7197	0.0250
10	0.7428	0.0231
11	0.7644	0.0215
12	0.7846	0.0202
13	0.8229	0.0383
14	0.8600	0.0371
15	0.8961	0.0361
16	0.9312	0.0351
17	0.9654	0.0342
18	0.9988	0.0334
19	1.0315	0.0327
20	1.0635	0.0320
21	1.0949	0.0314
22	1.1256	0.0308
23	1.1558	0.0302
24	1.1855	0.0297
25	1.2147	0.0292
26	1.2434	0.0287
27	1.2716	0.0283
28	1.2995	0.0278
29	1.3269	0.0274
30	1.3540	0.0271
31	1.3807	0.0267

32	1.4070	0.0264
33	1.4331	0.0260
34	1.4588	0.0257
35	1.4842	0.0254
36	1.5093	0.0251
37	1.5341	0.0248
38	1.5586	0.0245
39	1.5829	0.0243
40	1.6069	0.0240
41	1.6307	0.0238
42	1.6543	0.0236
43	1.6776	0.0233
44	1.7007	0.0231
45	1.7236	0.0229
46	1.7463	0.0227
47	1.7688	0.0225
48	1.7911	0.0223
49	1.8132	0.0221
50	1.8352	0.0219
51	1.8569	0.0218
52	1.8785	0.0216
53	1.8999	0.0214
54	1.9212	0.0213
55	1.9423	0.0211
56	1.9632	0.0209
57	1.9840	0.0208
58	2.0046	0.0206
59	2.0251	0.0205
60	2.0455	0.0204
61	2.0657	0.0202
62	2.0858	0.0201
63	2.1057	0.0200
64	2.1256	0.0198
65	2.1453	0.0197
66	2.1649	0.0196
67	2.1843	0.0195
68	2.2037	0.0193
69	2.2229	0.0192
70	2.2420	0.0191
71	2.2610	0.0190
72	2.2799	0.0189
73	2.2905	0.0106
74	2.3010	0.0105
75	2.3114	0.0104
76	2.3216	0.0103
77	2.3319	0.0102
78	2.3420	0.0101
79	2.3520	0.0100
80	2.3619	0.0099
81	2.3718	0.0099

82	2.3816	0.0098
83	2.3913	0.0097
84	2.4009	0.0096
85	2.4105	0.0096
86	2.4200	0.0095
87	2.4294	0.0094
88	2.4387	0.0093
89	2.4480	0.0093
90	2.4571	0.0092
91	2.4663	0.0091
92	2.4753	0.0091
93	2.4843	0.0090
94	2.4933	0.0089
95	2.5021	0.0089
96	2.5109	0.0088
97	2.5197	0.0087
98	2.5284	0.0087
99	2.5370	0.0086
100	2.5456	0.0086
101	2.5541	0.0085
102	2.5625	0.0085
103	2.5709	0.0084
104	2.5793	0.0083
105	2.5876	0.0083
106	2.5958	0.0082
107	2.6040	0.0082
108	2.6121	0.0081
109	2.6202	0.0081
110	2.6283	0.0080
111	2.6363	0.0080
112	2.6442	0.0079
113	2.6521	0.0079
114	2.6599	0.0079
115	2.6677	0.0078
116	2.6755	0.0078
117	2.6832	0.0077
118	2.6909	0.0077
119	2.6985	0.0076
120	2.7061	0.0076
121	2.7137	0.0075
122	2.7212	0.0075
123	2.7286	0.0075
124	2.7360	0.0074
125	2.7434	0.0074
126	2.7508	0.0073
127	2.7581	0.0073
128	2.7653	0.0073
129	2.7726	0.0072
130	2.7798	0.0072
131	2.7869	0.0072

132	2.7940	0.0071
133	2.8011	0.0071
134	2.8082	0.0070
135	2.8152	0.0070
136	2.8222	0.0070
137	2.8291	0.0069
138	2.8360	0.0069
139	2.8429	0.0069
140	2.8497	0.0068
141	2.8566	0.0068
142	2.8633	0.0068
143	2.8701	0.0067
144	2.8768	0.0067
145	2.8835	0.0067
146	2.8901	0.0067
147	2.8968	0.0066
148	2.9034	0.0066
149	2.9099	0.0066
150	2.9165	0.0065
151	2.9230	0.0065
152	2.9295	0.0065
153	2.9359	0.0065
154	2.9423	0.0064
155	2.9487	0.0064
156	2.9551	0.0064
157	2.9614	0.0063
158	2.9678	0.0063
159	2.9740	0.0063
160	2.9803	0.0063
161	2.9865	0.0062
162	2.9928	0.0062
163	2.9989	0.0062
164	3.0051	0.0062
165	3.0112	0.0061
166	3.0173	0.0061
167	3.0234	0.0061
168	3.0295	0.0061
169	3.0355	0.0060
170	3.0415	0.0060
171	3.0475	0.0060
172	3.0535	0.0060
173	3.0594	0.0059
174	3.0654	0.0059
175	3.0713	0.0059
176	3.0771	0.0059
177	3.0830	0.0059
178	3.0888	0.0058
179	3.0946	0.0058
180	3.1004	0.0058
181	3.1062	0.0058

182	3.1119	0.0057
183	3.1177	0.0057
184	3.1234	0.0057
185	3.1291	0.0057
186	3.1347	0.0057
187	3.1404	0.0056
188	3.1460	0.0056
189	3.1516	0.0056
190	3.1572	0.0056
191	3.1627	0.0056
192	3.1683	0.0055
193	3.1738	0.0055
194	3.1793	0.0055
195	3.1848	0.0055
196	3.1903	0.0055
197	3.1957	0.0055
198	3.2012	0.0054
199	3.2066	0.0054
200	3.2120	0.0054
201	3.2174	0.0054
202	3.2227	0.0054
203	3.2281	0.0053
204	3.2334	0.0053
205	3.2387	0.0053
206	3.2440	0.0053
207	3.2493	0.0053
208	3.2545	0.0053
209	3.2598	0.0052
210	3.2650	0.0052
211	3.2702	0.0052
212	3.2754	0.0052
213	3.2806	0.0052
214	3.2857	0.0052
215	3.2909	0.0051
216	3.2960	0.0051
217	3.3011	0.0051
218	3.3062	0.0051
219	3.3113	0.0051
220	3.3163	0.0051
221	3.3214	0.0050
222	3.3264	0.0050
223	3.3314	0.0050
224	3.3364	0.0050
225	3.3414	0.0050
226	3.3464	0.0050
227	3.3514	0.0050
228	3.3563	0.0049
229	3.3612	0.0049
230	3.3662	0.0049
231	3.3711	0.0049

232	3.3760	0.0049
233	3.3808	0.0049
234	3.3857	0.0049
235	3.3905	0.0048
236	3.3954	0.0048
237	3.4002	0.0048
238	3.4050	0.0048
239	3.4098	0.0048
240	3.4146	0.0048
241	3.4193	0.0048
242	3.4241	0.0048
243	3.4288	0.0047
244	3.4336	0.0047
245	3.4383	0.0047
246	3.4430	0.0047
247	3.4477	0.0047
248	3.4523	0.0047
249	3.4570	0.0047
250	3.4617	0.0047
251	3.4663	0.0046
252	3.4709	0.0046
253	3.4755	0.0046
254	3.4801	0.0046
255	3.4847	0.0046
256	3.4893	0.0046
257	3.4939	0.0046
258	3.4984	0.0046
259	3.5030	0.0045
260	3.5075	0.0045
261	3.5120	0.0045
262	3.5165	0.0045
263	3.5210	0.0045
264	3.5255	0.0045
265	3.5300	0.0045
266	3.5345	0.0045
267	3.5389	0.0045
268	3.5433	0.0044
269	3.5478	0.0044
270	3.5522	0.0044
271	3.5566	0.0044
272	3.5610	0.0044
273	3.5654	0.0044
274	3.5698	0.0044
275	3.5741	0.0044
276	3.5785	0.0044
277	3.5828	0.0043
278	3.5872	0.0043
279	3.5915	0.0043
280	3.5958	0.0043
281	3.6001	0.0043

282	3.6044	0.0043
283	3.6087	0.0043
284	3.6130	0.0043
285	3.6172	0.0043
286	3.6215	0.0043
287	3.6257	0.0042
288	3.6299	0.0042

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0042	0.0010	0.0032
2	0.0042	0.0010	0.0032
3	0.0043	0.0010	0.0032
4	0.0043	0.0010	0.0032
5	0.0043	0.0010	0.0033
6	0.0043	0.0010	0.0033
7	0.0043	0.0010	0.0033
8	0.0043	0.0010	0.0033
9	0.0044	0.0011	0.0033
10	0.0044	0.0011	0.0033
11	0.0044	0.0011	0.0033
12	0.0044	0.0011	0.0033
13	0.0044	0.0011	0.0033
14	0.0044	0.0011	0.0034
15	0.0045	0.0011	0.0034
16	0.0045	0.0011	0.0034
17	0.0045	0.0011	0.0034
18	0.0045	0.0011	0.0034
19	0.0045	0.0011	0.0034
20	0.0045	0.0011	0.0034
21	0.0046	0.0011	0.0035
22	0.0046	0.0011	0.0035
23	0.0046	0.0011	0.0035
24	0.0046	0.0011	0.0035
25	0.0046	0.0011	0.0035
26	0.0046	0.0011	0.0035
27	0.0047	0.0011	0.0035
28	0.0047	0.0011	0.0035
29	0.0047	0.0011	0.0036
30	0.0047	0.0011	0.0036
31	0.0047	0.0011	0.0036
32	0.0048	0.0012	0.0036
33	0.0048	0.0012	0.0036
34	0.0048	0.0012	0.0036
35	0.0048	0.0012	0.0037
36	0.0048	0.0012	0.0037
37	0.0049	0.0012	0.0037
38	0.0049	0.0012	0.0037

39	0.0049	0.0012	0.0037
40	0.0049	0.0012	0.0037
41	0.0049	0.0012	0.0037
42	0.0050	0.0012	0.0038
43	0.0050	0.0012	0.0038
44	0.0050	0.0012	0.0038
45	0.0050	0.0012	0.0038
46	0.0050	0.0012	0.0038
47	0.0051	0.0012	0.0038
48	0.0051	0.0012	0.0039
49	0.0051	0.0012	0.0039
50	0.0051	0.0012	0.0039
51	0.0052	0.0013	0.0039
52	0.0052	0.0013	0.0039
53	0.0052	0.0013	0.0040
54	0.0052	0.0013	0.0040
55	0.0053	0.0013	0.0040
56	0.0053	0.0013	0.0040
57	0.0053	0.0013	0.0040
58	0.0053	0.0013	0.0040
59	0.0054	0.0013	0.0041
60	0.0054	0.0013	0.0041
61	0.0054	0.0013	0.0041
62	0.0055	0.0013	0.0041
63	0.0055	0.0013	0.0042
64	0.0055	0.0013	0.0042
65	0.0055	0.0013	0.0042
66	0.0056	0.0013	0.0042
67	0.0056	0.0014	0.0042
68	0.0056	0.0014	0.0043
69	0.0057	0.0014	0.0043
70	0.0057	0.0014	0.0043
71	0.0057	0.0014	0.0043
72	0.0057	0.0014	0.0044
73	0.0058	0.0014	0.0044
74	0.0058	0.0014	0.0044
75	0.0059	0.0014	0.0044
76	0.0059	0.0014	0.0045
77	0.0059	0.0014	0.0045
78	0.0059	0.0014	0.0045
79	0.0060	0.0015	0.0045
80	0.0060	0.0015	0.0046
81	0.0061	0.0015	0.0046
82	0.0061	0.0015	0.0046
83	0.0061	0.0015	0.0046
84	0.0062	0.0015	0.0047
85	0.0062	0.0015	0.0047
86	0.0062	0.0015	0.0047
87	0.0063	0.0015	0.0048
88	0.0063	0.0015	0.0048

89	0.0064	0.0015	0.0048
90	0.0064	0.0015	0.0048
91	0.0065	0.0016	0.0049
92	0.0065	0.0016	0.0049
93	0.0065	0.0016	0.0050
94	0.0066	0.0016	0.0050
95	0.0066	0.0016	0.0050
96	0.0067	0.0016	0.0050
97	0.0067	0.0016	0.0051
98	0.0067	0.0016	0.0051
99	0.0068	0.0017	0.0052
100	0.0068	0.0017	0.0052
101	0.0069	0.0017	0.0052
102	0.0069	0.0017	0.0053
103	0.0070	0.0017	0.0053
104	0.0070	0.0017	0.0053
105	0.0071	0.0017	0.0054
106	0.0072	0.0017	0.0054
107	0.0072	0.0018	0.0055
108	0.0073	0.0018	0.0055
109	0.0073	0.0018	0.0056
110	0.0074	0.0018	0.0056
111	0.0075	0.0018	0.0057
112	0.0075	0.0018	0.0057
113	0.0076	0.0018	0.0057
114	0.0076	0.0018	0.0058
115	0.0077	0.0019	0.0058
116	0.0078	0.0019	0.0059
117	0.0079	0.0019	0.0059
118	0.0079	0.0019	0.0060
119	0.0080	0.0019	0.0061
120	0.0080	0.0019	0.0061
121	0.0081	0.0020	0.0062
122	0.0082	0.0020	0.0062
123	0.0083	0.0020	0.0063
124	0.0083	0.0020	0.0063
125	0.0085	0.0020	0.0064
126	0.0085	0.0021	0.0065
127	0.0086	0.0021	0.0065
128	0.0087	0.0021	0.0066
129	0.0088	0.0021	0.0067
130	0.0089	0.0021	0.0067
131	0.0090	0.0022	0.0068
132	0.0091	0.0022	0.0069
133	0.0092	0.0022	0.0070
134	0.0093	0.0022	0.0070
135	0.0094	0.0023	0.0071
136	0.0095	0.0023	0.0072
137	0.0096	0.0023	0.0073
138	0.0097	0.0024	0.0074

139	0.0099	0.0024	0.0075
140	0.0099	0.0024	0.0075
141	0.0101	0.0025	0.0077
142	0.0102	0.0025	0.0077
143	0.0104	0.0025	0.0079
144	0.0105	0.0025	0.0079
145	0.0189	0.0046	0.0143
146	0.0190	0.0046	0.0144
147	0.0192	0.0047	0.0146
148	0.0193	0.0047	0.0147
149	0.0196	0.0047	0.0148
150	0.0197	0.0048	0.0149
151	0.0200	0.0048	0.0151
152	0.0201	0.0049	0.0152
153	0.0204	0.0049	0.0154
154	0.0205	0.0050	0.0155
155	0.0208	0.0050	0.0158
156	0.0209	0.0051	0.0159
157	0.0213	0.0051	0.0161
158	0.0214	0.0052	0.0162
159	0.0218	0.0053	0.0165
160	0.0219	0.0053	0.0166
161	0.0223	0.0054	0.0169
162	0.0225	0.0054	0.0170
163	0.0229	0.0055	0.0174
164	0.0231	0.0056	0.0175
165	0.0236	0.0057	0.0179
166	0.0238	0.0058	0.0180
167	0.0243	0.0059	0.0184
168	0.0245	0.0059	0.0186
169	0.0251	0.0061	0.0190
170	0.0254	0.0062	0.0192
171	0.0260	0.0063	0.0197
172	0.0264	0.0064	0.0200
173	0.0271	0.0066	0.0205
174	0.0274	0.0066	0.0208
175	0.0283	0.0068	0.0214
176	0.0287	0.0070	0.0218
177	0.0297	0.0072	0.0225
178	0.0302	0.0073	0.0229
179	0.0314	0.0076	0.0238
180	0.0320	0.0077	0.0242
181	0.0334	0.0081	0.0253
182	0.0342	0.0083	0.0259
183	0.0361	0.0087	0.0273
184	0.0371	0.0090	0.0281
185	0.0202	0.0049	0.0153
186	0.0215	0.0052	0.0163
187	0.0250	0.0061	0.0189
188	0.0273	0.0066	0.0207

189	0.0339	0.0082	0.0257
190	0.0391	0.0095	0.0296
191	0.0593	0.0144	0.0449
192	0.0861	0.0155	0.0706
193	0.3723	0.0155	0.3568
194	0.0467	0.0113	0.0354
195	0.0302	0.0073	0.0229
196	0.0231	0.0056	0.0175
197	0.0383	0.0093	0.0290
198	0.0351	0.0085	0.0266
199	0.0327	0.0079	0.0248
200	0.0308	0.0074	0.0233
201	0.0292	0.0071	0.0221
202	0.0278	0.0067	0.0211
203	0.0267	0.0065	0.0202
204	0.0257	0.0062	0.0195
205	0.0248	0.0060	0.0188
206	0.0240	0.0058	0.0182
207	0.0233	0.0057	0.0177
208	0.0227	0.0055	0.0172
209	0.0221	0.0054	0.0168
210	0.0216	0.0052	0.0164
211	0.0211	0.0051	0.0160
212	0.0206	0.0050	0.0156
213	0.0202	0.0049	0.0153
214	0.0198	0.0048	0.0150
215	0.0195	0.0047	0.0147
216	0.0191	0.0046	0.0145
217	0.0106	0.0026	0.0080
218	0.0103	0.0025	0.0078
219	0.0100	0.0024	0.0076
220	0.0098	0.0024	0.0074
221	0.0096	0.0023	0.0072
222	0.0093	0.0023	0.0071
223	0.0091	0.0022	0.0069
224	0.0089	0.0022	0.0068
225	0.0087	0.0021	0.0066
226	0.0086	0.0021	0.0065
227	0.0084	0.0020	0.0064
228	0.0082	0.0020	0.0062
229	0.0081	0.0020	0.0061
230	0.0079	0.0019	0.0060
231	0.0078	0.0019	0.0059
232	0.0077	0.0019	0.0058
233	0.0075	0.0018	0.0057
234	0.0074	0.0018	0.0056
235	0.0073	0.0018	0.0055
236	0.0072	0.0017	0.0055
237	0.0071	0.0017	0.0054
238	0.0070	0.0017	0.0053

239	0.0069	0.0017	0.0052
240	0.0068	0.0016	0.0051
241	0.0067	0.0016	0.0051
242	0.0066	0.0016	0.0050
243	0.0065	0.0016	0.0049
244	0.0064	0.0016	0.0049
245	0.0063	0.0015	0.0048
246	0.0063	0.0015	0.0047
247	0.0062	0.0015	0.0047
248	0.0061	0.0015	0.0046
249	0.0060	0.0015	0.0046
250	0.0060	0.0014	0.0045
251	0.0059	0.0014	0.0045
252	0.0058	0.0014	0.0044
253	0.0058	0.0014	0.0044
254	0.0057	0.0014	0.0043
255	0.0056	0.0014	0.0043
256	0.0056	0.0014	0.0042
257	0.0055	0.0013	0.0042
258	0.0055	0.0013	0.0041
259	0.0054	0.0013	0.0041
260	0.0054	0.0013	0.0041
261	0.0053	0.0013	0.0040
262	0.0053	0.0013	0.0040
263	0.0052	0.0013	0.0039
264	0.0052	0.0012	0.0039
265	0.0051	0.0012	0.0039
266	0.0051	0.0012	0.0038
267	0.0050	0.0012	0.0038
268	0.0050	0.0012	0.0038
269	0.0049	0.0012	0.0037
270	0.0049	0.0012	0.0037
271	0.0048	0.0012	0.0037
272	0.0048	0.0012	0.0036
273	0.0048	0.0012	0.0036
274	0.0047	0.0011	0.0036
275	0.0047	0.0011	0.0036
276	0.0047	0.0011	0.0035
277	0.0046	0.0011	0.0035
278	0.0046	0.0011	0.0035
279	0.0045	0.0011	0.0034
280	0.0045	0.0011	0.0034
281	0.0045	0.0011	0.0034
282	0.0044	0.0011	0.0034
283	0.0044	0.0011	0.0033
284	0.0044	0.0011	0.0033
285	0.0043	0.0011	0.0033
286	0.0043	0.0010	0.0033
287	0.0043	0.0010	0.0032
288	0.0043	0.0010	0.0032

 Total soil rain loss = 0.80(In)
 Total effective rainfall = 2.83(In)
 Peak flow rate in flood hydrograph = 26.42(CFS)

+++++
 24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0003	0.04	Q				
0+10	0.0020	0.25	Q				
0+15	0.0044	0.34	Q				
0+20	0.0070	0.39	Q				
0+25	0.0099	0.41	Q				
0+30	0.0129	0.43	Q				
0+35	0.0159	0.44	Q				
0+40	0.0190	0.45	Q				
0+45	0.0222	0.46	Q				
0+50	0.0253	0.46	Q				
0+55	0.0285	0.46	Q				
1+ 0	0.0317	0.47	Q				
1+ 5	0.0350	0.47	Q				
1+10	0.0382	0.47	Q				
1+15	0.0414	0.47	Q				
1+20	0.0447	0.47	Q				
1+25	0.0480	0.47	Q				
1+30	0.0513	0.48	Q				
1+35	0.0545	0.48	Q				
1+40	0.0579	0.48	Q				
1+45	0.0612	0.48	Q				
1+50	0.0645	0.48	Q				
1+55	0.0678	0.49	Q				
2+ 0	0.0712	0.49	QV				
2+ 5	0.0746	0.49	QV				
2+10	0.0780	0.49	QV				
2+15	0.0814	0.49	QV				
2+20	0.0848	0.50	QV				
2+25	0.0882	0.50	QV				
2+30	0.0916	0.50	QV				
2+35	0.0951	0.50	QV				
2+40	0.0986	0.50	QV				
2+45	0.1020	0.51	QV				
2+50	0.1055	0.51	QV				
2+55	0.1090	0.51	QV				

3+ 0	0.1126	0.51	QV
3+ 5	0.1161	0.51	QV
3+10	0.1197	0.52	QV
3+15	0.1232	0.52	QV
3+20	0.1268	0.52	QV
3+25	0.1304	0.52	QV
3+30	0.1340	0.53	QV
3+35	0.1377	0.53	Q V
3+40	0.1413	0.53	Q V
3+45	0.1450	0.53	Q V
3+50	0.1487	0.53	Q V
3+55	0.1524	0.54	Q V
4+ 0	0.1561	0.54	Q V
4+ 5	0.1598	0.54	Q V
4+10	0.1635	0.54	Q V
4+15	0.1673	0.55	Q V
4+20	0.1711	0.55	Q V
4+25	0.1749	0.55	Q V
4+30	0.1787	0.55	Q V
4+35	0.1825	0.56	Q V
4+40	0.1864	0.56	Q V
4+45	0.1903	0.56	Q V
4+50	0.1942	0.57	Q V
4+55	0.1981	0.57	Q V
5+ 0	0.2020	0.57	Q V
5+ 5	0.2060	0.57	Q V
5+10	0.2099	0.58	Q V
5+15	0.2139	0.58	Q V
5+20	0.2179	0.58	Q V
5+25	0.2220	0.59	Q V
5+30	0.2260	0.59	Q V
5+35	0.2301	0.59	Q V
5+40	0.2342	0.59	Q V
5+45	0.2383	0.60	Q V
5+50	0.2424	0.60	Q V
5+55	0.2466	0.60	Q V
6+ 0	0.2508	0.61	Q V
6+ 5	0.2550	0.61	Q V
6+10	0.2592	0.61	Q V
6+15	0.2635	0.62	Q V
6+20	0.2677	0.62	Q V
6+25	0.2720	0.62	Q V
6+30	0.2763	0.63	Q V
6+35	0.2807	0.63	Q V
6+40	0.2851	0.64	Q V
6+45	0.2895	0.64	Q V
6+50	0.2939	0.64	Q V
6+55	0.2983	0.65	Q V
7+ 0	0.3028	0.65	Q V
7+ 5	0.3073	0.65	Q V

7+10	0.3119	0.66	Q	V				
7+15	0.3164	0.66	Q	V				
7+20	0.3210	0.67	Q	V				
7+25	0.3256	0.67	Q	V				
7+30	0.3303	0.67	Q	V				
7+35	0.3349	0.68	Q	V				
7+40	0.3397	0.68	Q	V				
7+45	0.3444	0.69	Q	V				
7+50	0.3492	0.69	Q	V				
7+55	0.3540	0.70	Q	V				
8+ 0	0.3588	0.70	Q	V				
8+ 5	0.3637	0.71	Q	V				
8+10	0.3686	0.71	Q	V				
8+15	0.3735	0.72	Q	V				
8+20	0.3784	0.72	Q	V				
8+25	0.3835	0.73	Q	V				
8+30	0.3885	0.73	Q	V				
8+35	0.3936	0.74	Q	V				
8+40	0.3987	0.74	Q	V				
8+45	0.4038	0.75	Q	V				
8+50	0.4090	0.75	Q	V				
8+55	0.4142	0.76	Q	V				
9+ 0	0.4195	0.76	Q	V				
9+ 5	0.4248	0.77	Q	V				
9+10	0.4302	0.78	Q	V				
9+15	0.4355	0.78	Q	V				
9+20	0.4410	0.79	Q	V				
9+25	0.4465	0.80	Q	V				
9+30	0.4520	0.80	Q	V				
9+35	0.4576	0.81	Q	V				
9+40	0.4632	0.82	Q	V				
9+45	0.4688	0.82	Q	V				
9+50	0.4746	0.83	Q	V				
9+55	0.4803	0.84	Q	V				
10+ 0	0.4861	0.84	Q	V				
10+ 5	0.4920	0.85	Q	V				
10+10	0.4979	0.86	Q	V				
10+15	0.5039	0.87	Q	V				
10+20	0.5099	0.88	Q	V				
10+25	0.5160	0.88	Q	V				
10+30	0.5222	0.89	Q	V				
10+35	0.5284	0.90	Q	V				
10+40	0.5346	0.91	Q	V				
10+45	0.5410	0.92	Q	V				
10+50	0.5474	0.93	Q	V				
10+55	0.5538	0.94	Q	V				
11+ 0	0.5604	0.95	Q	V				
11+ 5	0.5670	0.96	Q	V				
11+10	0.5736	0.97	Q	V				
11+15	0.5804	0.98	Q	V				

11+20	0.5872	0.99	Q	V				
11+25	0.5941	1.00	Q	V				
11+30	0.6011	1.01	Q	V				
11+35	0.6082	1.03	Q	V				
11+40	0.6153	1.04	Q	V				
11+45	0.6225	1.05	Q	V				
11+50	0.6299	1.06	Q	V				
11+55	0.6373	1.08	Q	V				
12+ 0	0.6448	1.09	Q	V				
12+ 5	0.6530	1.19	Q	V				
12+10	0.6641	1.60	Q	V				
12+15	0.6765	1.81	Q	V				
12+20	0.6896	1.91	Q	V				
12+25	0.7032	1.97	Q	V				
12+30	0.7171	2.02	Q	V				
12+35	0.7313	2.06	Q	V				
12+40	0.7457	2.09	Q	V				
12+45	0.7602	2.12	Q	V				
12+50	0.7750	2.15	Q	V				
12+55	0.7900	2.17	Q	V				
13+ 0	0.8051	2.19	Q	V				
13+ 5	0.8203	2.22	Q	V				
13+10	0.8358	2.24	Q	V				
13+15	0.8514	2.26	Q	V				
13+20	0.8672	2.29	Q	V				
13+25	0.8831	2.32	Q	V				
13+30	0.8993	2.35	Q	V				
13+35	0.9157	2.38	Q	V				
13+40	0.9323	2.41	Q	V				
13+45	0.9491	2.44	Q	V				
13+50	0.9661	2.48	Q	V				
13+55	0.9834	2.51	Q	V				
14+ 0	1.0010	2.55	Q	V				
14+ 5	1.0188	2.59	Q	V				
14+10	1.0369	2.63	Q	V				
14+15	1.0553	2.67	Q	V				
14+20	1.0741	2.73	Q	V				
14+25	1.0932	2.77	Q	V				
14+30	1.1127	2.83	Q	V				
14+35	1.1325	2.88	Q	V				
14+40	1.1528	2.95	Q	V				
14+45	1.1736	3.01	Q	V				
14+50	1.1949	3.09	Q	V				
14+55	1.2166	3.16	Q	V				
15+ 0	1.2390	3.25	Q	V				
15+ 5	1.2621	3.34	Q	V				
15+10	1.2859	3.46	Q	V				
15+15	1.3104	3.57	Q	V				
15+20	1.3360	3.71	Q	V				
15+25	1.3611	3.66	Q	V				

15+30	1.3812	2.91	Q		V		
15+35	1.3995	2.65	Q		V		
15+40	1.4182	2.72	Q		V		
15+45	1.4382	2.90	Q		V		
15+50	1.4610	3.32	Q		V		
15+55	1.4881	3.93	Q		V		
16+ 0	1.5256	5.44		Q	V		
16+ 5	1.6043	11.43			V		
16+10	1.7863	26.42		Q		V	Q
16+15	1.8892	14.94			Q	V	
16+20	1.9475	8.46		Q		V	
16+25	1.9886	5.98		Q		V	
16+30	2.0258	5.39		Q		V	
16+35	2.0590	4.82		Q		V	
16+40	2.0882	4.24		Q		V	
16+45	2.1148	3.86		Q		V	
16+50	2.1398	3.64	Q			V	
16+55	2.1625	3.29	Q			V	
17+ 0	2.1830	2.98	Q			V	
17+ 5	2.2027	2.86	Q			V	
17+10	2.2217	2.76	Q			V	
17+15	2.2400	2.67	Q			V	
17+20	2.2578	2.58	Q			V	
17+25	2.2750	2.50	Q			V	
17+30	2.2918	2.43	Q			V	
17+35	2.3080	2.37	Q			V	
17+40	2.3239	2.31	Q			V	
17+45	2.3395	2.26	Q			V	
17+50	2.3547	2.21	Q			V	
17+55	2.3696	2.16	Q			V	
18+ 0	2.3841	2.12	Q			V	
18+ 5	2.3979	2.00	Q			V	
18+10	2.4087	1.56	Q			V	
18+15	2.4179	1.34	Q			V	
18+20	2.4263	1.23	Q			V	
18+25	2.4343	1.15	Q			V	
18+30	2.4418	1.09	Q			V	
18+35	2.4490	1.05	Q			V	
18+40	2.4560	1.01	Q			V	
18+45	2.4628	0.98	Q			V	
18+50	2.4694	0.96	Q			V	
18+55	2.4758	0.93	Q			V	
19+ 0	2.4821	0.91	Q			V	
19+ 5	2.4883	0.90	Q			V	
19+10	2.4944	0.88	Q			V	
19+15	2.5003	0.86	Q			V	
19+20	2.5061	0.85	Q			V	
19+25	2.5119	0.83	Q			V	
19+30	2.5175	0.82	Q			V	
19+35	2.5231	0.81	Q			V	

19+40	2.5285	0.79	|Q				V
19+45	2.5339	0.78	|Q				V
19+50	2.5392	0.77	|Q				V
19+55	2.5444	0.76	|Q				V
20+ 0	2.5495	0.74	Q				V
20+ 5	2.5546	0.73	Q				V
20+10	2.5595	0.72	Q				V
20+15	2.5645	0.71	Q				V
20+20	2.5693	0.70	Q				V
20+25	2.5741	0.69	Q				V
20+30	2.5788	0.69	Q				V
20+35	2.5835	0.68	Q				V
20+40	2.5881	0.67	Q				V
20+45	2.5926	0.66	Q				V
20+50	2.5971	0.65	Q				V
20+55	2.6015	0.64	Q				V
21+ 0	2.6059	0.64	Q				V
21+ 5	2.6103	0.63	Q				V
21+10	2.6145	0.62	Q				V
21+15	2.6188	0.62	Q				V
21+20	2.6230	0.61	Q				V
21+25	2.6271	0.60	Q				V
21+30	2.6312	0.60	Q				V
21+35	2.6353	0.59	Q				V
21+40	2.6393	0.58	Q				V
21+45	2.6433	0.58	Q				V
21+50	2.6472	0.57	Q				V
21+55	2.6511	0.57	Q				V
22+ 0	2.6550	0.56	Q				V
22+ 5	2.6588	0.56	Q				V
22+10	2.6626	0.55	Q				V
22+15	2.6663	0.55	Q				V
22+20	2.6701	0.54	Q				V
22+25	2.6738	0.54	Q				V
22+30	2.6774	0.53	Q				V
22+35	2.6810	0.53	Q				V
22+40	2.6846	0.52	Q				V
22+45	2.6882	0.52	Q				V
22+50	2.6917	0.51	Q				V
22+55	2.6952	0.51	Q				V
23+ 0	2.6987	0.50	Q				V
23+ 5	2.7021	0.50	Q				V
23+10	2.7056	0.50	Q				V
23+15	2.7089	0.49	Q				V
23+20	2.7123	0.49	Q				V
23+25	2.7156	0.48	Q				V
23+30	2.7190	0.48	Q				V
23+35	2.7222	0.48	Q				V
23+40	2.7255	0.47	Q				V
23+45	2.7287	0.47	Q				V

23+50	2.7320	0.47	Q	|	|	|	V|
23+55	2.7352	0.46	Q	|	|	|	V|
24+ 0	2.7383	0.46	Q	|	|	|	V|
24+ 5	2.7412	0.41	Q	|	|	|	V|
24+10	2.7426	0.21	Q	|	|	|	V|
24+15	2.7434	0.11	Q	|	|	|	V|
24+20	2.7438	0.07	Q	|	|	|	V|
24+25	2.7441	0.04	Q	|	|	|	V|
24+30	2.7443	0.03	Q	|	|	|	V|

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 09/27/21

+++++

San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6277

I15 INDUSTRIAL PARK BLDG 3
POSTDEVELOPED 10 YR UNIT HYDROGRAPH SUBAREA C
MGUBBAREINER 2021-09-27
--

Storm Event Year = 10

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 10		
3.82	1	0.79

Rainfall data for year 10		
3.82	6	2.28

Rainfall data for year 10		
3.82	24	3.63

+++++

***** Area-averaged max loss rate, Fm *****

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	32.0	3.82	1.000	0.978	0.190	0.186

Area-averaged adjusted loss rate Fm (In/Hr) = 0.186

***** Area-Averaged low loss rate fraction, Yb *****

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
0.73	0.190	32.0	32.0	18.15	0.000
3.09	0.810	98.0	98.0	0.20	0.936

Area-averaged catchment yield fraction, Y = 0.758

Area-averaged low loss fraction, Yb = 0.242

User entry of time of concentration = 0.306 (hours)

+++++

Watershed area = 3.82(Ac.)

Catchment Lag time = 0.245 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 34.0081

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.186(In/Hr)

Average low loss rate fraction (Yb) = 0.242 (decimal)

DESERT S-Graph Selected

Computed peak 5-minute rainfall = 0.372(In)

Computed peak 30-minute rainfall = 0.638(In)

Specified peak 1-hour rainfall = 0.785(In)

Computed peak 3-hour rainfall = 1.509(In)

Specified peak 6-hour rainfall = 2.280(In)

Specified peak 24-hour rainfall = 3.630(In)

Rainfall depth area reduction factors:

Using a total area of 3.82(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.372(In)

30-minute factor = 1.000 Adjusted rainfall = 0.638(In)

1-hour factor = 1.000 Adjusted rainfall = 0.785(In)

3-hour factor = 1.000 Adjusted rainfall = 1.509(In)

6-hour factor = 1.000 Adjusted rainfall = 2.280(In)

24-hour factor = 1.000 Adjusted rainfall = 3.630(In)

U n i t H y d r o g r a p h

+++++

Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

	(K =	46.20 (CFS))
1	2.136	0.987
2	12.478	4.778
3	39.080	12.289
4	58.659	9.045
5	69.125	4.835
6	76.070	3.209
7	81.019	2.286
8	84.761	1.729
9	87.813	1.410
10	90.071	1.043
11	91.928	0.858
12	93.498	0.725
13	94.753	0.580
14	95.829	0.497
15	96.709	0.406
16	97.388	0.314
17	97.907	0.240
18	98.256	0.161
19	98.650	0.182
20	99.058	0.189
21	99.449	0.181
22	99.695	0.114
23	100.000	0.057

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.3724	0.3724
2	0.4585	0.0861
3	0.5178	0.0593
4	0.5645	0.0467
5	0.6036	0.0391
6	0.6375	0.0339
7	0.6677	0.0302
8	0.6950	0.0273
9	0.7200	0.0250
10	0.7431	0.0231
11	0.7646	0.0216
12	0.7849	0.0202
13	0.8232	0.0383
14	0.8603	0.0371
15	0.8963	0.0361
16	0.9314	0.0351
17	0.9657	0.0342
18	0.9991	0.0334
19	1.0318	0.0327

20	1.0638	0.0320
21	1.0951	0.0313
22	1.1258	0.0307
23	1.1560	0.0302
24	1.1857	0.0297
25	1.2149	0.0292
26	1.2436	0.0287
27	1.2718	0.0283
28	1.2996	0.0278
29	1.3271	0.0274
30	1.3541	0.0271
31	1.3808	0.0267
32	1.4071	0.0263
33	1.4332	0.0260
34	1.4589	0.0257
35	1.4842	0.0254
36	1.5093	0.0251
37	1.5342	0.0248
38	1.5587	0.0245
39	1.5830	0.0243
40	1.6070	0.0240
41	1.6308	0.0238
42	1.6543	0.0236
43	1.6777	0.0233
44	1.7008	0.0231
45	1.7237	0.0229
46	1.7464	0.0227
47	1.7689	0.0225
48	1.7912	0.0223
49	1.8133	0.0221
50	1.8352	0.0219
51	1.8570	0.0218
52	1.8786	0.0216
53	1.9000	0.0214
54	1.9212	0.0213
55	1.9423	0.0211
56	1.9633	0.0209
57	1.9840	0.0208
58	2.0047	0.0206
59	2.0252	0.0205
60	2.0455	0.0204
61	2.0658	0.0202
62	2.0859	0.0201
63	2.1058	0.0200
64	2.1256	0.0198
65	2.1453	0.0197
66	2.1649	0.0196
67	2.1844	0.0195
68	2.2037	0.0193
69	2.2230	0.0192

70	2.2421	0.0191
71	2.2611	0.0190
72	2.2800	0.0189
73	2.2905	0.0106
74	2.3010	0.0105
75	2.3114	0.0104
76	2.3217	0.0103
77	2.3319	0.0102
78	2.3420	0.0101
79	2.3521	0.0100
80	2.3620	0.0099
81	2.3719	0.0099
82	2.3816	0.0098
83	2.3914	0.0097
84	2.4010	0.0096
85	2.4105	0.0096
86	2.4200	0.0095
87	2.4294	0.0094
88	2.4387	0.0093
89	2.4480	0.0093
90	2.4572	0.0092
91	2.4663	0.0091
92	2.4754	0.0091
93	2.4844	0.0090
94	2.4933	0.0089
95	2.5022	0.0089
96	2.5110	0.0088
97	2.5197	0.0087
98	2.5284	0.0087
99	2.5370	0.0086
100	2.5456	0.0086
101	2.5541	0.0085
102	2.5626	0.0085
103	2.5710	0.0084
104	2.5793	0.0083
105	2.5876	0.0083
106	2.5959	0.0082
107	2.6040	0.0082
108	2.6122	0.0081
109	2.6203	0.0081
110	2.6283	0.0080
111	2.6363	0.0080
112	2.6442	0.0079
113	2.6521	0.0079
114	2.6600	0.0079
115	2.6678	0.0078
116	2.6756	0.0078
117	2.6833	0.0077
118	2.6909	0.0077
119	2.6986	0.0076

120	2.7062	0.0076
121	2.7137	0.0075
122	2.7212	0.0075
123	2.7287	0.0075
124	2.7361	0.0074
125	2.7435	0.0074
126	2.7508	0.0073
127	2.7581	0.0073
128	2.7654	0.0073
129	2.7726	0.0072
130	2.7798	0.0072
131	2.7870	0.0072
132	2.7941	0.0071
133	2.8012	0.0071
134	2.8082	0.0070
135	2.8152	0.0070
136	2.8222	0.0070
137	2.8292	0.0069
138	2.8361	0.0069
139	2.8429	0.0069
140	2.8498	0.0068
141	2.8566	0.0068
142	2.8634	0.0068
143	2.8701	0.0067
144	2.8768	0.0067
145	2.8835	0.0067
146	2.8902	0.0067
147	2.8968	0.0066
148	2.9034	0.0066
149	2.9100	0.0066
150	2.9165	0.0065
151	2.9230	0.0065
152	2.9295	0.0065
153	2.9360	0.0065
154	2.9424	0.0064
155	2.9488	0.0064
156	2.9551	0.0064
157	2.9615	0.0063
158	2.9678	0.0063
159	2.9741	0.0063
160	2.9804	0.0063
161	2.9866	0.0062
162	2.9928	0.0062
163	2.9990	0.0062
164	3.0051	0.0062
165	3.0113	0.0061
166	3.0174	0.0061
167	3.0235	0.0061
168	3.0295	0.0061
169	3.0356	0.0060

170	3.0416	0.0060
171	3.0476	0.0060
172	3.0535	0.0060
173	3.0595	0.0059
174	3.0654	0.0059
175	3.0713	0.0059
176	3.0772	0.0059
177	3.0830	0.0059
178	3.0889	0.0058
179	3.0947	0.0058
180	3.1005	0.0058
181	3.1062	0.0058
182	3.1120	0.0057
183	3.1177	0.0057
184	3.1234	0.0057
185	3.1291	0.0057
186	3.1348	0.0057
187	3.1404	0.0056
188	3.1460	0.0056
189	3.1516	0.0056
190	3.1572	0.0056
191	3.1628	0.0056
192	3.1683	0.0055
193	3.1739	0.0055
194	3.1794	0.0055
195	3.1849	0.0055
196	3.1903	0.0055
197	3.1958	0.0055
198	3.2012	0.0054
199	3.2066	0.0054
200	3.2120	0.0054
201	3.2174	0.0054
202	3.2228	0.0054
203	3.2281	0.0053
204	3.2334	0.0053
205	3.2387	0.0053
206	3.2440	0.0053
207	3.2493	0.0053
208	3.2546	0.0053
209	3.2598	0.0052
210	3.2650	0.0052
211	3.2702	0.0052
212	3.2754	0.0052
213	3.2806	0.0052
214	3.2858	0.0052
215	3.2909	0.0051
216	3.2960	0.0051
217	3.3011	0.0051
218	3.3062	0.0051
219	3.3113	0.0051

220	3.3164	0.0051
221	3.3214	0.0050
222	3.3265	0.0050
223	3.3315	0.0050
224	3.3365	0.0050
225	3.3415	0.0050
226	3.3465	0.0050
227	3.3514	0.0050
228	3.3564	0.0049
229	3.3613	0.0049
230	3.3662	0.0049
231	3.3711	0.0049
232	3.3760	0.0049
233	3.3809	0.0049
234	3.3857	0.0049
235	3.3906	0.0048
236	3.3954	0.0048
237	3.4002	0.0048
238	3.4050	0.0048
239	3.4098	0.0048
240	3.4146	0.0048
241	3.4194	0.0048
242	3.4241	0.0048
243	3.4289	0.0047
244	3.4336	0.0047
245	3.4383	0.0047
246	3.4430	0.0047
247	3.4477	0.0047
248	3.4524	0.0047
249	3.4570	0.0047
250	3.4617	0.0047
251	3.4663	0.0046
252	3.4710	0.0046
253	3.4756	0.0046
254	3.4802	0.0046
255	3.4848	0.0046
256	3.4893	0.0046
257	3.4939	0.0046
258	3.4985	0.0046
259	3.5030	0.0045
260	3.5075	0.0045
261	3.5121	0.0045
262	3.5166	0.0045
263	3.5211	0.0045
264	3.5256	0.0045
265	3.5300	0.0045
266	3.5345	0.0045
267	3.5389	0.0045
268	3.5434	0.0044
269	3.5478	0.0044

270	3.5522	0.0044
271	3.5566	0.0044
272	3.5610	0.0044
273	3.5654	0.0044
274	3.5698	0.0044
275	3.5742	0.0044
276	3.5785	0.0044
277	3.5829	0.0043
278	3.5872	0.0043
279	3.5915	0.0043
280	3.5958	0.0043
281	3.6001	0.0043
282	3.6044	0.0043
283	3.6087	0.0043
284	3.6130	0.0043
285	3.6173	0.0043
286	3.6215	0.0043
287	3.6257	0.0042
288	3.6300	0.0042

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0042	0.0010	0.0032
2	0.0042	0.0010	0.0032
3	0.0043	0.0010	0.0032
4	0.0043	0.0010	0.0032
5	0.0043	0.0010	0.0033
6	0.0043	0.0010	0.0033
7	0.0043	0.0010	0.0033
8	0.0043	0.0010	0.0033
9	0.0044	0.0011	0.0033
10	0.0044	0.0011	0.0033
11	0.0044	0.0011	0.0033
12	0.0044	0.0011	0.0033
13	0.0044	0.0011	0.0033
14	0.0044	0.0011	0.0034
15	0.0045	0.0011	0.0034
16	0.0045	0.0011	0.0034
17	0.0045	0.0011	0.0034
18	0.0045	0.0011	0.0034
19	0.0045	0.0011	0.0034
20	0.0045	0.0011	0.0034
21	0.0046	0.0011	0.0035
22	0.0046	0.0011	0.0035
23	0.0046	0.0011	0.0035
24	0.0046	0.0011	0.0035
25	0.0046	0.0011	0.0035
26	0.0046	0.0011	0.0035

27	0.0047	0.0011	0.0035
28	0.0047	0.0011	0.0035
29	0.0047	0.0011	0.0036
30	0.0047	0.0011	0.0036
31	0.0047	0.0011	0.0036
32	0.0048	0.0012	0.0036
33	0.0048	0.0012	0.0036
34	0.0048	0.0012	0.0036
35	0.0048	0.0012	0.0037
36	0.0048	0.0012	0.0037
37	0.0049	0.0012	0.0037
38	0.0049	0.0012	0.0037
39	0.0049	0.0012	0.0037
40	0.0049	0.0012	0.0037
41	0.0049	0.0012	0.0037
42	0.0050	0.0012	0.0038
43	0.0050	0.0012	0.0038
44	0.0050	0.0012	0.0038
45	0.0050	0.0012	0.0038
46	0.0050	0.0012	0.0038
47	0.0051	0.0012	0.0038
48	0.0051	0.0012	0.0039
49	0.0051	0.0012	0.0039
50	0.0051	0.0012	0.0039
51	0.0052	0.0013	0.0039
52	0.0052	0.0013	0.0039
53	0.0052	0.0013	0.0040
54	0.0052	0.0013	0.0040
55	0.0053	0.0013	0.0040
56	0.0053	0.0013	0.0040
57	0.0053	0.0013	0.0040
58	0.0053	0.0013	0.0040
59	0.0054	0.0013	0.0041
60	0.0054	0.0013	0.0041
61	0.0054	0.0013	0.0041
62	0.0055	0.0013	0.0041
63	0.0055	0.0013	0.0042
64	0.0055	0.0013	0.0042
65	0.0055	0.0013	0.0042
66	0.0056	0.0013	0.0042
67	0.0056	0.0014	0.0042
68	0.0056	0.0014	0.0043
69	0.0057	0.0014	0.0043
70	0.0057	0.0014	0.0043
71	0.0057	0.0014	0.0043
72	0.0057	0.0014	0.0044
73	0.0058	0.0014	0.0044
74	0.0058	0.0014	0.0044
75	0.0059	0.0014	0.0044
76	0.0059	0.0014	0.0045

77	0.0059	0.0014	0.0045
78	0.0059	0.0014	0.0045
79	0.0060	0.0015	0.0045
80	0.0060	0.0015	0.0046
81	0.0061	0.0015	0.0046
82	0.0061	0.0015	0.0046
83	0.0061	0.0015	0.0046
84	0.0062	0.0015	0.0047
85	0.0062	0.0015	0.0047
86	0.0062	0.0015	0.0047
87	0.0063	0.0015	0.0048
88	0.0063	0.0015	0.0048
89	0.0064	0.0015	0.0048
90	0.0064	0.0015	0.0048
91	0.0065	0.0016	0.0049
92	0.0065	0.0016	0.0049
93	0.0065	0.0016	0.0050
94	0.0066	0.0016	0.0050
95	0.0066	0.0016	0.0050
96	0.0067	0.0016	0.0050
97	0.0067	0.0016	0.0051
98	0.0067	0.0016	0.0051
99	0.0068	0.0016	0.0052
100	0.0068	0.0017	0.0052
101	0.0069	0.0017	0.0052
102	0.0069	0.0017	0.0053
103	0.0070	0.0017	0.0053
104	0.0070	0.0017	0.0053
105	0.0071	0.0017	0.0054
106	0.0072	0.0017	0.0054
107	0.0072	0.0018	0.0055
108	0.0073	0.0018	0.0055
109	0.0073	0.0018	0.0056
110	0.0074	0.0018	0.0056
111	0.0075	0.0018	0.0057
112	0.0075	0.0018	0.0057
113	0.0076	0.0018	0.0057
114	0.0076	0.0018	0.0058
115	0.0077	0.0019	0.0058
116	0.0078	0.0019	0.0059
117	0.0079	0.0019	0.0059
118	0.0079	0.0019	0.0060
119	0.0080	0.0019	0.0061
120	0.0080	0.0019	0.0061
121	0.0081	0.0020	0.0062
122	0.0082	0.0020	0.0062
123	0.0083	0.0020	0.0063
124	0.0083	0.0020	0.0063
125	0.0085	0.0020	0.0064
126	0.0085	0.0021	0.0065

127	0.0086	0.0021	0.0065
128	0.0087	0.0021	0.0066
129	0.0088	0.0021	0.0067
130	0.0089	0.0021	0.0067
131	0.0090	0.0022	0.0068
132	0.0091	0.0022	0.0069
133	0.0092	0.0022	0.0070
134	0.0093	0.0022	0.0070
135	0.0094	0.0023	0.0071
136	0.0095	0.0023	0.0072
137	0.0096	0.0023	0.0073
138	0.0097	0.0024	0.0074
139	0.0099	0.0024	0.0075
140	0.0099	0.0024	0.0075
141	0.0101	0.0025	0.0077
142	0.0102	0.0025	0.0077
143	0.0104	0.0025	0.0079
144	0.0105	0.0025	0.0079
145	0.0189	0.0046	0.0143
146	0.0190	0.0046	0.0144
147	0.0192	0.0047	0.0146
148	0.0193	0.0047	0.0147
149	0.0196	0.0047	0.0148
150	0.0197	0.0048	0.0149
151	0.0200	0.0048	0.0151
152	0.0201	0.0049	0.0152
153	0.0204	0.0049	0.0154
154	0.0205	0.0050	0.0155
155	0.0208	0.0050	0.0158
156	0.0209	0.0051	0.0159
157	0.0213	0.0051	0.0161
158	0.0214	0.0052	0.0162
159	0.0218	0.0053	0.0165
160	0.0219	0.0053	0.0166
161	0.0223	0.0054	0.0169
162	0.0225	0.0054	0.0170
163	0.0229	0.0055	0.0174
164	0.0231	0.0056	0.0175
165	0.0236	0.0057	0.0178
166	0.0238	0.0058	0.0180
167	0.0243	0.0059	0.0184
168	0.0245	0.0059	0.0186
169	0.0251	0.0061	0.0190
170	0.0254	0.0061	0.0192
171	0.0260	0.0063	0.0197
172	0.0263	0.0064	0.0200
173	0.0271	0.0066	0.0205
174	0.0274	0.0066	0.0208
175	0.0283	0.0068	0.0214
176	0.0287	0.0069	0.0217

177	0.0297	0.0072	0.0225
178	0.0302	0.0073	0.0229
179	0.0313	0.0076	0.0238
180	0.0320	0.0077	0.0242
181	0.0334	0.0081	0.0253
182	0.0342	0.0083	0.0259
183	0.0361	0.0087	0.0273
184	0.0371	0.0090	0.0281
185	0.0202	0.0049	0.0153
186	0.0216	0.0052	0.0163
187	0.0250	0.0061	0.0189
188	0.0273	0.0066	0.0207
189	0.0339	0.0082	0.0257
190	0.0391	0.0095	0.0296
191	0.0593	0.0144	0.0449
192	0.0861	0.0155	0.0706
193	0.3724	0.0155	0.3569
194	0.0467	0.0113	0.0354
195	0.0302	0.0073	0.0229
196	0.0231	0.0056	0.0175
197	0.0383	0.0093	0.0290
198	0.0351	0.0085	0.0266
199	0.0327	0.0079	0.0248
200	0.0307	0.0074	0.0233
201	0.0292	0.0071	0.0221
202	0.0278	0.0067	0.0211
203	0.0267	0.0065	0.0202
204	0.0257	0.0062	0.0195
205	0.0248	0.0060	0.0188
206	0.0240	0.0058	0.0182
207	0.0233	0.0057	0.0177
208	0.0227	0.0055	0.0172
209	0.0221	0.0054	0.0168
210	0.0216	0.0052	0.0164
211	0.0211	0.0051	0.0160
212	0.0206	0.0050	0.0156
213	0.0202	0.0049	0.0153
214	0.0198	0.0048	0.0150
215	0.0195	0.0047	0.0147
216	0.0191	0.0046	0.0145
217	0.0106	0.0026	0.0080
218	0.0103	0.0025	0.0078
219	0.0100	0.0024	0.0076
220	0.0098	0.0024	0.0074
221	0.0096	0.0023	0.0072
222	0.0093	0.0023	0.0071
223	0.0091	0.0022	0.0069
224	0.0089	0.0022	0.0068
225	0.0087	0.0021	0.0066
226	0.0086	0.0021	0.0065

227	0.0084	0.0020	0.0064
228	0.0082	0.0020	0.0062
229	0.0081	0.0020	0.0061
230	0.0079	0.0019	0.0060
231	0.0078	0.0019	0.0059
232	0.0077	0.0019	0.0058
233	0.0075	0.0018	0.0057
234	0.0074	0.0018	0.0056
235	0.0073	0.0018	0.0055
236	0.0072	0.0017	0.0055
237	0.0071	0.0017	0.0054
238	0.0070	0.0017	0.0053
239	0.0069	0.0017	0.0052
240	0.0068	0.0016	0.0051
241	0.0067	0.0016	0.0051
242	0.0066	0.0016	0.0050
243	0.0065	0.0016	0.0049
244	0.0064	0.0016	0.0049
245	0.0063	0.0015	0.0048
246	0.0063	0.0015	0.0047
247	0.0062	0.0015	0.0047
248	0.0061	0.0015	0.0046
249	0.0060	0.0015	0.0046
250	0.0060	0.0014	0.0045
251	0.0059	0.0014	0.0045
252	0.0058	0.0014	0.0044
253	0.0058	0.0014	0.0044
254	0.0057	0.0014	0.0043
255	0.0056	0.0014	0.0043
256	0.0056	0.0014	0.0042
257	0.0055	0.0013	0.0042
258	0.0055	0.0013	0.0041
259	0.0054	0.0013	0.0041
260	0.0054	0.0013	0.0041
261	0.0053	0.0013	0.0040
262	0.0053	0.0013	0.0040
263	0.0052	0.0013	0.0039
264	0.0052	0.0012	0.0039
265	0.0051	0.0012	0.0039
266	0.0051	0.0012	0.0038
267	0.0050	0.0012	0.0038
268	0.0050	0.0012	0.0038
269	0.0049	0.0012	0.0037
270	0.0049	0.0012	0.0037
271	0.0048	0.0012	0.0037
272	0.0048	0.0012	0.0036
273	0.0048	0.0012	0.0036
274	0.0047	0.0011	0.0036
275	0.0047	0.0011	0.0036
276	0.0047	0.0011	0.0035

277	0.0046	0.0011	0.0035
278	0.0046	0.0011	0.0035
279	0.0045	0.0011	0.0034
280	0.0045	0.0011	0.0034
281	0.0045	0.0011	0.0034
282	0.0044	0.0011	0.0034
283	0.0044	0.0011	0.0033
284	0.0044	0.0011	0.0033
285	0.0043	0.0011	0.0033
286	0.0043	0.0010	0.0033
287	0.0043	0.0010	0.0032
288	0.0043	0.0010	0.0032

 Total soil rain loss = 0.80(In)
 Total effective rainfall = 2.83(In)
 Peak flow rate in flood hydrograph = 5.77(CFS)

+++++

24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00	Q				
0+10	0.0001	0.02	Q				
0+15	0.0005	0.06	Q				
0+20	0.0011	0.09	Q				
0+25	0.0019	0.10	Q				
0+30	0.0026	0.11	Q				
0+35	0.0035	0.12	Q				
0+40	0.0044	0.13	Q				
0+45	0.0053	0.13	Q				
0+50	0.0062	0.14	Q				
0+55	0.0072	0.14	Q				
1+ 0	0.0081	0.14	Q				
1+ 5	0.0091	0.14	Q				
1+10	0.0101	0.15	Q				
1+15	0.0112	0.15	Q				
1+20	0.0122	0.15	Q				
1+25	0.0132	0.15	Q				
1+30	0.0143	0.15	Q				
1+35	0.0154	0.15	Q				
1+40	0.0164	0.15	Q				
1+45	0.0175	0.16	Q				
1+50	0.0186	0.16	Q				
1+55	0.0197	0.16	Q				

2+ 0	0.0207	0.16	Q
2+ 5	0.0218	0.16	Q
2+10	0.0229	0.16	QV
2+15	0.0240	0.16	QV
2+20	0.0252	0.16	QV
2+25	0.0263	0.16	QV
2+30	0.0274	0.16	QV
2+35	0.0285	0.16	QV
2+40	0.0296	0.16	QV
2+45	0.0308	0.16	QV
2+50	0.0319	0.16	QV
2+55	0.0330	0.17	QV
3+ 0	0.0342	0.17	QV
3+ 5	0.0353	0.17	QV
3+10	0.0365	0.17	QV
3+15	0.0376	0.17	QV
3+20	0.0388	0.17	QV
3+25	0.0400	0.17	QV
3+30	0.0411	0.17	QV
3+35	0.0423	0.17	QV
3+40	0.0435	0.17	QV
3+45	0.0447	0.17	QV
3+50	0.0459	0.17	Q V
3+55	0.0471	0.17	Q V
4+ 0	0.0483	0.17	Q V
4+ 5	0.0495	0.18	Q V
4+10	0.0507	0.18	Q V
4+15	0.0519	0.18	Q V
4+20	0.0532	0.18	Q V
4+25	0.0544	0.18	Q V
4+30	0.0556	0.18	Q V
4+35	0.0569	0.18	Q V
4+40	0.0581	0.18	Q V
4+45	0.0594	0.18	Q V
4+50	0.0606	0.18	Q V
4+55	0.0619	0.18	Q V
5+ 0	0.0632	0.18	Q V
5+ 5	0.0644	0.19	Q V
5+10	0.0657	0.19	Q V
5+15	0.0670	0.19	Q V
5+20	0.0683	0.19	Q V
5+25	0.0696	0.19	Q V
5+30	0.0709	0.19	Q V
5+35	0.0723	0.19	Q V
5+40	0.0736	0.19	Q V
5+45	0.0749	0.19	Q V
5+50	0.0763	0.19	Q V
5+55	0.0776	0.20	Q V
6+ 0	0.0790	0.20	Q V
6+ 5	0.0803	0.20	Q V

6+10	0.0817	0.20	Q	V				
6+15	0.0831	0.20	Q	V				
6+20	0.0844	0.20	Q	V				
6+25	0.0858	0.20	Q	V				
6+30	0.0872	0.20	Q	V				
6+35	0.0886	0.20	Q	V				
6+40	0.0900	0.21	Q	V				
6+45	0.0915	0.21	Q	V				
6+50	0.0929	0.21	Q	V				
6+55	0.0943	0.21	Q	V				
7+ 0	0.0958	0.21	Q	V				
7+ 5	0.0972	0.21	Q	V				
7+10	0.0987	0.21	Q	V				
7+15	0.1002	0.21	Q	V				
7+20	0.1017	0.22	Q	V				
7+25	0.1031	0.22	Q	V				
7+30	0.1046	0.22	Q	V				
7+35	0.1062	0.22	Q	V				
7+40	0.1077	0.22	Q	V				
7+45	0.1092	0.22	Q	V				
7+50	0.1107	0.22	Q	V				
7+55	0.1123	0.22	Q	V				
8+ 0	0.1139	0.23	Q	V				
8+ 5	0.1154	0.23	Q	V				
8+10	0.1170	0.23	Q	V				
8+15	0.1186	0.23	Q	V				
8+20	0.1202	0.23	Q	V				
8+25	0.1218	0.23	Q	V				
8+30	0.1234	0.24	Q	V				
8+35	0.1251	0.24	Q	V				
8+40	0.1267	0.24	Q	V				
8+45	0.1284	0.24	Q	V				
8+50	0.1300	0.24	Q	V				
8+55	0.1317	0.24	Q	V				
9+ 0	0.1334	0.25	Q	V				
9+ 5	0.1351	0.25	Q	V				
9+10	0.1369	0.25	Q	V				
9+15	0.1386	0.25	|Q	V				
9+20	0.1403	0.25	|Q	V				
9+25	0.1421	0.26	|Q	V				
9+30	0.1439	0.26	|Q	V				
9+35	0.1457	0.26	|Q	V				
9+40	0.1475	0.26	|Q	V				
9+45	0.1493	0.26	|Q	V				
9+50	0.1511	0.27	|Q	V				
9+55	0.1530	0.27	|Q	V				
10+ 0	0.1548	0.27	|Q	V				
10+ 5	0.1567	0.27	|Q	V				
10+10	0.1586	0.28	|Q	V				
10+15	0.1605	0.28	|Q	V				

10+20	0.1625	0.28	Q	V				
10+25	0.1644	0.28	Q	V				
10+30	0.1664	0.29	Q	V				
10+35	0.1684	0.29	Q	V				
10+40	0.1704	0.29	Q	V				
10+45	0.1724	0.29	Q	V				
10+50	0.1745	0.30	Q	V				
10+55	0.1765	0.30	Q	V				
11+ 0	0.1786	0.30	Q	V				
11+ 5	0.1808	0.31	Q	V				
11+10	0.1829	0.31	Q	V				
11+15	0.1850	0.31	Q	V				
11+20	0.1872	0.32	Q	V				
11+25	0.1894	0.32	Q	V				
11+30	0.1917	0.32	Q	V				
11+35	0.1939	0.33	Q	V				
11+40	0.1962	0.33	Q	V				
11+45	0.1985	0.34	Q	V				
11+50	0.2008	0.34	Q	V				
11+55	0.2032	0.34	Q	V				
12+ 0	0.2056	0.35	Q	V				
12+ 5	0.2081	0.36	Q	V				
12+10	0.2108	0.39	Q	V				
12+15	0.2140	0.47	Q	V				
12+20	0.2177	0.54	Q	V				
12+25	0.2217	0.57	Q	V				
12+30	0.2258	0.60	Q	V				
12+35	0.2300	0.62	Q	V				
12+40	0.2344	0.63	Q	V				
12+45	0.2388	0.65	Q	V				
12+50	0.2434	0.66	Q	V				
12+55	0.2480	0.67	Q	V				
13+ 0	0.2527	0.68	Q	V				
13+ 5	0.2575	0.70	Q	V				
13+10	0.2624	0.71	Q	V				
13+15	0.2673	0.72	Q	V				
13+20	0.2723	0.73	Q	V				
13+25	0.2774	0.74	Q	V				
13+30	0.2825	0.74	Q	V				
13+35	0.2877	0.75	Q	V				
13+40	0.2930	0.77	Q	V				
13+45	0.2983	0.78	Q	V				
13+50	0.3037	0.79	Q	V				
13+55	0.3092	0.80	Q	V				
14+ 0	0.3148	0.81	Q	V				
14+ 5	0.3204	0.82	Q	V				
14+10	0.3262	0.83	Q	V				
14+15	0.3320	0.85	Q	V				
14+20	0.3379	0.86	Q	V				
14+25	0.3440	0.87	Q	V				

14+30	0.3501	0.89	Q		V			
14+35	0.3563	0.91	Q		V			
14+40	0.3627	0.92	Q		V			
14+45	0.3692	0.94	Q		V			
14+50	0.3758	0.96	Q		V			
14+55	0.3826	0.99	Q		V			
15+ 0	0.3896	1.01	Q		V			
15+ 5	0.3967	1.04	Q		V			
15+10	0.4040	1.06	Q		V			
15+15	0.4116	1.10	Q		V			
15+20	0.4194	1.13	Q		V			
15+25	0.4274	1.16	Q		V			
15+30	0.4352	1.13	Q		V			
15+35	0.4421	1.01	Q		V			
15+40	0.4485	0.93	Q		V			
15+45	0.4550	0.94	Q		V			
15+50	0.4617	0.98	Q		V			
15+55	0.4692	1.09	Q		V			
16+ 0	0.4780	1.28	Q		V			
16+ 5	0.4913	1.93	Q		V			
16+10	0.5152	3.47		Q	V			
16+15	0.5550	5.77			QV			
16+20	0.5862	4.54			Q	V		
16+25	0.6067	2.97		Q		V		
16+30	0.6226	2.31		Q		V		
16+35	0.6365	2.02		Q		V		
16+40	0.6492	1.84		Q		V		
16+45	0.6608	1.69		Q		V		
16+50	0.6713	1.52		Q		V		
16+55	0.6810	1.41		Q		V		
17+ 0	0.6902	1.32		Q		V		
17+ 5	0.6986	1.23	Q			V		
17+10	0.7067	1.16	Q			V		
17+15	0.7142	1.10	Q			V		
17+20	0.7213	1.03	Q			V		
17+25	0.7281	0.98	Q			V		
17+30	0.7344	0.93	Q			V		
17+35	0.7407	0.91	Q			V		
17+40	0.7468	0.89	Q			V		
17+45	0.7527	0.86	Q			V		
17+50	0.7584	0.81	Q			V		
17+55	0.7637	0.77	Q			V		
18+ 0	0.7688	0.74	Q			V		
18+ 5	0.7737	0.72	Q			V		
18+10	0.7783	0.67	Q			V		
18+15	0.7823	0.58	Q			V		
18+20	0.7858	0.51	Q			V		
18+25	0.7891	0.47	Q			V		
18+30	0.7921	0.44	Q			V		
18+35	0.7949	0.41	Q			V		

18+40	0.7977	0.39	|Q				V
18+45	0.8002	0.38	|Q				V
18+50	0.8027	0.36	|Q				V
18+55	0.8051	0.35	|Q				V
19+ 0	0.8074	0.34	|Q				V
19+ 5	0.8097	0.33	|Q				V
19+10	0.8119	0.32	|Q				V
19+15	0.8140	0.31	|Q				V
19+20	0.8160	0.30	|Q				V
19+25	0.8181	0.29	|Q				V
19+30	0.8200	0.29	|Q				V
19+35	0.8219	0.28	|Q				V
19+40	0.8238	0.27	|Q				V
19+45	0.8257	0.27	|Q				V
19+50	0.8275	0.26	|Q				V
19+55	0.8293	0.26	|Q				V
20+ 0	0.8310	0.25	|Q				V
20+ 5	0.8327	0.25	Q				V
20+10	0.8344	0.25	Q				V
20+15	0.8361	0.24	Q				V
20+20	0.8377	0.24	Q				V
20+25	0.8394	0.24	Q				V
20+30	0.8410	0.23	Q				V
20+35	0.8425	0.23	Q				V
20+40	0.8441	0.23	Q				V
20+45	0.8456	0.22	Q				V
20+50	0.8472	0.22	Q				V
20+55	0.8487	0.22	Q				V
21+ 0	0.8501	0.22	Q				V
21+ 5	0.8516	0.21	Q				V
21+10	0.8530	0.21	Q				V
21+15	0.8545	0.21	Q				V
21+20	0.8559	0.21	Q				V
21+25	0.8573	0.20	Q				V
21+30	0.8587	0.20	Q				V
21+35	0.8600	0.20	Q				V
21+40	0.8614	0.20	Q				V
21+45	0.8627	0.19	Q				V
21+50	0.8640	0.19	Q				V
21+55	0.8654	0.19	Q				V
22+ 0	0.8666	0.19	Q				V
22+ 5	0.8679	0.19	Q				V
22+10	0.8692	0.18	Q				V
22+15	0.8705	0.18	Q				V
22+20	0.8717	0.18	Q				V
22+25	0.8729	0.18	Q				V
22+30	0.8742	0.18	Q				V
22+35	0.8754	0.18	Q				V
22+40	0.8766	0.17	Q				V
22+45	0.8778	0.17	Q				V

22+50	0.8790	0.17	Q				V
22+55	0.8801	0.17	Q				V
23+ 0	0.8813	0.17	Q				V
23+ 5	0.8824	0.17	Q				V
23+10	0.8836	0.17	Q				V
23+15	0.8847	0.16	Q				V
23+20	0.8858	0.16	Q				V
23+25	0.8870	0.16	Q				V
23+30	0.8881	0.16	Q				V
23+35	0.8892	0.16	Q				V
23+40	0.8903	0.16	Q				V
23+45	0.8913	0.16	Q				V
23+50	0.8924	0.16	Q				V
23+55	0.8935	0.15	Q				V
24+ 0	0.8945	0.15	Q				V
24+ 5	0.8956	0.15	Q				V
24+10	0.8965	0.13	Q				V
24+15	0.8971	0.09	Q				V
24+20	0.8975	0.06	Q				V
24+25	0.8979	0.05	Q				V
24+30	0.8981	0.04	Q				V

SECTION 6.5: Attachment D

Basin Summary Table
Basin Routing Analysis (10-Year Storm)

Basin Requirements		
Storm Event	Max Flow Allowed (CFS)	Required Retention (CF)
10-Year	22.22	98,340
100-Year	27.89*	98,340

Basin Summary			
Drainage Area	10-Year Max Flow (CFS)	100-Year Max Flow (CFS)	Provided Onsite Retention (CF)
DA B and C (Basin 1 and CMP)	0.00	0.00	-
DA A (Basin 2 and CMP)	0.00	0.00	-
Total	0.00	0.00	445,172

Note: * Calculated Using Data for 25-Year Storm Event

Basin 1 (DA B and C)						
Elevation (ft)	Surface Area (SF)	Depth (ft)	Basin Volume (CF)	CMP Volume (CF)	Volume (ac-ft)	Outflow (cfs)
3588.00*	3,588	0.0	0	445,172	10.22	0.00
3589.00	3,589	1.0	7,045	445,172	10.38	0.00
3590.00**	3,590	2.0	15,410	445,172	10.57	0.00
3591.00***	3,591	3.0	25,167	445,172	10.80	0.00

Basin 2 (DA A)						
Elevation (ft)	Surface Area (SF)	Depth (ft)	Basin Volume (CF)	CMP Volume (CF)	Volume (ac-ft)	Outflow (cfs)
3588.00*	3,596	0.0	0	445,172	10.22	0.00
3589.00	3,597	1.0	6,964	445,172	10.38	0.00
3590.00**	3,598	2.0	15,271	445,172	10.57	0.00
3591.00***	3,599	3.0	24,994	445,172	10.79	0.00

Note: * Bottom of Basin w/ 4.0' of Engineered Soil with 35% Porosity

** Retention Volume

*** Top of Basin

**** The same underground CMP is shared between Basins 1 and 2

Summary Table			
Storm Event	Storm Volume	Volume Retained****	Max Flow Out (CFS)
10-Year	182,860	475,853	0.00
100-Year	342,639	475,853	0.00

Drawdown Calculations

Area A Basin 2

WQMP Form 4.3-3

2	0.9	in/hr	
3	2	Factor of Safety	
4	0.45	in/hr	3.6
5	96	hr	
6	3	ft	
7	3		
8	6961.21	sf	
9	4	ft	
10	0.35		
11	0	ft	
12	0		
13	3		DCV 5,929
14	31,412		530%

DCV	5,929	CF
1	104,677	SF
2	0.81	
3	0.61	
4	0.458	IN
5	0.567	IN
6	48	HR
C2=	1.582	24 hr
	1.963	48 hr

Design Capture Volume
Site Area
Imperviousness of Site
Runoff Coefficient (Rc)
1hr 2Yr Rainfall Valley Desert
Mean 6-hr Precipitation 1.4807 1.2371
Drawdown Time

Area B+C Basin 1

WQMP Form 4.3-3

2	0.7	in/hr	
3	2	Factor of Safety	
4	0.35	in/hr	2.8
5	96	hr	
6	3	ft	
7	3		
8	7044.87	sf	
9	4	ft	
10	0.35		
11	0	ft	
12	0		
13	3		DCV 38,147
14	31,614		83%

DCV	38,147	CF
1	673,436	SF
2	0.81	
3	0.61	
4	0.458	IN
5	0.567	IN
6	48	HR
C2=	1.582	24 hr
	1.963	48 hr

Design Capture Volume
Site Area
Imperviousness of Site
Runoff Coefficient (Rc)
1hr 2Yr Rainfall Valley Desert
Mean 6-hr Precipitation 1.4807 1.2371
Drawdown Time

Combined DCV
44,076

NOAA ATLAS-14 RAINFALL DATA

	2 YR	10 YR	100 YR
1 HR	0.458	0.785	1.31
6 HR	1.12	1.82	3.05
24 HR	2.11	3.63	6.31

	Basin 1	Infiltration	Basin 2	Infiltration
	Drawdown	0.7 in/hr	Drawdown	0.9 in/hr
Drawdown (hr)	IN	FT	IN	FT
24	8.4	0.7	10.8	0.9
48	16.8	1.4	21.6	1.8
72	25.2	2.1	32.4	2.7
96	33.6	2.8	43.2	3.6

* Drawdown value selected: 2.8 FT

* 96 HR Drawdown Volume = 2.8 * Surface Area

	CMP Footprint (+6 for stone)	VOL HOLD	Surface Area (SF)	96 HR Drawdown (CF)	V100	Leftover Volume
1	730 x 116	348,521	84,680	237,104	342,639	
						105,535
2	192 x 26	19,612	4,992	13,978		
3	200 x 26	20,435	5,200	14,560		
4	111 x 33.5	14,704	3,719	10,413		
5	189 x 26	19,303	4,914	13,759		
6	221 x 31	22,597	5,746	16,089		
	total	445,172				36,736
	Basin 1	25,167	7,045	19,726		
	Basin 2	24,994	6,961	19,491		
	total	495,332	123,257	345,120	122,371	-2,481

0 FT of water left in chamber after 96 HR

Appendix G-3

Water Supply Assessment Report

WATER SUPPLY ASSESSMENT REPORT (WSA)

PROJECT:

POPLAR 18

**Located at Poplar Street East of Highway 395
In the City of Hesperia**

Developer:

POPLAR 35, LLC

Water Purveyor:

City of Hesperia Water District

**Prepared by:
Kavous Emami, P.E.
(714) 401-4695**



August 2022

Table of Contents

ACRONYMS AND ABBREVIATIONS	6
INTRODUCTION	7
Water Supply Assessment Requirement	7
Poplar 18 Project Site Plan	9
Hesperia Water District	10
Current Water Demands	13
Future Water Demands.....	15
Existing Water Supplies.....	16
Pressure Zones	19
Water Transmission Pipelines	20
Water Distribution Pipelines	20
Hesperia Water District Design Criteria	20
Water Duty Factor	21
Average Day Demand and Peaking Factors.....	22

WATER SUPPLY ASSESSMENT: Poplar 18 in the City of Hesperia

Pumping Stations	23
Water Storage Criteria	23
Operational Storage	23
Fire Flow Storage	24
Water Pressure Zone 5, Water Storage site	25
Pressure Reducing Valve Criteria	26
Conclusion	26

FIGURES and Exhibits

Proposed Project sites	9
Proposed Building Sites	10
Fig. 2, City of Hesperia Water Service Boundary	13
Fig. 3, Regional and Recharge Recovery Project Map	17
Exhibit A, Zone 5, reservoir Site	23

TABLES

Table 1: Water Demand Projection	14
Table 2: Water Duty Factor	19
Table 4-2 Demands for Potable and Raw Water.....	12

WATER SUPPLY ASSESSMENT: Poplar 18 in the City of Hesperia

Table 4-3: Total Water Demand	12
-------------------------------------	----

Table 6: Water Storage Requirements by Pressure Zone	20
--	----

ACRONYMS AND ABBREVIATIONS

AF	acre-feet
AFY	acre-feet per year
AWWA	American Water Works Association
cfs	cubic feet per second
EIR	Environmental Impact Report
GPCD	gallons per capita per day
gpd	gallons per day
GPM	Gallons Per Minute
HGL	Hydraulic Grade Line
HWL	High Water Level
SF	Square feet
MWA	Mojave Water Agency
Project	Poplar 18, at Poplar / State 395 in the City of Hesperia
SB	Senate Bill
SWP	State Water Project
UWMP	Urban Water Management Plan
WSA	Water Supply Assessment

Introduction

The information provided in the preparation of this Water Supply Assessment is mainly obtained from the review of the Hesperia Water District Urban Water Management Plan (2015), Hesperia Water Management Plan (2020), Hesperia Water District Water Master Plan (2015) and information obtained from the City of Hesperia, Planning Department, Engineering Department, and the GIS Department staff.

Water Code Section 10910:

The California Water Code section 10910 commonly known as Senate Bill (SB) 610 requires preparation of a Water Supply Assessment (WSA). As part of that assessment, the public water system shall indicate whether its total projected water supplies available during normal, single-dry, and multiple-dry water years included in the 20-year projection contained in the urban water management plan will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses.

Water Code Section 10913. Project:

Section 10913 of the Water Code defines a "Project" for which a WSA must be prepared as any of the following:

- a) A proposed residential development of more than 500 dwelling units.
- b) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- c) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- d) A proposed hotel or motel, or both, having more than 500 rooms.
- e) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area.
- f) A mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

PPOSED NEW DEVELOPMENT

Project Name:

Poplar 18
At Hwy 395 and Poplar Street
In the City of Hesperia

Developer/Owner:

Poplar 35, LLC
14180 Dallas Parkway
Dallas, TX. 75254

Project Architect:

RGA Office of Architectural Design
15231 Alton Parkway, Suite #100
Irvine, CA. 92618
Tel: (949) 341-0920

Project Civil Engineer:

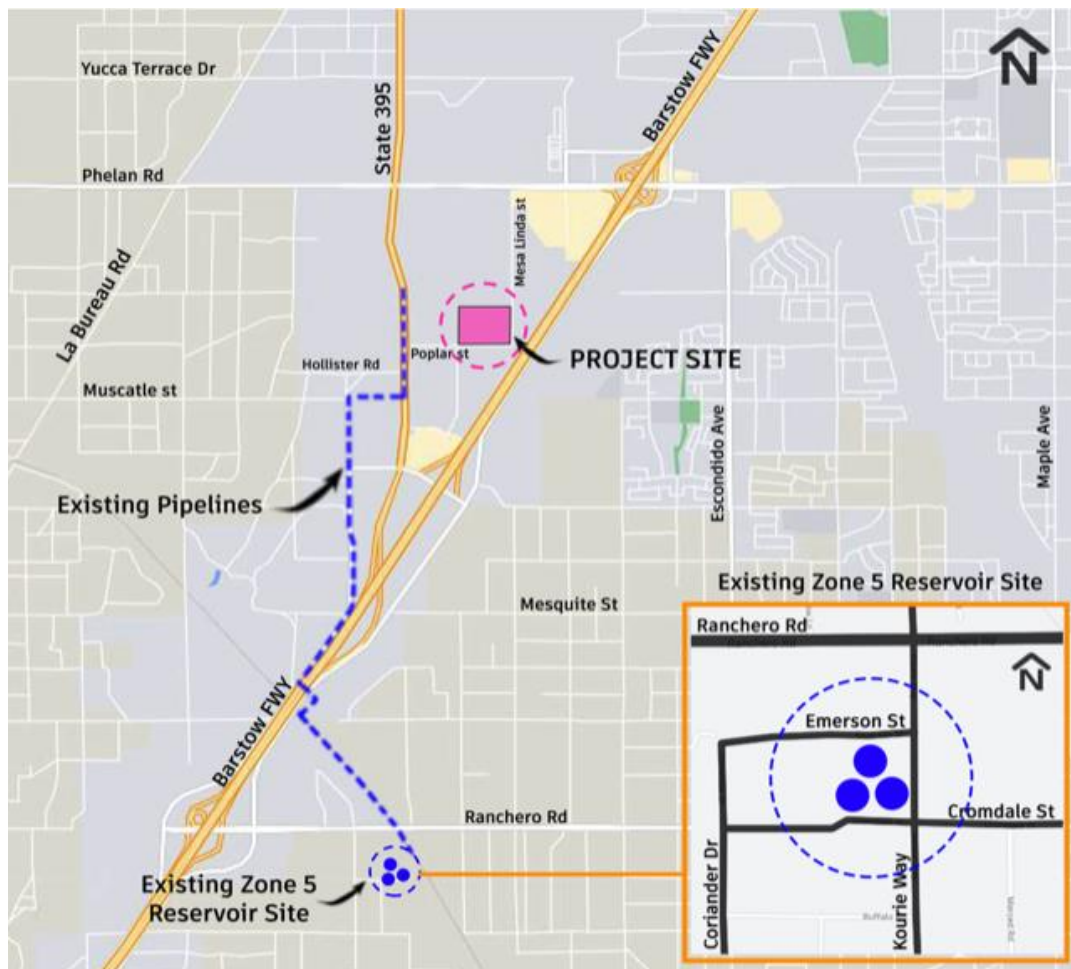
Westland Group
4150 Concourse, Suit 100
Ontario, CA. 91764

WSA Report by:

KEC Engineers, Inc.
13201 9th Street
Chino, CA. 91710
(714) 401-4695

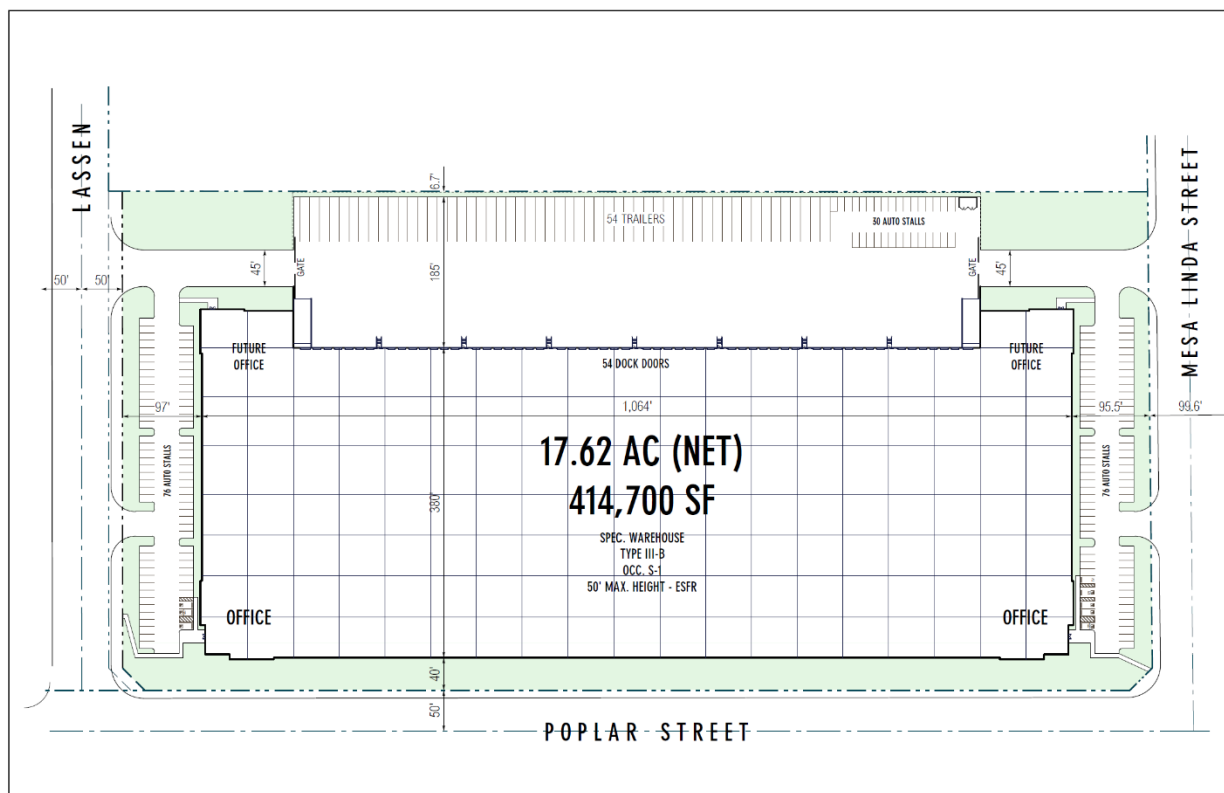
Project Description:

Poplar 18 project is an 18 acre parcel located at Highway 395 and Poplar Street in the City of Hesperia. The proposed development at this site is 414,700 square foot warehouse building. The City's zoning designation for this site is Commercial/Industrial Business Park.



(fig.1) Project Site

EXHIBIT A, Proposed Building Site



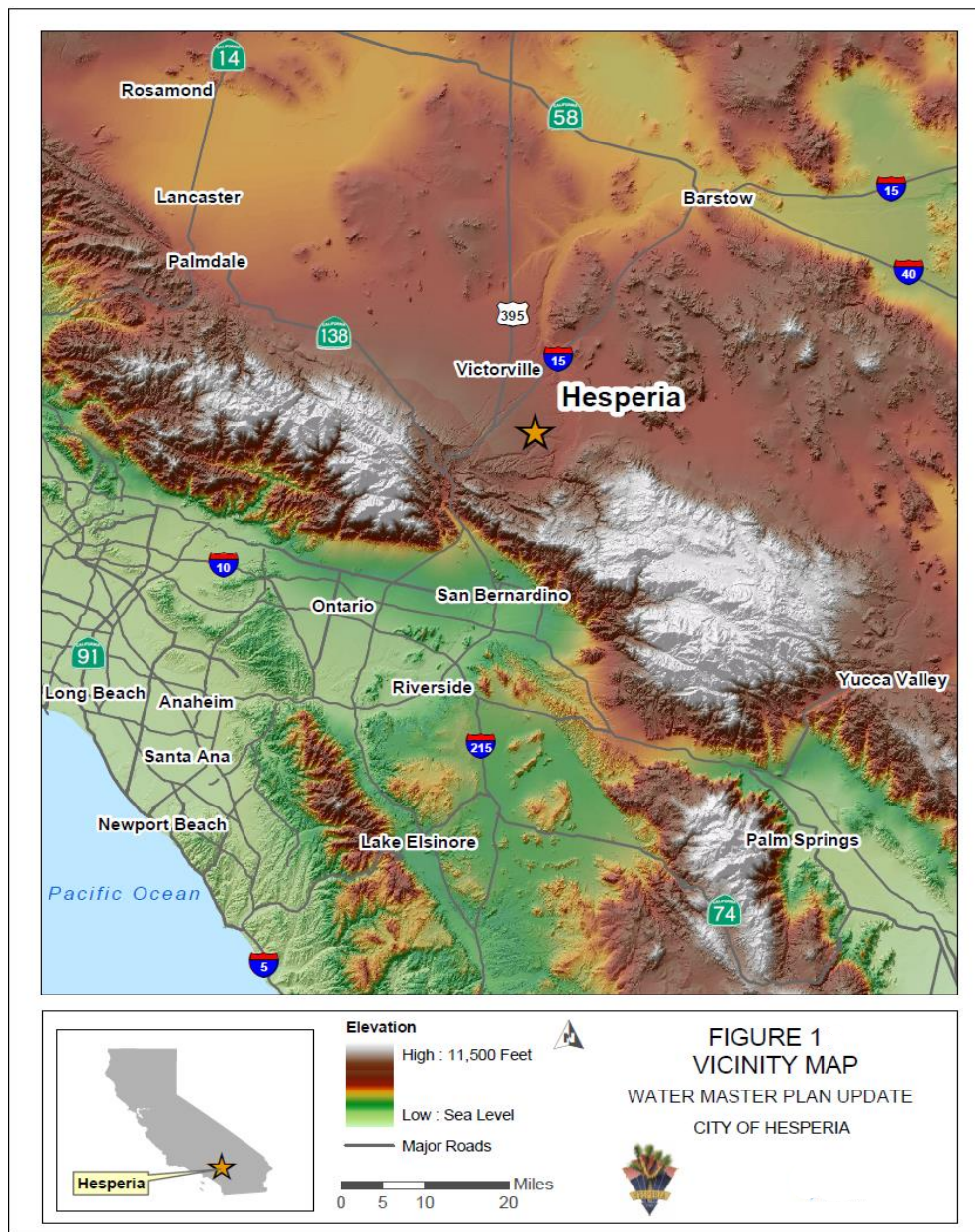
Water Purveyor (Hesperia Water District)

The original town site of Hesperia was laid out in 1891 as part of the U.S. and Santa Fe Railroad efforts. Water for the community was provided by Victor Valley County Water District (VVCWD) until 1975, when the Hesperia Water District was formed as a self-governed special district. The City of Hesperia was incorporated in 1988, and in 1992 the District was reorganized as a subsidiary special district of the City. The District operates as a self-sustaining utility business enterprise and the City Council serves as the District's Board of Directors.

The District is located in the High Desert region of San Bernardino County and is bordered by the town of Apple Valley to the northeast, the City of Victorville to the north, and the community of Phelan to the west.

The District's water service area matches the City's boundaries, with minor exceptions, and covers approximately 74 square miles (FIG. 2-1). The District provides domestic water from sixteen (16) active wells within this area. All wells are within Mojave River Ground Water Basin. Water is conveyed from the wells to the consumers via a distribution system with pipe sizes ranging from 4 and 24 inches in diameter. The District currently maintains 14 water storage reservoirs within the distribution system with a total capacity of nearly 200 AF, or 64 million gallons.

WATER SUPPLY ASSESSMENT: Poplar 18 in the City of Hesperia



WATER SUPPLY ASSESSMENT: Poplar 18 in the City of Hesperia

Figure 2-1. Hesperia Water District Water Service Area⁹

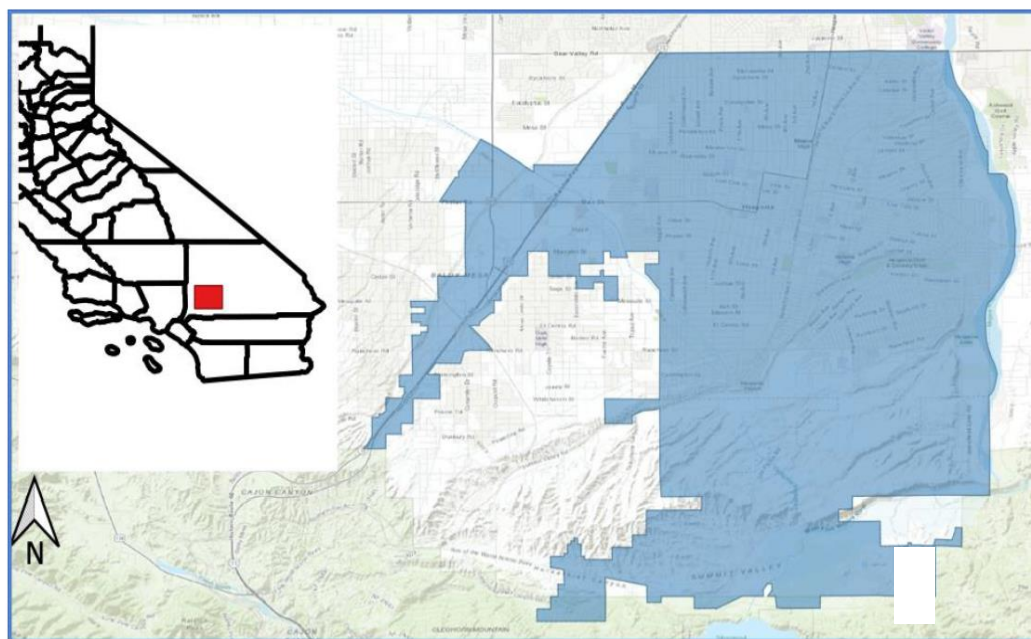


Table 2-1: Customer Water Service Connections

Customer Class	2015	2016	2017	2018	2019	2020
Single Family Residential	24,749	25,243	25,021	25,214	25,347	25,457
Multi-Family Residential	278	359	422	512	517	525
Commercial/Institutional	1,261	965	1,001	1,044	1,057	1049
Industrial	19	19	0	0	0	0
Landscape Irrigation	96	99	105	109	109	118
Other	77	392	489	510	[not in eAR]	[not in eAR]
Total	26,480	27,077	27,038	27,389	27,030	27,149

Current Water Demands:

In 2015, the District produced 12,688 AF of water into the Distribution system. The residential delivery of the metered potable water was 79% of all metered flow. Less than 5% of the total water production was not accounted for due to unmetered flow and/or water losses. Table 4-1 of the 2020 Urban Water Management Plan depict the water demands for different use. This table depicts that demand for the combined commercial and industrial developments were consistently below 15% of the total water

WATER SUPPLY ASSESSMENT: Poplar 18 in the City of Hesperia

production. Such ratio signifies that the commercial and industrial development will continue to have a low impact on the water system except for the fire protection and or any new establishment requiring high levels of water usage (i.e. bottling, agrarian, meet processing, etc.).

Table 4-1: Potable Customer Use: 2016 to 2019 (values in acre-feet)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Single-Family Residential	2016	708	463	607	562	812	719	1,172	973	1,206	913	911	586	9,632
	2017	684	409	538	487	850	748	1,183	930	1,236	863	910	650	9,487
	2018	765	513	651	483	809	792	1,169	941	1,263	891	922	605	9,802
	2019	665	437	559	416	763	724	980	924	1,241	853	952	600	9,115
Multi-Family Residential	2016	50	14	43	18	72	37	74	64	75	58	84	50	639
	2017	84	54	70	57	87	90	110	84	123	83	95	69	1,006
	2018	86	59	79	63	86	85	112	94	123	92	98	61	1,038
	2019	79	57	67	54	80	86	92	93	124	90	99	62	982
Commercial Institutional	2016	106	59	115	83	163	112	256	152	247	170	189	87	1,739
	2017	119	57	100	81	186	155	243	173	257	142	183	100	1,796
	2018	144	71	123	81	173	140	244	175	266	171	185	78	1,851
	2019	118	54	101	66	154	130	213	168	270	148	211	79	1,711
Landscape Irrigation	2016	23	1	15	2	38	5	64	6	75	7	53	3	292
	2017	25	1	16	2	54	15	76	21	88	7	59	5	368
	2018	38	3	27	3	44	6	88	7	94	7	58	3	378
	2019	26	1	10	1	43	4	72	6	91	6	54	3	316
Other	2016	0	2	3	2	6	6	3	10	8	9	39	10	100
	2017	3	4	5	6	6	4	4	4	4	4	3	6	55
	2018	2	2	3	5	8	6	2	15	7	4	0	0	55
	2019	1	1	0	7	2	7	31	0	8	32	2	1	93
Total Metered Deliveries	2016	888	539	781	668	1,091	879	1,570	1,205	1,610	1,157	1,277	736	12,403
	2017	915	525	729	633	1,183	1,012	1,616	1,213	1,707	1,098	1,250	830	12,712
	2018	1,034	648	883	635	1,120	1,029	1,615	1,232	1,753	1,165	1,263	747	13,124
	2019	889	550	737	544	1,042	951	1,387	1,191	1,735	1,128	1,317	744	12,215

Future Water Demands

Based on the population growth projections provided by Beacon Economics, Mojave Water Agency developed water demand projections by region as well as by purveyor service area, including Hesperia Water District. The MWA methodology utilized historical water production and population data (2010 through 2015) to develop a trend in GPCD that was then applied to the beacon population growth. Using the past historical data MWA projected the water demand in 5- year increments by multiplying the average GPCD to the projected population provided by Beacon Economics.

In accordance with 2020 Urban Water Management Plan (UWMP), the past population growth and the projected population growth for the City of Hesperia are shown in the following tables.

Table 2-2: Population Growth Rate – 2010-2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population	89,742	90,536	91,163	91,280	91,294	92,022	92,732	93,787	94,676	95,905
Growth Rate		0.88%	0.69%	0.13%	0.02%	0.80%	0.77%	1.14%	0.95%	1.30%
Net Growth 2010-2019: 6.67%										
Average Annual Growth: 0.74%										

Table 2-3: Population — Projected (2020 through 2060)

	2020	2025	2030	2035	2040	2045	2050	2055	2060
Hesperia Water District	97,380	107,045	115,279	121,959	128,221	133,910	139,001	143,602	147,734
Annual Growth Rate		9.93%	7.69%	5.79%	5.13%	4.44%	3.80%	3.31%	2.88%

The UWMP for 2020 shows the Daily Per Capita Water Use (GPCD) to be 129 gallons while the District's targeted per capita usage was 184 gallons per capita per day

Water Demand Projection:

Table 4-5: Forecast Future Water Use (values in acre-feet per year)⁴³

2020	2025	2030	2035	2040	2045
14,040	15,250	16,290	16,990	17,740	18,420

Water Supplies:

The District has historically utilized ground water as its sole source of water supply, but has implemented and is implementing new projects to diversify its supplies including recycled water and imported State Water Project (SWP). The District pays for a portion of the ground water to the Mojave Basin Area Watermaster for replenishment of the Mojave water Basin. In 2013, the MWA, in partnership with retail water purveyors, completed the regional recharge and Recovery Project known as “R3” (See Figure 3). This project banks SWP in the Mojave River ground water basin and then later recovers and delivers the water, as a potable supply. The District has a direct connection to the R3 project.

Table 3-6: Projected Water Supply Acquisitions through 2045 (AFY)

Projected Water Acquisitions		2025	2030	2035	2040	2045
Normal		4,800	5,833	6,532	7,282	7,963
Single Dry Year		4,896	5,949	6,649	7,399	8,080
Multi-Year Drought	Year 1	4,896	5,949	6,649	7,399	8,080
	Year 2	4,896	5,949	6,649	7,399	8,080
	Year 3	4,896	5,949	6,649	7,399	8,080
	Year 4	4,896	5,949	6,649	7,399	8,080
	Year 5	4,896	5,949	6,649	7,399	8,080

WATER SUPPLY ASSESSMENT: Poplar 18 in the City of Hesperia

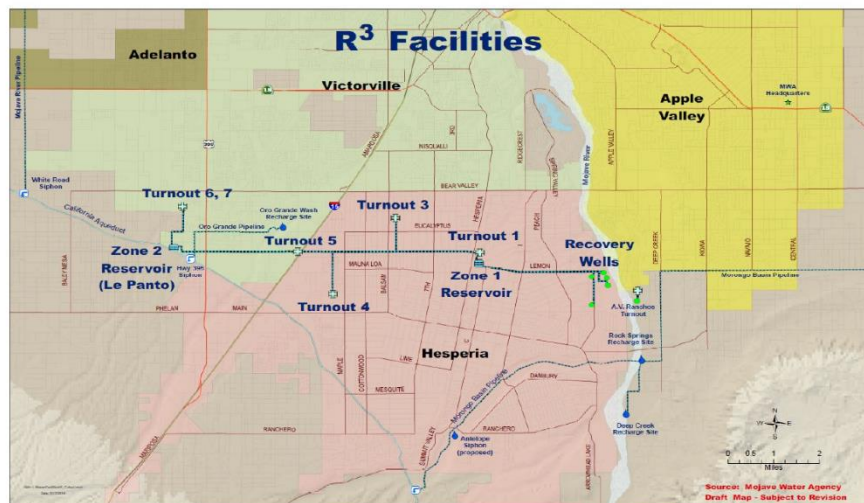


Fig 3. Regional and Recharge Recovery Project

Ground Water Basins

Figure 3-2: Groundwater Basins in Mojave Area

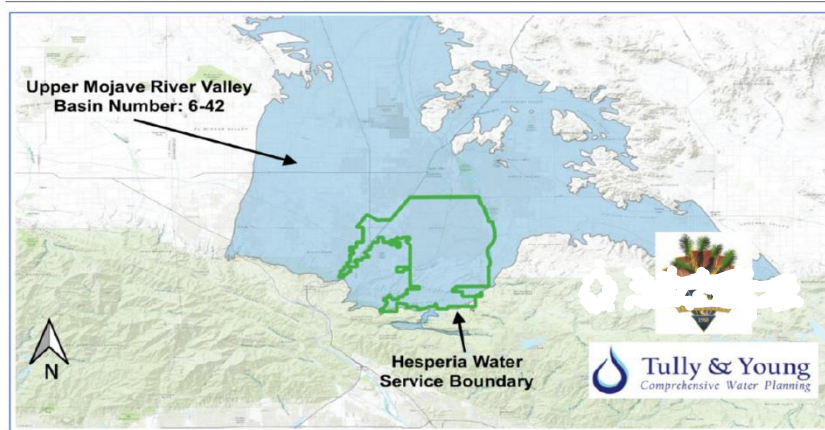
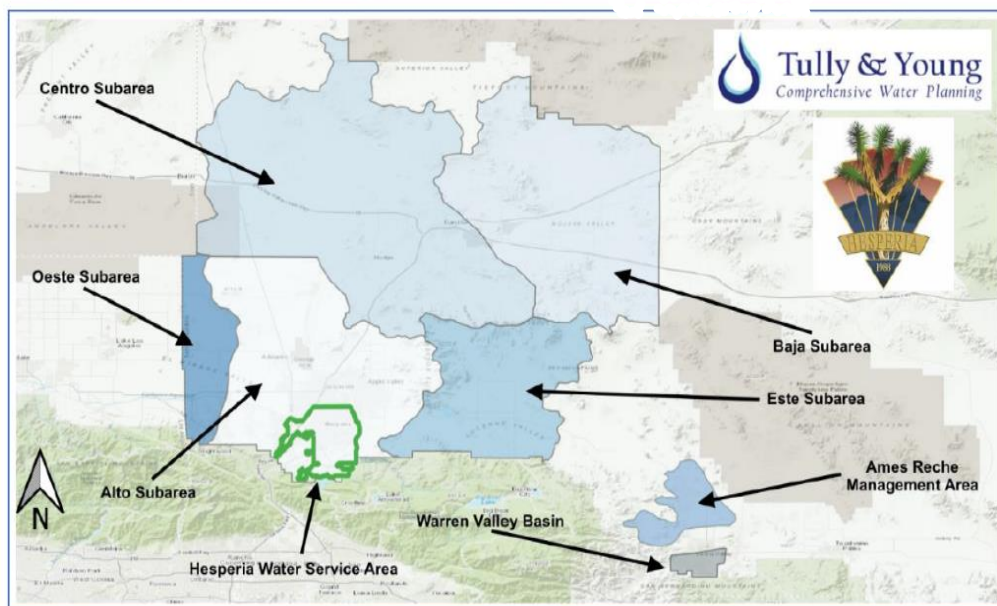


Figure 3-4: Mojave Adjudication Subareas



From: UWMP 2020

The California Department of Water Resources (DWR) Bulletin 118 identifies 36 ground water basins and subbasins within the Mojave region. The groundwater basins along the Mojave River and adjacent areas is referred to as “Mojave Basin Area” (See Figure 3-4 above). The Hesperia water District pumps the groundwater from Alto Subarea, one of the 6 subareas adjudicated within the Mojave Water Basin. In an effort to meet the long term basin sustainability the Mojave Water Agency is charged with managing the Mojave groundwater basin and importing water supplies. In addition, the Court assigned Hesperia and other water producers a Base Annual Production (BAP) of which they could pump a variable percentage of their BAP annually. The Free Production Allowance (FPA) allows Hesperia Water District to pump 55% of their BAP depending on the Basin’s water supply. Any water production above the court assigned allocation has to be acquired and paid for by the pumper needing addition water.

The table below depicts the projected water supply acquisition through 2045.

Table 3-6: Projected Water Supply Acquisitions through 2045 (AFY)

Projected Water Acquisitions		2025	2030	2035	2040	2045
Normal		4,800	5,833	6,532	7,282	7,963
Single Dry Year		4,896	5,949	6,649	7,399	8,080
Multi-Year Drought	Year 1	4,896	5,949	6,649	7,399	8,080
	Year 2	4,896	5,949	6,649	7,399	8,080
	Year 3	4,896	5,949	6,649	7,399	8,080
	Year 4	4,896	5,949	6,649	7,399	8,080
	Year 5	4,896	5,949	6,649	7,399	8,080

Pressure Zone:

Poplar 18 project is located in pressure zone #5 and being gravity fed from Plant #30 with three reservoirs (30-1, 30-2, and 30-3) of 15 million gallons combined storage capacity with High Water Level (HWL) of 3852 feet. The highest finished floor elevation of the proposed development is about 3608 feet. This elevation drop from the HWL to the project pad elevation will result in a static water pressure of about 106 psi which necessitate installation of pressure regulator at the potable water service for the proposed warehouse building.

Water Transmission Pipelines:

In accordance with the District's Water Master Plan, Plant #30 has an 18" transmission pipeline from the three reservoirs extending beyond the vicinity of Highway 395 and Poplar Street.

A new water distribution system should be constructed and extended easterly from the existing 18 inch pipeline to supply domestic and fire flow to the proposed Poplar 18 site and provide the required 4000 gpm fire flow at 20 psi residual pressure.

Table 2 – Fire Flow Requirements by Land Use Type

Land Use	Minimum Required Fire Flow (gpm)	Minimum Residual Pressure (psi)	Duration (hrs)	Required Fire Flow Storage (MG)
Single-Family Residential	1,500	20	2	0.18
Multi-Family Residential	2,500	20	2	0.3
Public Facility	3,500	20	3	0.63
Commercial	3,500	20	3	0.63
Industrial	4,000	20	4	0.96
Hospital	4,000	20	4	0.96

Water Distribution pipelines:

A looped On-site water system for serving the proposed warehouse building for domestic and fire flow will be necessary. The on-site water system must be calculated for the size to deliver about 4,020 gpm for fire flow and maximum day demand. The on-site water distribution system are not shown on Fig “1” at this time.

Hesperia Water District Design Criteria:

The District’s recommended water system design criteria from the 2015 Water Master Plan is utilized to establish the water availability serving The Poplar 18 site. The design criteria includes the following:

- Distribution System Criteria
 - Pump Station Criteria
 - Pressure reducing Valve Criteria
 - Storage Criteria
- 1- The distribution system criteria is to deliver Maximum Day Demand plus 4,000 gpm for the fire flow. Based on the 2015 Water Master Plan The water Duty Factor See Table 3 for industrial park is established at 866 GPD/Unit.

WATER SUPPLY ASSESSMENT: Poplar 18 in the City of Hesperia

Table 3, Water Duty Factor

Zoning Code	Zoning Description	Area	type	persons per Household	Water		Wastewater	
					Duty Factor (gpd/unit)	GPD/du	Duty Factor (gpd/unit)	GPD/du
AU	Airport Use	General Plan	Commercial	N/A	578	N/A	153	N/A
C1	Neighborhood Commercial	General Plan	Commercial	N/A	578	N/A	153	N/A
C2	General Commercial	General Plan	Commercial	N/A	578	N/A	153	N/A
C3	Service Commercial	General Plan	Commercial	N/A	578	N/A	153	N/A
P-GOVT	Government Facility	General Plan	Commercial	N/A	578	N/A	153	N/A
P-SCHOOL	Public School	General Plan	Commercial	N/A	578	N/A	153	N/A
Rec-Com	Recreational Commercial	General Plan	Commercial	N/A	578	N/A	153	N/A
ASC	Auto Sales Commercial	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
CIBP	Com/Ind Business park	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
MU	Mixed Use	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
NC	Neighborhood Commercial	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
OC	Office Commercial	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
OP	Office Park	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
PC	Pedestrian commercial	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
PIO	Public/Institutional Overlay	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
RC	Regional Commercial	Main Street/Freeway Corridor	Commercial	N/A	578	N/A	153	N/A
L1	Limited Manufacturing	General Plan	Industrial	N/A	866	N/A	230	N/A
L2	General Manufacturing	General Plan	Industrial	N/A	866	N/A	230	N/A
GI	General Industrial	Main Street/Freeway Corridor	Industrial	N/A	866	N/A	230	N/A

Average Day Water Demand and Peaking Factors

$866 \text{ GPD/AC} \times 18 \text{ AC} = 15,588 \text{ GPD}$

$15588 \div 24 = 650 \text{ GPH}$

$650 \div 60 = 11 \text{ gpm (Average Day Demand)}$

$11 \times 1.8 = 20 \text{ gpm (MDD)}$

*1.8 is the MDD peaking factor for zone 5

zone	Average Day Demand (mgd)	Maximum Day Demand (mgd)	Operational Storage (MG)	Emergency Storage (MG)	Fire Flow Storage (MG)	Total Storage required	Storage Available (MG)	GW Supply Available @ 90% (MG)	Surplus/ Shortfall (MG)
1	2.0	3.4	1.0	9.9	1.0	11.9	11.5	22.9	22.5
2	5.9	10.2	3.1	29.3	1.0	33.3			
2A	0.1	0.2	0.1	0.7	0.6	1.4			
2B	0.9	1.5	0.5	4.4	1.0	5.8			
2/2A/2B	6.9	12.0	3.6	34.3	1.0	38.9	18.0	10.8	10.1
3	3.5	6.2	1.8	17.7	1.0	20.5	20.0	4.4	3.9
4	0.4	0.8	0.2	2.2	1.0	3.4			
5	1.4	2.5	0.7	7.1	0.6	8.5			
4/5	1.9	3.2	1.0	9.3	1.0	11.3	15.0	0.0	3.7
FC	0.3	0.5	0.2	1.4	0.6	2.2	0.0	0.0	2.2
TOTAL	14.5	25.3	7.6	72.7	4.5	84.8	64.5	38.2	17.9

Table 6 -2025 Storage Requirements

zone	Average Day Demand (mgd)	Maximum Day Demand (mgd)	Operational Storage (MG)	Emergency Storage (MG)	Fire Flow Storage (MG)	Total Storage required	Storage Available (MG)	GW Supply Available @ 90% (MG)	Surplus/ Shortfall (MG)
1	2.0	3.4	1.0	9.9	1.0	11.9	11.5	22.9	22.5
2	5.9	10.2	3.1	29.4	1.0	33.4			
2A	0.1	0.2	0.1	0.7	0.6	1.4			
2B	0.9	1.5	0.5	4.4	1.0	5.8			
2/2A/2B	6.9	12.0	3.6	34.5	1.0	39.1	18.0	10.8	10.2
3	4.4	7.7	2.3	22.0	1.0	25.3	20.0	4.4	0.9
4	0.4	0.8	0.2	2.2	1.0	3.4			
5	1.9	3.3	1.0	9.6	0.6	11.2			
4/5	2.4	4.1	1.2	11.8	1.0	14.0	15.0	0.0	1.0
FC	0.3	0.5	0.2	1.4	0.6	2.2	0.0	0.0	2.2
TOTAL	15.9	27.7	8.3	79.7	4.5	92.5	64.5	38.2	10.2

Pumping Stations:

This project is being served from Plant 30 reservoirs with the HWL of 3852' and thus, no pumping will be required.

See Exhibit "R" for the Clustered of existing reservoirs serving pressure zone #5.

Storage Criteria:

In Accordance with the District's water storage requirement consists of operational, fire flow, and emergency storage.

Operational Storage :

The City must provide sufficient storage under normal operating conditions to balance differences between water supply and weekly and diurnal variations in water demand.

In accordance with AWWA Manual of Standard Practice (M31 & M32), the minimum operational storage requirement averages at 30% maximum day demand which is consistent with the City's water master Plan.

Fire Flow Storage:

Fire flow storage requirements are based on the San Bernardino County Fire Department, which has been established at 4,000 gpm, for 4 hours duration at 20 psi residual pressure.

According to the City's Water Master Plan, Table 5- 2025 Supply Requirements, it is states that:

The combined water pressure Zones 4/5: Avg. Day Demand = 2.4 MG

Max Day Demand = 4.1 MG

The water storage requirement for both zones 4 and 5 are as follows:

- 1- Operational Storage = $4.1 \text{ (MDD)} \times (30\%) = 1.23 \text{ MG}$
- 2- Emergency Storage = $2.4 \text{ (ADD)} \times 500\% = 12 \text{ MG}$
- 3- Fire flow Storage = $4,000 \text{ gpm} \times 4 \times 60 = 0.96 \text{ MG}$

Total storage required through 2025= 14.19MG

Knowing that the current available water storage in zone 4 and 5 is 15MG, There is more than 800,000 gallon surplus storage capacity for the proposed development.

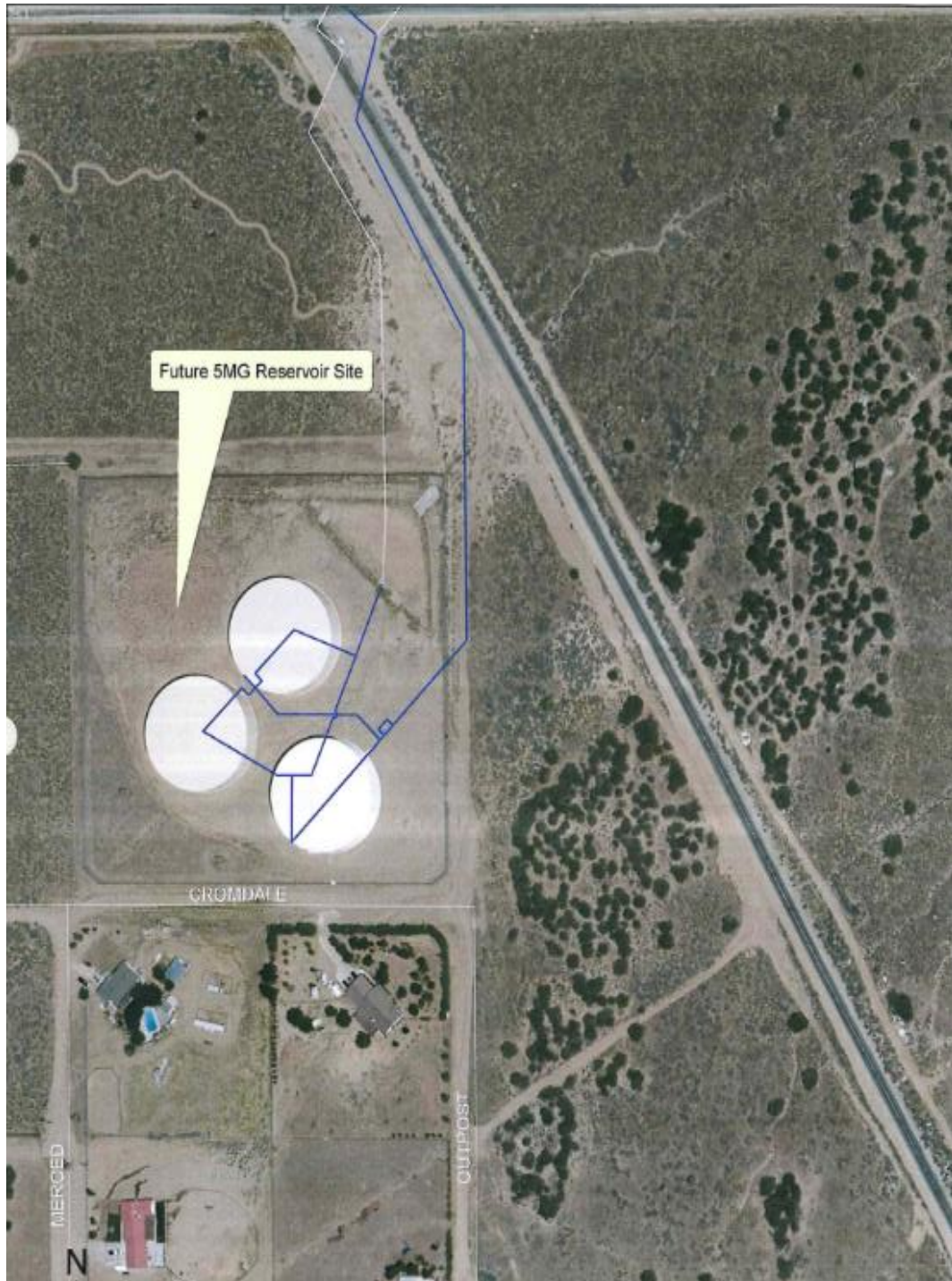


EXHIBIT "R"

Pressure Reducing Valve Criteria:

The on-site water distribution system for the proposed development would be delivering water at an average static water pressure of approximately 106 psi which is slightly high but within acceptable pressure range for a water distribution system. However, based on the Uniform Plumbing Code, water services with over 80 psi must be equipped with a pressure regulating valve which applies to all 4 services for this development.

Conclusion:

Based on the Urban Water Management Plan Report of 2020

Hesperia has reliable water supplies to meet its retail customer demands in normal, single dry years, and five consecutive dry year conditions through 2060. The managed groundwater reliability, and the numerous current and planned projects in the Mojave Basin designed to increase the reliability of the groundwater supply. In addition, Hesperia also has updated its water shortage contingency plan under the requirements in the Water Code section 10632 of the Urban Water Management Planning Act to address any potential water shortage conditions.

In summary and in accordance with the foregoing and the standards set forth by SB 610, this WSA concludes that the total projected water supplies available to Hesperia Water District during normal, single-dry, and multiple-dry water years over the next 20 years will be sufficient to meet the projected water demands for the proposed Project.

Appendix H-1

Field Noise Data

FIELD NOISE MEASUREMENT DATA

PROJECT	I-15 INDUSTRIAL PARK		PROJECT #	13087
SITE ID			OBSERVER(S)	PEJE VIZAR
SITE ADDRESS				
START DATE	1/5/21	END DATE	1/5/21	
START TIME		END TIME		

METEOROLOGICAL CONDITIONS

TEMP 57 F HUMIDITY 37 % R.H.
 WINDSPD 5 MPH DIR. N NE S SE S SW W NW
 SKY SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

WIND CALM LIGHT MODERATE
 VARIABLE STEADY GUSTY

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT
 CALIBRATOR
 CALIBRATION CHECK

PICCOLUS SLM 9-3
OSWA CA 114

TYPE 1 2

SERIAL # 140317064
 SERIAL # 490151
 WINDSCRN YES

PRE-TEST dBA SPL POST-TEST dBA SPL

SETTINGS

A-WTD SLOW

FAST

FRONTAL

RANDOM

ANSI

OTHER:

REC. #

BEGIN

END

Leq

Lmax

Lmin

L90

L50

L10

OTHER (SPECIFY METRIC)

14-15

13:46

14:01

68.5

83.8

52.6

COMMENTS

READING TAKEN AT SOUTHERN FENCELINE OF 12550 MAIN ST (MOBILE HOME PARK); PRIMARY NOISE SOURCE IS TRAFFIC ON MAIN ST; WILLOW OAKS ESTATES

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE

TRAFFIC

AIRCRAFT

RAIL

INDUSTRIAL

OTHER:

ROADWAY TYPE: ASPHALT

DIST. TO RDWY C/L OR EOP: APX 90' FROM C/L ON MAIN ST.

TRAFFIC COUNT DURATION: 15 MIN

SPEED

COUNT 1
(OR RDWY 1)

DIRECTION

NB/EB

SB/WB

NB/EB

SB/WB

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE

COUNT 2
(OR RDWY 2)

NB/EB

SB/WB

NB/EB

SB/WB

AUTOS

366

MED TRKS

1

HVY TRKS

7

BUSES

0

MOTRCLS

3

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
 DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DIST. GARDENERS / LANDSCAPING NOISE
 OTHER:

DESCRIPTION / SKETCH

TERRAIN HARD SOFT MIXED FLAT OTHER:

PHOTOS 9755; 9756; 9757; 9758; 9759; 9760; 9762; 9763

OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT I-15 INDUSTRIAL PARK PROJECT # 13087
 SITE ID _____ OBSERVER(S) PETE VIZAR
 SITE ADDRESS _____
 START DATE 1/5/21 END DATE 1/5/21
 START TIME _____ END TIME _____

METEOROLOGICAL CONDITIONS

TEMP 57 F HUMIDITY 34 % R.H. WIND CALM (LIGHT) MODERATE
 WINDSPD 6 MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
 SKY (SUNNY) CLEAR OVCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT PICCOLUS SLM 9-3 TYPE 1 2 SERIAL # 140317064
 CALIBRATOR OSWA CA 114 SERIAL # 490151
 CALIBRATION CHECK _____ POST-TEST _____ dBA SPL WINDSCRN YES

SETTINGS

(A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER: _____

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
<u>16-17</u>	<u>14:19</u>	<u>14:34</u>	<u>59.3</u>	<u>69.3</u>	<u>50.5</u>				

COMMENTS

AT SOUTH EASTERN END OF
READING TAKEN AT WEST MAIN VILLAS HOUSING TRACT (9800 MESA LINDA ST),
ALONGSIDE UNIT 110; PRIMARY NOISE SOURCE IS TRAFFIC ON
MAIN ST TO THE SOUTH;

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: _____
 ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR EOP: APX 125' TO C/L ON MAIN ST.
 TRAFFIC COUNT DURATION: 15 MIN SPEED _____ MIN SPEED _____

COUNT 1 (OR RDWY 1)	DIRECTION	MIN		SPEED		IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	MIN		SPEED	
		NB/EB	SB/WB	NB/EB	SB/WB			NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS	<u>X</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>✓</u>		<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
	MED TRKS										
	HVY TRKS										
	BUSES										
	MOTRCLS										

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
 POSTED SPEED LIMIT SIGNS SAY: _____

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
 DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DIST. GARDENERS / LANDSCAPING NOISE
 OTHER: _____

DESCRIPTION / SKETCH

TERRAIN HARD SOFT MIXED FLAT OTHER: _____
 PHOTOS 9765; 9766; 9767; 9768
 OTHER COMMENTS / SKETCH _____



FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT	I-15 INDUSTRIAL PARK		PROJECT #	13087
SITE ID			OBSERVER(S)	PETE VIZAR
SITE ADDRESS				
START DATE	1/5/21	END DATE	1/5/21	
START TIME			END TIME	

METEOROLOGICAL CONDITIONS				
TEMP	57 F	HUMIDITY	34 % R.H.	WIND
WINDSPD	6 MPH	DIR.	N NE S SE S SW W NW	CALM ☒ LIGHT MODERATE
SKY	☒ SUNNY CLEAR	OVRCAST	PRTLY CLDY	FOG RAIN
ACoustic MEASUREMENTS				
MEAS. INSTRUMENT	PICCOLUS SLM 9-3		TYPE	1 2
CALIBRATOR	BSWA CA 114		SERIAL #	140317064
CALIBRATION CHECK	PRE-TEST	dba SPL	POST-TEST	dba SPL
				WINDSCRN YES

SETTINGS	☒ A-WTD	☒ SLOW	FAST	FRONTAL	RANDOM	ANSI	OTHER:		
REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
573 18-19	15:13	15:29	63.7	77.6	58.0				

COMMENTS

READING TAKEN AT SOUTHWAN END OF MUTE. 6 AT 9757 CATADA RD;
 PRIMARY NOISE SOURCE IS TRAFFIC ON MAIN ST TO THE SOUTH. SECONDARY
 IS TRAFFIC ON CATADA RD TO THE WEST & TRAFFIC ENTERING/EXITING
 76 STATION ON NE CORNER OF MAIN ST & CATADA RD.; WINDOVER AIR CONDITIONING UNITS
 FROM MUTE. 6.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE		TRAFFIC	AIRCRAFT	RAIL	INDUSTRIAL	OTHER:	
ROADWAY TYPE:		ASPHALT				APX 350' FROM C/L ON MAIN ST	
TRAFFIC COUNT DURATION: 15		MIN	SPEED		MIN	SPEED	
COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS	424					
	MED TRKS	1					
	HVY TRKS	4					
	BUSES	1					
	MOTRCLS	1					
COUNT 2 (OR RDWY 2)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS						
	MED TRKS						
	HVY TRKS						
	BUSES						
	MOTRCLS						

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS ☒ BIRDS DIST. INDUSTRIAL
 DIST. KIDS PLAYING ☒ DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DIST. GARDENERS/LANDSCAPING NOISE
 OTHER:

DESCRIPTION / SKETCH

TERRAIN

☒ HARD

SOFT MIXED FLAT OTHER:

PHOTOS

9779; 9780; 9781; 9782; 9783; 9784

OTHER COMMENTS / SKETCH



DUDEK

PROJECT	7-15 INDUSTRIAL PARK		PROJECT #	13087
SITE ID			OBSERVER(S)	PETE VITAK
SITE ADDRESS				
START DATE	1/5/21	END DATE	1/6/21	
START TIME		END TIME		

METEOROLOGICAL CONDITIONS

TEMP	F	HUMIDITY	% R.H.	WIND	CALM	LIGHT	MODERATE
WINDSPD	MPH	DIR. N NE S SE S SW W NW			VARIABLE	STEADY	GUSTY
SKY	SUNNY CLEAR	OVRCST	PRTLY CLDY	FOG	RAIN		

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT	Pico 4		TYPE	1	2	SERIAL #	10218091401
CALIBRATOR	BSWA CA 114					SERIAL #	490151
CALIBRATION CHECK	-PRE-TEST	dBa SPL	POST-TEST		dBa SPL	WINDSCRN	YES

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER: _____

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
--------	-------	-----	-----	------	------	-----	-----	-----	-----------------------

COMMENTS

READING TAKEN IN PARKING AREA TO THE EAST OF MOTEL 6 DATA AT -
CATAWA RD. NOISE SOURCE IS TRAFFIC ON MAIN ST. SECONDARY
IS TRAFFIC ON CATAWA RD.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE						TRAFFIC AIRCRAFT		RAIL		INDUSTRIAL		OTHER:	
ROADWAY TYPE: ASPHALT								DIST. TO RDWY C/L OR EOP:				APX 340' TO C/L ON MAIN	
TRAFFIC COUNT DURATION: — MIN						SPEED				MIN		SPEED	
		NB/EB	SB/WB	NB/EB	SB/WB					NB/EB	SB/WB	NB/EB	SB/WB
COUNT 1 (OR RDWY 1)	DIRECTION												
	AUTOS							IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE					
	MED TRKS												
	HVY TRKS												
	BUSES												
COUNT 2 (OR RDWY 2)	MOTRCLS												

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED FLAT OTHER: _____

PHOTOS 9770; 9771; 9772; 9773; 9774; 9775; 9776; 9777

OTHER COMMENTS / SKETCH _____



ST1

Rec 14 to 15		Slow Response	dBA weighting		2.0 dB resolution stats														
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
1/5/2021 13:46	15.0 min		68.5	101	83.8	52.6	79	77	75	67	55	55	53	67	66.2	6.84	79	75	71
1/5/2021 14:01	6 sec		66.3	74.1	72.3	65.5	71	71	69	65	65	65	65	65	66.4	2.03	71	70.4	67

ST2

Rec 16 to 17		Slow Response		dBA weighting		2.0 dB resolution stats														
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%		
1/5/2021 14:19	15.0 min		59.3	88.8	69.3	50.5	65	61	61	57	53	51	51	57	57.3	3.21	63	61	59	
1/5/2021 14:34	5 sec		55.2	62.2	57.6	54.1	57	57	56	55	53	53	53	55	54.3	1.35	57	57	55	

ST3

Rec 18 to 19		Slow Response	dBA weighting		2.0 dB resolution stats														
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
1/5/2021 15:13	15.0 min		63.7	93.2	77.6	58	71	67	65	61	59	59	57	61	61.4	2.86	69	65	63
1/5/2021 15:28	51 sec		63.6	80.7	72.4	59.3	71	67	65	59	59	59	59	59	61.5	3.01	69	65	63

LT1

Duration	Meas Mode	Input Range	Input Type	SPL Time Weight	LN% Freq Weight	Overload	UnderRange	Sensitivity	L Aeq	Hour Beginning	Hourly Leq	24-Hour Leq	CNEL	Loudest Hour	Quietest Hour
0:07:47	Auto	Low	Mic	Slow	dBa	Yes	No	19.09mV/f	79.1						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	59.2	1	3:00:00 PM	58.5	58.5	708447	58.7
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	55.5						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	59.4						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58.9						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	59.5	2	4:00:00 PM	59.0	59.0	794810.2	
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	61						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	57.2	3	5:00:00 PM	58.1	58.1	643727.8	
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	60.1						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	57.3						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56.9						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58.9	4	6:00:01 PM	59.2	59.2	822512	
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58.5						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	60.7						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	59.2	5	7:00:00 PM	59.7	64.7	2963682	
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58.1						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	60.7						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	60.4						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58.4	6	8:00:00 PM	59.8	64.8	3013038	
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	59.4						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	57.7						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	62.2						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58.5	7	9:00:01 PM	59.5	64.5	2829667	
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58.4						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	61.1						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	59.5						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56.3	8	10:00:00 PM	57.9	67.9	6122615	
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	59.8						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	57.7						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56.8						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	58.3	9	11:00:00 PM	56.9	66.9	4876614	
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	55.3						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56.6						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56.8						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	60.8	10	12:00:01 AM	58.0	68.0	6342829	
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	57.9						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	55.7						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	55.4						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56.6	11	1:00:00 AM	55.7	65.7	3677970	
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	55						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	54						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56.5						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	52.1	12	2:00:00 AM	54.0	64.0	2515627	
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	55.4						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	54.6						
0:15:00	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	53.2						
0:14:59	Auto	Low	Mic	Slow	dBa	No	No	19.09mV/f	56.2	13	3:00:01 AM	57.8	67.8	6073224	

0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	54.4					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	57.7					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	60.6					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	60.8	14	4:00:00 AM	62.0	72.0	15695134
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	61.1					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	62.3					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	63.2					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	58.5	15	5:00:00 AM	59.3	69.3	8545142
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	58.3					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	59.2					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	60.8					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	56.9	16	6:00:01 AM	58.5	68.5	7022485
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	58.9					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	59.6					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	58					
0:15:00 Auto	Low	Mic	Slow	dBA	Yes	No	19.09mV/f	66	17	7:00:00 AM	62.9	62.9	1940811
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	64					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	58.5					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	57.5					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	57.9	18	8:00:00 AM	56.8	56.8	480152.4
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	56.3					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	54.8					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	57.6					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	59.7	19	9:00:00 AM	56.9	56.9	484313
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	54.8					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	54.4					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	56.3					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	56.4	20	10:00:01 AM	56.8	56.8	482073
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	55.5					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	59.8					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	52.6					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	53.2	21	11:00:00 AM	54.9	54.9	306175
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	54.2					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	56.4					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	55					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	55.1	22	12:00:00 PM	57.4	57.4	551243.1
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	57.2					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	59.2					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	57.2					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	54.7	23	1:00:01 PM	55.7	55.7	373391.1
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	55.3					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	54.1					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	57.8					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	55.6	24	2:00:00 PM	61.3	61.3	1339787
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	66.3					
0:14:59 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	57					
0:15:00 Auto	Low	Mic	Slow	dBA	No	No	19.09mV/f	53.6					
0:07:21 Auto	Low	Mic	Slow	dBA	Yes	No	19.09mV/f	72.5					

INTENTIONALLY LEFT BLANK

Appendix H-2

Construction Noise Modeling Data

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **80**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		4000	43.9	8	480	40
	Backhoe	1	40	78		4050	39.8	8	480	36
Total for Site Preparation Phase:										41.4
Grading	Excavator	1	40	81		4000	42.9	8	480	39
	Excavator	1	40	81		4050	42.8	8	480	39
	Grader	1	40	85		4100	46.7	8	480	43
	Dozer	1	40	82		4030	43.9	8	480	40
	Scraper	1	40	84		4080	45.8	8	480	42
	Scraper	1	40	84		4100	45.7	8	480	42
	Backhoe	1	40	78		4200	39.5	8	480	36
	Tractor	1	40	84		4250	45.4	8	480	41
Total for Grading Phase:										49.6
Building Construction	Crane	1	16	81		4050	42.8	8	480	35
	Man lift	1	20	75		4100	36.7	8	480	30
	Man lift	1	20	75		4030	36.9	8	480	30
	Man lift	1	20	75		4080	36.8	8	480	30
	Generator	1	50	72		4100	33.7	8	480	31
	Backhoe	1	40	78		4200	39.5	8	480	36
	Tractor	1	40	84		4250	45.4	8	480	41
	Front End Loader	1	40	79		4300	40.3	8	480	36
	Welder / Torch	1	40	73		4350	34.2	8	480	30
Total for Building Construction Phase:										44.8
Paving	Paver	1	50	77		4000	38.9	8	480	36
	Paver	1	50	77		4050	38.8	8	480	36
	Concrete Pump Truck	1	20	81		4100	42.7	8	480	36
	Concrete Mixer Truck	1	40	79		4030	40.9	8	480	37
	Roller	1	20	80		4080	41.8	8	480	35
	Roller	1	20	80		4100	41.7	8	480	35
										43.5
Architectural Coating	Compressor (air)	1	40	78		4050	39.8	8	480	36
Total for Architectural Coating Phase:										35.9

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **80**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		4500	42.9	8	480	39
	Backhoe	1	40	78		4500	38.9	8	480	35
Total for Site Preparation Phase:										40.4
Grading	Excavator	1	40	81		4500	41.9	8	480	38
	Excavator	1	40	81		4500	41.9	8	480	38
	Grader	1	40	85		4500	45.9	8	480	42
	Dozer	1	40	82		4500	42.9	8	480	39
	Scraper	1	40	84		4500	44.9	8	480	41
	Scraper	1	40	84		4500	44.9	8	480	41
	Backhoe	1	40	78		4500	38.9	8	480	35
	Tractor	1	40	84		4500	44.9	8	480	41
Total for Grading Phase:										48.8
Building Construction	Crane	1	16	81		4500	41.9	8	480	34
	Man lift	1	20	75		4500	35.9	8	480	29
	Man lift	1	20	75		4500	35.9	8	480	29
	Man lift	1	20	75		4500	35.9	8	480	29
	Generator	1	50	72		4500	32.9	8	480	30
	Backhoe	1	40	78		4500	38.9	8	480	35
	Tractor	1	40	84		4500	44.9	8	480	41
	Front End Loader	1	40	79		4500	39.9	8	480	36
Welder / Torch	1	40	73		4500	33.9	8	480	30	
Total for Building Construction Phase:										44.2
Paving	Paver	1	50	77		4500	37.9	8	480	35
	Paver	1	50	77		4500	37.9	8	480	35
	Concrete Pump Truck	1	20	81		4500	41.9	8	480	35
	Concrete Mixer Truck	1	40	79		4500	39.9	8	480	36
	Roller	1	20	80		4500	40.9	8	480	34
	Roller	1	20	80		4500	40.9	8	480	34
										42.6
Architectural Coating	Compressor (air)	1	40	78		4500	38.9	8	480	35
Total for Architectural Coating Phase:										34.9

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **80**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		3500	45.1	8	480	41
	Backhoe	1	40	78		3550	41.0	8	480	37
Total for Site Preparation Phase:										42.5
Grading	Excavator	1	40	81		3520	44.0	8	480	40
	Excavator	1	40	81		3570	43.9	8	480	40
	Grader	1	40	85		3600	47.9	8	480	44
	Dozer	1	40	82		3650	44.7	8	480	41
	Scraper	1	40	84		3580	46.9	8	480	43
	Scraper	1	40	84		3620	46.8	8	480	43
	Backhoe	1	40	78		3670	40.7	8	480	37
	Tractor	1	40	84		3600	46.9	8	480	43
Total for Grading Phase:										50.8
Building Construction	Crane	1	16	81		3550	44.0	8	480	36
	Man lift	1	20	75		3570	37.9	8	480	31
	Man lift	1	20	75		3600	37.9	8	480	31
	Man lift	1	20	75		3650	37.7	8	480	31
	Generator	1	50	72		3580	34.9	8	480	32
	Backhoe	1	40	78		3620	40.8	8	480	37
	Tractor	1	40	84		3670	46.7	8	480	43
	Front End Loader	1	40	79		3600	41.9	8	480	38
Welder / Torch	1	40	73		3650	35.7	8	480	32	
Total for Building Construction Phase:										46.1
Paving	Paver	1	50	77		3530	40.0	8	480	37
	Paver	1	50	77		3580	39.9	8	480	37
	Concrete Pump Truck	1	20	81		3600	43.9	8	480	37
	Concrete Mixer Truck	1	40	79		3650	41.7	8	480	38
	Roller	1	20	80		3620	42.8	8	480	36
	Roller	1	20	80		3670	42.7	8	480	36
										44.5
Architectural Coating	Compressor (air)	1	40	78		3550	41.0	8	480	37
Total for Architectural Coating Phase:										37.0

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **80**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		3700	44.6	8	480	41
	Backhoe	1	40	78		3700	40.6	8	480	37
Total for Site Preparation Phase:										42.1
Grading	Excavator	1	40	81		3700	43.6	8	480	40
	Excavator	1	40	81		3700	43.6	8	480	40
	Grader	1	40	85		3700	47.6	8	480	44
	Dozer	1	40	82		3700	44.6	8	480	41
	Scraper	1	40	84		3700	46.6	8	480	43
	Scraper	1	40	84		3700	46.6	8	480	43
	Backhoe	1	40	78		3700	40.6	8	480	37
	Tractor	1	40	84		3700	46.6	8	480	43
Total for Grading Phase:										50.5
Building Construction	Crane	1	16	81		3700	43.6	8	480	36
	Man lift	1	20	75		3700	37.6	8	480	31
	Man lift	1	20	75		3700	37.6	8	480	31
	Man lift	1	20	75		3700	37.6	8	480	31
	Generator	1	50	72		3700	34.6	8	480	32
	Backhoe	1	40	78		3700	40.6	8	480	37
	Tractor	1	40	84		3700	46.6	8	480	43
	Front End Loader	1	40	79		3700	41.6	8	480	38
Welder / Torch	1	40	73		3700	35.6	8	480	32	
Total for Building Construction Phase:										45.9
Paving	Paver	1	50	77		3700	39.6	8	480	37
	Paver	1	50	77		3700	39.6	8	480	37
	Concrete Pump Truck	1	20	81		3700	43.6	8	480	37
	Concrete Mixer Truck	1	40	79		3700	41.6	8	480	38
	Roller	1	20	80		3700	42.6	8	480	36
	Roller	1	20	80		3700	42.6	8	480	36
										44.3
Architectural Coating	Compressor (air)	1	40	78		3700	40.6	8	480	37
Total for Architectural Coating Phase:										36.6

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **80**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		3550	45.0	8	480	41
	Backhoe	1	40	78		3600	40.9	8	480	37
Total for Site Preparation Phase:										42.4
Grading	Excavator	1	40	81		3570	43.9	8	480	40
	Excavator	1	40	81		3620	43.8	8	480	40
	Grader	1	40	85		3650	47.7	8	480	44
	Dozer	1	40	82		3700	44.6	8	480	41
	Scraper	1	40	84		3630	46.8	8	480	43
	Scraper	1	40	84		3670	46.7	8	480	43
	Backhoe	1	40	78		3720	40.6	8	480	37
	Tractor	1	40	84		3650	46.7	8	480	43
Total for Grading Phase:										50.6
Building Construction	Crane	1	16	81		3600	43.9	8	480	36
	Man lift	1	20	75		3620	37.8	8	480	31
	Man lift	1	20	75		3650	37.7	8	480	31
	Man lift	1	20	75		3700	37.6	8	480	31
	Generator	1	50	72		3630	34.8	8	480	32
	Backhoe	1	40	78		3670	40.7	8	480	37
	Tractor	1	40	84		3720	46.6	8	480	43
	Front End Loader	1	40	79		3650	41.7	8	480	38
	Welder / Torch	1	40	73		3700	35.6	8	480	32
Total for Building Construction Phase:										45.9
Paving	Paver	1	50	77		3580	39.9	8	480	37
	Paver	1	50	77		3630	39.8	8	480	37
	Concrete Pump Truck	1	20	81		3650	43.7	8	480	37
	Concrete Mixer Truck	1	40	79		3700	41.6	8	480	38
	Roller	1	20	80		3670	42.7	8	480	36
	Roller	1	20	80		3720	42.6	8	480	36
										44.4
Architectural Coating	Compressor (air)	1	40	78		3600	40.9	8	480	37
Total for Architectural Coating Phase:										36.9

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **80**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		3850	44.3	8	480	40
	Backhoe	1	40	78		3850	40.3	8	480	36
Total for Site Preparation Phase:										41.7
Grading	Excavator	1	40	81		3850	43.3	8	480	39
	Excavator	1	40	81		3850	43.3	8	480	39
	Grader	1	40	85		3850	47.3	8	480	43
	Dozer	1	40	82		3850	44.3	8	480	40
	Scraper	1	40	84		3850	46.3	8	480	42
	Scraper	1	40	84		3850	46.3	8	480	42
	Backhoe	1	40	78		3850	40.3	8	480	36
	Tractor	1	40	84		3850	46.3	8	480	42
Total for Grading Phase:										50.2
Building Construction	Crane	1	16	81		3850	43.3	8	480	35
	Man lift	1	20	75		3850	37.3	8	480	30
	Man lift	1	20	75		3850	37.3	8	480	30
	Man lift	1	20	75		3850	37.3	8	480	30
	Generator	1	50	72		3850	34.3	8	480	31
	Backhoe	1	40	78		3850	40.3	8	480	36
	Tractor	1	40	84		3850	46.3	8	480	42
	Front End Loader	1	40	79		3850	41.3	8	480	37
	Welder / Torch	1	40	73		3850	35.3	8	480	31
Total for Building Construction Phase:										45.5
Paving	Paver	1	50	77		3850	39.3	8	480	36
	Paver	1	50	77		3850	39.3	8	480	36
	Concrete Pump Truck	1	20	81		3850	43.3	8	480	36
	Concrete Mixer Truck	1	40	79		3850	41.3	8	480	37
	Roller	1	20	80		3850	42.3	8	480	35
	Roller	1	20	80		3850	42.3	8	480	35
										43.9
Architectural Coating	Compressor (air)	1	40	78		3850	40.3	8	480	36
Total for Architectural Coating Phase:										36.3

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **85**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		3000	46.4	8	480	42
	Backhoe	1	40	78		3050	42.3	8	480	38
Total for Site Preparation Phase:										43.9
Grading	Excavator	1	40	81		3000	45.4	8	480	41
	Excavator	1	40	81		3050	45.3	8	480	41
	Grader	1	40	85		3100	49.2	8	480	45
	Dozer	1	40	82		3030	46.4	8	480	42
	Scraper	1	40	84		3080	48.2	8	480	44
	Scraper	1	40	84		3100	48.2	8	480	44
	Backhoe	1	40	78		3200	41.9	8	480	38
	Tractor	1	40	84		3250	47.7	8	480	44
Total for Grading Phase:										52.0
Building Construction	Crane	1	16	81		3050	45.3	8	480	37
	Man lift	1	20	75		3100	39.2	8	480	32
	Man lift	1	20	75		3030	39.4	8	480	32
	Man lift	1	20	75		3080	39.2	8	480	32
	Generator	1	50	72		3100	36.2	8	480	33
	Backhoe	1	40	78		3200	41.9	8	480	38
	Tractor	1	40	84		3250	47.7	8	480	44
	Front End Loader	1	40	79		3300	42.6	8	480	39
	Welder / Torch	1	40	73		3350	36.5	8	480	32
Total for Building Construction Phase:										47.1
Paving	Paver	1	50	77		3000	41.4	8	480	38
	Paver	1	50	77		3050	41.3	8	480	38
	Concrete Pump Truck	1	20	81		3100	45.2	8	480	38
	Concrete Mixer Truck	1	40	79		3030	43.4	8	480	39
	Roller	1	20	80		3080	44.2	8	480	37
	Roller	1	20	80		3100	44.2	8	480	37
										46.0
Architectural Coating	Compressor (air)	1	40	78		3050	42.3	8	480	38
Total for Architectural Coating Phase:										38.3

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **85**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		3350	45.5	8	480	41
	Backhoe	1	40	78		3350	41.5	8	480	37
Total for Site Preparation Phase:										43.0
Grading	Excavator	1	40	81		3350	44.5	8	480	40
	Excavator	1	40	81		3350	44.5	8	480	40
	Grader	1	40	85		3350	48.5	8	480	44
	Dozer	1	40	82		3350	45.5	8	480	41
	Scraper	1	40	84		3350	47.5	8	480	43
	Scraper	1	40	84		3350	47.5	8	480	43
	Backhoe	1	40	78		3350	41.5	8	480	37
	Tractor	1	40	84		3350	47.5	8	480	43
Total for Grading Phase:										51.4
Building Construction	Crane	1	16	81		3350	44.5	8	480	37
	Man lift	1	20	75		3350	38.5	8	480	31
	Man lift	1	20	75		3350	38.5	8	480	31
	Man lift	1	20	75		3350	38.5	8	480	31
	Generator	1	50	72		3350	35.5	8	480	32
	Backhoe	1	40	78		3350	41.5	8	480	37
	Tractor	1	40	84		3350	47.5	8	480	43
	Front End Loader	1	40	79		3350	42.5	8	480	38
	Welder / Torch	1	40	73		3350	36.5	8	480	32
Total for Building Construction Phase:										46.8
Paving	Paver	1	50	77		3350	40.5	8	480	37
	Paver	1	50	77		3350	40.5	8	480	37
	Concrete Pump Truck	1	20	81		3350	44.5	8	480	37
	Concrete Mixer Truck	1	40	79		3350	42.5	8	480	38
	Roller	1	20	80		3350	43.5	8	480	36
	Roller	1	20	80		3350	43.5	8	480	36
										45.2
Architectural Coating	Compressor (air)	1	40	78		3350	41.5	8	480	37
Total for Architectural Coating Phase:										37.5

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **85**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		2050	49.7	8	480	46
	Backhoe	1	40	78		2100	45.5	8	480	42
Total for Site Preparation Phase:										47.2
Grading	Excavator	1	40	81		2050	48.7	8	480	45
	Excavator	1	40	81		2100	48.5	8	480	45
	Grader	1	40	85		2150	52.3	8	480	48
	Dozer	1	40	82		2080	49.6	8	480	46
	Scraper	1	40	84		2130	51.4	8	480	47
	Scraper	1	40	84		2150	51.3	8	480	47
	Backhoe	1	40	78		2250	44.9	8	480	41
	Tractor	1	40	84		2300	50.7	8	480	47
Total for Grading Phase:										55.2
Building Construction	Crane	1	16	81		2100	48.5	8	480	41
	Man lift	1	20	75		2150	42.3	8	480	35
	Man lift	1	20	75		2080	42.6	8	480	36
	Man lift	1	20	75		2130	42.4	8	480	35
	Generator	1	50	72		2150	39.3	8	480	36
	Backhoe	1	40	78		2250	44.9	8	480	41
	Tractor	1	40	84		2300	50.7	8	480	47
	Front End Loader	1	40	79		2350	45.6	8	480	42
	Welder / Torch	1	40	73		2400	39.4	8	480	35
Total for Building Construction Phase:										50.2
Paving	Paver	1	50	77		2050	44.7	8	480	42
	Paver	1	50	77		2100	44.5	8	480	42
	Concrete Pump Truck	1	20	81		2150	48.3	8	480	41
	Concrete Mixer Truck	1	40	79		2080	46.6	8	480	43
	Roller	1	20	80		2130	47.4	8	480	40
	Roller	1	20	80		2150	47.3	8	480	40
Total for Paving Phase:										49.2
Architectural Coating	Compressor (air)	1	40	78		2100	45.5	8	480	42
Total for Architectural Coating Phase:										41.6

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **85**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		2700	47.4	8	480	43
	Backhoe	1	40	78		2700	43.4	8	480	39
Total for Site Preparation Phase:										44.8
Grading	Excavator	1	40	81		2700	46.4	8	480	42
	Excavator	1	40	81		2700	46.4	8	480	42
	Grader	1	40	85		2700	50.4	8	480	46
	Dozer	1	40	82		2700	47.4	8	480	43
	Scraper	1	40	84		2700	49.4	8	480	45
	Scraper	1	40	84		2700	49.4	8	480	45
	Backhoe	1	40	78		2700	43.4	8	480	39
	Tractor	1	40	84		2700	49.4	8	480	45
Total for Grading Phase:										53.3
Building Construction	Crane	1	16	81		2700	46.4	8	480	38
	Man lift	1	20	75		2700	40.4	8	480	33
	Man lift	1	20	75		2700	40.4	8	480	33
	Man lift	1	20	75		2700	40.4	8	480	33
	Generator	1	50	72		2700	37.4	8	480	34
	Backhoe	1	40	78		2700	43.4	8	480	39
	Tractor	1	40	84		2700	49.4	8	480	45
	Front End Loader	1	40	79		2700	44.4	8	480	40
	Welder / Torch	1	40	73		2700	38.4	8	480	34
Total for Building Construction Phase:										48.6
Paving	Paver	1	50	77		2700	42.4	8	480	39
	Paver	1	50	77		2700	42.4	8	480	39
	Concrete Pump Truck	1	20	81		2700	46.4	8	480	39
	Concrete Mixer Truck	1	40	79		2700	44.4	8	480	40
	Roller	1	20	80		2700	45.4	8	480	38
	Roller	1	20	80		2700	45.4	8	480	38
Total for Paving Phase:										47.0
Architectural Coating	Compressor (air)	1	40	78		2700	43.4	8	480	39
Total for Architectural Coating Phase:										39.4

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **85**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq	
Site Preparation	Dozer	1	40	82		250	68.0	8	480	64	
	Backhoe	1	40	78		300	62.4	8	480	58	
Total for Site Preparation Phase:											65.1
Grading	Excavator	1	40	81		270	66.4	8	480	62	
	Excavator	1	40	81		320	64.9	8	480	61	
	Grader	1	40	85		350	68.1	8	480	64	
	Dozer	1	40	82		400	63.9	8	480	60	
	Scraper	1	40	84		330	67.6	8	480	64	
	Scraper	1	40	84		370	66.6	8	480	63	
	Backhoe	1	40	78		420	59.5	8	480	56	
	Tractor	1	40	84		350	67.1	8	480	63	
Total for Grading Phase:											71.2
Building Construction	Crane	1	16	81		300	65.4	8	480	57	
	Man lift	1	20	75		320	58.9	8	480	52	
	Man lift	1	20	75		350	58.1	8	480	51	
	Man lift	1	20	75		400	56.9	8	480	50	
	Generator	1	50	72		330	55.6	8	480	53	
	Backhoe	1	40	78		370	60.6	8	480	57	
	Tractor	1	40	84		420	65.5	8	480	62	
	Front End Loader	1	40	79		350	62.1	8	480	58	
Welder / Torch	1	40	73		400	54.9	8	480	51		
Total for Building Construction Phase:											65.8
Paving	Paver	1	50	77		280	62.0	8	480	59	
	Paver	1	50	77		330	60.6	8	480	58	
	Concrete Pump Truck	1	20	81		350	64.1	8	480	57	
	Concrete Mixer Truck	1	40	79		400	60.9	8	480	57	
	Roller	1	20	80		370	62.6	8	480	56	
	Roller	1	20	80		420	61.5	8	480	55	
											64.8
Architectural Coating	Compressor (air)	1	40	78		300	62.4	8	480	58	
Total for Architectural Coating Phase:											58.5

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **85**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		900	56.9	8	480	53
	Backhoe	1	40	78		900	52.9	8	480	49
Total for Site Preparation Phase:										54.4
Grading	Excavator	1	40	81		900	55.9	8	480	52
	Excavator	1	40	81		900	55.9	8	480	52
	Grader	1	40	85		900	59.9	8	480	56
	Dozer	1	40	82		900	56.9	8	480	53
	Scraper	1	40	84		900	58.9	8	480	55
	Scraper	1	40	84		900	58.9	8	480	55
	Backhoe	1	40	78		900	52.9	8	480	49
	Tractor	1	40	84		900	58.9	8	480	55
Total for Grading Phase:										62.8
Building Construction	Crane	1	16	81		900	55.9	8	480	48
	Man lift	1	20	75		900	49.9	8	480	43
	Man lift	1	20	75		900	49.9	8	480	43
	Man lift	1	20	75		900	49.9	8	480	43
	Generator	1	50	72		900	46.9	8	480	44
	Backhoe	1	40	78		900	52.9	8	480	49
	Tractor	1	40	84		900	58.9	8	480	55
	Front End Loader	1	40	79		900	53.9	8	480	50
	Welder / Torch	1	40	73		900	47.9	8	480	44
Total for Building Construction Phase:										58.2
Paving	Paver	1	50	77		900	51.9	8	480	49
	Paver	1	50	77		900	51.9	8	480	49
	Concrete Pump Truck	1	20	81		900	55.9	8	480	49
	Concrete Mixer Truck	1	40	79		900	53.9	8	480	50
	Roller	1	20	80		900	54.9	8	480	48
	Roller	1	20	80		900	54.9	8	480	48
										56.6
Architectural Coating	Compressor (air)	1	40	78		900	52.9	8	480	49
Total for Architectural Coating Phase:										48.9

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **90**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		1150	54.8	8	480	51
	Backhoe	1	40	78		1200	50.4	8	480	46
Total for Site Preparation Phase:										52.1
Grading	Excavator	1	40	81		1150	53.8	8	480	50
	Excavator	1	40	81		1200	53.4	8	480	49
	Grader	1	40	85		1250	57.0	8	480	53
	Dozer	1	40	82		1180	54.5	8	480	51
	Scraper	1	40	84		1230	56.2	8	480	52
	Scraper	1	40	84		1250	56.0	8	480	52
	Backhoe	1	40	78		1350	49.4	8	480	45
	Tractor	1	40	84		1400	55.1	8	480	51
Total for Grading Phase:										59.9
Building Construction	Crane	1	16	81		1200	53.4	8	480	45
	Man lift	1	20	75		1250	47.0	8	480	40
	Man lift	1	20	75		1180	47.5	8	480	41
	Man lift	1	20	75		1230	47.2	8	480	40
	Generator	1	50	72		1250	44.0	8	480	41
	Backhoe	1	40	78		1350	49.4	8	480	45
	Tractor	1	40	84		1400	55.1	8	480	51
	Front End Loader	1	40	79		1450	49.8	8	480	46
	Welder / Torch	1	40	73		1500	43.5	8	480	39
Total for Building Construction Phase:										54.6
Paving	Paver	1	50	77		1150	49.8	8	480	47
	Paver	1	50	77		1200	49.4	8	480	46
	Concrete Pump Truck	1	20	81		1250	53.0	8	480	46
	Concrete Mixer Truck	1	40	79		1180	51.5	8	480	48
	Roller	1	20	80		1230	52.2	8	480	45
	Roller	1	20	80		1250	52.0	8	480	45
Total for Paving Phase:										54.0
Architectural Coating	Compressor (air)	1	40	78		1200	50.4	8	480	46
Total for Architectural Coating Phase:										46.4

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = **90**
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = **8**

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Dozer	1	40	82		1800	50.9	8	480	47
	Backhoe	1	40	78		1800	46.9	8	480	43
Total for Site Preparation Phase:										48.3
Grading	Excavator	1	40	81		1800	49.9	8	480	46
	Excavator	1	40	81		1800	49.9	8	480	46
	Grader	1	40	85		1800	53.9	8	480	50
	Dozer	1	40	82		1800	50.9	8	480	47
	Scraper	1	40	84		1800	52.9	8	480	49
	Scraper	1	40	84		1800	52.9	8	480	49
	Backhoe	1	40	78		1800	46.9	8	480	43
	Tractor	1	40	84		1800	52.9	8	480	49
Total for Grading Phase:										56.8
Building Construction	Crane	1	16	81		1800	49.9	8	480	42
	Man lift	1	20	75		1800	43.9	8	480	37
	Man lift	1	20	75		1800	43.9	8	480	37
	Man lift	1	20	75		1800	43.9	8	480	37
	Generator	1	50	72		1800	40.9	8	480	38
	Backhoe	1	40	78		1800	46.9	8	480	43
	Tractor	1	40	84		1800	52.9	8	480	49
	Front End Loader	1	40	79		1800	47.9	8	480	44
	Welder / Torch	1	40	73		1800	41.9	8	480	38
Total for Building Construction Phase:										52.1
Paving	Paver	1	50	77		1800	45.9	8	480	43
	Paver	1	50	77		1800	45.9	8	480	43
	Concrete Pump Truck	1	20	81		1800	49.9	8	480	43
	Concrete Mixer Truck	1	40	79		1800	47.9	8	480	44
	Roller	1	20	80		1800	48.9	8	480	42
	Roller	1	20	80		1800	48.9	8	480	42
Total for Paving Phase:										50.5
Architectural Coating	Compressor (air)	1	40	78		1800	46.9	8	480	43
Total for Architectural Coating Phase:										42.9

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = 80
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = 8

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Off-Site Utilities	Backhoe	1	40	78		130	69.7	8	480	66
	Man lift	1	20	75		150	65.5	8	480	58
	Generator	1	50	72		170	61.4	8	480	58
	Crane	1	16	81		200	69.0	8	480	61
	Welder / Torch	1	40	73		180	61.9	8	480	58
Total for Off-Site Utilities Phase:										68.4

Appendix H - Construction Noise Modeling Input Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per FTA guidance = 80
allowable hours over which Leq is to be averaged (example: 8 for FTA guidance) = 8

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Off-Site Utilities	Backhoe	1	40	78		2000	46.0	8	480	42
	Man lift	1	20	75		2000	43.0	8	480	36
	Generator	1	50	72		2000	40.0	8	480	37
	Crane	1	16	81		2000	49.0	8	480	41
	Welder / Torch	1	40	73		2000	41.0	8	480	37
Total for Off-Site Utilities Phase:										46.3

Appendix H-3

Traffic Noise Modeling Data

INPUT: ROADWAYS
13087

Dudek										
MG										
INPUT: ROADWAYS										
PROJECT/CONTRACT:	13087									
RUN:	I15 Industrial Project - Cal Run									
Roadway		Points								
Name	Width	Name	No.	Coordinates	(pavement)		Flow Control		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt
							Device	Constraint	Vehicles	On
									Affected	Struct?
	ft			ft	ft	ft		mph	%	
Main Street - W. of Hwy 395	100.0	point1	1	807.2	8,559.2	100.00				Average
		point3	3	2,099.7	8,550.5	100.00				
Hwy 395 N. of Main Street	65.0	point37	37	2,185.5	9,286.6	100.00				Average
		point14	14	2,103.8	8,566.0	100.00				
Cataba Road	45.0	point39	39	6,306.0	8,517.8	100.00				Average
		point26	26	6,323.4	7,038.8	100.00				Average
		point27	27	6,334.3	6,789.5	100.00				
I-15 NB	65.0	point41	41	4,447.5	2,852.2	100.00				Average
		point33	33	5,307.0	4,186.3	100.00				Average
		point34	34	6,185.4	5,519.5	100.00				Average
		point35	35	7,783.6	8,021.5	100.00				Average
		point2	2	9,496.1	10,661.3	100.00				
I-15 SB	65.0	point43	43	9,411.9	10,707.1	100.00				Average
		point29	29	6,583.5	6,406.0	100.00				Average
		point30	30	4,899.4	3,781.5	100.00				Average
		point31	31	4,265.6	2,899.7	100.00				
Mesa Linda Street	40.0	point45	45	4,991.4	8,527.9	100.00				Average
		point8	8	5,008.9	5,916.6	100.00				Average
		point9	9	5,003.6	4,598.1	100.00				
Hwy 395 S. of Main Street	65.0	point47	47	2,105.5	8,538.8	100.00				Average
		point16	16	2,000.9	7,420.6	100.00				Average
		point17	17	2,017.4	7,037.6	100.00				Average
		point18	18	2,074.3	6,735.8	100.00				Average
		point19	19	2,201.1	6,379.3	100.00				Average
		point20	20	2,288.6	6,138.7	100.00				Average

INPUT: ROADWAYS
13087

		point21	21	2,317.1	6,008.6	100.00				Average	
		point22	22	2,334.5	5,840.2	100.00				Average	
		point23	23	2,367.6	4,614.0	100.00					
Poplar Street	65.0	point49	49	4,976.8	4,614.1	100.00				Average	
		point11	11	3,636.7	4,603.6	100.00				Average	
		point12	12	2,379.9	4,614.1	100.00					
Hwy 395 S. of Poplar Street	65.0	point50	50	2,367.6	4,614.0	100.00				Average	
		point24	24	2,364.2	3,357.2	100.00					
Main Street - E. of Hwy 395	100.0	point51	51	2,099.7	8,550.5	100.00				Average	
		point4	4	4,977.8	8,536.6	100.00					
Main Street-Mesa Linda St. to Cataba Rd	100.0	point52	52	4,977.8	8,536.6	100.00				Average	
		point5	5	6,303.1	8,547.6	100.00					
Main Street-Cataba Rd to I-15	100.0	point53	53	6,303.1	8,547.6	100.00				Average	
		point6	6	7,950.9	8,553.1	100.00					

INPUT: TRAFFIC FOR LAeq1h Volumes

13087

Dudek MG													
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	13087												
RUN:	I15 Industrial Project - Cal Run												
Roadway	Points												
Name	Name	No.	Segment										
			Autos										
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Main Street - W. of Hwy 395	point1	1	0	0	0	0	0	0	0	0	0	0	0
	point3	3											
Hwy 395 N. of Main Street	point37	37	0	0	0	0	0	0	0	0	0	0	0
	point14	14											
Cataba Road	point39	39	0	0	0	0	0	0	0	0	0	0	0
	point26	26	0	0	0	0	0	0	0	0	0	0	0
	point27	27											
I-15 NB	point41	41	4875	70	168	70	560	65	0	0	0	0	0
	point33	33	4875	70	168	70	560	65	0	0	0	0	0
	point34	34	4875	70	168	70	560	65	0	0	0	0	0
	point35	35	4875	70	168	70	560	65	0	0	0	0	0
	point2	2											
I-15 SB	point43	43	4875	70	168	70	560	65	0	0	0	0	0
	point29	29	4875	70	168	70	560	65	0	0	0	0	0
	point30	30	4875	70	168	70	560	65	0	0	0	0	0
	point31	31											
Mesa Linda Street	point45	45	0	0	0	0	0	0	0	0	0	0	0
	point8	8	0	0	0	0	0	0	0	0	0	0	0
	point9	9											
Hwy 395 S. of Main Street	point47	47	0	0	0	0	0	0	0	0	0	0	0
	point16	16	0	0	0	0	0	0	0	0	0	0	0
	point17	17	0	0	0	0	0	0	0	0	0	0	0
	point18	18	0	0	0	0	0	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes
13087

	point19	19	0	0	0	0	0	0	0	0	0	0
	point20	20	0	0	0	0	0	0	0	0	0	0
	point21	21	0	0	0	0	0	0	0	0	0	0
	point22	22	0	0	0	0	0	0	0	0	0	0
	point23	23										
Poplar Street	point49	49	0	0	0	0	0	0	0	0	0	0
	point11	11	0	0	0	0	0	0	0	0	0	0
	point12	12										
Hwy 395 S. of Poplar Street	point50	50	0	0	0	0	0	0	0	0	0	0
Main Street - E. of Hwy 395	point24	24										
	point51	51	1464	55	4	55	28	50	0	0	12	55
	point4	4										
Main Street-Mesa Linda St. to Cataba Rd	point52	52	1464	55	4	55	28	50	0	0	12	55
Main Street-Cataba Rd to I-15	point5	5										
	point53	53	1696	55	4	55	16	50	4	55	4	55
	point6	6										

INPUT: RECEIVERS
13087

Dudek MG												
INPUT: RECEIVERS												
PROJECT/CONTRACT:	13087											
RUN:	I15 Industrial Project - Cal Run											
Receiver												
Name	No.	#DUs	Coordinates (ground)		Height	Input Sound Levels and Criteria					Active	
			X	Y	Z	above	Existing	Impact Criteria		NR	in	
						Ground	L _{Aeq} 1h	L _{Aeq} 1h	Sub'l	Goal	Calc.	
			ft	ft	ft	ft	dBA	dBA	dB	dB		
ST1	1	1	5,230.5	8,654.1	100.00	5.00	68.50	66	10.0	8.0	Y	
ST2	2	1	4,299.0	8,694.7	100.00	5.00	59.30	66	10.0	8.0	Y	
ST3	3	1	6,467.0	8,873.1	100.00	5.00	63.70	66	10.0	8.0	Y	
M1	4	1	6,447.7	6,498.4	100.00	5.00	0.00	66	10.0	8.0	Y	
M2	5	1	3,268.1	4,508.8	100.00	5.00	0.00	66	10.0	8.0	Y	
M3	6	1	2,469.0	3,910.1	100.00	5.00	0.00	66	10.0	8.0	Y	
M4	8	1	5,255.5	8,692.6	100.00	5.00	0.00	66	10.0	8.0	Y	

INPUT: BARRIERS

13087

Dudek					15 October 2021														
MG					TNM 2.5														
INPUT: BARRIERS																			
PROJECT/CONTRACT:	13087																		
RUN:	I15 Industrial Project - Cal Run																		
Barrier										Points									
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates	(bottom)	Height	Segment					
		Min	Max	\$ per	\$ per	Top	Run:Rise	\$ per			X	Y	Z	at	Seg	Ht	Perturbs	On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	2,632.2	5,843.7	100.00	40.00	0.00	0	0		
									point3	3	2,624.0	4,904.1	100.00	40.00	0.00	0	0		
									point4	4	2,560.6	4,909.6	100.00	40.00	0.00	0	0		
									point5	5	2,567.5	4,777.4	100.00	40.00	0.00	0	0		
									point6	6	3,299.1	4,787.0	100.00	40.00	0.00	0	0		
									point7	7	3,292.2	4,902.7	100.00	40.00	0.00	0	0		
									point8	8	3,244.0	4,906.8	100.00	40.00	0.00	0	0		
									point9	9	3,246.7	5,849.3	100.00	40.00	0.00	0	0		
									point10	10	2,640.5	5,838.2	100.00	40.00					
Barrier 2	W	0.00	99.99	0.00				0.00	point18	18	5,931.2	6,994.6	100.00	40.00	0.00	0	0		
									point12	12	5,927.7	5,581.6	100.00	40.00	0.00	0	0		
									point13	13	5,781.9	5,369.8	100.00	40.00	0.00	0	0		
									point14	14	5,313.2	5,369.8	100.00	40.00	0.00	0	0		
									point15	15	5,306.2	6,838.4	100.00	40.00	0.00	0	0		
									point16	16	5,254.2	6,824.5	100.00	40.00	0.00	0	0		
									point2	2	5,257.6	6,991.2	100.00	40.00					
Barrier4	W	0.00	99.99	0.00				0.00	point19	19	4,708.1	8,603.6	100.00	6.00	0.00	0	0		
									point20	20	3,329.1	8,603.6	100.00	6.00					
Barrier5	W	0.00	99.99	0.00				0.00	point21	21	5,035.8	8,665.2	100.00	6.00	0.00	0	0		
									point22	22	5,649.9	8,663.9	100.00	6.00					
Barrier6	W	0.00	99.99	0.00				0.00	point23	23	6,456.7	6,487.8	100.00	20.00	0.00	0	0		
									point24	24	6,579.0	6,675.3	100.00	20.00	0.00	0	0		
									point25	25	6,642.8	6,637.4	100.00	20.00	0.00	0	0		
									point26	26	6,515.0	6,445.7	100.00	20.00	0.00	0	0		
									point27	27	6,451.2	6,484.8	100.00	20.00					

RESULTS: SOUND LEVELS
13087

Dudek													
MG													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		13087											
RUN:		I15 Industrial Project - Cal Run											
BARRIER DESIGN:		INPUT HEIGHTS											
ATMOSPHERICS:		68 deg F, 50% RH											
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc	Impact				minus	
												Goal	
			dBA	dBA	dBA		dB	dB		dBA	dB	dB	dB
ST1	1	1	68.5	67.9	66		-0.6	10	Snd Lvl	67.9	0.0	8	-8.0
ST2	2	1	59.3	59.7	66		0.4	10	----	59.7	0.0	8	-8.0
ST3	3	1	63.7	63.3	66		-0.4	10	----	63.3	0.0	8	-8.0
M1	4	1	0.0	71.0	66		71.0	10	Snd Lvl	71.0	0.0	8	-8.0
M2	5	1	0.0	53.7	66		53.7	10	----	53.7	0.0	8	-8.0
M3	6	1	0.0	49.7	66		49.7	10	----	49.7	0.0	8	-8.0
M4	8	1	0.0	60.5	66		60.5	10	----	60.5	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		7	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

INPUT: ROADWAYS
13727

Dudek										
MG										
INPUT: ROADWAYS										
PROJECT/CONTRACT:	13727									
RUN:	I15 Indstrl Prj Ph 2 aka Poplar 18 - Existing									
Roadway		Points								
Name	Width	Name	No.	Coordinates	(pavement)		Flow Control		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt
							Device	Constraint	Vehicles	On
									Affected	Struct?
	ft			ft	ft	ft		mph	%	
Main Street - W. of Hwy 395	100.0	point1	1	807.2	8,559.2	100.00				Average
		point3	3	2,099.7	8,550.5	100.00				
Hwy 395 N. of Main Street	65.0	point37	37	2,185.5	9,286.6	100.00				Average
		point14	14	2,103.8	8,566.0	100.00				
Cataba Road	45.0	point39	39	6,306.0	8,517.8	100.00				Average
		point26	26	6,323.4	7,038.8	100.00				Average
		point27	27	6,334.3	6,789.5	100.00				
I-15 NB	65.0	point41	41	4,447.5	2,852.2	100.00				Average
		point33	33	5,307.0	4,186.3	100.00				Average
		point34	34	6,185.4	5,519.5	100.00				Average
		point35	35	7,783.6	8,021.5	100.00				Average
		point2	2	9,496.1	10,661.3	100.00				
I-15 SB	65.0	point43	43	9,411.9	10,707.1	100.00				Average
		point29	29	6,583.5	6,406.0	100.00				Average
		point30	30	4,899.4	3,781.5	100.00				Average
		point31	31	4,265.6	2,899.7	100.00				
Mesa Linda Street	40.0	point45	45	4,991.4	8,527.9	100.00				Average
		point8	8	5,008.9	5,916.6	100.00				Average
		point9	9	5,003.6	4,598.1	100.00				
Hwy 395 S. of Main Street	65.0	point47	47	2,105.5	8,538.8	100.00				Average
		point16	16	2,000.9	7,420.6	100.00				Average
		point17	17	2,017.4	7,037.6	100.00				Average
		point18	18	2,074.3	6,735.8	100.00				Average
		point19	19	2,201.1	6,379.3	100.00				Average
		point20	20	2,288.6	6,138.7	100.00				Average

INPUT: ROADWAYS
13727

		point21	21	2,317.1	6,008.6	100.00				Average	
		point22	22	2,334.5	5,840.2	100.00				Average	
		point23	23	2,367.6	4,614.0	100.00					
Poplar Street	65.0	point49	49	4,976.8	4,614.1	100.00				Average	
		point11	11	3,636.7	4,603.6	100.00				Average	
		point12	12	2,379.9	4,614.1	100.00					
Hwy 395 S. of Poplar Street	65.0	point50	50	2,367.6	4,614.0	100.00				Average	
		point24	24	2,364.2	3,357.2	100.00					
Main Street - E. of Hwy 395	100.0	point51	51	2,099.7	8,550.5	100.00				Average	
		point4	4	4,977.8	8,536.6	100.00					
Main Street-Mesa Linda St. to Cataba Rd	100.0	point52	52	4,977.8	8,536.6	100.00				Average	
		point5	5	6,303.1	8,547.6	100.00					
Main Street-Cataba Rd to I-15	100.0	point53	53	6,303.1	8,547.6	100.00				Average	
		point6	6	7,950.9	8,553.1	100.00					

INPUT: TRAFFIC FOR LAeq1h Volumes
13727

Dudek MG													
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	13727												
RUN:	I15 Indstrl Prj Ph 2 aka Poplar 18 - Existing												
Roadway	Points												
Name	Name	No.	Segment										
			Autos										
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Main Street - W. of Hwy 395	point1	1	1488	55	30	55	14	50	0	0	0	0	
	point3	3											
Hwy 395 N. of Main Street	point37	37	1856	55	30	55	130	50	0	0	0	0	
	point14	14											
Cataba Road	point39	39	638	45	5	45	2	40	0	0	0	0	
	point26	26	638	45	5	45	2	40	0	0	0	0	
	point27	27											
I-15 NB	point41	41	4875	70	168	70	560	65	0	0	0	0	
	point33	33	4875	70	168	70	560	65	0	0	0	0	
	point34	34	4875	70	168	70	560	65	0	0	0	0	
	point35	35	4875	70	168	70	560	65	0	0	0	0	
	point2	2											
I-15 SB	point43	43	4875	70	168	70	560	65	0	0	0	0	
	point29	29	4875	70	168	70	560	65	0	0	0	0	
	point30	30	4875	70	168	70	560	65	0	0	0	0	
	point31	31											
Mesa Linda Street	point45	45	128	45	3	45	8	40	0	0	0	0	
	point8	8	128	45	3	45	8	40	0	0	0	0	
	point9	9											
Hwy 395 S. of Main Street	point47	47	1617	55	28	55	124	50	0	0	0	0	
	point16	16	1617	55	28	55	124	50	0	0	0	0	
	point17	17	1617	55	28	55	124	50	0	0	0	0	
	point18	18	1617	55	28	55	124	50	0	0	0	0	

INPUT: TRAFFIC FOR LAeq1h Volumes
13727

	point19	19	1617	55	28	55	124	50	0	0	0	0
	point20	20	1617	55	28	55	124	50	0	0	0	0
	point21	21	1617	55	28	55	124	50	0	0	0	0
	point22	22	1617	55	28	55	124	50	0	0	0	0
	point23	23										
Poplar Street	point49	49	56	45	8	45	4	40	0	0	0	0
	point11	11	56	45	8	45	4	40	0	0	0	0
	point12	12										
Hwy 395 S. of Poplar Street	point50	50	1529	55	93	55	147	50	0	0	0	0
Main Street - E. of Hwy 395	point24	24										
	point51	51	1638	55	28	55	14	50	0	0	0	0
	point4	4										
Main Street-Mesa Linda St. to Cataba Rd	point52	52	1802	55	30	55	22	50	0	0	0	0
Main Street-Cataba Rd to I-15	point5	5										
	point53	53	1802	55	30	55	22	50	0	0	0	0
	point6	6										

INPUT: BARRIERS

13727

Dudek					21 February 2022														
MG					TNM 2.5														
INPUT: BARRIERS																			
PROJECT/CONTRACT:	13727																		
RUN:	I15 Indstrl Prj Ph 2 aka Poplar 18 - Existing																		
Barrier										Points									
Name	Type	Height Min	Max	If Wall \$ per Unit Area	If Berm \$ per Unit Vol.	Top Width	Run:Rise ft:ft	Add'tnl \$ per Unit Length	Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Perturbs Incre- #Up #Dn	On Struct?	Important Reflec- tions?		
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	2,632.2	5,843.7	100.00	40.00	0.00	0	0		
									point3	3	2,624.0	4,904.1	100.00	40.00	0.00	0	0		
									point4	4	2,560.6	4,909.6	100.00	40.00	0.00	0	0		
									point5	5	2,567.5	4,777.4	100.00	40.00	0.00	0	0		
									point6	6	3,299.1	4,787.0	100.00	40.00	0.00	0	0		
									point7	7	3,292.2	4,902.7	100.00	40.00	0.00	0	0		
									point8	8	3,244.0	4,906.8	100.00	40.00	0.00	0	0		
									point9	9	3,246.7	5,849.3	100.00	40.00	0.00	0	0		
									point10	10	2,640.5	5,838.2	100.00	40.00					
Barrier 2	W	0.00	99.99	0.00				0.00	point18	18	5,931.2	6,994.6	100.00	40.00	0.00	0	0		
									point12	12	5,927.7	5,581.6	100.00	40.00	0.00	0	0		
									point13	13	5,781.9	5,369.8	100.00	40.00	0.00	0	0		
									point14	14	5,313.2	5,369.8	100.00	40.00	0.00	0	0		
									point15	15	5,306.2	6,838.4	100.00	40.00	0.00	0	0		
									point16	16	5,254.2	6,824.5	100.00	40.00	0.00	0	0		
									point2	2	5,257.6	6,991.2	100.00	40.00					
Barrier4	W	0.00	99.99	0.00				0.00	point19	19	4,708.1	8,603.6	100.00	6.00	0.00	0	0		
									point20	20	3,329.1	8,603.6	100.00	6.00					
Barrier5	W	0.00	99.99	0.00				0.00	point21	21	5,035.8	8,665.2	100.00	6.00	0.00	0	0		
									point22	22	5,649.9	8,663.9	100.00	6.00					
Barrier6	W	0.00	99.99	0.00				0.00	point23	23	6,456.7	6,487.8	100.00	20.00	0.00	0	0		
									point24	24	6,579.0	6,675.3	100.00	20.00	0.00	0	0		
									point25	25	6,642.8	6,637.4	100.00	20.00	0.00	0	0		
									point26	26	6,515.0	6,445.7	100.00	20.00	0.00	0	0		
									point27	27	6,451.2	6,484.8	100.00	20.00					

13727

C:\TNM25\Projects\I15 Ind Ph 2 aka Poplar 18\Existing 1 21 February 20

INPUT: ROADWAYS
13727

Dudek										
MG										
INPUT: ROADWAYS										
PROJECT/CONTRACT:	13727									
RUN:	I15 Ind Prj Ph 2 aka Poplar 18 - Ex w Prj									
Roadway		Points								
Name	Width	Name	No.	Coordinates	(pavement)		Flow Control		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt
							Device	Constraint	Vehicles	On
									Affected	Struct?
	ft			ft	ft	ft		mph	%	
Main Street - W. of Hwy 395	100.0	point1	1	807.2	8,559.2	100.00				Average
		point3	3	2,099.7	8,550.5	100.00				
Hwy 395 N. of Main Street	65.0	point37	37	2,185.5	9,286.6	100.00				Average
		point14	14	2,103.8	8,566.0	100.00				
Cataba Road	45.0	point39	39	6,306.0	8,517.8	100.00				Average
		point26	26	6,323.4	7,038.8	100.00				Average
		point27	27	6,334.3	6,789.5	100.00				
I-15 NB	65.0	point41	41	4,447.5	2,852.2	100.00				Average
		point33	33	5,307.0	4,186.3	100.00				Average
		point34	34	6,185.4	5,519.5	100.00				Average
		point35	35	7,783.6	8,021.5	100.00				Average
		point2	2	9,496.1	10,661.3	100.00				
I-15 SB	65.0	point43	43	9,411.9	10,707.1	100.00				Average
		point29	29	6,583.5	6,406.0	100.00				Average
		point30	30	4,899.4	3,781.5	100.00				Average
		point31	31	4,265.6	2,899.7	100.00				
Mesa Linda Street	40.0	point45	45	4,991.4	8,527.9	100.00				Average
		point8	8	5,008.9	5,916.6	100.00				Average
		point9	9	5,003.6	4,598.1	100.00				
Hwy 395 S. of Main Street	65.0	point47	47	2,105.5	8,538.8	100.00				Average
		point16	16	2,000.9	7,420.6	100.00				Average
		point17	17	2,017.4	7,037.6	100.00				Average
		point18	18	2,074.3	6,735.8	100.00				Average
		point19	19	2,201.1	6,379.3	100.00				Average
		point20	20	2,288.6	6,138.7	100.00				Average

INPUT: ROADWAYS
13727

		point21	21	2,317.1	6,008.6	100.00				Average	
		point22	22	2,334.5	5,840.2	100.00				Average	
		point23	23	2,367.6	4,614.0	100.00					
Poplar Street	65.0	point49	49	4,976.8	4,614.1	100.00				Average	
		point11	11	3,636.7	4,603.6	100.00				Average	
		point12	12	2,379.9	4,614.1	100.00					
Hwy 395 S. of Poplar Street	65.0	point50	50	2,367.6	4,614.0	100.00				Average	
		point24	24	2,364.2	3,357.2	100.00					
Main Street - E. of Hwy 395	100.0	point51	51	2,099.7	8,550.5	100.00				Average	
		point4	4	4,977.8	8,536.6	100.00					
Main Street-Mesa Linda St. to Cataba Rd	100.0	point52	52	4,977.8	8,536.6	100.00				Average	
		point5	5	6,303.1	8,547.6	100.00					
Main Street-Cataba Rd to I-15	100.0	point53	53	6,303.1	8,547.6	100.00				Average	
		point6	6	7,950.9	8,553.1	100.00					

INPUT: TRAFFIC FOR LAeq1h Volumes
13727

Dudek MG													
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	13727												
RUN:	I15 Ind Prj Ph 2 aka Poplar 18 - Ex w Prj												
Roadway	Points												
Name	Name	No.	Segment										
			Autos										
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Main Street - W. of Hwy 395	point1	1	1496	55	30	55	14	50	0	0	0	0	
	point3	3											
Hwy 395 N. of Main Street	point37	37	1886	55	31	55	131	50	0	0	0	0	
	point14	14											
Cataba Road	point39	39	638	45	5	45	2	40	0	0	0	0	
	point26	26	638	45	5	45	2	40	0	0	0	0	
	point27	27											
I-15 NB	point41	41	4875	70	168	70	560	65	0	0	0	0	
	point33	33	4875	70	168	70	560	65	0	0	0	0	
	point34	34	4875	70	168	70	560	65	0	0	0	0	
	point35	35	4875	70	168	70	560	65	0	0	0	0	
	point2	2											
I-15 SB	point43	43	4875	70	168	70	560	65	0	0	0	0	
	point29	29	4875	70	168	70	560	65	0	0	0	0	
	point30	30	4875	70	168	70	560	65	0	0	0	0	
	point31	31											
Mesa Linda Street	point45	45	189	45	3	45	8	40	0	0	0	0	
	point8	8	189	45	3	45	8	40	0	0	0	0	
	point9	9											
Hwy 395 S. of Main Street	point47	47	1636	55	29	55	125	50	0	0	0	0	
	point16	16	1636	55	29	55	125	50	0	0	0	0	
	point17	17	1636	55	29	55	125	50	0	0	0	0	
	point18	18	1636	55	29	55	125	50	0	0	0	0	

INPUT: TRAFFIC FOR LAeq1h Volumes
13727

	point19	19	1636	55	29	55	125	50	0	0	0	0
	point20	20	1636	55	29	55	125	50	0	0	0	0
	point21	21	1636	55	29	55	125	50	0	0	0	0
	point22	22	1636	55	29	55	125	50	0	0	0	0
	point23	23										
Poplar Street	point49	49	109	45	22	45	16	40	0	0	0	0
	point11	11	109	45	22	45	16	40	0	0	0	0
	point12	12										
Hwy 395 S. of Poplar Street	point50	50	1563	55	106	55	158	50	0	0	0	0
Main Street - E. of Hwy 395	point24	24										
	point51	51	1657	55	28	55	14	50	0	0	0	0
	point4	4										
Main Street-Mesa Linda St. to Cataba Rd	point52	52	1844	55	30	55	22	50	0	0	0	0
Main Street-Cataba Rd to I-15	point5	5										
	point53	53	1844	55	30	55	22	50	0	0	0	0
	point6	6										

INPUT: RECEIVERS
13727

Dudek MG						21 February 2022 TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	13727										
RUN:	I15 Ind Prj Ph 2 aka Poplar 18 - Ex w Prj										
Receiver											
Name	No.	#DUs	Coordinates (ground)		Height	Input Sound Levels and Criteria				Active	
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	L _{Aeq} 1h	L _{Aeq} 1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	5,230.5	8,654.1	100.00	5.00	0.00	66	10.0	8.0	Y
ST2	2	1	4,299.0	8,694.7	100.00	5.00	0.00	66	10.0	8.0	Y
ST3	3	1	6,467.0	8,873.1	100.00	5.00	0.00	66	10.0	8.0	Y
M1	4	1	6,447.7	6,498.4	100.00	5.00	0.00	66	10.0	8.0	Y
M2	5	1	3,268.1	4,508.8	100.00	5.00	0.00	66	10.0	8.0	Y
M3	6	1	2,469.0	3,910.1	100.00	5.00	0.00	66	10.0	8.0	Y
M4	8	1	5,255.5	8,692.6	100.00	5.00	0.00	66	10.0	8.0	Y

INPUT: BARRIERS

13727

Dudek					21 February 2022																
MG					TNM 2.5																
INPUT: BARRIERS																					
PROJECT/CONTRACT:		13727																			
RUN:		I15 Ind Prj Ph 2 aka Poplar 18 - Ex w Prj																			
Barrier																					
Name		Type	Height		If Wall	If Berm		Add'tnl	Points					Height	Segment						
			Min	Max	\$ per	\$ per	Top	Run:Rise	\$ per	Name	No.	Coordinates (bottom)			at	Seg	Ht	Perturbs	On	Important	
					Unit	Unit	Width		Unit			X	Y	Z	Point	Incre-	#Up	#Dn	Struct?	Reflec-	
					Area	Vol.			Length							ment				tions?	
			ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft					
Barrier1		W	0.00	99.99	0.00				0.00	point1	1	2,632.2	5,843.7	100.00	40.00	0.00	0	0			
										point3	3	2,624.0	4,904.1	100.00	40.00	0.00	0	0			
										point4	4	2,560.6	4,909.6	100.00	40.00	0.00	0	0			
										point5	5	2,567.5	4,777.4	100.00	40.00	0.00	0	0			
										point6	6	3,299.1	4,787.0	100.00	40.00	0.00	0	0			
										point7	7	3,292.2	4,902.7	100.00	40.00	0.00	0	0			
										point8	8	3,244.0	4,906.8	100.00	40.00	0.00	0	0			
										point9	9	3,246.7	5,849.3	100.00	40.00	0.00	0	0			
										point10	10	2,640.5	5,838.2	100.00	40.00						
Barrier 2		W	0.00	99.99	0.00				0.00	point18	18	5,931.2	6,994.6	100.00	40.00	0.00	0	0			
										point12	12	5,927.7	5,581.6	100.00	40.00	0.00	0	0			
										point13	13	5,781.9	5,369.8	100.00	40.00	0.00	0	0			
										point14	14	5,313.2	5,369.8	100.00	40.00	0.00	0	0			
										point15	15	5,306.2	6,838.4	100.00	40.00	0.00	0	0			
										point16	16	5,254.2	6,824.5	100.00	40.00	0.00	0	0			
										point2	2	5,257.6	6,991.2	100.00	40.00						
Barrier4		W	0.00	99.99	0.00				0.00	point19	19	4,708.1	8,603.6	100.00	6.00	0.00	0	0			
										point20	20	3,329.1	8,603.6	100.00	6.00						
Barrier5		W	0.00	99.99	0.00				0.00	point21	21	5,035.8	8,665.2	100.00	6.00	0.00	0	0			
										point22	22	5,649.9	8,663.9	100.00	6.00						
Barrier6		W	0.00	99.99	0.00				0.00	point23	23	6,456.7	6,487.8	100.00	20.00	0.00	0	0			
										point24	24	6,579.0	6,675.3	100.00	20.00	0.00	0	0			
										point25	25	6,642.8	6,637.4	100.00	20.00	0.00	0	0			
										point26	26	6,515.0	6,445.7	100.00	20.00	0.00	0	0			
										point27	27	6,451.2	6,484.8	100.00	20.00						

13727

C:\TNM25\Projects\I15 Ind Ph 2 aka Poplar 18\Existing with Proj	1	21 Feb 2016
---	---	-------------

INPUT: ROADWAYS
13727

Dudek										
MG										
INPUT: ROADWAYS										
PROJECT/CONTRACT:	13727									
RUN:	I15 Indstrl Prj Ph 2 aka Poplar 18 - 2040									
Roadway		Points								
Name	Width	Name	No.	Coordinates	(pavement)		Flow Control		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt
							Device	Constraint	Vehicles	On
									Affected	Struct?
	ft			ft	ft	ft		mph	%	
Main Street - W. of Hwy 395	100.0	point1	1	807.2	8,559.2	100.00				Average
		point3	3	2,099.7	8,550.5	100.00				
Hwy 395 N. of Main Street	65.0	point37	37	2,185.5	9,286.6	100.00				Average
		point14	14	2,103.8	8,566.0	100.00				
Cataba Road	45.0	point39	39	6,306.0	8,517.8	100.00				Average
		point26	26	6,323.4	7,038.8	100.00				Average
		point27	27	6,334.3	6,789.5	100.00				
I-15 NB	65.0	point41	41	4,447.5	2,852.2	100.00				Average
		point33	33	5,307.0	4,186.3	100.00				Average
		point34	34	6,185.4	5,519.5	100.00				Average
		point35	35	7,783.6	8,021.5	100.00				Average
		point2	2	9,496.1	10,661.3	100.00				
I-15 SB	65.0	point43	43	9,411.9	10,707.1	100.00				Average
		point29	29	6,583.5	6,406.0	100.00				Average
		point30	30	4,899.4	3,781.5	100.00				Average
		point31	31	4,265.6	2,899.7	100.00				
Mesa Linda Street	40.0	point45	45	4,991.4	8,527.9	100.00				Average
		point8	8	5,008.9	5,916.6	100.00				Average
		point9	9	5,003.6	4,598.1	100.00				
Hwy 395 S. of Main Street	65.0	point47	47	2,105.5	8,538.8	100.00				Average
		point16	16	2,000.9	7,420.6	100.00				Average
		point17	17	2,017.4	7,037.6	100.00				Average
		point18	18	2,074.3	6,735.8	100.00				Average
		point19	19	2,201.1	6,379.3	100.00				Average
		point20	20	2,288.6	6,138.7	100.00				Average

INPUT: ROADWAYS
13727

		point21	21	2,317.1	6,008.6	100.00				Average	
		point22	22	2,334.5	5,840.2	100.00				Average	
		point23	23	2,367.6	4,614.0	100.00					
Poplar Street	65.0	point49	49	4,976.8	4,614.1	100.00				Average	
		point11	11	3,636.7	4,603.6	100.00				Average	
		point12	12	2,379.9	4,614.1	100.00					
Hwy 395 S. of Poplar Street	65.0	point50	50	2,367.6	4,614.0	100.00				Average	
		point24	24	2,364.2	3,357.2	100.00					
Main Street - E. of Hwy 395	100.0	point51	51	2,099.7	8,550.5	100.00				Average	
		point4	4	4,977.8	8,536.6	100.00					
Main Street-Mesa Linda St. to Cataba Rd	100.0	point52	52	4,977.8	8,536.6	100.00				Average	
		point5	5	6,303.1	8,547.6	100.00					
Main Street-Cataba Rd to I-15	100.0	point53	53	6,303.1	8,547.6	100.00				Average	
		point6	6	7,950.9	8,553.1	100.00					

INPUT: TRAFFIC FOR LAeq1h Volumes
13727

Dudek MG													
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	13727												
RUN:	I15 Indstrl Prj Ph 2 aka Poplar 18 - 2040												
Roadway	Points												
Name	Name	No.	Segment										
			Autos										
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Main Street - W. of Hwy 395	point1	1	1048	55	52	55	24	50	0	0	0	0	
	point3	3											
Hwy 395 N. of Main Street	point37	37	4153	55	65	55	291	50	0	0	0	0	
	point14	14											
Cataba Road	point39	39	638	45	5	45	2	40	0	0	0	0	
	point26	26	638	45	5	45	2	40	0	0	0	0	
	point27	27											
I-15 NB	point41	41	4875	70	168	70	560	65	0	0	0	0	
	point33	33	4875	70	168	70	560	65	0	0	0	0	
	point34	34	4875	70	168	70	560	65	0	0	0	0	
	point35	35	4875	70	168	70	560	65	0	0	0	0	
	point2	2											
I-15 SB	point43	43	4875	70	168	70	560	65	0	0	0	0	
	point29	29	4875	70	168	70	560	65	0	0	0	0	
	point30	30	4875	70	168	70	560	65	0	0	0	0	
	point31	31											
Mesa Linda Street	point45	45	247	45	5	45	22	40	0	0	0	0	
	point8	8	247	45	5	45	22	40	0	0	0	0	
	point9	9											
Hwy 395 S. of Main Street	point47	47	3750	55	65	55	345	50	0	0	0	0	
	point16	16	3750	55	65	55	345	50	0	0	0	0	
	point17	17	3750	55	65	55	345	50	0	0	0	0	
	point18	18	3750	55	65	55	345	50	0	0	0	0	

INPUT: TRAFFIC FOR LAeq1h Volumes
13727

	point19	19	3750	55	65	55	345	50	0	0	0	0
	point20	20	3750	55	65	55	345	50	0	0	0	0
	point21	21	3750	55	65	55	345	50	0	0	0	0
	point22	22	3750	55	65	55	345	50	0	0	0	0
	point23	23										
Poplar Street	point49	49	684	45	102	45	98	40	0	0	0	0
	point11	11	684	45	102	45	98	40	0	0	0	0
	point12	12										
Hwy 395 S. of Poplar Street	point50	50	3135	55	181	55	468	50	0	0	0	0
Main Street - E. of Hwy 395	point24	24										
	point51	51	2608	55	47	55	26	50	0	0	0	0
	point4	4										
Main Street-Mesa Linda St. to Cataba Rd	point52	52	3209	55	60	55	41	50	0	0	0	0
Main Street-Cataba Rd to I-15	point5	5										
	point53	53	3209	55	60	55	41	50	0	0	0	0
	point6	6										

INPUT: RECEIVERS
13727

Dudek MG						21 February 2022 TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	13727										
RUN:	I15 Indstrl Prj Ph 2 aka Poplar 18 - 2040										
Receiver											
Name	No.	#DUs	Coordinates (ground)		Height	Input Sound Levels and Criteria				Active	
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	L _{Aeq} 1h	L _{Aeq} 1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	5,230.5	8,654.1	100.00	5.00	0.00	66	10.0	8.0	Y
ST2	2	1	4,299.0	8,694.7	100.00	5.00	0.00	66	10.0	8.0	Y
ST3	3	1	6,467.0	8,873.1	100.00	5.00	0.00	66	10.0	8.0	Y
M1	4	1	6,447.7	6,498.4	100.00	5.00	0.00	66	10.0	8.0	Y
M2	5	1	3,268.1	4,508.8	100.00	5.00	0.00	66	10.0	8.0	Y
M3	6	1	2,469.0	3,910.1	100.00	5.00	0.00	66	10.0	8.0	Y
M4	8	1	5,255.5	8,692.6	100.00	5.00	0.00	66	10.0	8.0	Y

INPUT: BARRIERS

13727

Dudek					21 February 2022														
MG					TNM 2.5														
INPUT: BARRIERS																			
PROJECT/CONTRACT:	13727																		
RUN:	I15 Indstrl Prj Ph 2 aka Poplar 18 - 2040																		
Barrier										Points									
Name	Type	Height Min	Max	If Wall \$ per Unit Area	If Berm \$ per Unit Vol.	Top Width	Run:Rise ft:ft	Add'tnl \$ per Unit Length	Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Perturbs Incr- #Up #Dn	On Struct?	Important Reflec- tions?		
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	2,632.2	5,843.7	100.00	40.00	0.00	0	0		
									point3	3	2,624.0	4,904.1	100.00	40.00	0.00	0	0		
									point4	4	2,560.6	4,909.6	100.00	40.00	0.00	0	0		
									point5	5	2,567.5	4,777.4	100.00	40.00	0.00	0	0		
									point6	6	3,299.1	4,787.0	100.00	40.00	0.00	0	0		
									point7	7	3,292.2	4,902.7	100.00	40.00	0.00	0	0		
									point8	8	3,244.0	4,906.8	100.00	40.00	0.00	0	0		
									point9	9	3,246.7	5,849.3	100.00	40.00	0.00	0	0		
									point10	10	2,640.5	5,838.2	100.00	40.00					
Barrier 2	W	0.00	99.99	0.00				0.00	point18	18	5,931.2	6,994.6	100.00	40.00	0.00	0	0		
									point12	12	5,927.7	5,581.6	100.00	40.00	0.00	0	0		
									point13	13	5,781.9	5,369.8	100.00	40.00	0.00	0	0		
									point14	14	5,313.2	5,369.8	100.00	40.00	0.00	0	0		
									point15	15	5,306.2	6,838.4	100.00	40.00	0.00	0	0		
									point16	16	5,254.2	6,824.5	100.00	40.00	0.00	0	0		
									point2	2	5,257.6	6,991.2	100.00	40.00					
Barrier4	W	0.00	99.99	0.00				0.00	point19	19	4,708.1	8,603.6	100.00	6.00	0.00	0	0		
									point20	20	3,329.1	8,603.6	100.00	6.00					
Barrier5	W	0.00	99.99	0.00				0.00	point21	21	5,035.8	8,665.2	100.00	6.00	0.00	0	0		
									point22	22	5,649.9	8,663.9	100.00	6.00					
Barrier6	W	0.00	99.99	0.00				0.00	point23	23	6,456.7	6,487.8	100.00	20.00	0.00	0	0		
									point24	24	6,579.0	6,675.3	100.00	20.00	0.00	0	0		
									point25	25	6,642.8	6,637.4	100.00	20.00	0.00	0	0		
									point26	26	6,515.0	6,445.7	100.00	20.00	0.00	0	0		
									point27	27	6,451.2	6,484.8	100.00	20.00					

13727

C:\TNM25\Projects\I15 Ind Ph 2 aka Poplar 18\Year 2040

INPUT: ROADWAYS
13727

Dudek										
MG										
INPUT: ROADWAYS										
PROJECT/CONTRACT:	13727									
RUN:	I15 IndstrlPrjPh 2 aka Poplar 18 - 2040wP									
Roadway		Points								
Name	Width	Name	No.	Coordinates	(pavement)		Flow Control		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt
							Device	Constraint	Vehicles	On
									Affected	Struct?
	ft			ft	ft	ft		mph	%	
Main Street - W. of Hwy 395	100.0	point1	1	807.2	8,559.2	100.00				Average
		point3	3	2,099.7	8,550.5	100.00				
Hwy 395 N. of Main Street	65.0	point37	37	2,185.5	9,286.6	100.00				Average
		point14	14	2,103.8	8,566.0	100.00				
Cataba Road	45.0	point39	39	6,306.0	8,517.8	100.00				Average
		point26	26	6,323.4	7,038.8	100.00				Average
		point27	27	6,334.3	6,789.5	100.00				
I-15 NB	65.0	point41	41	4,447.5	2,852.2	100.00				Average
		point33	33	5,307.0	4,186.3	100.00				Average
		point34	34	6,185.4	5,519.5	100.00				Average
		point35	35	7,783.6	8,021.5	100.00				Average
		point2	2	9,496.1	10,661.3	100.00				
I-15 SB	65.0	point43	43	9,411.9	10,707.1	100.00				Average
		point29	29	6,583.5	6,406.0	100.00				Average
		point30	30	4,899.4	3,781.5	100.00				Average
		point31	31	4,265.6	2,899.7	100.00				
Mesa Linda Street	40.0	point45	45	4,991.4	8,527.9	100.00				Average
		point8	8	5,008.9	5,916.6	100.00				Average
		point9	9	5,003.6	4,598.1	100.00				
Hwy 395 S. of Main Street	65.0	point47	47	2,105.5	8,538.8	100.00				Average
		point16	16	2,000.9	7,420.6	100.00				Average
		point17	17	2,017.4	7,037.6	100.00				Average
		point18	18	2,074.3	6,735.8	100.00				Average
		point19	19	2,201.1	6,379.3	100.00				Average
		point20	20	2,288.6	6,138.7	100.00				Average

INPUT: ROADWAYS
13727

		point21	21	2,317.1	6,008.6	100.00				Average	
		point22	22	2,334.5	5,840.2	100.00				Average	
		point23	23	2,367.6	4,614.0	100.00					
Poplar Street	65.0	point49	49	4,976.8	4,614.1	100.00				Average	
		point11	11	3,636.7	4,603.6	100.00				Average	
		point12	12	2,379.9	4,614.1	100.00					
Hwy 395 S. of Poplar Street	65.0	point50	50	2,367.6	4,614.0	100.00				Average	
		point24	24	2,364.2	3,357.2	100.00					
Main Street - E. of Hwy 395	100.0	point51	51	2,099.7	8,550.5	100.00				Average	
		point4	4	4,977.8	8,536.6	100.00					
Main Street-Mesa Linda St. to Cataba Rd	100.0	point52	52	4,977.8	8,536.6	100.00				Average	
		point5	5	6,303.1	8,547.6	100.00					
Main Street-Cataba Rd to I-15	100.0	point53	53	6,303.1	8,547.6	100.00				Average	
		point6	6	7,950.9	8,553.1	100.00					

INPUT: TRAFFIC FOR LAeq1h Volumes
13727

Dudek MG													
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	13727												
RUN:	I15 IndstrlPrjPh 2 aka Poplar 18 - 2040wP												
Roadway	Points												
Name	Name	No.	Segment										
			Autos										
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Main Street - W. of Hwy 395	point1	1	1048	55	52	55	24	50	0	0	0	0	
	point3	3											
Hwy 395 N. of Main Street	point37	37	4183	55	66	55	292	50	0	0	0	0	
	point14	14											
Cataba Road	point39	39	638	45	5	45	2	40	0	0	0	0	
	point26	26	638	45	5	45	2	40	0	0	0	0	
	point27	27											
I-15 NB	point41	41	4875	70	168	70	560	65	0	0	0	0	
	point33	33	4875	70	168	70	560	65	0	0	0	0	
	point34	34	4875	70	168	70	560	65	0	0	0	0	
	point35	35	4875	70	168	70	560	65	0	0	0	0	
	point2	2											
I-15 SB	point43	43	4875	70	168	70	560	65	0	0	0	0	
	point29	29	4875	70	168	70	560	65	0	0	0	0	
	point30	30	4875	70	168	70	560	65	0	0	0	0	
	point31	31											
Mesa Linda Street	point45	45	308	45	5	45	22	40	0	0	0	0	
	point8	8	308	45	5	45	22	40	0	0	0	0	
	point9	9											
Hwy 395 S. of Main Street	point47	47	3769	55	66	55	346	50	0	0	0	0	
	point16	16	3769	55	66	55	346	50	0	0	0	0	
	point17	17	3769	55	66	55	346	50	0	0	0	0	
	point18	18	3769	55	66	55	346	50	0	0	0	0	

INPUT: TRAFFIC FOR LAeq1h Volumes
13727

	point19	19	3769	55	66	55	346	50	0	0	0	0
	point20	20	3769	55	66	55	346	50	0	0	0	0
	point21	21	3769	55	66	55	346	50	0	0	0	0
	point22	22	3769	55	66	55	346	50	0	0	0	0
	point23	23										
Poplar Street	point49	49	737	45	116	45	110	40	0	0	0	0
	point11	11	737	45	116	45	110	40	0	0	0	0
	point12	12										
Hwy 395 S. of Poplar Street	point50	50	3169	55	194	55	479	50	0	0	0	0
Main Street - E. of Hwy 395	point24	24										
	point51	51	2627	55	47	55	26	50	0	0	0	0
	point4	4										
Main Street-Mesa Linda St. to Cataba Rd	point52	52	3251	55	60	55	41	50	0	0	0	0
Main Street-Cataba Rd to I-15	point5	5										
	point53	53	3251	55	60	55	41	50	0	0	0	0
	point6	6										

INPUT: RECEIVERS

13727

Dudek MG						21 February 2022 TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	13727										
RUN:	I15 IndstrlPrjPh 2 aka Poplar 18 - 2040wP										
Receiver											
Name	No.	#DUs	Coordinates (ground)		Height	Input Sound Levels and Criteria				Active	
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	L _{Aeq} 1h	L _{Aeq} 1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	5,230.5	8,654.1	100.00	5.00	0.00	66	10.0	8.0	Y
ST2	2	1	4,299.0	8,694.7	100.00	5.00	0.00	66	10.0	8.0	Y
ST3	3	1	6,467.0	8,873.1	100.00	5.00	0.00	66	10.0	8.0	Y
M1	4	1	6,447.7	6,498.4	100.00	5.00	0.00	66	10.0	8.0	Y
M2	5	1	3,268.1	4,508.8	100.00	5.00	0.00	66	10.0	8.0	Y
M3	6	1	2,469.0	3,910.1	100.00	5.00	0.00	66	10.0	8.0	Y
M4	8	1	5,255.5	8,692.6	100.00	5.00	0.00	66	10.0	8.0	Y

INPUT: BARRIERS

13727

Dudek					21 February 2022																			
MG					TNM 2.5																			
INPUT: BARRIERS																								
PROJECT/CONTRACT:		13727																						
RUN:		I15 IndstrlPrjPh 2 aka Poplar 18 - 2040wP																						
Barrier									Points															
Name		Type	Height		If Wall	If Berm		Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment									
			Min	Max	\$ per	\$ per	Top	Run:Rise			X	Y	Z	at	Seg	Ht	Perturbs	On	Important					
					Unit	Unit	Width							Point	Incre-	#Up	#Dn	Struct?	Reflec-					
					Area	Vol.									ment				tions?					
			ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft		ft	ft	ft	ft	ft									
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	2,632.2	5,843.7	100.00	40.00	0.00	0	0							
									point3	3	2,624.0	4,904.1	100.00	40.00	0.00	0	0							
									point4	4	2,560.6	4,909.6	100.00	40.00	0.00	0	0							
									point5	5	2,567.5	4,777.4	100.00	40.00	0.00	0	0							
									point6	6	3,299.1	4,787.0	100.00	40.00	0.00	0	0							
									point7	7	3,292.2	4,902.7	100.00	40.00	0.00	0	0							
									point8	8	3,244.0	4,906.8	100.00	40.00	0.00	0	0							
									point9	9	3,246.7	5,849.3	100.00	40.00	0.00	0	0							
									point10	10	2,640.5	5,838.2	100.00	40.00										
Barrier 2	W	0.00	99.99	0.00				0.00	point18	18	5,931.2	6,994.6	100.00	40.00	0.00	0	0							
									point12	12	5,927.7	5,581.6	100.00	40.00	0.00	0	0							
									point13	13	5,781.9	5,369.8	100.00	40.00	0.00	0	0							
									point14	14	5,313.2	5,369.8	100.00	40.00	0.00	0	0							
									point15	15	5,306.2	6,838.4	100.00	40.00	0.00	0	0							
									point16	16	5,254.2	6,824.5	100.00	40.00	0.00	0	0							
									point2	2	5,257.6	6,991.2	100.00	40.00										
Barrier4	W	0.00	99.99	0.00				0.00	point19	19	4,708.1	8,603.6	100.00	6.00	0.00	0	0							
									point20	20	3,329.1	8,603.6	100.00	6.00										
Barrier5	W	0.00	99.99	0.00				0.00	point21	21	5,035.8	8,665.2	100.00	6.00	0.00	0	0							
									point22	22	5,649.9	8,663.9	100.00	6.00										
Barrier6	W	0.00	99.99	0.00				0.00	point23	23	6,456.7	6,487.8	100.00	20.00	0.00	0	0							
									point24	24	6,579.0	6,675.3	100.00	20.00	0.00	0	0							
									point25	25	6,642.8	6,637.4	100.00	20.00	0.00	0	0							
									point26	26	6,515.0	6,445.7	100.00	20.00	0.00	0	0							
									point27	27	6,451.2	6,484.8	100.00	20.00										

13727

C:\TNM25\Projects\I15 Ind Ph 2 aka Poplar 18\Yr 2040 w Prj	1	21 February 20
--	---	----------------

Appendix H-4

On-Site Noise Modeling Data

MECHANICAL EQUIPMENT NOISE LEVEL

Input:

Equipment Locations / Source Noise Data

Site	X	Y	Elev. At Roof or Ground	Source Height	LwA		Sound Level at 50 feet Total	Equip. Location Site / Number	Frequency (in Hz)	500
					Single Source	Number of Units				
HVAC 1 Bldg 1	3708	4725	40	3	94.5	1	63	HVAC 1 Bldg 1 York ZF-048		
HVAC 2 Bldg 1	3708	5110	40	3	94.5	1	63	HVAC 2 Bldg 1 York ZF-048		
HVAC 3 Bldg 1	4810	5110	40	3	94.5	1	63	HVAC 3 Bldg 1 York ZF-048		
HVAC 4 Bldg 1	4810	4725	40	3	94.5	1	63	HVAC 4 Bldg 1 York ZF-048		

Receivers at P.L. and Vicinity				Applicable Standard		Building Elevation 0	Roof Elevation 40
North PL Bldg 1	4261.442	5354.534	0		70		
East PL Bldg 1	4983.534	4990.717	0		70		
West PL Bldg 1	3508.813	4960.18	0		70		
South PL Bldg 1	4275.349	4624.144	0		70		
Commercial to E	6444.12	6516.18	0		65		
Commercial to S	2979.26	4562.87	0		65		
Industrial to S	2488.04	3932.2	0		70		
Commercial to N	5279.72	8169.27	0		70		
Residential to North	5273.55	8696.53	0		55		
Residential to North	4221.49	8685.64	0		55		

Output:

Output:				Location:		Applicable Standard												
				North PL Bldg 1		4261.4	5354.5	0.0	70									
Source Coordinates				Receiver Coordinate s	Location- Equipment	Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Source to Barrier (feet)	Receiver to Barrier (feet)	Barrier (base) (feet)	Barrier Height (feet)	Fresnel No. at 500 Hz	Barrier Attenuation (dBA)	Leq w/o Barrier (dBA)	Leq w/Barrier (dBA)	
Equip Site	X	Y	Z	X	Y													
HVAC 1 Bldg 1	3708	4725	40	4261.4416	5354.5344	York ZF-048	63	5	43.0	838	25	813	40	3.0	0.02	5	38	33
HVAC 2 Bldg 1	3708	5110	40	4261.4416	5354.5344	York ZF-048	63	5	43.0	605	25	580	40	3.0	0.05	6	41	35
HVAC 3 Bldg 1	4810	5110	40	4261.4416	5354.5344	York ZF-048	63	5	43.0	601	25	576	40	3.0	0.05	6	41	35
HVAC 4 Bldg 1	4810	4725	40	4261.4416	5354.5344	York ZF-048	63	5	43.0	835	25	810	40	3.0	0.02	5	38	33
TOTAL Leq:																46	40	
																Without Barrier	With Barrier/ Parapet	

MECHANICAL EQUIPMENT NOISE LEVEL

Input:																		
Equipment Locations / Source Noise Data																		
Site	X	Y	Elev. At Roof or Ground	Source Height	LwA				Equip. Location	Frequency (in Hz)	500							
					Single Source	Number of Units	50 feet Total	Site / Number										
HVAC 1 Bldg 1	3708	4725	40	3	94.5	1	63	HVAC 1 Bldg 1 York ZF-048										
HVAC 2 Bldg 1	3708	5110	40	3	94.5	1	63	HVAC 2 Bldg 1 York ZF-048										
HVAC 3 Bldg 1	4810	5110	40	3	94.5	1	63	HVAC 3 Bldg 1 York ZF-048										
HVAC 4 Bldg 1	4810	4725	40	3	94.5	1	63	HVAC 4 Bldg 1 York ZF-048										
Receivers at P.L. and Vicinity			Applicable Standard		Building Elevation 0		Roof Elevation 40											
North PL Bldg 1	4261.442	5354.534	0	70														
East PL Bldg 1	4983.534	4990.717	0	70														
West PL Bldg 1	3508.813	4960.18	0	70														
South PL Bldg 1	4275.349	4624.144	0	70														
Commercial to E	6444.12	6516.18	0	65														
Commercial to S	2979.26	4562.87	0	65														
Industrial to S	2488.04	3932.2	0	70														
Commercial to N	5279.72	8169.27	0	70														
Residential to North -	5273.55	8696.53	0	55														
Residential to North -	4221.49	8685.64	0	55														
Output:																		
Location:										Applicable Standard								
East PL Bldg 1										4983.5	4990.7	0.0	70					
Source Coordinates				Receiver Coordinate s	Location- Equipment		Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Source to Barrier (feet)	Receiver to Barrier (feet)	Barrier (base) (feet)	Barrier Height (feet)	Fresnel No. at 500 Hz	Barrier Attenuation (dBA)	Leq w/o Barrier (dBA)	Leq w/Barrier (dBA)
Equip Site	X	Y	Z	X	Y													
HVAC 1 Bldg 1	3708	4725	40	4983.5336	4990.7168	York ZF-048	63	5	43.0	1,303	25	1,278	40	3.0	0.01	5	35	29
HVAC 2 Bldg 1	3708	5110	40	4983.5336	4990.7168	York ZF-048	63	5	43.0	1,281	25	1,256	40	3.0	0.01	5	35	30
HVAC 3 Bldg 1	4810	5110	40	4983.5336	4990.7168	York ZF-048	63	5	43.0	211	25	186	40	3.0	0.40	10	50	40
HVAC 4 Bldg 1	4810	4725	40	4983.5336	4990.7168	York ZF-048	63	5	43.0	317	25	292	40	3.0	0.17	8	47	39
TOTAL Leq:																	52	43
																	Without Barrier	With Barrier/ Parapet

MECHANICAL EQUIPMENT NOISE LEVEL

Input:

Equipment Locations / Source Noise Data					LwA				
Site	X	Y	Elev. At	Source	Single Source	Number of Units	Sound Level at	Equip. Location	Frequency (in Hz)
			Roof or Ground							Height	50 feet Total	Site / Number
HVAC 1 Bldg 1	3708	4725	40	3	94.5	1	63	HVAC 1 Bldg 1 York ZF-048	500
HVAC 2 Bldg 1	3708	5110	40	3	94.5	1	63	HVAC 2 Bldg 1 York ZF-048	
HVAC 3 Bldg 1	4810	5110	40	3	94.5	1	63	HVAC 3 Bldg 1 York ZF-048	
HVAC 4 Bldg 1	4810	4725	40	3	94.5	1	63	HVAC 4 Bldg 1 York ZF-048	
Receivers at P.L. and Vicinity					Building				
North PL Bldg 1	4261.442	5354.534	0	70	0	40			
East PL Bldg 1	4983.534	4990.717	0	70					
West PL Bldg 1	3508.813	4960.18	0	70					
South PL Bldg 1	4275.349	4624.144	0	70					
Commercial to E	6444.12	6516.18	0	65					
Commercial to S	2979.26	4562.87	0	65					
Industrial to S	2488.04	3932.2	0	70					
Commercial to N	5279.72	8169.27	0	70					
Residential to North -	5273.55	8696.53	0	55					
Residential to North -	4221.49	8685.64	0	55					

Output:

Location:										Applicable Standard									
West PL Bldg 1										70									
Source Coordinates				Receiver Coordinates		Location- Equipment	Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Source to Barrier (feet)	Receiver to Barrier (feet)	Barrier (base) (feet)	Barrier Height (feet)	Fresnel No. at 500 Hz	Barrier Attenuation (dBA)	Leq w/o Barrier (dBA)	Leq w/Barrier (dBA)	
Equip Site	X	Y	Z	X	Y														
HVAC 1 Bldg 1	3708	4725	40	3508.8128	4960.18	York ZF-048	63	5	43.0	308	25	283	40	3.0	0.18	8	47	39	
HVAC 2 Bldg 1	3708	5110	40	3508.8128	4960.18	York ZF-048	63	5	43.0	249	25	224	40	3.0	0.28	9	49	39	
HVAC 3 Bldg 1	4810	5110	40	3508.8128	4960.18	York ZF-048	63	5	43.0	1,310	25	1,285	40	3.0	0.01	5	34	29	
HVAC 4 Bldg 1	4810	4725	40	3508.8128	4960.18	York ZF-048	63	5	43.0	1,322	25	1,297	40	3.0	0.01	5	34	29	
TOTAL Leq:																	51	43	
																	Without Barrier	With Barrier/ Parapet	

MECHANICAL EQUIPMENT NOISE LEVEL

Input:																		
Equipment Locations / Source Noise Data					LwA													
Site	X	Y	Elev. At Roof or Ground	Source Height	Sound Level at 50 feet Total			Equip. Location Site / Number	Frequency (in Hz)	500								
					Single Source	Number of Units	Building Elevation 0											
HVAC 1 Bldg 1	3708	4725	40	3	94.5	1	63	HVAC 1 Bldg 1 York ZF-048										
HVAC 2 Bldg 1	3708	5110	40	3	94.5	1	63	HVAC 2 Bldg 1 York ZF-048										
HVAC 3 Bldg 1	4810	5110	40	3	94.5	1	63	HVAC 3 Bldg 1 York ZF-048										
HVAC 4 Bldg 1	4810	4725	40	3	94.5	1	63	HVAC 4 Bldg 1 York ZF-048										
Receivers at P.L. and Vicinity					Applicable Standard		Roof Elevation 40											
North PL Bldg 1	4261.442	5354.534	0		70													
East PL Bldg 1	4983.534	4990.717	0		70													
West PL Bldg 1	3508.813	4960.18	0		70													
South PL Bldg 1	4275.349	4624.144	0		70													
Commercial to E	6444.12	6516.18	0		65													
Commercial to S	2979.26	4562.87	0		65													
Industrial to S	2488.04	3932.2	0		70													
Commercial to N	5279.72	8169.27	0		70													
Residential to North -	5273.55	8696.53	0		55													
Residential to North -	4221.49	8685.64	0		55													
Output:																		
					Location: South PL Bldg 1		4275.3		4624.1		0.0		Applicable Standard					
											70							
Source Coordinates				Receiver Coordinates	Location-Equipment	Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Source to Barrier (feet)	Receiver to Barrier (feet)	Barrier (base) (feet)	Barrier Height (feet)	Fresnel No. at 500 Hz	Barrier Attenuation (dBA)	Leq w/o Barrier (dBA)	Leq w/Barrier (dBA)	
Equip Site	X	Y	Z	X	Y													
HVAC 1 Bldg 1	3708	4725	40	4275.3488	4624.144	York ZF-048	63	5	43.0	576	25	551	40	3.0	0.05	6	42	36
HVAC 2 Bldg 1	3708	5110	40	4275.3488	4624.144	York ZF-048	63	5	43.0	747	25	722	40	3.0	0.03	6	39	34
HVAC 3 Bldg 1	4810	5110	40	4275.3488	4624.144	York ZF-048	63	5	43.0	722	25	697	40	3.0	0.03	6	40	34
HVAC 4 Bldg 1	4810	4725	40	4275.3488	4624.144	York ZF-048	63	5	43.0	544	25	519	40	3.0	0.06	6	42	36
TOTAL Leq:																47	41	
																Without Barrier	With Barrier/ Parapet	

MECHANICAL EQUIPMENT NOISE LEVEL

Input:

Equipment Locations / Source Noise Data

Site	X	Y	Elev. At Roof or Ground	Source Height	LwA		Sound Level at 50 feet Total	Equip. Location Site / Number	Frequency (in Hz)	500
					Single Source	Number of Units				
HVAC 1 Bldg 1	3708	4725	40	3	94.5	1	63	HVAC 1 Bldg 1 York ZF-048		
HVAC 2 Bldg 1	3708	5110	40	3	94.5	1	63	HVAC 2 Bldg 1 York ZF-048		
HVAC 3 Bldg 1	4810	5110	40	3	94.5	1	63	HVAC 3 Bldg 1 York ZF-048		
HVAC 4 Bldg 1	4810	4725	40	3	94.5	1	63	HVAC 4 Bldg 1 York ZF-048		
Receivers at P.L. and Vicinity					Building Elevation 0		Roof Elevation 40		Applicable Standard	
North PL Bldg 1	4261.442	5354.534	0						70	
East PL Bldg 1	4983.534	4990.717	0						70	
West PL Bldg 1	3508.813	4960.18	0						70	
South PL Bldg 1	4275.349	4624.144	0						70	
Commercial to E	6444.12	6516.18	0						65	
Commercial to S	2979.26	4562.87	0						65	
Industrial to S	2488.04	3932.2	0						70	
Commercial to N	5279.72	8169.27	0						70	
Residential to North -	5273.55	8696.53	0						55	
Residential to North -	4221.49	8685.64	0						55	

Output:

Output:				Location: Commercial to E				6444.1				6516.2				0.0				Applicable Standard				65								
				Source Coordinates				Receiver Coordinate s		Location- Equipment		Leq (h) at 50' (dBA)		Receiver Elevation (feet)		Source Elevation (feet)		Source to Receiver (feet)		Source to Barrier (feet)		Receiver to Barrier (feet)		Barrier (base) (feet)		Barrier Height (feet)		Fresnel No. at 500 Hz		Barrier Attenuation (dBA)		Leq w/o Barrier (dBA)		Leq w/Barrier (dBA)
Equip Site	X	Y	Z	X	Y																											
HVAC 1 Bldg 1	3708	4725	40	6444.12	6516.18	York ZF-048	63	5	43.0	3,270	25	3,245	40	3.0	0.00	5	27	22														
HVAC 2 Bldg 1	3708	5110	40	6444.12	6516.18	York ZF-048	63	5	43.0	3,076	25	3,051	40	3.0	0.00	5	27	22														
HVAC 3 Bldg 1	4810	5110	40	6444.12	6516.18	York ZF-048	63	5	43.0	2,156	25	2,131	40	3.0	0.00	5	30	25														
HVAC 4 Bldg 1	4810	4725	40	6444.12	6516.18	York ZF-048	63	5	43.0	2,425	25	2,400	40	3.0	0.00	5	29	24														
																TOTAL Leq:		34		30								Without Barrier		With Barrier/ Parapet		

MECHANICAL EQUIPMENT NOISE LEVEL

Input:

Equipment Locations / Source Noise Data

Site	X	Y	Elev. At Roof or Ground	Source Height	LwA		Sound Level at 50 feet Total	Equip. Location Site / Number	Frequency (in Hz)	500
					Single Source	Number of Units				
HVAC 1 Bldg 1	3708	4725	40	3	94.5	1	63	HVAC 1 Bldg 1 York ZF-048		
HVAC 2 Bldg 1	3708	5110	40	3	94.5	1	63	HVAC 2 Bldg 1 York ZF-048		
HVAC 3 Bldg 1	4810	5110	40	3	94.5	1	63	HVAC 3 Bldg 1 York ZF-048		
HVAC 4 Bldg 1	4810	4725	40	3	94.5	1	63	HVAC 4 Bldg 1 York ZF-048		

Receivers at P.L. and Vicinity				Applicable Standard		Building Elevation 0	Roof Elevation 40
North PL Bldg 1	4261.442	5354.534	0		70		
East PL Bldg 1	4983.534	4990.717	0		70		
West PL Bldg 1	3508.813	4960.18	0		70		
South PL Bldg 1	4275.349	4624.144	0		70		
Commercial to E	6444.12	6516.18	0		65		
Commercial to S	2979.26	4562.87	0		65		
Industrial to S	2488.04	3932.2	0		70		
Commercial to N	5279.72	8169.27	0		70		
Residential to North -	5273.55	8696.53	0		55		
Residential to North -	4221.49	8685.64	0		55		

Output:

Output:				Location: Commercial to S			2979.3	4562.9	0.0	Applicable Standard								
				65														
Source Coordinates				Receiver Coordinate s	Location- Equipment	Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Source to Barrier (feet)	Receiver to Barrier (feet)	Barrier (base) (feet)	Barrier Height (feet)	Fresnel No. at 500 Hz	Barrier Attenuation (dBA)	Leq w/o Barrier (dBA)	Leq w/Barrier (dBA)	
Equip Site	X	Y	Z	X	Y													
HVAC 1 Bldg 1	3708	4725	40	2979.26	4562.87	York ZF-048	63	5	43.0	747	25	722	40	3.0	0.03	6	39	34
HVAC 2 Bldg 1	3708	5110	40	2979.26	4562.87	York ZF-048	63	5	43.0	911	25	886	40	3.0	0.02	5	38	32
HVAC 3 Bldg 1	4810	5110	40	2979.26	4562.87	York ZF-048	63	5	43.0	1,911	25	1,886	40	3.0	0.00	5	31	26
HVAC 4 Bldg 1	4810	4725	40	2979.26	4562.87	York ZF-048	63	5	43.0	1,838	25	1,813	40	3.0	0.00	5	32	27
TOTAL Leq:																42	37	
																Without Barrier	With Barrier/ Parapet	

MECHANICAL EQUIPMENT NOISE LEVEL

Input:

Equipment Locations / Source Noise Data

Site	X	Y	Elev. At		Source Height	LwA		Sound Level at 50 feet Total	Equip. Location Site / Number	Frequency (in Hz)	500
			Roof or Ground			Single Source	Number of Units				
HVAC 1 Bldg 1	3708	4725	40	3		94.5	1	63	HVAC 1 Bldg 1 York ZF-048		
HVAC 2 Bldg 1	3708	5110	40	3		94.5	1	63	HVAC 2 Bldg 1 York ZF-048		
HVAC 3 Bldg 1	4810	5110	40	3		94.5	1	63	HVAC 3 Bldg 1 York ZF-048		
HVAC 4 Bldg 1	4810	4725	40	3		94.5	1	63	HVAC 4 Bldg 1 York ZF-048		

Receivers at P.L. and Vicinity					Applicable Standard		Building Elevation 0	Roof Elevation 40
North PL Bldg 1	4261.442	5354.534			0	70		
East PL Bldg 1	4983.534	4990.717			0	70		
West PL Bldg 1	3508.813	4960.18			0	70		
South PL Bldg 1	4275.349	4624.144			0	70		
Commercial to E	6444.12	6516.18			0	65		
Commercial to S	2979.26	4562.87			0	65		
Industrial to S	2488.04	3932.2			0	70		
Commercial to N	5279.72	8169.27			0	70		
Residential to North -	5273.55	8696.53			0	55		
Residential to North -	4221.49	8685.64			0	55		

Output:

Output:				Location: Industrial to S				2488.0	3932.2	0.0	Applicable Standard 70							
				Receiver Coordinate s				Location-Equipment	Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Source to Barrier (feet)	Receiver to Barrier (feet)	Barrier (base) (feet)	Barrier Height (feet)	Fresnel No. at 500 Hz	Barrier Attenuation (dBA)	Leq w/o Barrier (dBA)	Leq w/Barrier (dBA)
Equip Site	X	Y	Z	X	Y													
HVAC 1 Bldg 1	3708	4725	40	2488.04	3932.2	York ZF-048	63	5	43.0	1,455	25	1,430	40	3.0	0.01	5	34	29
HVAC 2 Bldg 1	3708	5110	40	2488.04	3932.2	York ZF-048	63	5	43.0	1,696	25	1,671	40	3.0	0.01	5	32	27
HVAC 3 Bldg 1	4810	5110	40	2488.04	3932.2	York ZF-048	63	5	43.0	2,604	25	2,579	40	3.0	0.00	5	28	24
HVAC 4 Bldg 1	4810	4725	40	2488.04	3932.2	York ZF-048	63	5	43.0	2,454	25	2,429	40	3.0	0.00	5	29	24
TOTAL Leq:																	37	32
																	Without Barrier	With Barrier/ Parapet

MECHANICAL EQUIPMENT NOISE LEVEL

Input:

Equipment Locations / Source Noise Data

Site	X	Y	Elev. At		Source Height	LwA		Sound Level at 50 feet Total	Equip. Location Site / Number	Frequency (in Hz)	500
			Roof or Ground			Single Source	Number of Units				
HVAC 1 Bldg 1	3708	4725	40	3		94.5	1	63	HVAC 1 Bldg 1 York ZF-048		
HVAC 2 Bldg 1	3708	5110	40	3		94.5	1	63	HVAC 2 Bldg 1 York ZF-048		
HVAC 3 Bldg 1	4810	5110	40	3		94.5	1	63	HVAC 3 Bldg 1 York ZF-048		
HVAC 4 Bldg 1	4810	4725	40	3		94.5	1	63	HVAC 4 Bldg 1 York ZF-048		

Receivers at P.L. and Vicinity			Applicable Standard		Building Elevation 0	Roof Elevation 40
North PL Bldg 1	4261.442	5354.534	0	70		
East PL Bldg 1	4983.534	4990.717	0	70		
West PL Bldg 1	3508.813	4960.18	0	70		
South PL Bldg 1	4275.349	4624.144	0	70		
Commercial to E	6444.12	6516.18	0	65		
Commercial to S	2979.26	4562.87	0	65		
Industrial to S	2488.04	3932.2	0	70		
Commercial to N	5279.72	8169.27	0	65		
Residential to North -	5273.55	8696.53	0	55		
Residential to North -	4221.49	8685.64	0	55		

Output:

				Location: Commercial to N		5279.7		8169.3		0.0		Applicable Standard		65	
Source Coordinates				Receiver Coordinates		Location-Equipment		Leq (h) at 50' (dBA)		Receiver Elevation (feet)		Source Elevation (feet)		Source to Receiver (feet)	
Equip Site	X	Y	Z	X	Y	York ZF-048	63	5	43.0	3,786	25	3,761	40	3.0	0.00
HVAC 1 Bldg 1	3708	4725	40	5279.72	8169.27	York ZF-048	63	5	43.0	3,439	25	3,414	40	3.0	0.00
HVAC 2 Bldg 1	3708	5110	40	5279.72	8169.27	York ZF-048	63	5	43.0	3,095	25	3,070	40	3.0	0.00
HVAC 3 Bldg 1	4810	5110	40	5279.72	8169.27	York ZF-048	63	5	43.0	3,476	25	3,451	40	3.0	0.00
HVAC 4 Bldg 1	4810	4725	40	5279.72	8169.27	York ZF-048	63	5	43.0	3,476	25	3,451	40	3.0	0.00
TOTAL Leq:														32	
														Without Barrier	
														With Barrier/Parapet	

MECHANICAL EQUIPMENT NOISE LEVEL

Input:

Equipment Locations / Source Noise Data

Site	X	Y	Elev. At Roof or Ground	Source Height	LwA		Sound Level at 50 feet Total	Equip. Location Site / Number	Frequency (in Hz)	500
					Single Source	Number of Units				
HVAC 1 Bldg 1	3708	4725	40	3	94.5	1	63	HVAC 1 Bldg 1 York ZF-048		
HVAC 2 Bldg 1	3708	5110	40	3	94.5	1	63	HVAC 2 Bldg 1 York ZF-048		
HVAC 3 Bldg 1	4810	5110	40	3	94.5	1	63	HVAC 3 Bldg 1 York ZF-048		
HVAC 4 Bldg 1	4810	4725	40	3	94.5	1	63	HVAC 4 Bldg 1 York ZF-048		

Receivers at P.L. and Vicinity				Applicable Standard		Building Elevation 0	Roof Elevation 40
North PL Bldg 1	4261.442	5354.534	0		70		
East PL Bldg 1	4983.534	4990.717	0		70		
West PL Bldg 1	3508.813	4960.18	0		70		
South PL Bldg 1	4275.349	4624.144	0		70		
Commercial to E	6444.12	6516.18	0		65		
Commercial to S	2979.26	4562.87	0		65		
Industrial to S	2488.04	3932.2	0		70		
Commercial to N	5279.72	8169.27	0		70		
Residential to North -	5273.55	8696.53	0		55		
Residential to North -	4221.49	8685.64	0		55		

Output:

Output:						Location: Residential to North - Bldg1		5273.6	8696.5	0.0	Applicable Standard							
											55							
Source Coordinates				Receiver Coordinate s	Location- Equipment		Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Source to Barrier (feet)	Receiver to Barrier (feet)	Barrier (base) (feet)	Barrier Height (feet)	Fresnel No. at 500 Hz	Barrier Attenuation (dBA)	Leq w/o Barrier (dBA)	Leq w/Barrier (dBA)
Equip Site	X	Y	Z	X	Y													
HVAC 1 Bldg 1	3708	4725	40	5273.55	8696.53	York ZF-048	63	5	43.0	4,269	25	4,244	40	3.0	0.00	5	24	19
HVAC 2 Bldg 1	3708	5110	40	5273.55	8696.53	York ZF-048	63	5	43.0	3,913	25	3,888	40	3.0	0.00	5	25	20
HVAC 3 Bldg 1	4810	5110	40	5273.55	8696.53	York ZF-048	63	5	43.0	3,616	25	3,591	40	3.0	0.00	5	26	21
HVAC 4 Bldg 1	4810	4725	40	5273.55	8696.53	York ZF-048	63	5	43.0	3,998	25	3,973	40	3.0	0.00	5	25	20
TOTAL Leq:																31	26	
																Without Barrier	With Barrier/ Parapet	

Appendix I

Transportation Attachments

Amanda Meroux

From: Justin Schlaefli <Jschlaefli@tkeengineering.com>
Sent: Monday, December 6, 2021 2:17 PM
To: Lisa Valdez; Michael Thornton - City Engineer; Ryan Leonard - Senior Planner
Cc: Patrick Cruz; Sean Kilkenny; Amanda Meroux
Subject: Re: Poplar 18 Transportation Scoping Memo- #2

Lisa,

It appears my comments were addressed. Thank you. I will forward a recommendation to approve the scoping agreement and we will return the form once signed.

Thank you,

Justin Schlaefli, P.E., T.E., PTOE | Resident Engineer

TKE ENGINEERING, INC. | Civil Engineering Consultants

d: 619.818.6465 | o: 951.680.0440 | jschlaefli@tkeengineering.com

73710 Fred Waring Drive #104 | Palm Desert, CA 92260 | www.TKEengineering.com



Civil Engineering | Municipal Staff Augmentation | Construction Management | Inspection | Water Resources | Water and Wastewater Systems | Drainage | Traffic Engineering | Transportation Planning | Grant Writing and Funds Acquisition | Land Development | Land Surveying | Environmental Planning | Utility Coordination | Development Services

From: Lisa Valdez <lvaldez@dudek.com>
Sent: Monday, December 6, 2021 1:20:33 PM
To: Michael Thornton - City Engineer; Ryan Leonard - Senior Planner; Justin Schlaefli
Cc: Patrick Cruz; Sean Kilkenny; Amanda Meroux
Subject: RE: Poplar 18 Transportation Scoping Memo- #2

Good afternoon,

I understand that the City's computer and phone system were down at the time the email below was sent. I am resending this, just in case!

Thanks,

Lisa Valdez

Senior Transportation Planner

DUDEK

621 Chapala Street, Santa Barbara, CA 93101

O: 805.308.8505 C: 805.450.2583

www.dudek.com

From: Lisa Valdez

Sent: Thursday, December 2, 2021 11:34 AM

To: Michael Thornton - City Engineer <mthornton@cityofhesperia.us>; Ryan Leonard - Senior Planner <rleonard@cityofhesperia.us>; jschlaefli@tkeengineering.com

Cc: Patrick Cruz <pcruz@dudek.com>; Sean Kilkenny <skilkenny@dudek.com>; Amanda Meroux <ameroux@dudek.com>

Subject: Poplar 18 Transportation Scoping Memo- #2

Good morning,

In response to comments received from the City/TKE Engineering (11/17/21), we are submitting a revised Transportation Scoping memo and Agreement for the Poplar 18 project. The documents are attached for your review. Please let us know if you have any questions.

Thanks!

Lisa Valdez

Senior Transportation Planner

DUDEK

621 Chapala Street, Santa Barbara, CA 93101

O: 805.308.8505 C: 805.450.2583

www.dudek.com

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the City of Hesperia requirements for Traffic impact analysis of the following project. The analysis must follow either the Riverside County Transportation Department Traffic Study Guidelines dated **December 2020**; or San Bernardino County Transportation Authority (SBCTA) congestion management plan(CMP) guidelines and City of Hesperia approved TIA guidelines, as applicable.

Case No. _____

Related Cases-

SP No. _____

EIR No. _____

GPA No. _____

CZ No. _____

Project Name: Poplar 18 Industrial

Project Address: Between the Interstate 15 (I-15) and U.S. Highway 395 (US 395), south of Main Street and north of Poplar Street in the City of Hesperia

Project Description Development of 414,700 square feet (SF) industrial/warehousing across two buildings. Project to be evaluated in one phase.

	<u>Consultant</u>	<u>Developer</u>
Name:	<u>Dudek</u>	<u>Covington Realty Advisors, LLC</u>
Address:	<u>38 North Marengo Avenue</u> <u>Pasadena, California 91101</u>	<u>14180 Dallas Parkway, Suite 730</u> <u>Dallas, Texas 75254</u>
Telephone:	<u>(626) 204-9800</u>	_____
Fax:	<u>(626) 204-9834</u>	_____

A. Trip Generation Source: ITE Trip Generation, 10th Edition (2017); High Cube Warehouse Trip Generation Study (WSP, January 2019)

Current GP Land Use	<u>RC/CIBP</u>	Proposed Land Use	<u>CIBP</u>
Current Zoning	<u>RC/CIBP</u>	Proposed Zoning	<u>CIBP</u>

Current Trip Generation

Proposed Trip Generation (**PCE**)

	In	Out	Total	In	Out	Total
AM Trips	<u>0</u>	<u>0</u>	<u>0</u>	<u>147</u>	<u>27</u>	<u>174</u>
PM Trips	<u>0</u>	<u>0</u>	<u>0</u>	<u>32</u>	<u>142</u>	<u>174</u>

Internal Trip Allowance ☐ Yes ☒ No (_____ %Trip Discount)

Pass-By Trip Allowance ☐ Yes ☒ No (_____ %Trip Discount)

B. Trip Geographic Distribution: N____% S____% E____% W____% (**VARIES**)

(See attached exhibits for detailed assignment)

C. Background Traffic

Project Build-out Year 2024

Annual Ambient Growth Rate: 2.0/yr

Phase Year(s) N/A

Other area projects to be analyzed: Project list attached per correspondence with City of Hesperia Planning Department (May 4, 2021)

Model/ Forecast methodology: San Bernardino County Transportation Analysis Model (SBTAM)

D. Study Intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies)

See attachment

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

E. Study Roadway Segments: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies)

_____	_____
_____	_____
_____	_____

F. Other Jurisdictional Impacts

Is this project within a City's Sphere of Influence or one- mile radius of City boundaries? ☒ Yes ☐ No
If so, name of City Jurisdiction: Unincorporated County of San Bernardino; Caltrans

G. Site Plan (Provide reduced copy) **See Exhibit 1**

H. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by local agency)

Vehicle Miles Traveled (VMT) Analysis

Truck turning exhibits

95th percentile queuing analysis

Existing and future roadway cross sections

J. Existing Conditions

Traffic count data must be new or recent within one year. Provide traffic count dates if using other than new counts.
Date of counts See attached scoping letter detailing the proposed methodology

Recommended by:

Lisa Valdez
Consultant's Representative

10/01/21
Date

Scoping Agreement Submitted on 10/1/21
Revised on 12/2/21

Approved Scoping Agreement:

City Engineer

Date

December 2, 2021

13727

Mr. Ryan Leonard, AICP
City of Hesperia
9700 Seventh Avenue
Hesperia, CA 92345

Subject: *Poplar 18 Industrial Project Traffic Impact Analysis Scoping Agreement*

Dear Mr. Leonard:

Dudek appreciates the opportunity to provide this scoping letter regarding the traffic impact analysis (TIA) for the Poplar Industrial Park Project (proposed project/project) in the City of Hesperia (City). The proposed project is located between the Interstate 15 (I-15) and U.S. Highway 395 (US Hwy 395), south of Main Street and north of Poplar Street, on the western side of the City. See Figure 1 for the project location and proposed study area.

This letter describes the anticipated trip generation and trip distribution of the proposed project and provides the proposed analysis methodology for the TIA. The methodology in this scoping letter is based on the July 2020 City of Hesperia TIA Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment (LOS) (TIA Guidelines).

Project Description

The Project would include construction of an industrial/warehouse building with associated office spaces, surface parking, and loading areas on 17.63-acres of vacant land. The building would be approximately 414,700 square feet (SF) (see Figure 2). The project is anticipated to begin construction in 2022, with an Opening Year of 2024.

Access to the project site is proposed along Poplar Street, Lassen Road, and Mesa Linda Street. Four project access driveways would be provided, as shown in Figure 2: two driveways on the western side of the site off Lassen Road and two driveways on the easternmost side of the project site along Mesa Linda Street. Paved passenger vehicle parking areas would be provided along the east and west side of the building, while tractor-trailer stalls and loading docks would be provided on the north side of the building.

Trip Generation

Trip generation estimates for the proposed project are based on daily and AM and PM peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Handbook, 11th Edition* (2021) and the *Transportation Uniform Mitigation Fee (TUMF) High-Cube Warehouse Trip Generation Study* (WSP, January 29, 2019). Additionally, Passenger car equivalent (PCE) factors were applied to the trip generation estimates to account for truck traffic. The San Bernardino County Congestion Management Program (CMP) (2016 Update) indicates that projects with high truck percentages should convert project trips to PCE. A 1.5 PCE factor was applied to 2-axle trucks, 2.0 PCE for 3-axle trucks, and a 3.0 PCE factor was applied to 4-axle trucks per Appendix B of the San Bernardino County CMP.

The layout of the building is most representative of a high-cube warehousing land use. However, as a specific end-user is not in place for the proposed project, a 35% General Light Industrial and 65% High-Cube Warehousing split of the total building square footage, consistent with the splits used in the Hesperia Commerce Center II Traffic Impact Analysis (July 2, 2020), is applied to provide a conservative analysis. The General Light Industrial trip rate is higher (approximately 6 times higher in the AM peak hour and 4 times higher in the PM peak hour) than the High-Cube Fulfillment Center Warehouse trip rate. Thus, incorporation of the industrial trip rate split, in the event that a small portion of the building is converted to a more industrial-specific land use, increases the total trip generation estimate compared to a warehousing-only estimate, the expected sole land use of the facility. As such, the following vehicle-mix and land use assumptions were made to provide a conservative analysis:

- **General Light Industrial (ITE Code 110)** trip rates were used to obtain trip generation estimates for 35% of the project, totaling approximately 145,145 SF of the total estimated building area. As the *ITE Trip Generation Handbook* does not provide information regarding the type of vehicle generated for light industrial uses, vehicle mixes data and percentages from the Fontana Truck Trip Generation Study, August, 2004 for Light Industrial land use are utilized.
- **High-Cube Fulfillment Center Warehouse** trip rates were used to obtain trip generation estimates for 65% of the project, totaling approximately 269,555 SF of the total estimate building area. Although the *ITE Trip Generation Handbook* provides trip rates for High-Cube Fulfillment Center Warehouses (ITE Code 155), the rates provided in the *TUMF High-Cube Warehouse Trip Generation Study*, January 29, 2019, are utilized in this analysis. This study was commissioned by the Western Riverside Council of Governments (WRCOG) and includes trip generation rates based on an analysis of 11 local high-cube fulfillment centers. Although the AM peak hour WRCOG rate is slightly less conservative than the ITE rates for High-Cube Fulfillment Center Warehouses, the daily and PM peak hour WRCOG rates are higher. Additionally, as all data points were collected within the Inland Empire, the WRCOG study serves as a more accurate and representative data source to determine the trip generation for the proposed project. As inbound and outbound vehicle splits were not included in the study, the *ITE High-Cube Warehouse Vehicle Trip Generation Analysis* (October 2016) vehicle splits are utilized.

As shown in Table 1 below, the proposed project would generate 1,281 daily trips, 140 AM peak hour trips (120 inbound and 20 outbound), and 139 PM peak hour trips (26 inbound and 113 outbound). Accounting for truck traffic from warehousing and industrial land uses, the proposed project would generate 1,634 daily PCE trips, 179 AM peak hour PCE trips (153 inbound and 26 outbound), and 177 PM peak hour PCE trips (33 inbound and 144 outbound).

Table 1: Project Trip Generation

Land Use	ITE Code	Size/Units		Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
TRIP RATES										
General Light Industrial ¹	110	TSF		4.960	0.616	0.084	0.700	0.082	0.548	0.630
High-Cube Fulfillment Center Warehouse ²	N/A	TSF		2.129	0.094	0.028	0.122	0.046	0.119	0.165
TRIP GENERATION										
35% Building - General Light Industrial	110	145.145	TSF	707	95	13	108	13	81	94
65% Building - High-Cube FC Warehouse	N/A	269.555	TSF	574	25	8	33	12	32	44
I-15 Industrial Project Total		414.700	TSF	1,281	120	21	141	25	113	138
TRIP GENERATION SUMMARY (Non-PCE, by Vehicle Classification)										
General Light Industrial - 35% of Building										
Vehicle Mix ³	% ³									
Passenger Vehicles	78.6%			556	74	10	84	10	64	74
2-Axle Trucks	8.0%			57	8	1	9	1	6	7
3-Axle Trucks	3.9%			28	4	1	5	1	3	4
4+-Axle Trucks	9.5%			67	9	1	10	1	8	9
General Light Industrial Total (Non-PCE)				708	95	13	108	13	81	94
High-Cube Fulfillment Center Warehouse - 65% of Building										
Vehicle Mix ⁴	% Daily ⁴	% AM ⁴	% PM ⁴							
Passenger Vehicles	82.2%	84.4%	87.3%	472	21	6	28	11	28	39
2-4 Axle Trucks	7.6%	6.6%	6.7%	44	2	0	2	1	2	3
5+-Axle Trucks	10.2%	9.0%	6.1%	58	2	1	3	1	2	3
High-Cube Fulfillment Center Warehouse Total (Non-PCE)				574	25	8	33	12	32	44
Total by Vehicle Classification										
Passenger Vehicles				1,027	95	16	111	21	92	113
Trucks				254	25	4	29	5	21	26
Total Trip Generation (Non-PCE)				1,281	120	20	140	26	113	139

Table 1: Project Trip Generation

Land Use	ITE Code	Size/Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
TRIP GENERATION SUMMARY (PCE, by Vehicle Classification)									
General Light Industrial - 35% of Building									
Vehicle Mix	PCE ⁵								
Passenger Vehicles	1.0		556	75	11	86	11	64	75
2-Axle Trucks	1.5		86	12	2	14	2	10	12
3-Axle Trucks	2.0		56	8	2	10	2	7	9
4+-Axle Trucks	3.0		202	27	4	31	4	24	28
General Light Industrial Total (PCE)			900	122	19	141	19	105	124
High-Cube Fulfillment Center Warehouse - 65% of Building									
Vehicle Mix	PCE ⁵								
Passenger Vehicles	1.0		472	21	6	28	11	28	39
2-4 Axle Trucks	2.0		87	3	1	4	2	4	6
5+-Axle Trucks	3.0		175	7	2	9	2	6	8
High-Cube Fulfillment Center Warehouse Total (PCE)			735	32	10	42	15	38	53
Total by Vehicle Classification									
Passenger Vehicles			1,027	95	16	111	21	92	113
Trucks			607	58	10	68	12	52	64
Total Trip Generation (PCE)			1,634	153	26	179	33	144	177

Notes: Rounding discrepancies may occur. TSF = Thousand Square Feet; PCE = Passenger Car Equivalent

¹Trip rates from the Institute of Transportation Engineers (ITE), *Trip Generation*, 11th Edition, 2021.

²Trip rates from the TUMF High Cube Warehouse Trip Generation Study, January 29, 2019; inbound/outbound splits from the ITE High Cube Warehouse Vehicle Trip Generation Analysis, October 2016.

³Vehicle Mix and Percent from the Fontana Truck Trip Generation Study, August, 2004.

⁴Vehicle Mix and Percent from the TUMF High Cube Warehouse Trip Generation Study, January 29, 2019.

⁵Passenger Car Equivalent (PCE) factors from the San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016.

Trip Distribution

Project trip distribution percentages are based on logical travel paths to and from the project site, as well as consideration of City truck routes, and consideration of the traffic distribution patterns analyzed for the Hesperia Commerce Center II Traffic Impact Analysis, approximately ½-mile from the project site, and the I-15 Industrial Park project (currently under review), and adjacent to the project site. Main Street east of US Hwy 395 is not designated as a City truck route; therefore, all project truck traffic traveling to and from I-15 will be routed through the Joshua Street interchange. The preliminary project trip distribution percentages are shown in Figures 3 and 4, for passenger vehicle and truck trips, respectively. In addition, Dudek will obtain a select zone model forecast and review it against the estimated trip distribution patterns. The trip distribution will be adjusted, as appropriate, for consistency with the select zone forecast information.

Level of Service Analysis

Per the City's TIA Guidelines, a LOS analysis is required for projects that generate over 250 peak hour trips. While the project would generate less than 250 peak hour trips, a LOS analysis will be prepared for full disclosure of potential project impacts. Per the City's TIA Guidelines, intersections included in the analysis must consist of, at least, the intersections of Collector, or higher, roadways where the project would generate 50 or more peak hour trips through those intersections. For the proposed project, once the project trips are distributed on the local road network, they quickly fall below the 50 peak hour trip threshold. Therefore, the following study intersections have been selected based on our professional judgment and knowledge of the existing area, although they may not meet the 50 peak hour threshold (see Figure 1 for the study area):

- | | |
|---|---|
| 1. US Hwy 395/Phelan Road - Main Street | 7. I-15 SB Off-Ramp/Joshua Street |
| 2. Mesa Linda Street/Phelan Road | 8. I-15 NB On-Ramp/Joshua Street |
| 3. US Hwy 395/Poplar Street | 9. Lassen Road/Project Dwy-North |
| 4. Lassen Road/Poplar Street | 10. Mesa Linda Street/Project Dwy - North |
| 5. US Hwy 395/Three Flags Road | 11. Lassen Road/Project Dwy-South |
| 6. US Hwy 395/Joshua Street | 12. Mesa Linda Street/Project Dwy - South |

Analysis Scenarios

Consistent with the City TIA Guidelines, intersection LOS analyses will be prepared for the weekday AM and PM peak hours at the study area intersections listed above for the following analysis scenarios:

- Existing (2021) Conditions
- Existing Plus Project
- Opening Year (2024) No Project (future short-term year with cumulative projects and ambient growth)
- Opening Year (2024) Plus Project
- Horizon Year (2040) No Project
- Horizon Year (2040) Plus Project

Horizon Year (2040) traffic volumes will be obtained from the San Bernardino County Transportation Authority's (SBCTA) San Bernardino Transportation Analysis Model (SBTAM). Baseline and Plus Project traffic volumes from

SBTAM will be post-processed to model specifications to ensure volume balancing between adjacent intersections and flow conservation throughout the network.

Cumulative Projects

Cumulative projects are projects that are proposed and in the review process, but not yet fully approved; or projects that have been approved, but not fully constructed or occupied. A list of the cumulative project developments provided by City staff on May 4, 2021, is included in Table 2 below. Figure 5 identifies the locations of the cumulative projects.

Table 2 - Cumulative Development Land Use Summary

ID No.	Case No.	Location	Land Use	Quantity	Units
H1	CUP21-00006	Southeast corner of Caliente Road and Joshua Street; APN: 3039-331-04	Automotive Care Center	13.813	TSF
H2	CUP21-00003	East side of Hwy 395, south of Arenal Street; APN: 3064-421-01 & 02	High-Cube Cold Storage Warehouse	491.000	TSF
H3	CUP21-00001	North side of Muscatel Street, approximately 300 feet east of Caliente Road; APN: 3064-561-15	Automobile Care Center	12.800	TSF
H4	CUP20-00007	West side of Caliente Road, 400 feet north of Joshua Street; APN: 3039-321-08	Automobile Care Center	12.765	TSF
H5	CUP20-00006	West side of Amargosa Road, north of the California Aqueduct; APN: 0405-062-51	High-Cube Fulfillment Center Warehouse	440.000	TSF
H6	CUP19-00010	North of Phelan Road (Main Street), west of Highway 395, south of Yucca Terrace Drive and east of the Los Angeles Department of Water and Power line corridor; APN: 3064-351-03, 3064-361-01, 3064-391-01, 3064-401-02.	General Light Industrial; High-Cube Fulfillment Center Warehouse	3,750.000	TSF
H7	CUP19-00006	West side of Three Flags Avenue (Lassen Road) approximately 350 feet south of Poplar Street; APN: 3064-591-04	Automobile Parts and Service Center	3.100	TSF
			General Office Building	3.100	TSF
			Automobile Care Center	6.000	TSF
			Car Wash and Detail Center	7.200	TSF
H8	CUP18-00003	Northwest corner of US Highway 395 and Phelan Road; APN 3064-401-07 & 08	Convenience Market	4.631	TSF
			Fast-food Restaurant without Drive-Through Window	1.858	TSF
			Gasoline/Service Station	5.110	TSF
			Automated Car Wash	1.343	TSF
			Food Cart Pod	2.330	TSF

Table 2 - Cumulative Development Land Use Summary

ID No.	Case No.	Location	Land Use	Quantity	Units
H9	Industrial Park	East and west side of Caliente Road between the Union Pacific Railroad and Cedar Street; APNs: 3039-311-03 thru 06, 3039-341-01 thru 07, 3039-351-08, and 3039-431-02 & 04	Industrial Park	3,500.000	TSF
H10	Industrial Park	I-15 Phase I Industrial Park	Industrial Park	1,850,000	TSF

Source: Email correspondence with City of Hesperia Planning Department, May 4, 2021, including the addition of the I-15 Industrial Phase 1 project.

Notes: TSF = thousand square feet

Traffic Counts

Although COVID-19 shelter-in-place restrictions were lifted on June 15, 2021, traffic patterns have not returned to pre-pandemic conditions immediately. As such, new AM and PM peak hour intersection counts will not be collected as they may not reflect typical traffic conditions in the study area. Dudek is concurrently preparing the Traffic Impact Analysis for the adjacent I-15 Industrial Park Project (Cumulative Project H10) and will use the traffic counts from this Traffic Impact Analysis based on the methodology described below.

As part of the I-15 Industrial Park Project, Dudek used traffic counts from the Hesperia Commerce Center II Traffic Impact Analysis (July 2, 2020) for the locations available. Traffic counts were collected in September 2019 and January 2020 at the study intersections, as part of the Hesperia Commerce Center II Traffic Impact Analysis. The counts were collected before the COVID-19 shelter-in-place restrictions were put in place and are considered a reasonable baseline for existing conditions in the study area. Where historical traffic counts were not available, new traffic counts were collected on Wednesday, July 14, 2021. The traffic volumes were adjusted to typical (non-COVID-19) 2021 traffic conditions per the following methodology:

- Historical count data were provided where available from the Hesperia Commerce Center II Traffic Impact Analysis. These historical counts were grown to 2021 using an ambient annual growth rate of 2.0%. These volumes represent “non-COVID-19” conditions during the existing analysis year.
- New counts were collected at up to three representative locations where historical counts are available. The percent difference between the two data sets were then compared to determine the difference between COVID-19 conditions and projected non-COVID-19 conditions during the year 2021.
- Where historical counts are not available (this study includes one location – Lassen Road/Poplar Street), new traffic counts were collected and adjusted to non-COVID-19 conditions by applying the percentage differences noted above based on the representative count locations.

Caltrans Facilities

Caltrans released the Transportation Impact Study Guide (TISG) in May 2020, replacing the 2002 Guide for the Preparation of Traffic Impact Studies. Per the 2020 TISG, consistent with Senate Bill (SB) 743, Caltrans' primary review focus is now VMT, replacing LOS as the metric used to evaluate traffic impacts in CEQA transportation analyses. However, Caltrans released the Interim Local Development Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance (December 18, 2020), targeted at operational and safety analyses to address a specific geometric or operational issue related to the State Highway System and connections with the State Highway System. As such, the following Caltrans facility analysis is included in this TIA:

- Off-ramp queueing analysis at I-15 off-ramp and US Hwy 395 intersections in the project study area (listed above) to identify 95th percentile queues during peak hour traffic conditions and ensure sufficient storage is available such that the project would not add or contribute to queueing onto the highway mainline or exceed left-turn pocket storage capacities. 95th percentile queueing will be analyzed using Synchro/SimTraffic software.

Vehicle Miles Traveled (VMT) Analysis

VMT Screening

The City's TIA guidelines provide three types of VMT screening that can be applied to the proposed project to screen from a project-level VMT assessment.

- **Step 1: Transit Priority Area (TPA) Screening:** *Projects located within a TPA¹ may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may NOT be appropriate if the project:*
 1. Has a Floor Area Ratio (FAR) of less than 0.75;
 2. Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
 3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization)
 4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units

¹ A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor per the definitions below:

Pub. Resources Code, § 21064.3 ("Major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.)

Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.")

As shown in Attachment A, the proposed project is not located within a TPA. The nearest bus service is provided by Victor Valley Transit Routes 21P/W and 68 along Main Street, approximately 0.25 miles north of the easternmost building and approximately 0.75 miles northeast of the westernmost building. Routes 21P/W and 68 operate with one- to two-hour service frequencies. As such, the project site is not located within one-half mile of a TPA and **cannot be screened out** using the proximity to transit availability criteria.

- **Step 2: Low VMT Area Screening:** Residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area.

For this screening in the SBCTA area, the SBTAM travel forecasting model was used to measure VMT performance for City of Hesperia and for individual traffic analysis zones (TAZs). TAZs are geographic polygons similar to Census block groups used to represent areas of homogenous travel behavior. Total daily VMT per service population (population plus employment) was estimated for each TAZ. This presumption may not be appropriate if the project land uses would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

To identify if the project is in a low VMT-generating area, the analyst may review the SBCTA screening tool and compare the appropriate baseline TAZ VMT to current County of San Bernardino VMT threshold of 32.7 VMT/Service Population. Additionally, as noted above, the analyst must identify if the project is consistent with the existing land use within that TAZ and use professional judgement that there is nothing unique about the project that would otherwise be mis-represented utilizing the data from the travel demand model.

The SBCTA screening tool (available at <https://sbcta.maps.arcgis.com/>) was used to determine whether the proposed project is in a low VMT-generating area. Per the City's guidelines, a low VMT-generating area is determined as below the baseline County of San Bernardino origin-destination (OD) VMT/Service Population.

As shown in Table 3, the OD VMT per service population for the project TAZ is 95.1, and the County of San Bernardino OD VMT per service population is 33.2 for the year 2021.² Therefore, the TAZ would be 186.4% above the County's threshold, which would not meet the required baseline screening criteria established in the City's guidelines. As such, the proposed project **cannot be screened out** using this criterion.

² The City's TIA guidelines state the current County of San Bernardino OD VMT threshold is 32.7 VMT/Service Population, which is representative of the year 2016. The screening tool export provided in Attachment A identifies the County baseline as 33.2 OD VMT/Service Population, which is representative of the year 2021 per the baseline year associated with the proposed Project.

Table 3 – Summary of Project TAZ VMT

Base Year (2021)	VMT
OD VMT Per Service Population	
Project TAZ	95.1
Jurisdiction	33.2
% Difference (Project TAZ – Jurisdiction)	+186.4%
Threshold	33.2

Source: SBCTA VMT Screening Tool (Attachment A)

- **Step 3: Project Type Screening:** Projects generating less than 110 daily vehicle trips³

The City's guidelines identify several local serving land uses; however, the proposed project is not a retail project and would not fall under a local serving land use and would generate greater than 110 daily vehicle trips; therefore, the project **cannot be screened out** from further VMT analysis using this criterion.

VMT Analysis

Based on the above VMT screening analysis, Dudek will prepare a VMT analysis within the TIA for the proposed project consistent with the City's TIA guidelines, current CEQA guidelines, and SB 743. The VMT of the proposed project and the forecast regional VMT will be calculated using the SBTAM. The TAZ of the project site will be modified with the land uses of the proposed project, and a Select Zone model run will be performed to determine the project's trip assignment. As part of the Select Zone run, the VMT estimate of the project's TAZ will be determined. Then, the regional VMT estimate for the study area region (extent to be determined by the City) will also be provided from SBTAM. VMT estimates will be analyzed for the Baseline plus Project and Cumulative plus Project conditions.

The VMT analysis will be conducted per the City's TIA guidelines and may be supplemented with guidance from the State Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (November 2017), and/or other approved sources by the City. If VMT impacts are found, Dudek will coordinate with the City to determine the appropriate VMT reduction strategies provided in their VMT guidelines, and other resources noted in the OPR and Caltrans Technical Advisories (or other City-approved sources) to mitigate project impacts. The methodologies, findings, and recommendations of the VMT analysis will be provided in the VMT analysis.

³ This threshold ties directly to the OPR technical advisory and notes that CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

Special Issues

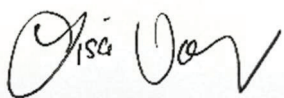
The following special issues will be addressed in the TIA:

- WB-67 truck turning templates will be overlayed at truck access driveways and locations where significant truck turning is anticipated (i.e. intersections #3, #4, and #6) to ensure the availability of adequate curb radii, driveway throat widths, and street widths along Mesa Linda Street, Lassen Road, and Poplar Street.
- Roadway cross sections to be provided for all roads fronting the project showing existing and future (with project) improvements to full City standards.
- A sight distance analysis will be conducted at any locations which may impact site access, specifically along Mesa Linda Street.
- Traffic signal warrant analysis will be conducted for all unsignalized study area intersections where two-way stop controlled (TWSC) or all-way stop-controlled (AWSC) intersections operate or are forecast to operate at levels of service inconsistent with the City and County General Plan standards.
- “Fair-share” contribution percentages and planning level cost estimates will be calculated for any recommended improvements determined in this TIA. Dudek requests that the City provide a list of improvements that are included in the City’s DIF and/or CIP programs.
- A 95th percentile peak hour queueing analysis at the US Hwy 395 intersections and I-15 off-ramp per the Interim Local Development Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance (December 18, 2020) as discussed above. Caltrans signal timing will be obtained from District 8 for utilization at the Caltrans intersections for this analysis. Improvement measures will be recommended based on the outcome of these analyses.
 - A 95th percentile peak hour queueing analysis will also be provided at any study intersection which operates or is projected to operate at an unacceptable level of service or where the project contributes more than 5 trips to a critical movement.

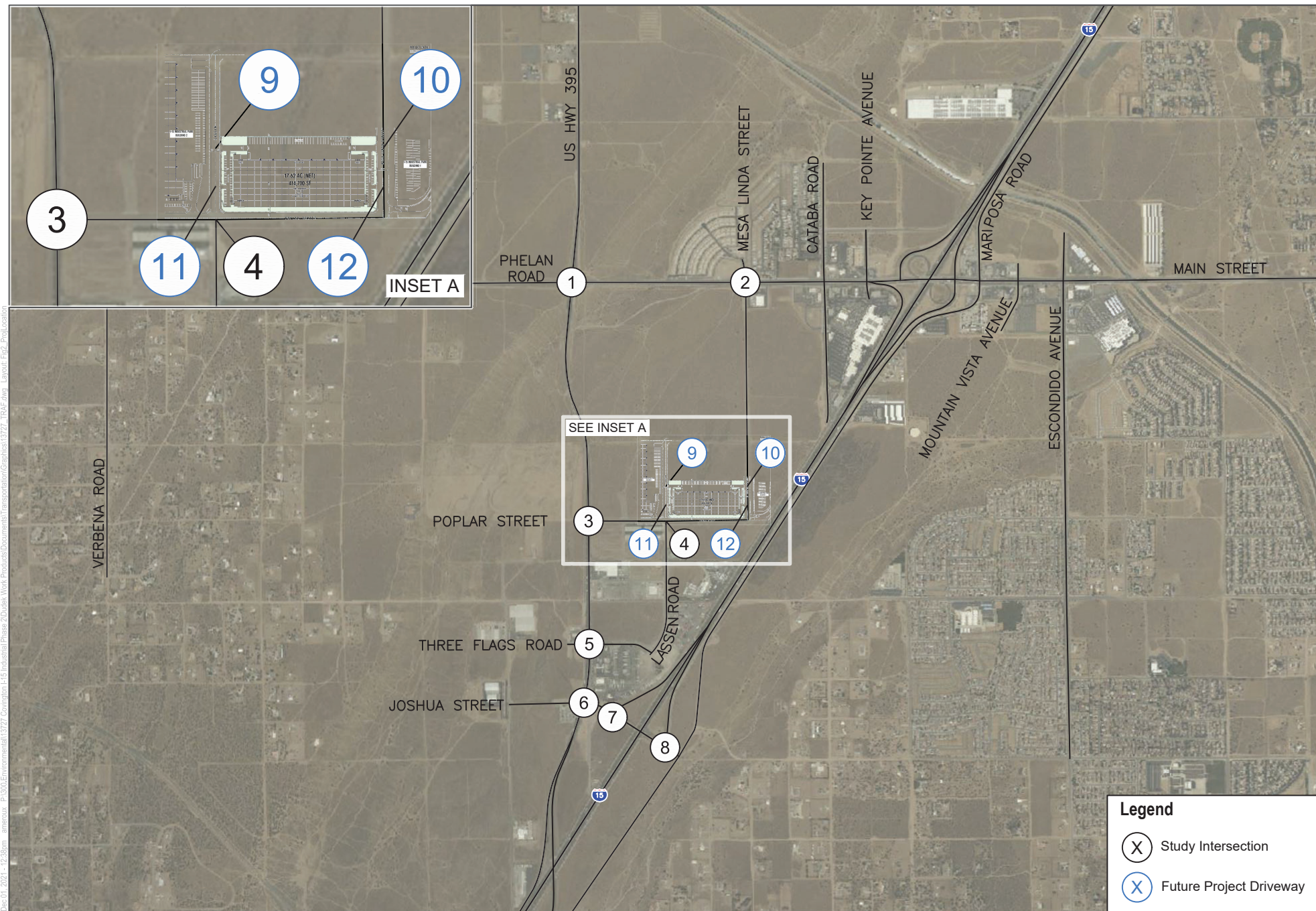
Conclusion

Dudek is pleased to submit this scoping letter for the Poplar 18 Industrial Park Project TIA. If you have any questions or wish to discuss the proposed methodology in greater detail, please contact me at (805) 450-2583 or lvaldez@dudek.com. We look forward to working with you.

Sincerely,



Lisa Valdez
Senior Transportation Planner



SOURCE: Bing Maps; RGA 2021

DUDEK



NOT TO SCALE

FIGURE 1
Project Location and Study Area

Poplar 18 Industrial Park

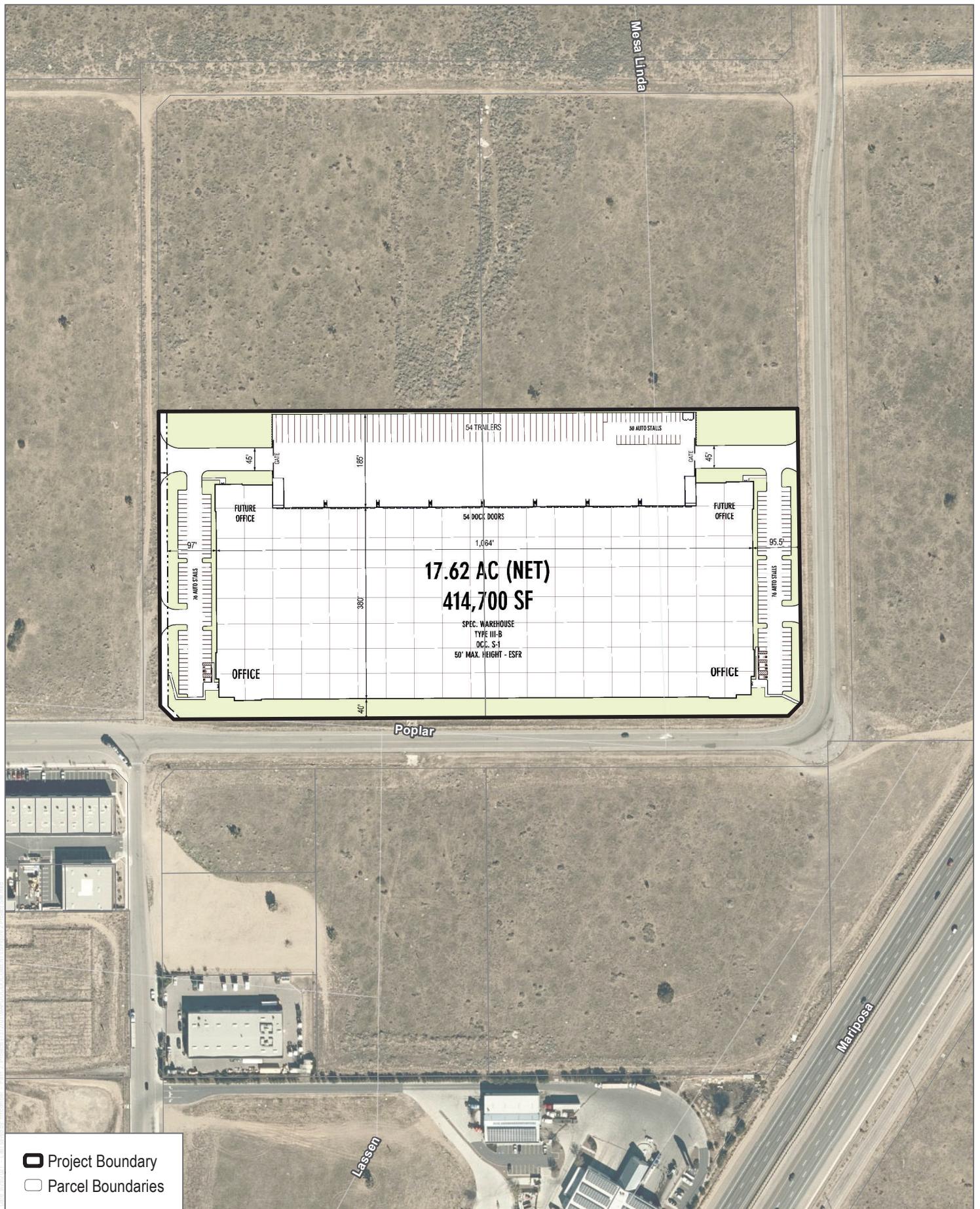
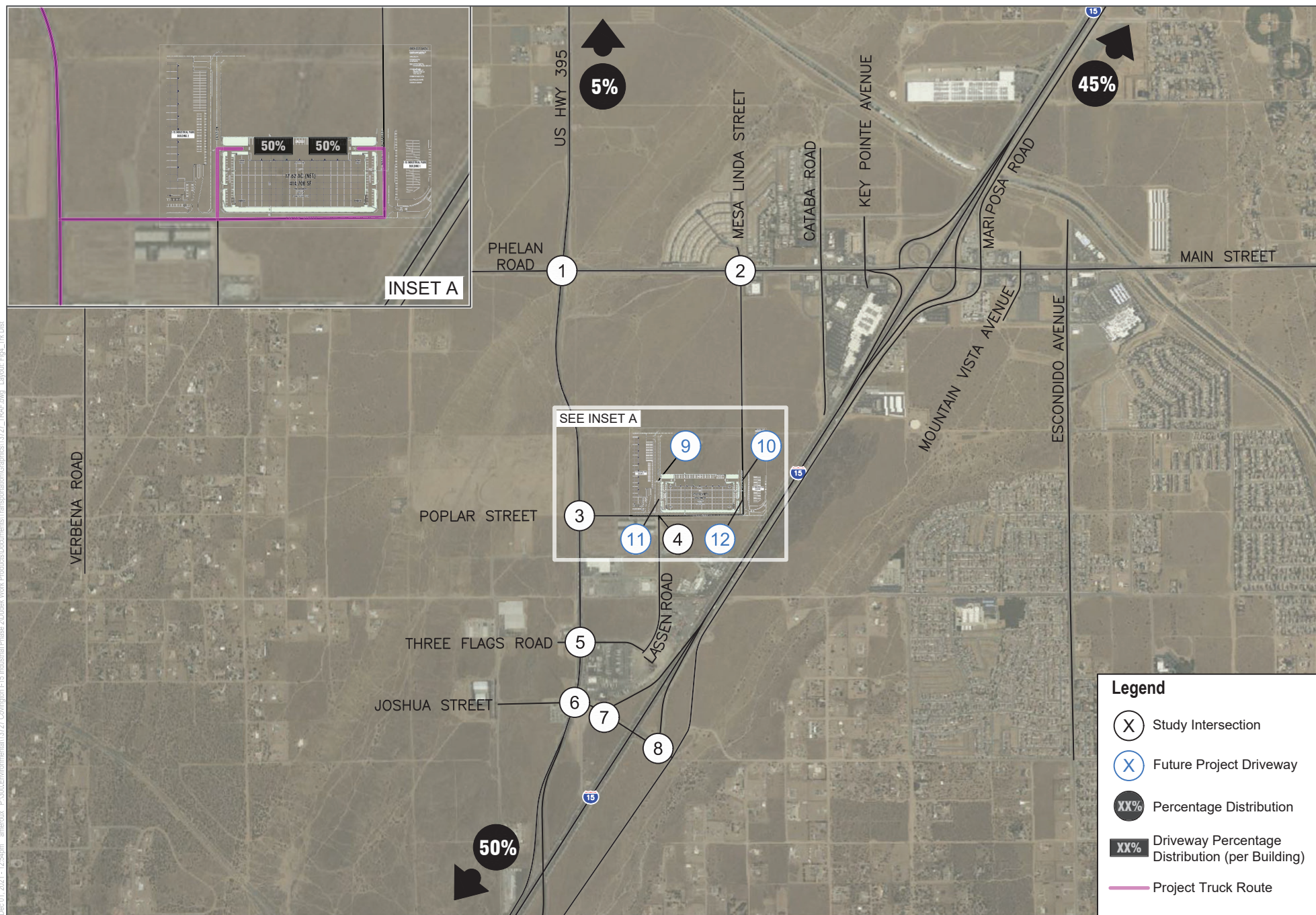


FIGURE 2

Project Site

Poplar 18 Industrial Park

Dec 01, 2021 - 12:54pm amercux P:\000_Environmental\13727_Coverage\1-15 Industrial Phase 2\ Dudek Work Products\Documents\Transportation\Graphics\13727_TPA2.dwg Layout: Final_TPA.dwg



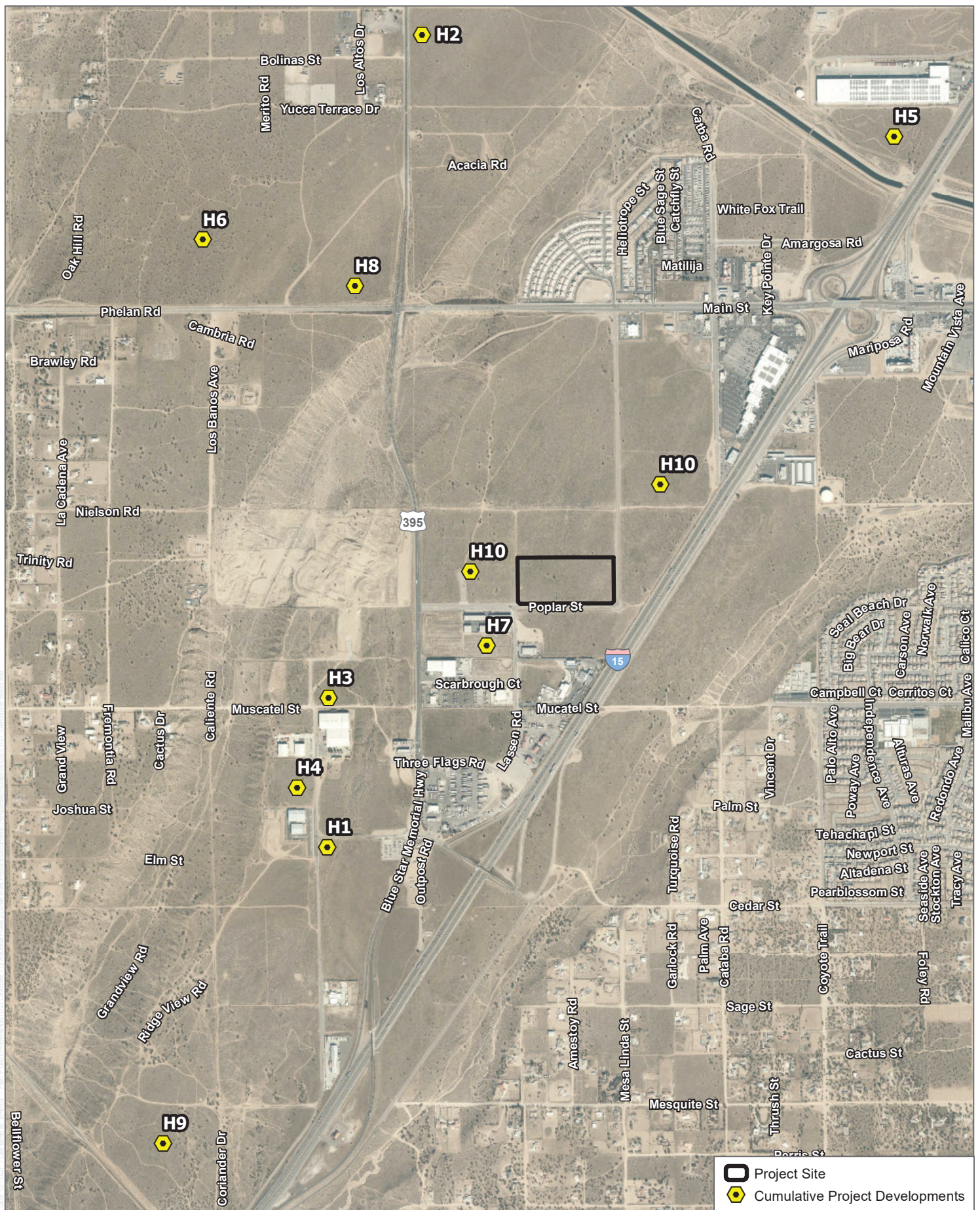
SOURCE: Bing Maps; RGA 2021

DUDEK



NOT TO SCALE

FIGURE 4
Project Truck Trip Distribution
Poplar 18 Industrial Park



Esri World Imagery 2019; Open Street Map 2019; City of Hesperia 2021

Figure 5

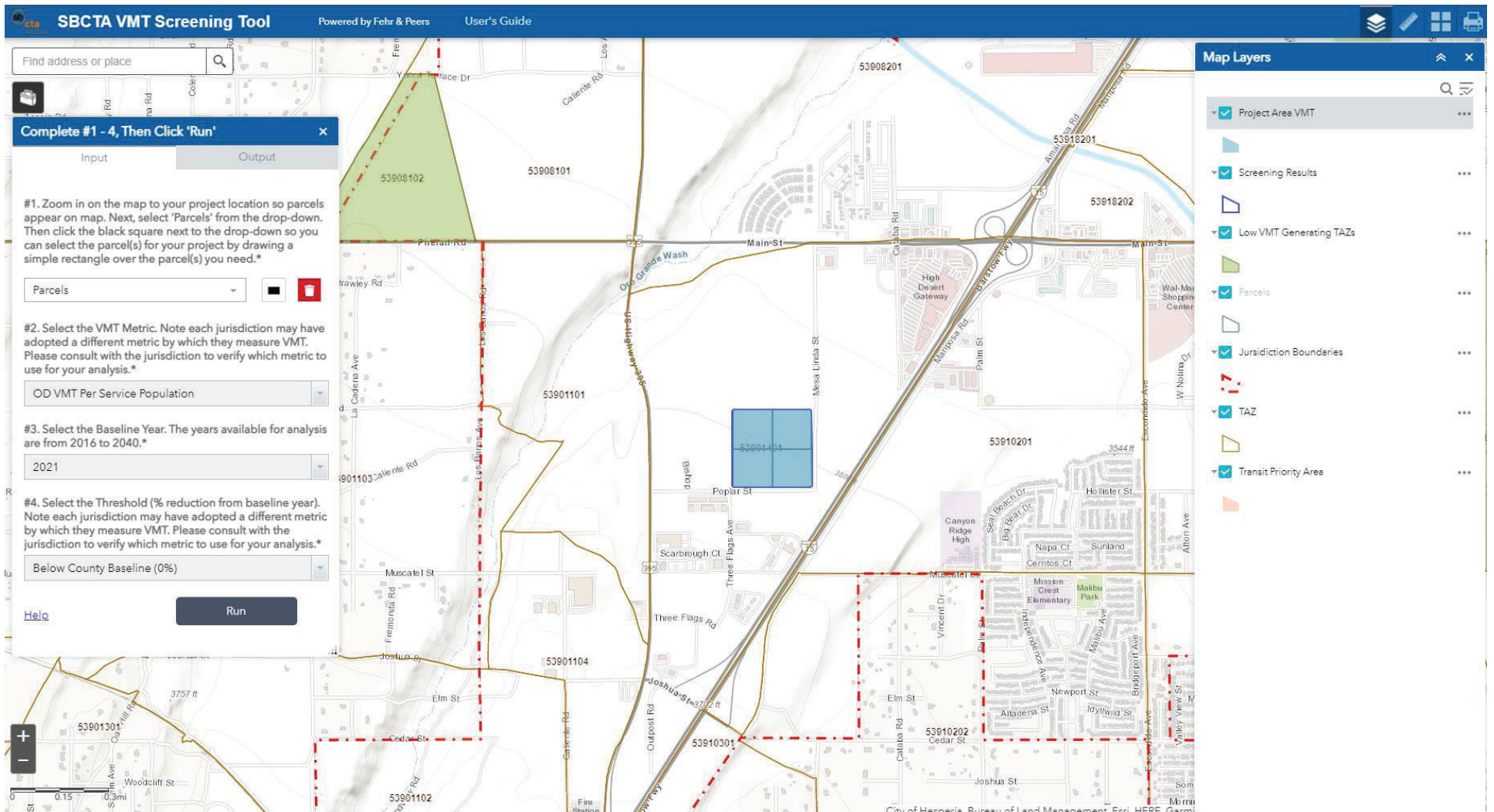
Cumulative Project Locations

Poplar 18 Industrial Park



Attachment A

SBCTA VMT Screening Tool Results



VTM per Service Population

Completely within a TPA? No (Fail)

Within a low VMT generating TAZ? No (Fail)

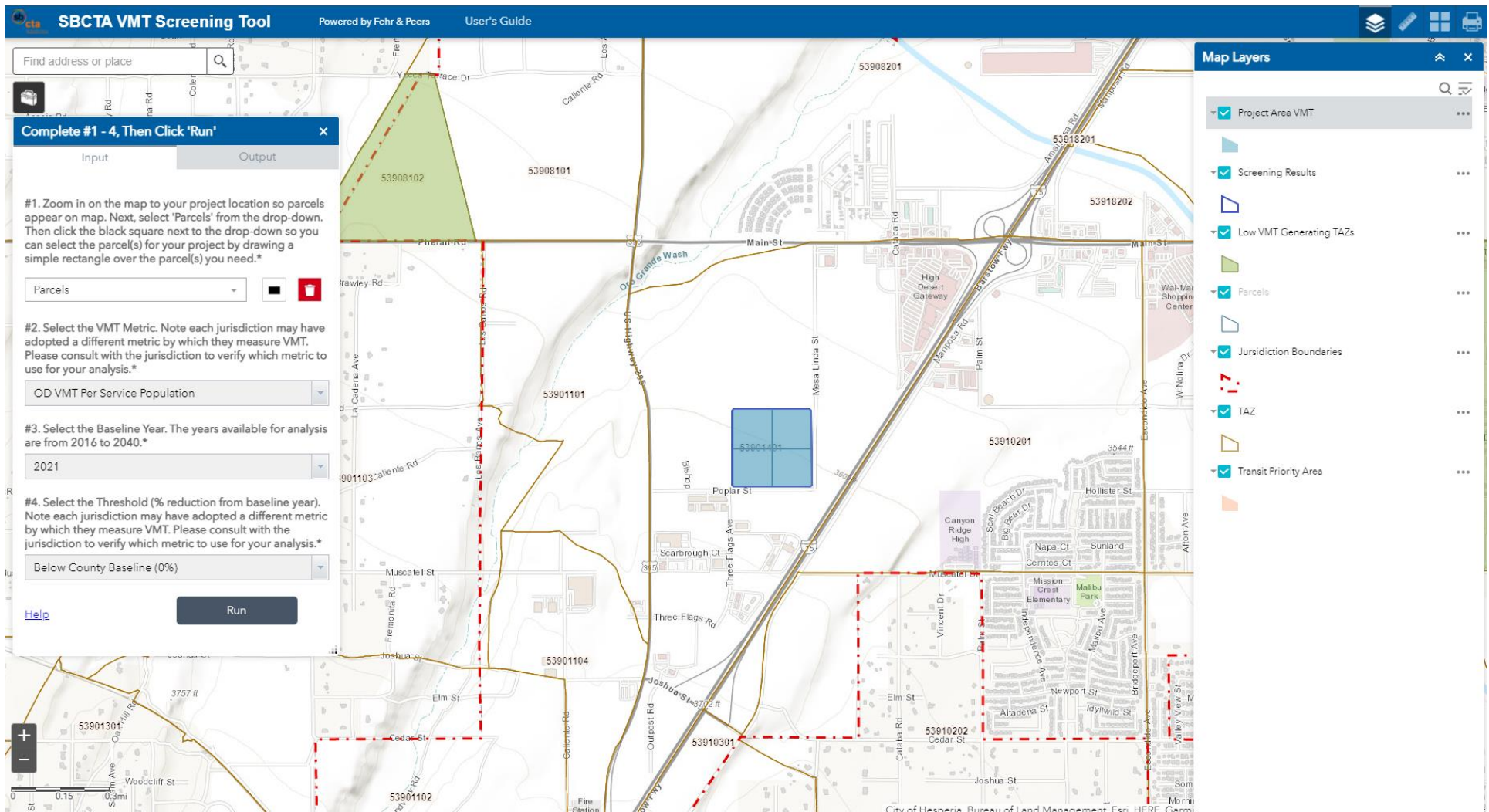
Note Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.

Assessor Parcel Number (APN)	306458102
Traffic Analysis Zone (TAZ)	53901401
TAZ VMT	95.1
Jurisdiction VMT	33.2
% Difference	186.4%
VTM Metric	OD VMT Per Service Population
Threshold	33.2

Assessor Parcel Number (APN)	306458104
Traffic Analysis Zone (TAZ)	53901401
TAZ VMT	95.1
Jurisdiction VMT	33.2
% Difference	186.4%
VTM Metric	OD VMT Per Service Population
Threshold	33.2

Assessor Parcel Number (APN)	306458103
Traffic Analysis Zone (TAZ)	53901401
TAZ VMT	95.1
Jurisdiction VMT	33.2
% Difference	186.4%
VTM Metric	OD VMT Per Service Population
Threshold	33.2

Assessor Parcel Number (APN)	306458105
Traffic Analysis Zone (TAZ)	53901401
TAZ VMT	95.1
Jurisdiction VMT	33.2
% Difference	186.4%
VTM Metric	OD VMT Per Service Population
Threshold	33.2



VTM per Service Population

Completely within a TPA? No (Fail)

Within a low VMT generating TAZ? No (Fail)

Note Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.

Assessor Parcel Number (APN)	306458102
Traffic Analysis Zone (TAZ)	53901401
TAZ VMT	95.1
Jurisdiction VMT	33.2
% Difference	186.4%
VTM Metric	OD VMT Per Service Population
Threshold	33.2

Assessor Parcel Number (APN)	306458104
Traffic Analysis Zone (TAZ)	53901401
TAZ VMT	95.1
Jurisdiction VMT	33.2
% Difference	186.4%
VTM Metric	OD VMT Per Service Population
Threshold	33.2

Assessor Parcel Number (APN)	306458103
Traffic Analysis Zone (TAZ)	53901401
TAZ VMT	95.1
Jurisdiction VMT	33.2
% Difference	186.4%
VTM Metric	OD VMT Per Service Population
Threshold	33.2

Assessor Parcel Number (APN)	306458105
Traffic Analysis Zone (TAZ)	53901401
TAZ VMT	95.1
Jurisdiction VMT	33.2
% Difference	186.4%
VTM Metric	OD VMT Per Service Population
Threshold	33.2

I-15 Industrial Park Project VMT (Bldg. 3 - Poplar St & US 395)

2016	I-15 Industrial Park Bldg. 3 (Project)	Entire San Bernardino County*	Entire San Bernardino County**
Population	-	2,140,539	
Employment	657	790,400	
Service Population	657	2,930,939	-
Homebased Work (HBW) VMT	10,563	13,562,903	
PA VMT	13,869	77,318,944	
OD VMT (auto only)	16,825	84,840,769	
OD VMT (auto + truck)	24,297	89,650,705	
HBW VMT per employee	16.1	17.2	
PA VMT per service population	21.1	26.4	
OD VMT per service population (auto only)	25.6	28.9	
OD VMT per service population (auto + truck)	37.0	30.6	30.0

2040	I-15 Industrial Park Bldg. 3 (Project)	Entire San Bernardino County*	Entire San Bernardino County**
Population	-	2,721,775	
Employment	657	1,027,872	
Service Population	657	3,749,647	-
Homebased Work (HBW) VMT	9,559	17,113,294	
PA VMT	12,774	103,271,633	
OD VMT (auto only)	16,865	112,779,783	
OD VMT (auto + truck)	24,014	120,214,345	
HBW VMT per employee	14.5	16.6	
PA VMT per service population	19.4	27.5	
OD VMT per service population (auto only)	25.7	30.1	
OD VMT per service population (auto + truck)	36.6	32.1	30.0

*: Estimated using Translutions "No Project" model runs

**: Obtained from City of Hesperia TIA Guidelines, July 2020

Roadway VMT / Project's effect on VMT (Within San Bernardino County)

2016	With Project	Without Project
Roadway VMT	57,453,875	57,484,358
Service Population	2,931,596	2,930,939
VMT per service population	19.6	19.6

2040	With Project	Without Project
Roadway VMT	88,380,178	88,660,625
Service Population	3,750,304	3,749,647
VMT per service population	23.6	23.6

Queuing and Blocking Report

Existing

AM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	B33	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	T	L	T
Maximum Queue (ft)	165	396	426	21	306	374	305	584	537	487	265	525
Average Queue (ft)	52	222	247	3	141	192	210	456	389	144	253	514
95th Queue (ft)	116	354	380	16	251	318	401	657	616	581	310	571
Link Distance (ft)		5798	5798		2174	2174		512	512	2895		455
Upstream Blk Time (%)								16	6			32
Queuing Penalty (veh)								65	23			0
Storage Bay Dist (ft)	340			245			280				240	
Storage Blk Time (%)		1			1		0	55			8	64
Queuing Penalty (veh)		1			0		0	53			40	137

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	SB	B47
Directions Served	TR	T
Maximum Queue (ft)	483	3157
Average Queue (ft)	452	1606
95th Queue (ft)	506	3725
Link Distance (ft)	455	5926
Upstream Blk Time (%)	10	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: US Hwy 395 & Poplar Street

Movement	WB	SB	B33	B33
Directions Served	R	L	T	
Maximum Queue (ft)	31	57	553	557
Average Queue (ft)	7	20	315	172
95th Queue (ft)	29	49	735	577
Link Distance (ft)	546		512	512
Upstream Blk Time (%)			4	1
Queuing Penalty (veh)			20	6
Storage Bay Dist (ft)		375		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Existing

AM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	49	78	167	25	44	58	171	176	48	49	140	142
Average Queue (ft)	16	30	81	1	17	19	55	59	14	14	63	70
95th Queue (ft)	40	60	139	10	38	47	124	129	35	39	123	126
Link Distance (ft)	301	301		613	613		903	903	903			1966
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)	0											
Queuing Penalty (veh)	0											

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	8
95th Queue (ft)	23
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Existing

AM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	41	65	111	46	55	15	133	128	11	91	140	144
Average Queue (ft)	11	21	43	12	28	2	60	41	0	39	49	56
95th Queue (ft)	35	56	89	35	47	9	109	95	5	78	105	114
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	5
Average Queue (ft)	0
95th Queue (ft)	2
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	22	53
Average Queue (ft)	3	29
95th Queue (ft)	14	41
Link Distance (ft)		1440
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	25	
Storage Blk Time (%)	0	7
Queuing Penalty (veh)	0	0

Queuing and Blocking Report

Existing

AM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB
Directions Served	LT
Maximum Queue (ft)	45
Average Queue (ft)	4
95th Queue (ft)	24
Link Distance (ft)	919
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 345

Queuing and Blocking Report

Existing

PM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	B33	B69	B69
Directions Served	L	T	TR	L	T	TR	L	T	TR	T	T	
Maximum Queue (ft)	208	387	406	225	550	579	305	584	545	2966	478	482
Average Queue (ft)	48	187	205	21	325	358	276	584	517	2833	399	348
95th Queue (ft)	124	311	329	116	513	544	403	587	531	3533	638	650
Link Distance (ft)		5798	5798		2174	2174		512	512	2895	430	430
Upstream Blk Time (%)								56	20	82	37	9
Queuing Penalty (veh)								373	134	1087	243	61
Storage Bay Dist (ft)	340			245			280					
Storage Blk Time (%)		1			23		0	87				
Queuing Penalty (veh)		0			2		0	147				

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	SB	SB	SB	B47
Directions Served	L	T	TR	T
Maximum Queue (ft)	265	525	484	834
Average Queue (ft)	241	456	388	254
95th Queue (ft)	324	620	583	743
Link Distance (ft)		455	455	5926
Upstream Blk Time (%)		20	7	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)	240			
Storage Blk Time (%)	13	47		
Queuing Penalty (veh)	53	91		

Intersection: 3: US Hwy 395 & Poplar Street

Movement	WB	WB	NB	NB	SB	B33	B33
Directions Served	L	R	T	TR	L	T	
Maximum Queue (ft)	36	52	1998	1999	40	550	542
Average Queue (ft)	5	13	1454	1442	9	240	82
95th Queue (ft)	24	39	2706	2717	34	666	395
Link Distance (ft)	546	546	1966	1966		512	512
Upstream Blk Time (%)			20	19		2	0
Queuing Penalty (veh)			130	121		8	1
Storage Bay Dist (ft)					375		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Queuing and Blocking Report
Existing

PM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	77	68	157	24	62	214	933	947	939	81	146	162
Average Queue (ft)	28	25	73	3	19	69	515	522	253	23	56	65
95th Queue (ft)	61	55	128	15	48	212	1186	1186	891	58	118	133
Link Distance (ft)	301	301		613	613		903	903	903			1966
Upstream Blk Time (%)							18	20	3			
Queuing Penalty (veh)							84	95	16			
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)						0	52					
Queuing Penalty (veh)						0	18					

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	36
Average Queue (ft)	6
95th Queue (ft)	23
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Existing

PM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	105	89	94	38	97	215	1747	1747	355	134	192	207
Average Queue (ft)	41	36	39	7	38	26	648	642	95	56	60	77
95th Queue (ft)	83	74	78	27	72	126	1803	1802	350	107	146	161
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)							20	21				
Queuing Penalty (veh)							0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)							39	37	0		0	
Queuing Penalty (veh)							7	33	0		0	

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	10
Average Queue (ft)	1
95th Queue (ft)	5
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	24	48
Average Queue (ft)	8	30
95th Queue (ft)	26	43
Link Distance (ft)		1440
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	25	
Storage Blk Time (%)	1	8
Queuing Penalty (veh)	2	1

Queuing and Blocking Report

Existing

PM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB
Directions Served	LT
Maximum Queue (ft)	45
Average Queue (ft)	6
95th Queue (ft)	29
Link Distance (ft)	919
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 2709

Queuing and Blocking Report
Existing plus Project

AM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	B33	B69	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	T	T	L
Maximum Queue (ft)	204	368	386	26	268	334	305	577	532	796	77	265
Average Queue (ft)	51	217	239	2	138	182	209	449	381	441	6	256
95th Queue (ft)	127	319	341	14	231	294	398	660	612	1969	81	302
Link Distance (ft)		5798	5798		2174	2174		512	512	2895	430	
Upstream Blk Time (%)								16	6	2		
Queuing Penalty (veh)								66	24	16		
Storage Bay Dist (ft)	340			245			280					240
Storage Blk Time (%)		1			1		0	53				18
Queuing Penalty (veh)		0			0		0	52				89

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	SB	SB	B47
Directions Served	T	TR	T
Maximum Queue (ft)	525	490	2976
Average Queue (ft)	516	448	1665
95th Queue (ft)	572	519	3678
Link Distance (ft)	455	455	5926
Upstream Blk Time (%)	30	9	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)	54		
Queuing Penalty (veh)	123		

Intersection: 3: US Hwy 395 & Poplar Street

Movement	WB	WB	NB	SB	B33	B33
Directions Served	L	R	TR	L	T	
Maximum Queue (ft)	65	32	8	70	564	555
Average Queue (ft)	20	7	0	26	346	178
95th Queue (ft)	59	27	4	60	756	579
Link Distance (ft)	546	546	1966		512	512
Upstream Blk Time (%)					4	1
Queuing Penalty (veh)					23	5
Storage Bay Dist (ft)				375		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Queuing and Blocking Report
Existing plus Project

AM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	68	88	147	24	44	57	158	167	39	43	132	142
Average Queue (ft)	16	31	76	2	18	18	56	65	14	12	59	66
95th Queue (ft)	45	64	127	12	39	45	128	139	35	34	117	123
Link Distance (ft)	301	301		613	613		903	903	903			1966
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)	0											
Queuing Penalty (veh)	0											

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	23
Average Queue (ft)	7
95th Queue (ft)	21
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Existing plus Project

AM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	46	57	106	50	68	22	130	123	2	114	157	146
Average Queue (ft)	13	20	44	12	36	2	66	47	0	43	52	58
95th Queue (ft)	38	49	87	35	58	11	114	100	1	90	125	122
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)											0	
Queuing Penalty (veh)											0	

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	5
Average Queue (ft)	0
95th Queue (ft)	2
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	22	56
Average Queue (ft)	2	31
95th Queue (ft)	13	44
Link Distance (ft)		1440
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	25	
Storage Blk Time (%)	0	9
Queuing Penalty (veh)	0	0

Queuing and Blocking Report

Existing plus Project

AM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB
Directions Served	LT
Maximum Queue (ft)	53
Average Queue (ft)	6
95th Queue (ft)	30
Link Distance (ft)	919
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 398

Queuing and Blocking Report
Existing plus Project

PM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	B33	B69	B69
Directions Served	L	T	TR	L	T	TR	L	T	TR	T	T	
Maximum Queue (ft)	184	368	395	134	579	611	305	584	553	2966	481	479
Average Queue (ft)	47	188	212	12	345	375	271	584	517	2792	380	344
95th Queue (ft)	116	325	353	67	628	657	403	588	544	3599	650	649
Link Distance (ft)		5798	5798		2174	2174		512	512	2895	430	430
Upstream Blk Time (%)								56	18	79	37	10
Queuing Penalty (veh)								375	121	1057	245	65
Storage Bay Dist (ft)	340			245			280					
Storage Blk Time (%)		2			24		0	88				
Queuing Penalty (veh)		1			2		0	152				

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	SB	SB	SB	B47
Directions Served	L	T	TR	T
Maximum Queue (ft)	265	525	482	1122
Average Queue (ft)	238	429	357	311
95th Queue (ft)	322	609	561	1223
Link Distance (ft)		455	455	5926
Upstream Blk Time (%)		16	5	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)	240			
Storage Blk Time (%)	13	41		
Queuing Penalty (veh)	55	82		

Intersection: 3: US Hwy 395 & Poplar Street

Movement	WB	WB	NB	NB	SB	B33	B33
Directions Served	L	R	T	TR	L	T	
Maximum Queue (ft)	334	144	1995	1994	35	558	539
Average Queue (ft)	202	35	1415	1408	12	233	93
95th Queue (ft)	462	148	2718	2733	35	659	414
Link Distance (ft)	546	546	1966	1966		512	512
Upstream Blk Time (%)	4		20	18		2	0
Queuing Penalty (veh)	3		132	119		8	2
Storage Bay Dist (ft)					375		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Queuing and Blocking Report
Existing plus Project

PM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	57	63	155	30	49	214	936	942	908	76	128	137
Average Queue (ft)	23	24	74	4	16	63	494	502	174	26	49	61
95th Queue (ft)	52	52	128	19	41	197	1157	1157	724	62	101	116
Link Distance (ft)	301	301		613	613		903	903	903			1966
Upstream Blk Time (%)							15	18	3			
Queuing Penalty (veh)							73	87	13			
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)						0	50					
Queuing Penalty (veh)						0	17					

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	35
Average Queue (ft)	7
95th Queue (ft)	25
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Existing plus Project

PM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	103	86	124	25	113	215	1747	1747	355	180	181	191
Average Queue (ft)	40	36	44	5	39	30	613	600	90	79	62	76
95th Queue (ft)	83	73	90	21	76	135	1726	1715	341	149	143	160
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)							16	17				
Queuing Penalty (veh)							0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)							37	34	0		0	
Queuing Penalty (veh)							7	31	0		0	

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	10
Average Queue (ft)	1
95th Queue (ft)	5
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	24	58
Average Queue (ft)	7	31
95th Queue (ft)	24	45
Link Distance (ft)		1440
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	25	
Storage Blk Time (%)	1	9
Queuing Penalty (veh)	2	1

Queuing and Blocking Report

Existing plus Project

PM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB
Directions Served	LT
Maximum Queue (ft)	58
Average Queue (ft)	7
95th Queue (ft)	32
Link Distance (ft)	919
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 2648

Queuing and Blocking Report
Opening Year (2024)

AM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	B71	B71	B71	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	T	T		L	T	TR
Maximum Queue (ft)	277	700	704	84	2245	2245	596	603	585	305	584	555
Average Queue (ft)	78	253	285	8	1919	1935	346	353	105	275	584	517
95th Queue (ft)	175	468	492	50	2819	2798	786	794	467	403	590	537
Link Distance (ft)		5798	5798		2174	2174	558	558	558		512	512
Upstream Blk Time (%)					55	62	9	15	2		65	18
Queuing Penalty (veh)					446	499	51	79	9		385	108
Storage Bay Dist (ft)	340			245						280		
Storage Blk Time (%)		4			61					0	89	
Queuing Penalty (veh)		3			7					0	181	

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	B33	B69	B69	SB	SB	SB	B47
Directions Served	T	T		L	T	TR	T
Maximum Queue (ft)	2966	484	468	265	525	482	5941
Average Queue (ft)	2829	386	271	257	524	458	5641
95th Queue (ft)	3501	637	606	298	530	471	7032
Link Distance (ft)	2895	429	429		455	455	5926
Upstream Blk Time (%)	85	35	5		51	13	83
Queuing Penalty (veh)	998	207	27		0	0	0
Storage Bay Dist (ft)				240			
Storage Blk Time (%)				26	63		
Queuing Penalty (veh)				154	236		

Queuing and Blocking Report
Opening Year (2024)

AM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	B14	B14	B95	NB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	T	T	L	T	TR	L	TR
Maximum Queue (ft)	78	70	595	507	253	228	19	225	1984	1991	78	23
Average Queue (ft)	26	24	445	252	82	72	1	151	1505	1507	30	1
95th Queue (ft)	93	57	735	687	322	310	10	316	2760	2769	66	10
Link Distance (ft)	291	291	546	546	524	524	15		1954	1954		429
Upstream Blk Time (%)			39	20	3	2	1		13	16		
Queuing Penalty (veh)			43	22	3	2	1		106	133		
Storage Bay Dist (ft)								200			375	
Storage Blk Time (%)								0	80			
Queuing Penalty (veh)								0	56			

Intersection: 3: US Hwy 395 & Poplar Street

Movement	B33	B33
Directions Served	T	
Maximum Queue (ft)	558	558
Average Queue (ft)	199	107
95th Queue (ft)	615	456
Link Distance (ft)	512	512
Upstream Blk Time (%)	2	0
Queuing Penalty (veh)	12	3
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
Opening Year (2024)

AM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	54	71	260	89	67	214	939	954	958	57	162	177
Average Queue (ft)	14	30	168	8	23	54	630	648	541	13	72	78
95th Queue (ft)	41	60	249	86	53	186	1227	1235	1278	39	136	150
Link Distance (ft)	301	301		613	613		903	903	903			1954
Upstream Blk Time (%)							15	28	19			
Queuing Penalty (veh)							92	167	115			
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)			3				57					
Queuing Penalty (veh)			0				14					

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	32
Average Queue (ft)	8
95th Queue (ft)	24
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Opening Year (2024)

AM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	113	119	131	328	400	215	1747	1747	355	218	261	250
Average Queue (ft)	44	49	60	130	180	63	952	949	71	108	128	140
95th Queue (ft)	94	91	111	245	361	204	2101	2093	305	186	216	224
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)				0	2		35	36				
Queuing Penalty (veh)				0	5		0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)							58	52	0	1	1	0
Queuing Penalty (veh)							21	20	0	6	1	0

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	47
Average Queue (ft)	10
95th Queue (ft)	32
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	WB	SB	SB
Directions Served	T	L	R
Maximum Queue (ft)	21	49	349
Average Queue (ft)	1	11	122
95th Queue (ft)	12	42	275
Link Distance (ft)	919		1440
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		25	
Storage Blk Time (%)		1	58
Queuing Penalty (veh)		9	7

Queuing and Blocking Report

Opening Year (2024)

AM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	99	6
Average Queue (ft)	31	0
95th Queue (ft)	76	4
Link Distance (ft)	919	238
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 4227

Queuing and Blocking Report
Opening Year (2024)

PM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	B71	B71	B71	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	T	T		L	T	TR
Maximum Queue (ft)	365	4081	4068	270	2245	2245	583	590	347	305	584	548
Average Queue (ft)	145	2497	2508	40	1852	1870	184	188	16	280	584	516
95th Queue (ft)	399	4389	4380	180	2698	2699	603	611	171	394	589	531
Link Distance (ft)		5798	5798		2174	2174	558	558	558		512	512
Upstream Blk Time (%)					35	39	5	8	1		60	19
Queuing Penalty (veh)					242	267	23	37	3		503	156
Storage Bay Dist (ft)	340			245						280		
Storage Blk Time (%)	0	65			68					0	87	
Queuing Penalty (veh)	0	40			10					0	229	

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	B33	B69	B69	SB	SB	SB	B47
Directions Served	T	T		L	T	TR	T
Maximum Queue (ft)	2966	485	487	265	525	479	5941
Average Queue (ft)	2946	429	361	263	525	456	5674
95th Queue (ft)	3148	591	643	269	527	469	7018
Link Distance (ft)	2895	429	429		455	455	5926
Upstream Blk Time (%)	93	43	10		48	7	80
Queuing Penalty (veh)	1560	360	86		0	0	0
Storage Bay Dist (ft)				240			
Storage Blk Time (%)				70	2		
Queuing Penalty (veh)				373	10		

Queuing and Blocking Report
Opening Year (2024)

PM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	B14	B14	B95	B95	NB	NB	NB	SB
Directions Served	L	TR	L	TR	T	T	T	T	L	T	TR	L
Maximum Queue (ft)	311	260	618	618	596	596	84	61	179	1992	1997	64
Average Queue (ft)	202	76	614	443	566	558	48	28	9	1706	1703	13
95th Queue (ft)	391	263	624	842	701	705	88	62	83	2679	2698	44
Link Distance (ft)	347	347	546	546	524	524	15	15		1965	1965	
Upstream Blk Time (%)	24	14	100	51	89	83	82	42		27	26	
Queuing Penalty (veh)	0	0	200	104	177	163	162	83		228	222	
Storage Bay Dist (ft)									200			375
Storage Blk Time (%)										90		
Queuing Penalty (veh)										4		

Intersection: 3: US Hwy 395 & Poplar Street

Movement	B33	B33
Directions Served	T	
Maximum Queue (ft)	424	207
Average Queue (ft)	28	10
95th Queue (ft)	221	127
Link Distance (ft)	512	512
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	1	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
Opening Year (2024)

PM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	74	60	246	38	54	215	936	949	960	46	157	160
Average Queue (ft)	26	26	127	3	18	86	726	741	671	15	71	73
95th Queue (ft)	58	52	204	20	45	244	1278	1276	1338	40	132	139
Link Distance (ft)	301	301		613	613		903	903	903			1965
Upstream Blk Time (%)							29	42	22			
Queuing Penalty (veh)							187	270	143			
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)			0			0	73					
Queuing Penalty (veh)			0			0	26					

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	22
Average Queue (ft)	4
95th Queue (ft)	16
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Opening Year (2024)

PM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	214	278	169	158	336	215	1747	1747	355	244	430	379
Average Queue (ft)	177	223	59	45	140	47	1426	1424	169	198	191	155
95th Queue (ft)	259	332	133	112	310	183	2232	2230	457	278	411	315
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)		31		0	3		57	62				
Queuing Penalty (veh)		0		0	4		0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)	36	9					84	82	0	18	1	0
Queuing Penalty (veh)	98	17					27	78	0	122	3	0

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	15
Average Queue (ft)	2
95th Queue (ft)	7
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	WB	SB	SB
Directions Served	T	L	R
Maximum Queue (ft)	10	49	149
Average Queue (ft)	2	26	59
95th Queue (ft)	14	50	138
Link Distance (ft)	919		1440
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		25	
Storage Blk Time (%)		11	27
Queuing Penalty (veh)		37	13

Queuing and Blocking Report
Opening Year (2024)

PM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB
Directions Served	LT
Maximum Queue (ft)	137
Average Queue (ft)	53
95th Queue (ft)	120
Link Distance (ft)	919
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 6270

Queuing and Blocking Report
Opening Year (2024) plus Project

AM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	B71	B71	B71	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	T	T		L	T	TR
Maximum Queue (ft)	243	667	714	229	2245	2245	604	612	592	305	584	542
Average Queue (ft)	77	281	313	19	2026	2036	410	416	132	283	584	515
95th Queue (ft)	178	516	551	107	2764	2748	822	829	527	387	588	526
Link Distance (ft)		5798	5798		2174	2174	558	558	558		512	512
Upstream Blk Time (%)					66	73	12	20	3		64	20
Queuing Penalty (veh)					542	596	66	107	17		381	121
Storage Bay Dist (ft)	340			245						280		
Storage Blk Time (%)		6			62					1	88	
Queuing Penalty (veh)		4			8					5	180	

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	B33	B69	B69	SB	SB	SB	B47
Directions Served	T	T		L	T	TR	T
Maximum Queue (ft)	2966	481	479	265	525	481	5941
Average Queue (ft)	2780	365	283	258	525	457	5703
95th Queue (ft)	3580	649	622	303	526	470	6940
Link Distance (ft)	2895	429	429		455	455	5926
Upstream Blk Time (%)	82	34	5		50	10	85
Queuing Penalty (veh)	954	198	32		0	0	0
Storage Bay Dist (ft)				240			
Storage Blk Time (%)				29	60		
Queuing Penalty (veh)				177	232		

Queuing and Blocking Report
Opening Year (2024) plus Project

AM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	B14	B14	B95	B95	NB	NB	NB	SB
Directions Served	L	TR	L	TR	T	T	T	T	L	T	TR	L
Maximum Queue (ft)	78	62	618	618	596	573	56	27	225	1975	1980	96
Average Queue (ft)	27	25	588	518	345	332	10	6	117	1412	1412	33
95th Queue (ft)	78	56	702	843	701	694	43	33	290	2758	2765	75
Link Distance (ft)	354	354	546	546	524	524	15	15		1954	1954	
Upstream Blk Time (%)			85	64	26	22	16	6		14	17	
Queuing Penalty (veh)			101	75	29	25	18	6		120	142	
Storage Bay Dist (ft)									200			375
Storage Blk Time (%)									0	75		
Queuing Penalty (veh)									0	52		

Intersection: 3: US Hwy 395 & Poplar Street

Movement	SB	B33	B33
Directions Served	TR	T	
Maximum Queue (ft)	8	557	553
Average Queue (ft)	1	215	87
95th Queue (ft)	6	633	411
Link Distance (ft)	429	512	512
Upstream Blk Time (%)		2	0
Queuing Penalty (veh)		12	3
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Opening Year (2024) plus Project

AM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	70	67	267	80	83	214	950	954	957	46	163	183
Average Queue (ft)	22	31	183	7	26	43	617	645	515	12	78	83
95th Queue (ft)	56	57	270	83	63	159	1234	1248	1258	35	150	161
Link Distance (ft)	301	301		613	613		903	903	903			1954
Upstream Blk Time (%)							15	26	16			
Queuing Penalty (veh)							96	160	102			
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)			3			0	56					
Queuing Penalty (veh)			0			0	13					

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	22
Average Queue (ft)	6
95th Queue (ft)	20
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Opening Year (2024) plus Project

AM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	104	118	137	226	403	215	1747	1747	355	227	278	286
Average Queue (ft)	41	44	52	118	244	47	1040	1036	89	115	144	155
95th Queue (ft)	85	94	112	207	449	171	2092	2084	341	197	245	255
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)					8		36	37				
Queuing Penalty (veh)					20		0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)							69	61	0	0	1	0
Queuing Penalty (veh)							25	24	0	0	3	1

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	146
Average Queue (ft)	19
95th Queue (ft)	97
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	WB	SB	SB
Directions Served	T	L	R
Maximum Queue (ft)	60	49	980
Average Queue (ft)	7	15	347
95th Queue (ft)	42	50	937
Link Distance (ft)	919		1440
Upstream Blk Time (%)			2
Queuing Penalty (veh)			0
Storage Bay Dist (ft)		25	
Storage Blk Time (%)		2	77
Queuing Penalty (veh)		12	10

Queuing and Blocking Report
Opening Year (2024) plus Project

AM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	107	4
Average Queue (ft)	34	0
95th Queue (ft)	86	3
Link Distance (ft)	919	238
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 4668

Queuing and Blocking Report
Opening Year (2024) plus Project

PM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	B71	B71	B71	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	T	T		L	T	TR
Maximum Queue (ft)	365	4305	4288	177	2245	2245	593	601	457	305	584	548
Average Queue (ft)	150	2809	2817	20	1901	1916	251	256	35	267	584	517
95th Queue (ft)	389	4554	4544	109	2724	2716	691	698	257	405	587	533
Link Distance (ft)		5798	5798		2174	2174	558	558	558		512	512
Upstream Blk Time (%)					49	53	10	14	1		62	16
Queuing Penalty (veh)					341	364	47	63	2		523	136
Storage Bay Dist (ft)	340			245						280		
Storage Blk Time (%)	0	66			70					0	85	
Queuing Penalty (veh)	0	40			10					0	228	

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	B33	B69	B69	SB	SB	SB	B47
Directions Served	T	T		L	T	TR	T
Maximum Queue (ft)	2966	479	482	265	525	473	5941
Average Queue (ft)	2918	422	362	263	525	453	5687
95th Queue (ft)	3309	597	633	270	526	504	6952
Link Distance (ft)	2895	429	429		455	455	5926
Upstream Blk Time (%)	91	39	9		48	8	79
Queuing Penalty (veh)	1546	334	80		0	0	0
Storage Bay Dist (ft)				240			
Storage Blk Time (%)				71	2		
Queuing Penalty (veh)				379	14		

Queuing and Blocking Report
Opening Year (2024) plus Project

PM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	B14	B14	B95	B95	NB	NB	NB	SB
Directions Served	L	TR	L	TR	T	T	T	T	L	T	TR	L
Maximum Queue (ft)	359	146	618	618	596	596	81	61	224	1983	1984	62
Average Queue (ft)	202	38	614	474	584	577	48	33	27	1659	1652	16
95th Queue (ft)	393	139	624	847	647	653	83	61	146	2683	2705	48
Link Distance (ft)	374	374	546	546	524	524	15	15		1954	1954	
Upstream Blk Time (%)	18	3	100	59	95	91	88	48		26	26	
Queuing Penalty (veh)	0	0	247	148	234	223	217	119		223	222	
Storage Bay Dist (ft)									200			375
Storage Blk Time (%)									0	88		
Queuing Penalty (veh)									0	4		

Intersection: 3: US Hwy 395 & Poplar Street

Movement	SB	B33	B33
Directions Served	TR	T	
Maximum Queue (ft)	4	398	221
Average Queue (ft)	0	14	8
95th Queue (ft)	3	149	114
Link Distance (ft)	429	512	512
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Opening Year (2024) plus Project

PM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	87	76	230	25	70	215	940	952	957	50	170	173
Average Queue (ft)	27	23	127	2	21	78	713	722	644	13	68	68
95th Queue (ft)	66	53	198	14	50	233	1274	1270	1328	37	138	138
Link Distance (ft)	301	301		613	613		903	903	903			1954
Upstream Blk Time (%)							25	37	20			
Queuing Penalty (veh)							165	243	132			
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)			0				70				0	
Queuing Penalty (veh)			0				25				0	

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	27
Average Queue (ft)	5
95th Queue (ft)	18
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Opening Year (2024) plus Project

PM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	215	278	114	106	300	215	1747	1747	355	244	448	382
Average Queue (ft)	181	223	49	46	119	48	1442	1443	161	208	190	157
95th Queue (ft)	259	339	104	92	257	183	2201	2201	449	280	402	312
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)		29			0		55	62				
Queuing Penalty (veh)		0			0		0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)	36	9					82	81	0	17	0	0
Queuing Penalty (veh)	98	17					27	77	0	119	2	0

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	16
Average Queue (ft)	2
95th Queue (ft)	10
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	WB	SB	SB
Directions Served	T	L	R
Maximum Queue (ft)	6	49	96
Average Queue (ft)	0	23	47
95th Queue (ft)	4	44	77
Link Distance (ft)	919		1440
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		25	
Storage Blk Time (%)		9	22
Queuing Penalty (veh)		30	11

Queuing and Blocking Report
Opening Year (2024) plus Project

PM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	165	4
Average Queue (ft)	56	0
95th Queue (ft)	124	3
Link Distance (ft)	919	238
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 6696

Queuing and Blocking Report
Horizon Year (2040)

AM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	B71	B71	B71	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	T	T		L	T	TR
Maximum Queue (ft)	364	2828	2841	269	2246	2246	607	618	589	305	584	564
Average Queue (ft)	217	1742	1770	35	2197	2199	494	501	167	251	470	424
95th Queue (ft)	456	3639	3656	147	2477	2469	802	808	591	418	799	734
Link Distance (ft)		5798	5798		2175	2175	558	558	558		512	512
Upstream Blk Time (%)		5	4		82	88	22	31	6		29	12
Queuing Penalty (veh)		0	0		663	712	119	169	34		228	95
Storage Bay Dist (ft)	340			245						280		
Storage Blk Time (%)	2	57			69					33	39	
Queuing Penalty (veh)	9	55			15					177	81	

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	B33	B69	B69	SB	SB	SB	B47
Directions Served	T	T		L	T	TR	T
Maximum Queue (ft)	2176	360	184	265	508	470	5960
Average Queue (ft)	1123	84	36	213	505	438	5762
95th Queue (ft)	3129	357	236	372	516	455	6838
Link Distance (ft)	2895	429	429		437	437	5945
Upstream Blk Time (%)	15	4	1		51	24	85
Queuing Penalty (veh)	228	28	7		0	0	0
Storage Bay Dist (ft)				240			
Storage Blk Time (%)				0	81		
Queuing Penalty (veh)				2	295		

Queuing and Blocking Report
Horizon Year (2040)

AM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	B14	B14	B95	B95	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	T	T	T	LT	TR	L	TR
Maximum Queue (ft)	81	143	610	616	593	596	38	54	1542	1525	300	272
Average Queue (ft)	24	46	601	542	534	542	17	28	580	554	179	126
95th Queue (ft)	61	162	635	837	744	749	41	53	1638	1635	371	478
Link Distance (ft)	382	382	546	546	524	524	15	15	1954	1954		429
Upstream Blk Time (%)		1	98	87	86	86	62	77	12	12		18
Queuing Penalty (veh)		0	370	328	321	322	233	288	127	128		544
Storage Bay Dist (ft)											375	
Storage Blk Time (%)											6	15
Queuing Penalty (veh)											130	63

Intersection: 3: US Hwy 395 & Poplar Street

Movement	B69	B33	B33
Directions Served	T	T	
Maximum Queue (ft)	1186	559	545
Average Queue (ft)	606	369	218
95th Queue (ft)	2467	760	635
Link Distance (ft)	2895	512	512
Upstream Blk Time (%)	13	15	12
Queuing Penalty (veh)	396	227	182
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Horizon Year (2040)

AM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	131	85	267	267	201	120	704	721	101	102	140	165
Average Queue (ft)	53	34	177	22	72	27	336	352	30	38	55	61
95th Queue (ft)	180	74	291	151	291	83	764	776	73	85	121	138
Link Distance (ft)	301	301		613	613		903	903	903			1954
Upstream Blk Time (%)	5				3		12	12				
Queuing Penalty (veh)	0				0		90	90				
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)			7				22					
Queuing Penalty (veh)			0				7					

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	22
Average Queue (ft)	5
95th Queue (ft)	17
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Horizon Year (2040)

AM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	154	165	126	219	399	215	1621	1618	355	211	274	267
Average Queue (ft)	80	87	44	104	233	73	1191	1194	161	98	113	114
95th Queue (ft)	173	195	100	201	411	192	1953	1945	448	194	236	228
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)		10			12		21	23				
Queuing Penalty (veh)		0			32		0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)	11						53	53	0	1	1	0
Queuing Penalty (veh)	11						30	49	0	9	2	1

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	176
Average Queue (ft)	26
95th Queue (ft)	89
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	WB	SB	SB
Directions Served	T	L	R
Maximum Queue (ft)	71	49	575
Average Queue (ft)	22	16	282
95th Queue (ft)	137	50	956
Link Distance (ft)	919		1440
Upstream Blk Time (%)			10
Queuing Penalty (veh)			0
Storage Bay Dist (ft)		25	
Storage Blk Time (%)		2	73
Queuing Penalty (veh)		14	13

Queuing and Blocking Report

Horizon Year (2040)

AM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB
Directions Served	LT
Maximum Queue (ft)	51
Average Queue (ft)	7
95th Queue (ft)	35
Link Distance (ft)	919
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 6919

Queuing and Blocking Report
Horizon Year (2040)

PM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	B71	B71	NB	NB	NB	B33
Directions Served	L	T	TR	L	T	TR	T	T	L	T	TR	T
Maximum Queue (ft)	364	2445	2449	261	1558	1590	20	24	305	584	569	2966
Average Queue (ft)	147	1540	1556	28	1045	1083	1	2	289	584	524	2937
95th Queue (ft)	407	2465	2478	137	1989	2012	17	24	381	589	550	3242
Link Distance (ft)		5798	5798		2176	2176	558	558		512	512	2895
Upstream Blk Time (%)					1	1				50	17	81
Queuing Penalty (veh)					4	6				794	272	2569
Storage Bay Dist (ft)	340			245					280			
Storage Blk Time (%)	0	69		0	67				1	84		
Queuing Penalty (veh)	0	35		0	8				16	336		

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	B69	B69	SB	SB	SB	B47
Directions Served	T		L	T	TR	T
Maximum Queue (ft)	497	478	265	550	530	5918
Average Queue (ft)	456	360	263	549	485	5706
95th Queue (ft)	480	630	269	555	512	6776
Link Distance (ft)	429	429		480	480	5903
Upstream Blk Time (%)	29	5		50	9	78
Queuing Penalty (veh)	453	85		0	0	0
Storage Bay Dist (ft)			240			
Storage Blk Time (%)			76	2		
Queuing Penalty (veh)			556	12		

Queuing and Blocking Report
Horizon Year (2040)

PM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	B14	B14	B95	B95	NB	NB	NB	SB
Directions Served	L	TR	L	TR	T	T	T	T	L	T	TR	L
Maximum Queue (ft)	394	325	618	618	596	596	76	74	225	1988	1988	372
Average Queue (ft)	283	103	607	579	568	586	19	33	71	1943	1945	213
95th Queue (ft)	449	343	619	765	613	599	57	57	241	2101	2119	406
Link Distance (ft)	386	386	546	546	524	524	15	15		1954	1954	
Upstream Blk Time (%)	32	19	100	92	97	99	34	83		20	26	
Queuing Penalty (veh)	0	0	414	381	403	409	143	341		295	372	
Storage Bay Dist (ft)									200			375
Storage Blk Time (%)										93		11
Queuing Penalty (veh)										34		132

Intersection: 3: US Hwy 395 & Poplar Street

Movement	SB	B69	B33	B33
Directions Served	TR	T	T	
Maximum Queue (ft)	401	628	511	310
Average Queue (ft)	92	87	40	14
95th Queue (ft)	399	498	259	152
Link Distance (ft)	429	2895	512	512
Upstream Blk Time (%)	7		0	0
Queuing Penalty (veh)	123		2	0
Storage Bay Dist (ft)				
Storage Blk Time (%)	3			
Queuing Penalty (veh)	12			

Queuing and Blocking Report
Horizon Year (2040)

PM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	314	128	246	628	628	215	939	955	958	163	195	176
Average Queue (ft)	212	28	127	552	625	64	876	883	780	67	76	78
95th Queue (ft)	394	84	238	858	668	220	1125	1130	1345	129	152	151
Link Distance (ft)	301	301		613	613		903	903	903			1954
Upstream Blk Time (%)	40			41	93		40	60	33			
Queuing Penalty (veh)	0			0	0		334	496	277			
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)			3			0	91				0	
Queuing Penalty (veh)			1			0	32				1	

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	23
Average Queue (ft)	4
95th Queue (ft)	16
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Horizon Year (2040)

PM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	215	278	357	394	406	215	1747	1747	355	232	345	312
Average Queue (ft)	214	278	147	64	344	43	1678	1677	109	148	134	133
95th Queue (ft)	218	282	306	216	508	176	2022	2027	376	245	303	260
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)		82	1	0	36		79	85				
Queuing Penalty (veh)		0	2	1	95		0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)	86	4					95	95	0	8	0	0
Queuing Penalty (veh)	352	21					40	92	0	64	1	0

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	23
Average Queue (ft)	3
95th Queue (ft)	11
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	WB	SB	SB
Directions Served	T	L	R
Maximum Queue (ft)	292	49	1455
Average Queue (ft)	87	28	848
95th Queue (ft)	245	65	1868
Link Distance (ft)	919		1440
Upstream Blk Time (%)			43
Queuing Penalty (veh)			0
Storage Bay Dist (ft)		25	
Storage Blk Time (%)		9	84
Queuing Penalty (veh)		49	54

Queuing and Blocking Report
Horizon Year (2040)

PM Peak Hour

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB
Directions Served	LT
Maximum Queue (ft)	179
Average Queue (ft)	69
95th Queue (ft)	136
Link Distance (ft)	919
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 10117

Queuing and Blocking Report
Horizon Year (2040) plus Project

AM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	B71	B71	B71	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	T	T		L	T	TR
Maximum Queue (ft)	365	2542	2565	269	2245	2245	602	612	587	305	584	548
Average Queue (ft)	241	1357	1382	40	2187	2193	477	485	136	246	431	379
95th Queue (ft)	467	3175	3185	168	2489	2474	812	814	534	410	751	693
Link Distance (ft)		5798	5798		2174	2174	558	558	558		512	512
Upstream Blk Time (%)		3	3		80	86	21	31	4		18	10
Queuing Penalty (veh)		0	0		649	697	115	167	24		142	81
Storage Bay Dist (ft)	340			245						280		
Storage Blk Time (%)	11	47			68					20	36	
Queuing Penalty (veh)	53	46			15					109	75	

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	B33	B69	B69	SB	SB	SB	B47
Directions Served	T	T		L	T	TR	T
Maximum Queue (ft)	1160	182	88	265	525	478	5941
Average Queue (ft)	489	16	3	243	525	452	5722
95th Queue (ft)	1817	144	63	340	525	490	6851
Link Distance (ft)	2895	428	428		455	455	5926
Upstream Blk Time (%)	3	0	0		50	14	84
Queuing Penalty (veh)	40	2	0		0	0	0
Storage Bay Dist (ft)				240			
Storage Blk Time (%)				7	80		
Queuing Penalty (veh)				98	301		

Queuing and Blocking Report
Horizon Year (2040) plus Project

AM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	B14	B14	B95	B95	NB	NB	NB	SB
Directions Served	L	TR	L	TR	T	T	T	T	L	T	TR	L
Maximum Queue (ft)	40	134	618	618	588	596	30	59	96	894	884	335
Average Queue (ft)	11	47	603	573	486	519	10	28	25	298	331	188
95th Queue (ft)	34	182	650	764	753	794	33	60	66	1369	1415	381
Link Distance (ft)	402	402	546	546	524	524	15	15		1954	1954	
Upstream Blk Time (%)		1	95	79	60	81	30	51		11	11	
Queuing Penalty (veh)		0	369	307	231	310	113	195		119	121	
Storage Bay Dist (ft)									200			375
Storage Blk Time (%)										0		17
Queuing Penalty (veh)										0		382

Intersection: 3: US Hwy 395 & Poplar Street

Movement	SB	B69	B33	B33
Directions Served	TR	T	T	
Maximum Queue (ft)	345	1186	563	550
Average Queue (ft)	102	455	365	210
95th Queue (ft)	427	2141	758	630
Link Distance (ft)	428	2895	512	512
Upstream Blk Time (%)	15	11	12	10
Queuing Penalty (veh)	452	327	185	148
Storage Bay Dist (ft)				
Storage Blk Time (%)	11			
Queuing Penalty (veh)	49			

Queuing and Blocking Report
Horizon Year (2040) plus Project

AM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	115	84	266	228	152	212	726	732	135	104	134	150
Average Queue (ft)	44	34	189	44	51	37	413	437	39	44	63	70
95th Queue (ft)	159	69	283	257	157	124	808	822	90	94	124	142
Link Distance (ft)	301	301		613	613		903	903	903			1954
Upstream Blk Time (%)	5			0			11	11				
Queuing Penalty (veh)	0			0			84	84				
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)			11				26					
Queuing Penalty (veh)			0				8					

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	18
Average Queue (ft)	4
95th Queue (ft)	16
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Horizon Year (2040) plus Project

AM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	158	160	135	276	397	214	1747	1747	355	219	252	248
Average Queue (ft)	84	77	47	110	245	63	1566	1567	126	100	120	127
95th Queue (ft)	170	190	110	220	420	180	2100	2094	400	193	225	231
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)		8		0	11		42	48				
Queuing Penalty (veh)		0		0	31		0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)	9	0				0	54	55	0	0	1	0
Queuing Penalty (veh)	9	0				0	30	52	0	3	2	0

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	135
Average Queue (ft)	21
95th Queue (ft)	75
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	WB	SB	SB
Directions Served	T	L	R
Maximum Queue (ft)	62	49	715
Average Queue (ft)	16	16	343
95th Queue (ft)	110	53	1012
Link Distance (ft)	919		1440
Upstream Blk Time (%)			9
Queuing Penalty (veh)			0
Storage Bay Dist (ft)		25	
Storage Blk Time (%)		1	79
Queuing Penalty (veh)		12	14

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB
Directions Served	LT
Maximum Queue (ft)	59
Average Queue (ft)	11
95th Queue (ft)	41
Link Distance (ft)	919
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 6249

Queuing and Blocking Report
Horizon Year (2040) plus Project

PM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	B33	B69	B69
Directions Served	L	T	TR	L	T	TR	L	T	TR	T	T	
Maximum Queue (ft)	364	3279	3288	269	1582	1607	305	584	551	2966	489	478
Average Queue (ft)	122	2197	2213	26	952	992	295	584	519	2944	452	374
95th Queue (ft)	363	3660	3665	137	1541	1578	368	586	537	3181	518	622
Link Distance (ft)		5798	5798		2174	2174		512	512	2895	430	430
Upstream Blk Time (%)								48	16	82	29	6
Queuing Penalty (veh)								768	261	2612	457	88
Storage Bay Dist (ft)	340			245			280					
Storage Blk Time (%)	0	72			71		1	84				
Queuing Penalty (veh)	0	36			8		18	341				

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	SB	SB	SB	B47
Directions Served	L	T	TR	T
Maximum Queue (ft)	265	525	486	5941
Average Queue (ft)	262	524	456	5721
95th Queue (ft)	269	528	471	6842
Link Distance (ft)		455	455	5926
Upstream Blk Time (%)		50	8	80
Queuing Penalty (veh)		0	0	0
Storage Bay Dist (ft)	240			
Storage Blk Time (%)	77	1		
Queuing Penalty (veh)	558	5		

Queuing and Blocking Report
Horizon Year (2040) plus Project

PM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	B14	B14	B95	B95	NB	NB	NB	SB
Directions Served	L	TR	L	TR	T	T	T	T	L	T	TR	L
Maximum Queue (ft)	378	300	617	618	596	596	71	56	225	1986	1991	400
Average Queue (ft)	292	119	605	556	581	585	29	30	74	1933	1937	267
95th Queue (ft)	440	357	617	769	611	597	61	52	248	2169	2180	487
Link Distance (ft)	372	372	546	546	524	524	15	15		1954	1954	
Upstream Blk Time (%)	40	17	100	84	100	99	70	86		21	26	
Queuing Penalty (veh)	0	0	462	391	460	459	321	395		301	375	
Storage Bay Dist (ft)									200			375
Storage Blk Time (%)										93		32
Queuing Penalty (veh)										34		373

Intersection: 3: US Hwy 395 & Poplar Street

Movement	SB	B69	B33	B33
Directions Served	TR	T	T	
Maximum Queue (ft)	493	1190	332	203
Average Queue (ft)	221	447	51	10
95th Queue (ft)	618	1868	292	130
Link Distance (ft)	430	2895	512	512
Upstream Blk Time (%)	20	3	0	0
Queuing Penalty (veh)	328	47	3	0
Storage Bay Dist (ft)				
Storage Blk Time (%)	2			
Queuing Penalty (veh)	7			

Queuing and Blocking Report
Horizon Year (2040) plus Project

PM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	211	122	259	628	628	215	955	961	957	144	173	164
Average Queue (ft)	119	27	130	569	621	62	880	884	770	61	80	76
95th Queue (ft)	282	72	245	847	683	213	1100	1111	1340	118	156	146
Link Distance (ft)	301	301		613	613		903	903	903			1954
Upstream Blk Time (%)	18			48	89		41	59	27			
Queuing Penalty (veh)	0			0	0		340	492	224			
Storage Bay Dist (ft)			245			190				225	225	
Storage Blk Time (%)			6			0	91				0	0
Queuing Penalty (veh)			1			0	32				0	0

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	28
Average Queue (ft)	4
95th Queue (ft)	17
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Horizon Year (2040) plus Project

PM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	215	278	274	336	409	215	1747	1747	355	243	344	305
Average Queue (ft)	214	277	92	65	366	65	1678	1675	196	160	144	144
95th Queue (ft)	217	284	215	236	505	221	2037	2040	486	256	336	281
Link Distance (ft)		263	393	393	393		1732	1732			903	903
Upstream Blk Time (%)		90		0	48		79	85				
Queuing Penalty (veh)		0		0	131		0	0				
Storage Bay Dist (ft)	190					190			330	220		
Storage Blk Time (%)	95	1					94	94	0	10	0	0
Queuing Penalty (veh)	386	5					39	90	0	75	1	0

Intersection: 6: US Hwy 395 & Joshua Street

Movement	SB
Directions Served	R
Maximum Queue (ft)	23
Average Queue (ft)	2
95th Queue (ft)	10
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	270
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	WB	SB	SB
Directions Served	T	L	R
Maximum Queue (ft)	381	49	1455
Average Queue (ft)	133	22	1127
95th Queue (ft)	324	60	2018
Link Distance (ft)	919		1440
Upstream Blk Time (%)			67
Queuing Penalty (veh)			0
Storage Bay Dist (ft)		25	
Storage Blk Time (%)		6	92
Queuing Penalty (veh)		33	58

Intersection: 8: Joshua Street & I-15 NB On-Ramp

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	156	4
Average Queue (ft)	68	0
95th Queue (ft)	134	3
Link Distance (ft)	919	238
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 11018

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

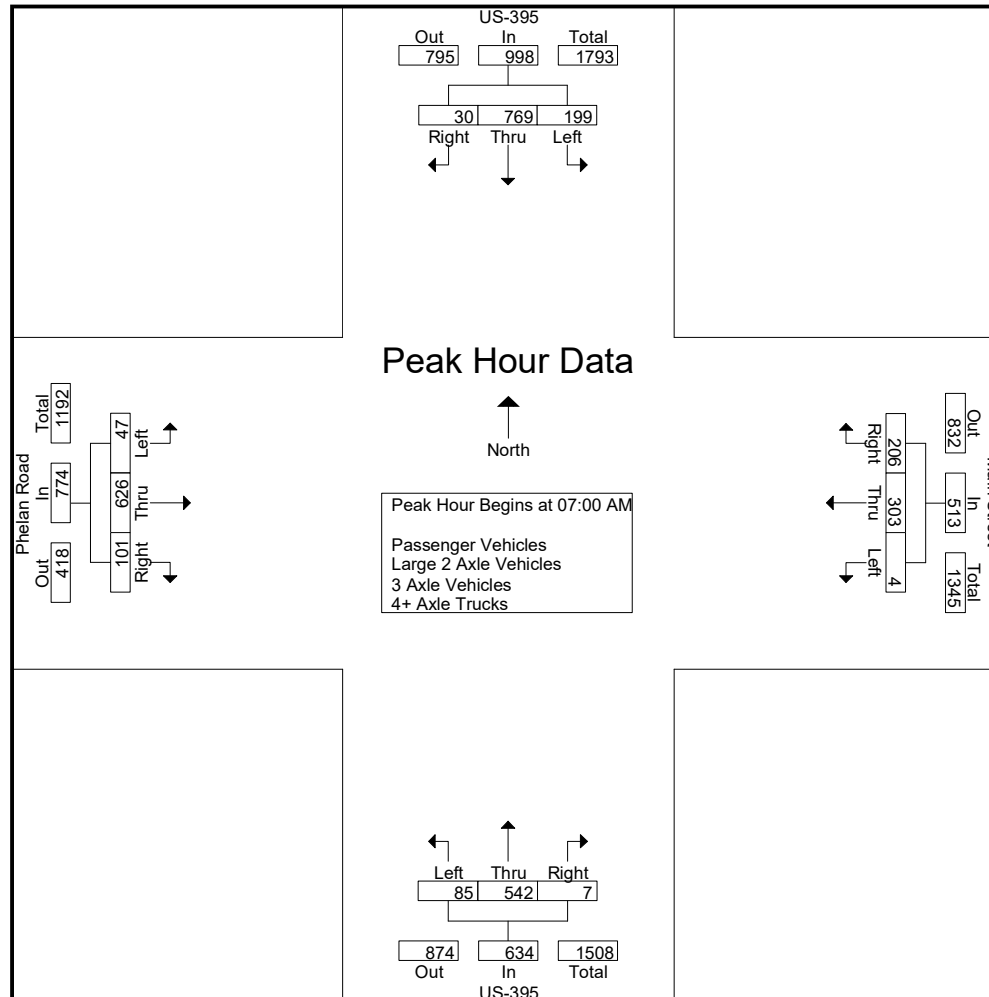
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	68	219	5	0	292	2	76	53	19	131	15	137	1	0	153	12	134	25	15	171	34	747	781
07:15 AM	45	190	11	2	246	1	67	54	24	122	22	133	3	0	158	11	149	34	12	194	38	720	758
07:30 AM	39	172	8	2	219	1	88	66	21	155	27	153	1	0	181	12	174	15	6	201	29	756	785
07:45 AM	47	188	6	0	241	0	72	33	13	105	21	119	2	0	142	12	169	27	10	208	23	696	719
Total	199	769	30	4	998	4	303	206	77	513	85	542	7	0	634	47	626	101	43	774	124	2919	3043
08:00 AM	31	176	5	1	212	1	71	35	14	107	13	85	1	0	99	7	153	34	6	194	21	612	633
08:15 AM	44	182	9	2	235	1	57	31	16	89	13	136	1	0	150	14	141	27	14	182	32	656	688
08:30 AM	35	170	9	2	214	2	87	37	16	126	20	129	3	0	152	12	158	22	8	192	26	684	710
08:45 AM	33	158	10	1	201	1	53	29	22	83	15	105	4	1	124	11	130	17	4	158	28	566	594
Total	143	686	33	6	862	5	268	132	68	405	61	455	9	1	525	44	582	100	32	726	107	2518	2625
Grand Total	342	1455	63	10	1860	9	571	338	145	918	146	997	16	1	1159	91	1208	201	75	1500	231	5437	5668
Apprch %	18.4	78.2	3.4			1	62.2	36.8			12.6	86	1.4			6.1	80.5	13.4					
Total %	6.3	26.8	1.2		34.2	0.2	10.5	6.2		16.9	2.7	18.3	0.3		21.3	1.7	22.2	3.7		27.6	4.1	95.9	
Passenger Vehicles	330	1295	58		1693	9	537	325		1010	130	846	12		989	90	1178	191		1534	0	0	5226
% Passenger Vehicles	96.5	89	92.1	100	90.5	100	94	96.2	95.9	95	89	84.9	75	100	85.3	98.9	97.5	95	100	97.4	0	0	92.2
Large 2 Axle Vehicles	6	23	5		34	0	25	5		34	11	40	2		53	0	16	7		23	0	0	144
% Large 2 Axle Vehicles	1.8	1.6	7.9	0	1.8	0	4.4	1.5	2.8	3.2	7.5	4	12.5	0	4.6	0	1.3	3.5	0	1.5	0	0	2.5
3 Axle Vehicles	3	8	0		11	0	6	3		10	2	10	0		12	0	7	0		7	0	0	40
% 3 Axle Vehicles	0.9	0.5	0	0	0.6	0	1.1	0.9	0.7	0.9	1.4	1	0	0	1	0	0.6	0	0	0.4	0	0	0.7
4+ Axle Trucks	3	129	0		132	0	3	5		9	3	101	2		106	1	7	3		11	0	0	258
% 4+ Axle Trucks	0.9	8.9	0	0	7.1	0	0.5	1.5	0.7	0.8	2.1	10.1	12.5	0	9.1	1.1	0.6	1.5	0	0.7	0	0	4.6

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	68	219	5	292	2	76	53	131	15	137	1	153	12	134	25	171	747
07:15 AM	45	190	11	246	1	67	54	122	22	133	3	158	11	149	34	194	720
07:30 AM	39	172	8	219	1	88	66	155	27	153	1	181	12	174	15	201	756
07:45 AM	47	188	6	241	0	72	33	105	21	119	2	142	12	169	27	208	696
Total Volume	199	769	30	998	4	303	206	513	85	542	7	634	47	626	101	774	2919
% App. Total	19.9	77.1	3		0.8	59.1	40.2		13.4	85.5	1.1		6.1	80.9	13		
PHF	.732	.878	.682	.854	.500	.861	.780	.827	.787	.886	.583	.876	.979	.899	.743	.930	.965

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:15 AM				
+0 mins.	68	219	5	292	2	76	53	131	15	137	1	153	11	149	34	194	
+15 mins.	45	190	11	246	1	67	54	122	22	133	3	158	12	174	15	201	
+30 mins.	39	172	8	219	1	88	66	155	27	153	1	181	12	169	27	208	
+45 mins.	47	188	6	241	0	72	33	105	21	119	2	142	7	153	34	194	
Total Volume	199	769	30	998	4	303	206	513	85	542	7	634	42	645	110	797	
% App. Total	19.9	77.1	3		0.8	59.1	40.2		13.4	85.5	1.1		5.3	80.9	13.8		
PHF	.732	.878	.682	.854	.500	.861	.780	.827	.787	.886	.583	.876	.875	.927	.809	.958	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

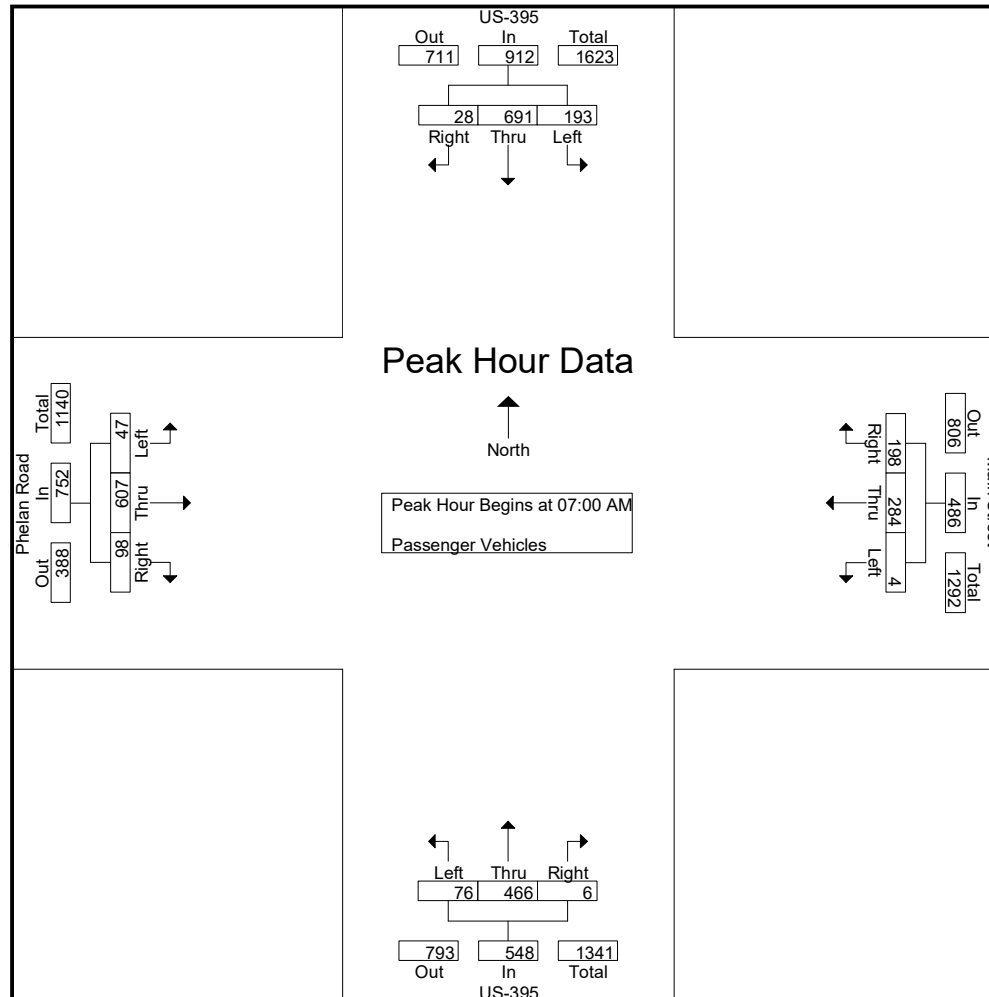
Groups Printed- Passenger Vehicles

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	64	199	4	0	267	2	69	50	19	121	15	120	1	0	136	12	130	24	15	166	34	690	724
07:15 AM	44	173	10	2	227	1	63	52	24	116	20	112	3	0	135	11	146	34	12	191	38	669	707
07:30 AM	39	150	8	2	197	1	84	64	20	149	23	134	1	0	158	12	170	14	6	196	28	700	728
07:45 AM	46	169	6	0	221	0	68	32	13	100	18	100	1	0	119	12	161	26	10	199	23	639	662
Total	193	691	28	4	912	4	284	198	76	486	76	466	6	0	548	47	607	98	43	752	123	2698	2821
08:00 AM	27	162	5	1	194	1	66	33	12	100	11	72	0	0	83	7	150	28	6	185	19	562	581
08:15 AM	44	161	9	2	214	1	54	31	16	86	12	117	1	0	130	14	138	27	14	179	32	609	641
08:30 AM	33	143	8	2	184	2	82	35	14	119	17	109	2	0	128	11	155	21	8	187	24	618	642
08:45 AM	33	138	8	1	179	1	51	28	21	80	14	82	3	1	99	11	128	17	4	156	27	514	541
Total	137	604	30	6	771	5	253	127	63	385	54	380	6	1	440	43	571	93	32	707	102	2303	2405
Grand Total	330	1295	58	10	1683	9	537	325	139	871	130	846	12	1	988	90	1178	191	75	1459	225	5001	5226
Apprch %	19.6	76.9	3.4			1	61.7	37.3			13.2	85.6	1.2			6.2	80.7	13.1					
Total %	6.6	25.9	1.2		33.7	0.2	10.7	6.5		17.4	2.6	16.9	0.2		19.8	1.8	23.6	3.8		29.2	4.3	95.7	

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	64	199	4	267	2	69	50	121	15	120	1	136	12	130	24	166	690
07:15 AM	44	173	10	227	1	63	52	116	20	112	3	135	11	146	34	191	669
07:30 AM	39	150	8	197	1	84	64	149	23	134	1	158	12	170	14	196	700
07:45 AM	46	169	6	221	0	68	32	100	18	100	1	119	12	161	26	199	639
Total Volume	193	691	28	912	4	284	198	486	76	466	6	548	47	607	98	752	2698
% App. Total	21.2	75.8	3.1		0.8	58.4	40.7		13.9	85	1.1		6.2	80.7	13		
PHF	.754	.868	.700	.854	.500	.845	.773	.815	.826	.869	.500	.867	.979	.893	.721	.945	.964

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	64	199	4	267	2	69	50	121	15	120	1	136	12	130	24	166	
+15 mins.	44	173	10	227	1	63	52	116	20	112	3	135	11	146	34	191	
+30 mins.	39	150	8	197	1	84	64	149	23	134	1	158	12	170	14	196	
+45 mins.	46	169	6	221	0	68	32	100	18	100	1	119	12	161	26	199	
Total Volume	193	691	28	912	4	284	198	486	76	466	6	548	47	607	98	752	
% App. Total	21.2	75.8	3.1		0.8	58.4	40.7		13.9	85	1.1		6.2	80.7	13		
PHF	.754	.868	.700	.854	.500	.845	.773	.815	.826	.869	.500	.867	.979	.893	.721	.945	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

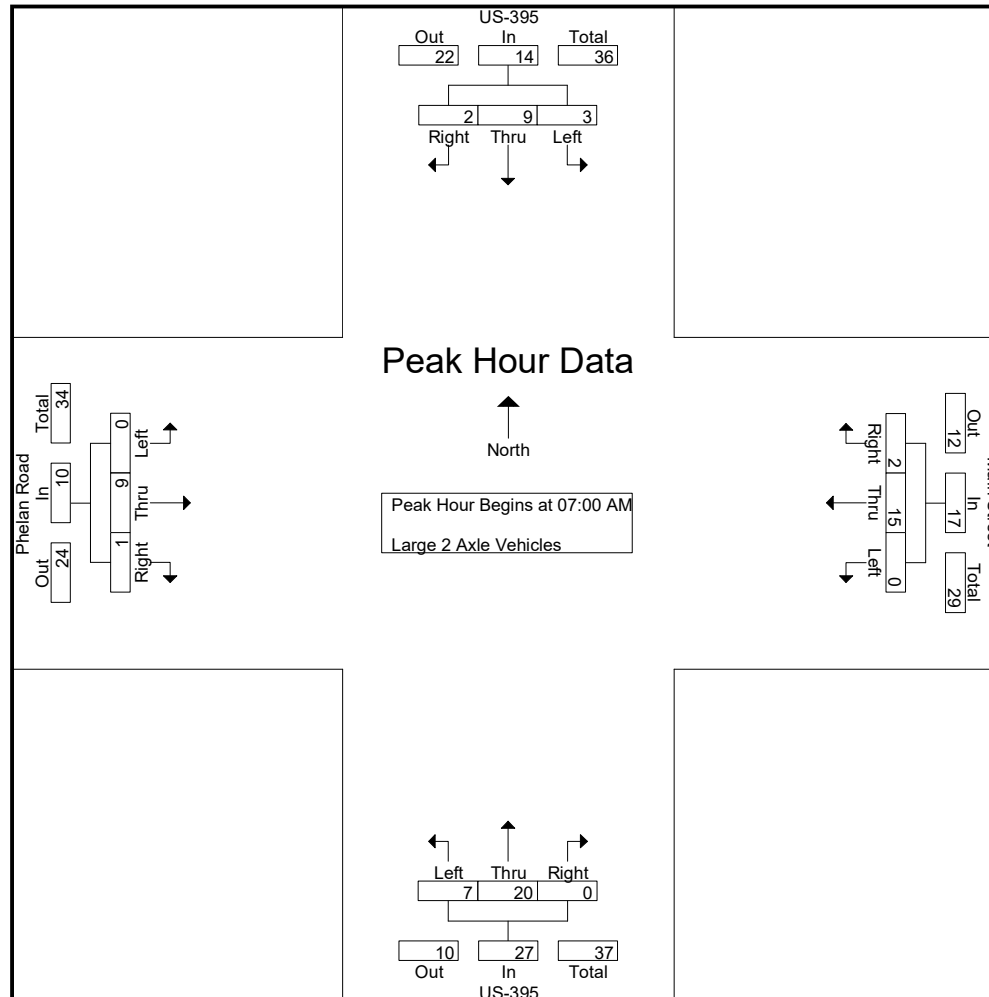
Groups Printed- Large 2 Axle Vehicles

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	1	3	1	0	5	0	7	1	0	8	0	3	0	0	3	0	2	0	0	2	0	18	18
07:15 AM	1	2	1	0	4	0	3	0	0	3	1	8	0	0	9	0	2	0	0	2	0	18	18
07:30 AM	0	4	0	0	4	0	2	1	1	3	4	5	0	0	9	0	1	1	0	2	1	18	19
07:45 AM	1	0	0	0	1	0	3	0	0	3	2	4	0	0	6	0	4	0	0	4	0	14	14
Total	3	9	2	0	14	0	15	2	1	17	7	20	0	0	27	0	9	1	0	10	1	68	69
08:00 AM	1	2	0	0	3	0	4	1	1	5	1	1	1	0	3	0	2	5	0	7	1	18	19
08:15 AM	0	5	0	0	5	0	2	0	0	2	0	4	0	0	4	0	1	0	0	1	0	12	12
08:30 AM	2	4	1	0	7	0	3	1	1	4	3	4	0	0	7	0	3	1	0	4	1	22	23
08:45 AM	0	3	2	0	5	0	1	1	1	2	0	11	1	0	12	0	1	0	0	1	1	20	21
Total	3	14	3	0	20	0	10	3	3	13	4	20	2	0	26	0	7	6	0	13	3	72	75
Grand Total	6	23	5	0	34	0	25	5	4	30	11	40	2	0	53	0	16	7	0	23	4	140	144
Apprch %	17.6	67.6	14.7			0	83.3	16.7			20.8	75.5	3.8			0	69.6	30.4					
Total %	4.3	16.4	3.6		24.3	0	17.9	3.6		21.4	7.9	28.6	1.4		37.9	0	11.4	5		16.4	2.8	97.2	

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	3	1	5	0	7	1	8	0	3	0	3	0	2	0	2	18
07:15 AM	1	2	1	4	0	3	0	3	1	8	0	9	0	2	0	2	18
07:30 AM	0	4	0	4	0	2	1	3	4	5	0	9	0	1	1	2	18
07:45 AM	1	0	0	1	0	3	0	3	2	4	0	6	0	4	0	4	14
Total Volume	3	9	2	14	0	15	2	17	7	20	0	27	0	9	1	10	68
% App. Total	21.4	64.3	14.3		0	88.2	11.8		25.9	74.1	0		0	90	10		
PHF	.750	.563	.500	.700	.000	.536	.500	.531	.438	.625	.000	.750	.000	.563	.250	.625	.944

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	1	3	1	5	0	7	1	8	0	3	0	3	0	2	0	2	
+15 mins.	1	2	1	4	0	3	0	3	1	8	0	9	0	2	0	2	
+30 mins.	0	4	0	4	0	2	1	3	4	5	0	9	0	1	1	2	
+45 mins.	1	0	0	1	0	3	0	3	2	4	0	6	0	4	0	4	
Total Volume	3	9	2	14	0	15	2	17	7	20	0	27	0	9	1	10	
% App. Total	21.4	64.3	14.3		0	88.2	11.8		25.9	74.1	0		0	90	10		
PHF	.750	.563	.500	.700	.000	.536	.500	.531	.438	.625	.000	.750	.000	.563	.250	.625	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

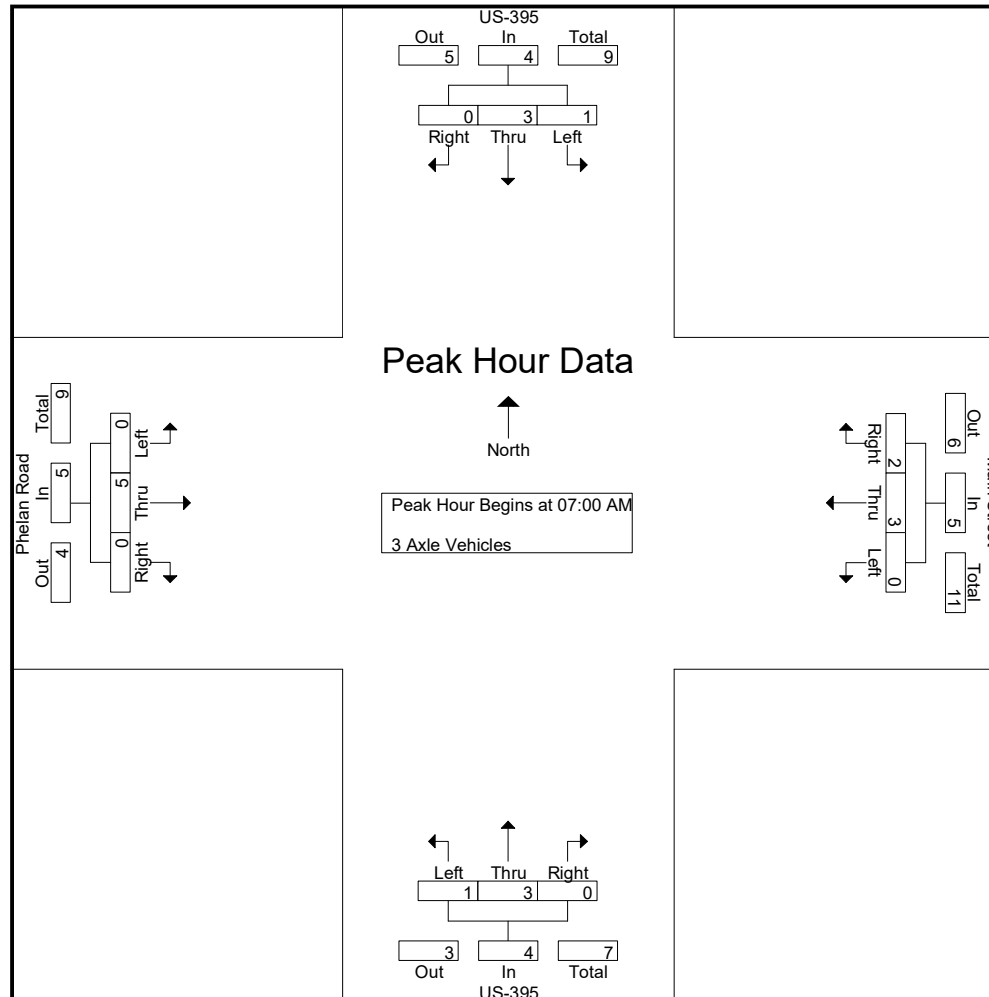
Groups Printed- 3 Axle Vehicles

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	1	2	0	0	3	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	0	6	6
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	2	2
07:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	3	3
07:45 AM	0	1	0	0	1	0	1	1	0	2	1	1	0	0	2	0	2	0	0	2	0	7	7
Total	1	3	0	0	4	0	3	2	0	5	1	3	0	0	4	0	5	0	0	5	0	18	18
08:00 AM	2	1	0	0	3	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0	0	6	6
08:15 AM	0	0	0	0	0	0	1	0	0	1	0	4	0	0	4	0	1	0	0	1	0	6	6
08:30 AM	0	3	0	0	3	0	1	1	1	2	0	2	0	0	2	0	0	0	0	0	1	7	8
08:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	2
Total	2	5	0	0	7	0	3	1	1	4	1	7	0	0	8	0	2	0	0	2	1	21	22
Grand Total	3	8	0	0	11	0	6	3	1	9	2	10	0	0	12	0	7	0	0	7	1	39	40
Apprch %	27.3	72.7	0			0	66.7	33.3			16.7	83.3	0			0	100	0					
Total %	7.7	20.5	0		28.2	0	15.4	7.7		23.1	5.1	25.6	0		30.8	0	17.9	0		17.9	2.5	97.5	

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	2	0	3	0	0	1	1	0	1	0	1	0	1	0	1	6
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	1	0	1	0	1	1	2	1	1	0	2	0	2	0	2	7
Total Volume	1	3	0	4	0	3	2	5	1	3	0	4	0	5	0	5	18
% App. Total	25	75	0		0	60	40		25	75	0		0	100	0		
PHF	.250	.375	.000	.333	.000	.375	.500	.625	.250	.750	.000	.500	.000	.625	.000	.625	.643

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	1	2	0	3	0	0	1	1	0	1	0	1	0	1	0	1	1
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	1
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	1
+45 mins.	0	1	0	1	0	1	1	2	1	1	0	2	0	2	0	2	2
Total Volume	1	3	0	4	0	3	2	5	1	3	0	4	0	5	0	5	5
% App. Total	25	75	0		0	60	40		25	75	0		0	100	0		
PHF	.250	.375	.000	.333	.000	.375	.500	.625	.250	.750	.000	.500	.000	.625	.000	.625	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

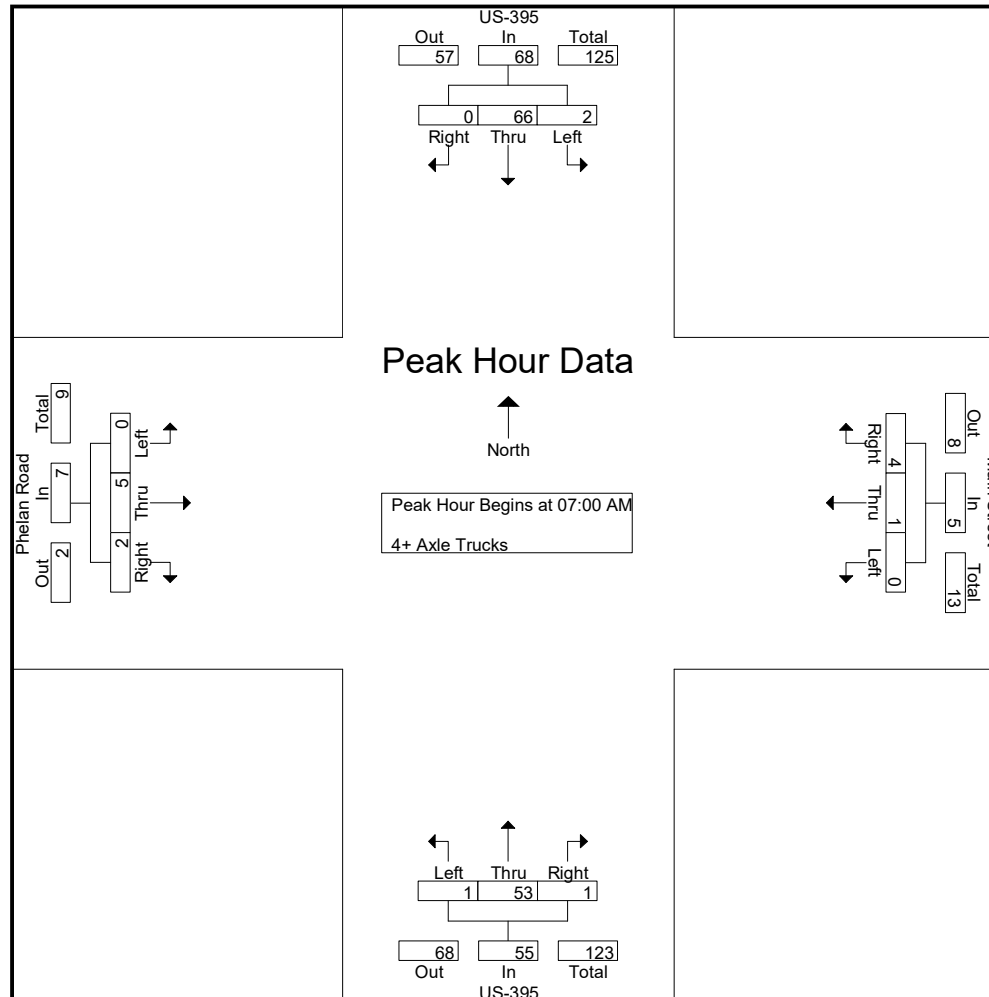
Groups Printed- 4+ Axle Trucks

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	2	15	0	0	17	0	0	1	0	1	0	13	0	0	13	0	1	1	0	2	0	33	33
07:15 AM	0	15	0	0	15	0	1	2	0	3	1	12	0	0	13	0	0	0	0	0	0	31	31
07:30 AM	0	18	0	0	18	0	0	1	0	1	0	14	0	0	14	0	2	0	0	2	0	35	35
07:45 AM	0	18	0	0	18	0	0	0	0	0	0	14	1	0	15	0	2	1	0	3	0	36	36
Total	2	66	0	0	68	0	1	4	0	5	1	53	1	0	55	0	5	2	0	7	0	135	135
08:00 AM	1	11	0	0	12	0	0	1	1	1	0	11	0	0	11	0	1	1	0	2	1	26	27
08:15 AM	0	16	0	0	16	0	0	0	0	0	1	11	0	0	12	0	1	0	0	1	0	29	29
08:30 AM	0	20	0	0	20	0	1	0	0	1	0	14	1	0	15	1	0	0	0	1	0	37	37
08:45 AM	0	16	0	0	16	0	1	0	0	1	1	12	0	0	13	0	0	0	0	0	0	30	30
Total	1	63	0	0	64	0	2	1	1	3	2	48	1	0	51	1	2	1	0	4	1	122	123
Grand Total	3	129	0	0	132	0	3	5	1	8	3	101	2	0	106	1	7	3	0	11	1	257	258
Apprch %	2.3	97.7	0			0	37.5	62.5			2.8	95.3	1.9			9.1	63.6	27.3					
Total %	1.2	50.2	0		51.4	0	1.2	1.9		3.1	1.2	39.3	0.8		41.2	0.4	2.7	1.2		4.3	0.4	99.6	

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	15	0	17	0	0	1	1	0	13	0	13	0	1	1	2	33
07:15 AM	0	15	0	15	0	1	2	3	1	12	0	13	0	0	0	0	31
07:30 AM	0	18	0	18	0	0	1	1	0	14	0	14	0	2	0	2	35
07:45 AM	0	18	0	18	0	0	0	0	0	14	1	15	0	2	1	3	36
Total Volume	2	66	0	68	0	1	4	5	1	53	1	55	0	5	2	7	135
% App. Total	2.9	97.1	0		0	20	80		1.8	96.4	1.8		0	71.4	28.6		
PHF	.250	.917	.000	.944	.000	.250	.500	.417	.250	.946	.250	.917	.000	.625	.500	.583	.938

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	2	15	0	17	0	0	1	1	0	13	0	13	0	1	1	2	
+15 mins.	0	15	0	15	0	1	2	3	1	12	0	13	0	0	0	0	
+30 mins.	0	18	0	18	0	0	1	1	0	14	0	14	0	2	0	2	
+45 mins.	0	18	0	18	0	0	0	0	0	14	1	15	0	2	1	3	
Total Volume	2	66	0	68	0	1	4	5	1	53	1	55	0	5	2	7	
% App. Total	2.9	97.1	0		0	20	80		1.8	96.4	1.8		0	71.4	28.6		
PHF	.250	.917	.000	.944	.000	.250	.500	.417	.250	.946	.250	.917	.000	.625	.500	.583	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

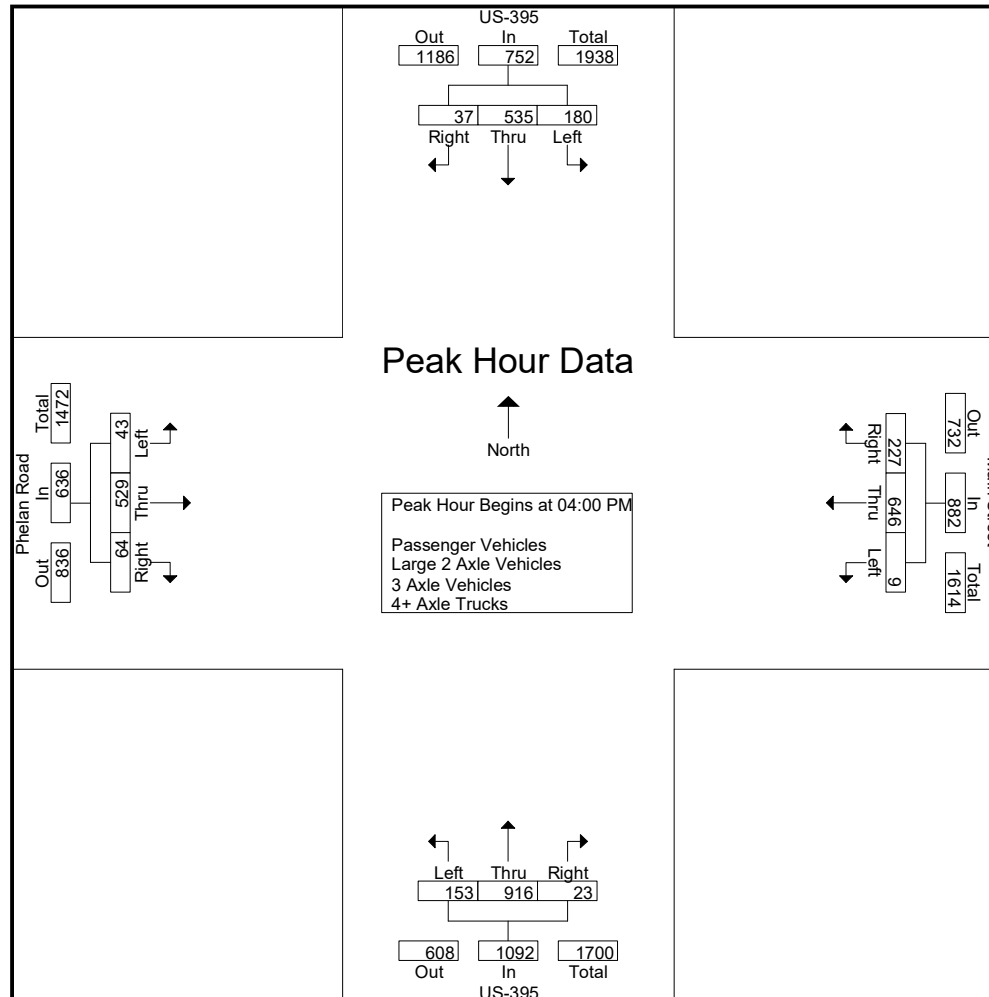
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	47	144	11	5	202	1	164	52	19	217	31	209	10	2	250	8	137	22	11	167	37	836	873
04:15 PM	46	132	9	4	187	3	180	68	25	251	47	230	6	0	283	9	140	12	5	161	34	882	916
04:30 PM	42	142	6	1	190	1	144	57	16	202	38	225	2	2	265	15	138	19	8	172	27	829	856
04:45 PM	45	117	11	4	173	4	158	50	20	212	37	252	5	3	294	11	114	11	3	136	30	815	845
Total	180	535	37	14	752	9	646	227	80	882	153	916	23	7	1092	43	529	64	27	636	128	3362	3490
05:00 PM	43	145	9	0	197	3	176	54	20	233	24	204	6	2	234	7	139	12	3	158	25	822	847
05:15 PM	49	126	9	2	184	0	128	60	25	188	39	229	7	0	275	16	152	21	9	189	36	836	872
05:30 PM	36	135	6	5	177	3	170	66	15	239	45	245	7	0	297	14	134	21	7	169	27	882	909
05:45 PM	39	134	4	2	177	3	137	54	16	194	28	259	8	3	295	6	104	26	13	136	34	802	836
Total	167	540	28	9	735	9	611	234	76	854	136	937	28	5	1101	43	529	80	32	652	122	3342	3464
Grand Total	347	1075	65	23	1487	18	1257	461	156	1736	289	1853	51	12	2193	86	1058	144	59	1288	250	6704	6954
Apprch %	23.3	72.3	4.4			1	72.4	26.6			13.2	84.5	2.3			6.7	82.1	11.2					
Total %	5.2	16	1		22.2	0.3	18.8	6.9		25.9	4.3	27.6	0.8		32.7	1.3	15.8	2.1		19.2	3.6	96.4	
Passenger Vehicles	338	922	59		1342	18	1241	449		1861	275	1744	47		2077	84	1026	139		1306	0	0	6586
% Passenger Vehicles	97.4	85.8	90.8	100	88.9	100	98.7	97.4	98.1	98.4	95.2	94.1	92.2	91.7	94.2	97.7	97	96.5	96.6	97	0	0	94.7
Large 2 Axle Vehicles	4	19	2		25	0	9	7		16	9	18	1		28	2	25	1		28	0	0	97
% Large 2 Axle Vehicles	1.2	1.8	3.1	0	1.7	0	0.7	1.5	0	0.8	3.1	1	2	0	1.3	2.3	2.4	0.7	0	2.1	0	0	1.4
3 Axle Vehicles	0	6	0		6	0	2	0		2	0	11	0		11	0	0	3		5	0	0	24
% 3 Axle Vehicles	0	0.6	0	0	0.4	0	0.2	0	0	0.1	0	0.6	0	0	0.5	0	0	2.1	3.4	0.4	0	0	0.3
4+ Axle Trucks	5	128	4		137	0	5	5		13	5	80	3		89	0	7	1		8	0	0	247
% 4+ Axle Trucks	1.4	11.9	6.2	0	9.1	0	0.4	1.1	1.9	0.7	1.7	4.3	5.9	8.3	4	0	0.7	0.7	0	0.6	0	0	3.6

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	47	144	11	202	1	164	52	217	31	209	10	250	8	137	22	167	836
04:15 PM	46	132	9	187	3	180	68	251	47	230	6	283	9	140	12	161	882
04:30 PM	42	142	6	190	1	144	57	202	38	225	2	265	15	138	19	172	829
04:45 PM	45	117	11	173	4	158	50	212	37	252	5	294	11	114	11	136	815
Total Volume	180	535	37	752	9	646	227	882	153	916	23	1092	43	529	64	636	3362
% App. Total	23.9	71.1	4.9		1	73.2	25.7		14	83.9	2.1		6.8	83.2	10.1		
PHF	.957	.929	.841	.931	.563	.897	.835	.878	.814	.909	.575	.929	.717	.945	.727	.924	.953

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:15 PM				05:00 PM				04:30 PM				
+0 mins.	47	144	11	202	3	180	68	251	24	204	6	234	15	138	19	172	
+15 mins.	46	132	9	187	1	144	57	202	39	229	7	275	11	114	11	136	
+30 mins.	42	142	6	190	4	158	50	212	45	245	7	297	7	139	12	158	
+45 mins.	45	117	11	173	3	176	54	233	28	259	8	295	16	152	21	189	
Total Volume	180	535	37	752	11	658	229	898	136	937	28	1101	49	543	63	655	
% App. Total	23.9	71.1	4.9		1.2	73.3	25.5		12.4	85.1	2.5		7.5	82.9	9.6		
PHF	.957	.929	.841	.931	.688	.914	.842	.894	.756	.904	.875	.927	.766	.893	.750	.866	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

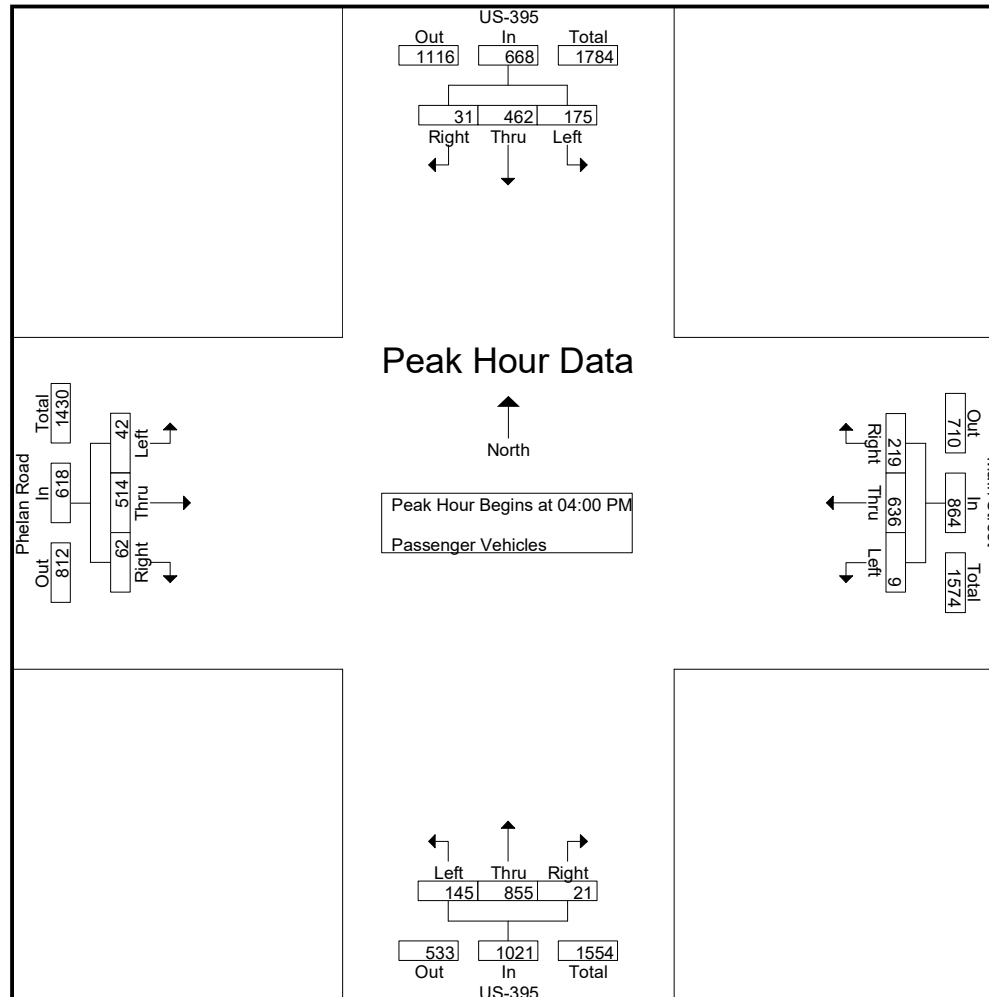
Groups Printed- Passenger Vehicles

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	44	124	9	5	177	1	161	50	18	212	29	194	9	2	232	8	136	22	11	166	36	787	823
04:15 PM	45	116	7	4	168	3	177	65	25	245	46	209	5	0	260	9	139	12	5	160	34	833	867
04:30 PM	41	124	4	1	169	1	142	55	16	198	36	208	2	2	246	14	130	17	8	161	27	774	801
04:45 PM	45	98	11	4	154	4	156	49	19	209	34	244	5	3	283	11	109	11	3	131	29	777	806
Total	175	462	31	14	668	9	636	219	78	864	145	855	21	7	1021	42	514	62	27	618	126	3171	3297
05:00 PM	42	122	9	0	173	3	172	53	20	228	24	193	6	2	223	7	134	12	3	153	25	777	802
05:15 PM	48	107	9	2	164	0	126	59	24	185	39	220	7	0	266	16	148	20	9	184	35	799	834
05:30 PM	35	115	6	5	156	3	170	66	15	239	44	225	7	0	276	13	130	20	6	163	26	834	860
05:45 PM	38	116	4	2	158	3	137	52	16	192	23	251	6	2	280	6	100	25	12	131	32	761	793
Total	163	460	28	9	651	9	605	230	75	844	130	889	26	4	1045	42	512	77	30	631	118	3171	3289
Grand Total	338	922	59	23	1319	18	1241	449	153	1708	275	1744	47	11	2066	84	1026	139	57	1249	244	6342	6586
Apprch %	25.6	69.9	4.5			1.1	72.7	26.3			13.3	84.4	2.3			6.7	82.1	11.1					
Total %	5.3	14.5	0.9		20.8	0.3	19.6	7.1		26.9	4.3	27.5	0.7		32.6	1.3	16.2	2.2		19.7	3.7	96.3	

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	44	124	9	177	1	161	50	212	29	194	9	232	8	136	22	166	787
04:15 PM	45	116	7	168	3	177	65	245	46	209	5	260	9	139	12	160	833
04:30 PM	41	124	4	169	1	142	55	198	36	208	2	246	14	130	17	161	774
04:45 PM	45	98	11	154	4	156	49	209	34	244	5	283	11	109	11	131	777
Total Volume	175	462	31	668	9	636	219	864	145	855	21	1021	42	514	62	618	3171
% App. Total	26.2	69.2	4.6		1	73.6	25.3		14.2	83.7	2.1		6.8	83.2	10		
PHF	.972	.931	.705	.944	.563	.898	.842	.882	.788	.876	.583	.902	.750	.924	.705	.931	.952

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	44	124	9	177	1	161	50	212	29	194	9	232	8	136	22	166	
+15 mins.	45	116	7	168	3	177	65	245	46	209	5	260	9	139	12	160	
+30 mins.	41	124	4	169	1	142	55	198	36	208	2	246	14	130	17	161	
+45 mins.	45	98	11	154	4	156	49	209	34	244	5	283	11	109	11	131	
Total Volume	175	462	31	668	9	636	219	864	145	855	21	1021	42	514	62	618	
% App. Total	26.2	69.2	4.6		1	73.6	25.3		14.2	83.7	2.1		6.8	83.2	10		
PHF	.972	.931	.705	.944	.563	.898	.842	.882	.788	.876	.583	.902	.750	.924	.705	.931	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

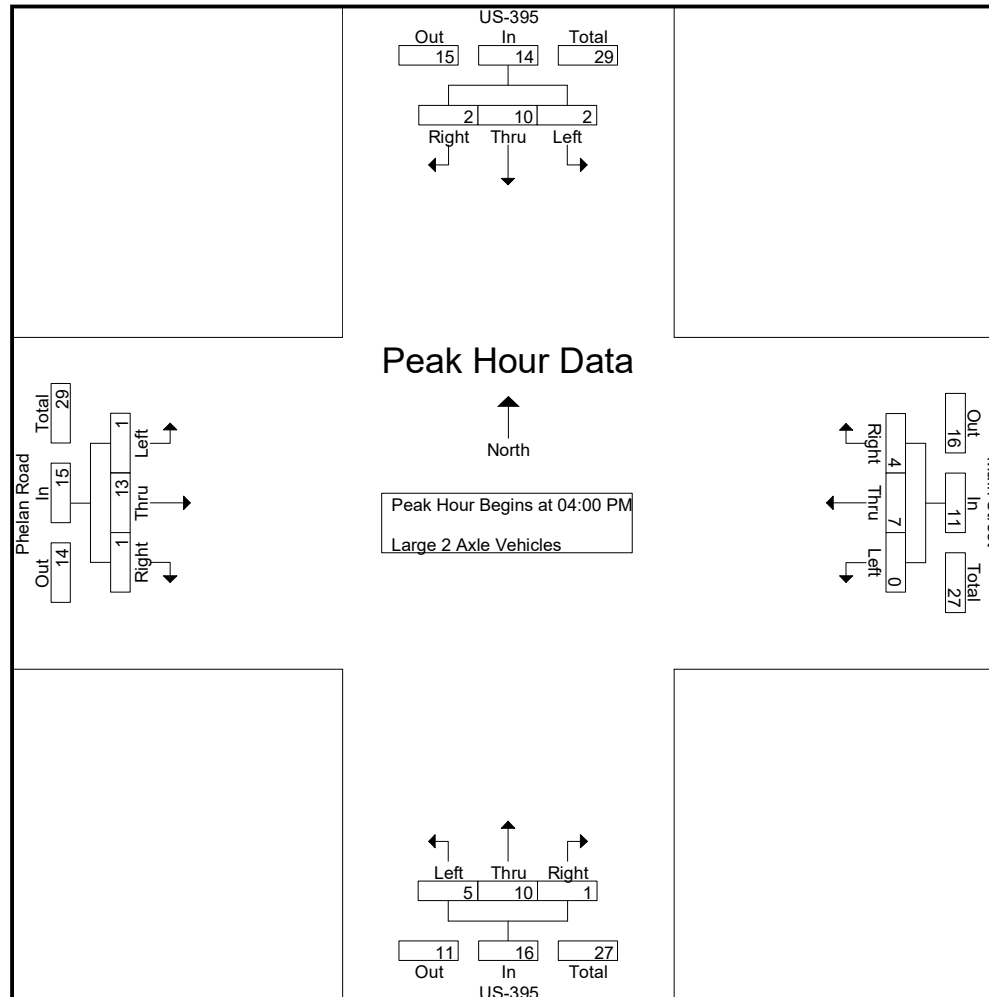
Groups Printed- Large 2 Axle Vehicles

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	3	1	0	4	0	2	1	0	3	1	3	1	0	5	0	1	0	0	1	0	13	13
04:15 PM	1	2	0	0	3	0	2	2	0	4	1	4	0	0	5	0	1	0	0	1	0	13	13
04:30 PM	1	0	1	0	2	0	2	1	0	3	2	2	0	0	4	1	6	1	0	8	0	17	17
04:45 PM	0	5	0	0	5	0	1	0	0	1	1	1	0	0	2	0	5	0	0	5	0	13	13
Total	2	10	2	0	14	0	7	4	0	11	5	10	1	0	16	1	13	1	0	15	0	56	56
05:00 PM	0	4	0	0	4	0	2	1	0	3	0	2	0	0	2	0	5	0	0	5	0	14	14
05:15 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	0	5	5
05:30 PM	1	3	0	0	4	0	0	0	0	0	1	4	0	0	5	1	4	0	0	5	0	14	14
05:45 PM	0	2	0	0	2	0	0	2	0	2	3	0	0	0	3	0	1	0	0	1	0	8	8
Total	2	9	0	0	11	0	2	3	0	5	4	8	0	0	12	1	12	0	0	13	0	41	41
Grand Total	4	19	2	0	25	0	9	7	0	16	9	18	1	0	28	2	25	1	0	28	0	97	97
Apprch %	16	76	8			0	56.2	43.8			32.1	64.3	3.6			7.1	89.3	3.6					
Total %	4.1	19.6	2.1		25.8	0	9.3	7.2		16.5	9.3	18.6	1		28.9	2.1	25.8	1		28.9	0	100	

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	3	1	4	0	2	1	3	1	3	1	5	0	1	0	1	13
04:15 PM	1	2	0	3	0	2	2	4	1	4	0	5	0	1	0	1	13
04:30 PM	1	0	1	2	0	2	1	3	2	2	0	4	1	6	1	8	17
04:45 PM	0	5	0	5	0	1	0	1	1	1	0	2	0	5	0	5	13
Total Volume	2	10	2	14	0	7	4	11	5	10	1	16	1	13	1	15	56
% App. Total	14.3	71.4	14.3		0	63.6	36.4		31.2	62.5	6.2		6.7	86.7	6.7		
PHF	.500	.500	.500	.700	.000	.875	.500	.688	.625	.625	.250	.800	.250	.542	.250	.469	.824

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	3	1	4	0	2	1	3	1	3	1	5	0	1	0	1	
+15 mins.	1	2	0	3	0	2	2	4	1	4	0	5	0	1	0	1	
+30 mins.	1	0	1	2	0	2	1	3	2	2	0	4	1	6	1	8	
+45 mins.	0	5	0	5	0	1	0	1	1	1	0	2	0	5	0	5	
Total Volume	2	10	2	14	0	7	4	11	5	10	1	16	1	13	1	15	
% App. Total	14.3	71.4	14.3		0	63.6	36.4		31.2	62.5	6.2		6.7	86.7	6.7		
PHF	.500	.500	.500	.700	.000	.875	.500	.688	.625	.625	.250	.800	.250	.542	.250	.469	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

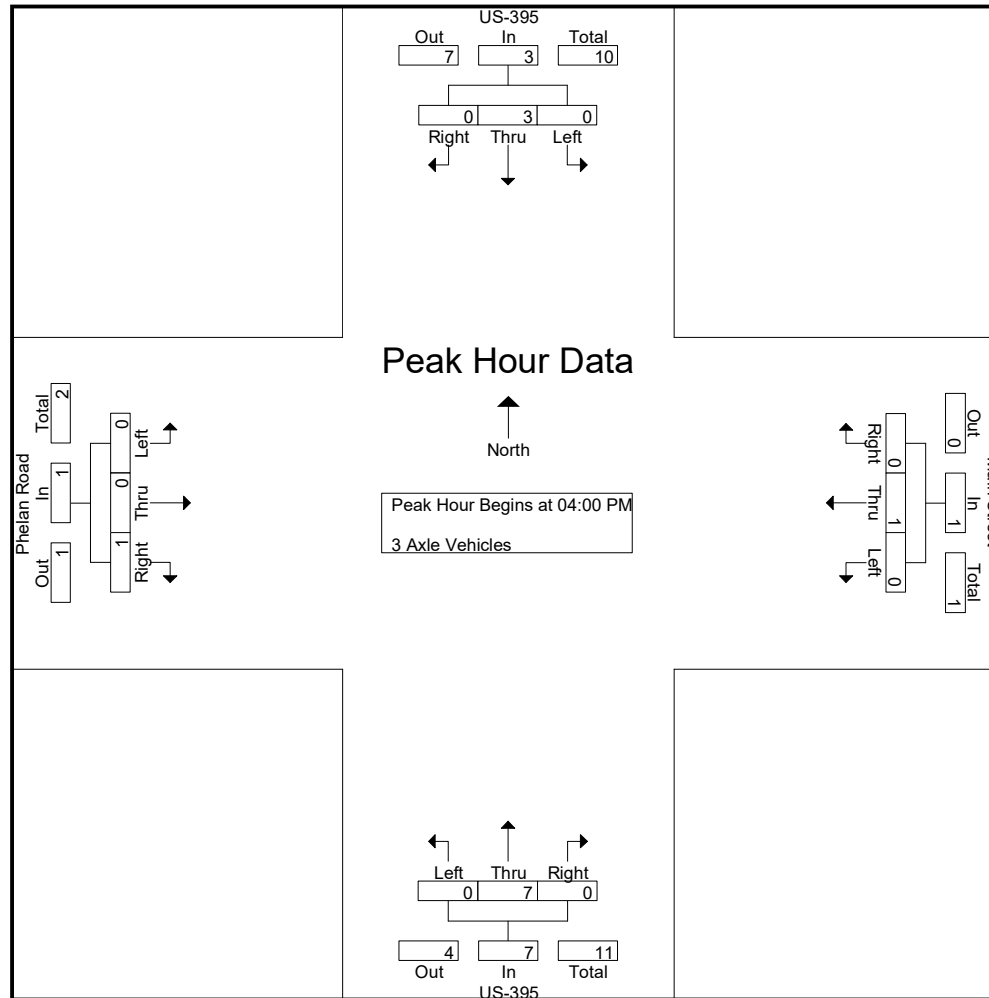
Groups Printed- 3 Axle Vehicles

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	3
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	4	0	0	4	0	0	0	0	0	0	5	5
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	3	3
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	3	0	0	3	0	1	0	0	1	0	7	0	0	7	0	0	1	0	1	0	12	12
05:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	2	2
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	1	1	1	1	4	5
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	1	2	3
Total	0	3	0	0	3	0	1	0	0	1	0	4	0	0	4	0	0	2	2	2	2	10	12
Grand Total	0	6	0	0	6	0	2	0	0	2	0	11	0	0	11	0	0	3	2	3	2	22	24
Apprch %	0	100	0			0	100	0			0	100	0			0	0	100					
Total %	0	27.3	0		27.3	0	9.1	0		9.1	0	50	0		50	0	0	13.6		13.6	8.3	91.7	

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
04:15 PM	0	0	0	0	0	1	0	1	0	4	0	4	0	0	0	0	5
04:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	3	0	3	0	1	0	1	0	7	0	7	0	0	1	1	12
% App. Total	0	100	0		0	100	0		0	100	0		0	0	100		
PHF	.000	.750	.000	.750	.000	.250	.000	.250	.000	.438	.000	.438	.000	.000	.250	.250	.600

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	4	0	4	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	1
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	3	0	3	0	1	0	1	0	7	0	7	0	0	1	1	1
% App. Total	0	100	0		0	100	0		0	100	0		0	0	100		
PHF	.000	.750	.000	.750	.000	.250	.000	.250	.000	.438	.000	.438	.000	.000	.250	.250	

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

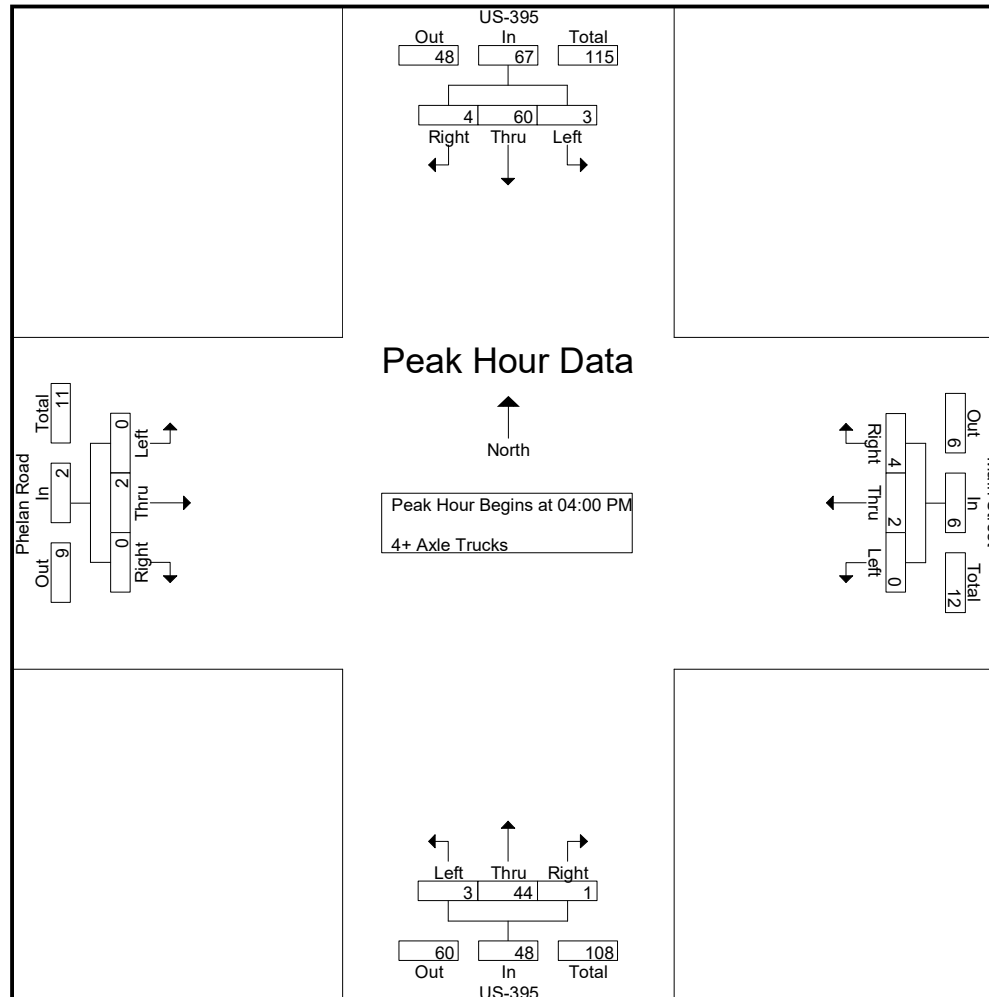
Groups Printed- 4+ Axle Trucks

	US-395 Southbound					Main Street Westbound					US-395 Northbound					Phelan Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	3	16	1	0	20	0	1	1	1	2	1	10	0	0	11	0	0	0	0	0	1	33	34
04:15 PM	0	14	2	0	16	0	0	1	0	1	0	13	1	0	14	0	0	0	0	0	0	31	31
04:30 PM	0	17	1	0	18	0	0	1	0	1	0	14	0	0	14	0	2	0	0	2	0	35	35
04:45 PM	0	13	0	0	13	0	1	1	1	2	2	7	0	0	9	0	0	0	0	0	1	24	25
Total	3	60	4	0	67	0	2	4	2	6	3	44	1	0	48	0	2	0	0	2	2	123	125
05:00 PM	1	17	0	0	18	0	2	0	0	2	0	9	0	0	9	0	0	0	0	0	0	29	29
05:15 PM	0	19	0	0	19	0	1	1	1	2	0	6	0	0	6	0	2	1	0	3	1	30	31
05:30 PM	0	16	0	0	16	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	30	30
05:45 PM	1	16	0	0	17	0	0	0	0	0	2	7	2	1	11	0	3	0	0	3	1	31	32
Total	2	68	0	0	70	0	3	1	1	4	2	36	2	1	40	0	5	1	0	6	2	120	122
Grand Total	5	128	4	0	137	0	5	5	3	10	5	80	3	1	88	0	7	1	0	8	4	243	247
Apprch %	3.6	93.4	2.9			0	50	50			5.7	90.9	3.4			0	87.5	12.5					
Total %	2.1	52.7	1.6		56.4	0	2.1	2.1		4.1	2.1	32.9	1.2		36.2	0	2.9	0.4		3.3	1.6	98.4	

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	3	16	1	20	0	1	1	2	1	10	0	11	0	0	0	0	33
04:15 PM	0	14	2	16	0	0	1	1	0	13	1	14	0	0	0	0	31
04:30 PM	0	17	1	18	0	0	1	1	0	14	0	14	0	2	0	2	35
04:45 PM	0	13	0	13	0	1	1	2	2	7	0	9	0	0	0	0	24
Total Volume	3	60	4	67	0	2	4	6	3	44	1	48	0	2	0	2	123
% App. Total	4.5	89.6	6		0	33.3	66.7		6.2	91.7	2.1		0	100	0		
PHF	.250	.882	.500	.838	.000	.500	1.00	.750	.375	.786	.250	.857	.000	.250	.000	.250	.879

City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: US-395
E/W: Phelan Road/Main Street
Weather: Clear

File Name : 08_HES_US-395_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	US-395 Southbound				Main Street Westbound				US-395 Northbound				Phelan Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	3	16	1	20	0	1	1	2	1	10	0	11	0	0	0	0	
+15 mins.	0	14	2	16	0	0	1	1	0	13	1	14	0	0	0	0	
+30 mins.	0	17	1	18	0	0	1	1	0	14	0	14	0	2	0	2	
+45 mins.	0	13	0	13	0	1	1	2	2	7	0	9	0	0	0	0	
Total Volume	3	60	4	67	0	2	4	6	3	44	1	48	0	2	0	2	
% App. Total	4.5	89.6	6		0	33.3	66.7		6.2	91.7	2.1		0	100	0		
PHF	.250	.882	.500	.838	.000	.500	1.000	.750	.375	.786	.250	.857	.000	.250	.000	.250	

Location: Hesperia
 N/S: US-395
 E/W: Phelan Road/Main Street



Date: 9/28/2019
 Day: Saturday

PEDESTRIANS

	North Leg US-395	East Leg Phelan Road/Main Street	South Leg US-395	West Leg Phelan Road/Main Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg US-395	East Leg Phelan Road/Main Street	South Leg US-395	West Leg Phelan Road/Main Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	1	0	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

Location: Hesperia
 N/S: US-395
 E/W: Phelan Road/Main Street



Date: 9/28/2019
 Day: Saturday

BICYCLES

		Southbound US-395			Westbound Phelan Road/Main Street			Northbound US-395			Eastbound Phelan Road/Main Street			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	0	0	0

		Southbound US-395			Westbound Phelan Road/Main Street			Northbound US-395			Eastbound Phelan Road/Main Street			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM		0	0	0	0	0	0	0	0	0	0	0	1	1
4:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM		0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	1	1	2

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Tue, Jan 7, 20

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Hesperia
SR-395
Poplar

PROJECT #:
LOCATION #:
CONTROL:

SC2468
14
STOP W

NOTES:

AM
PM
MD
OTHER
OTHER

▲
N
▼

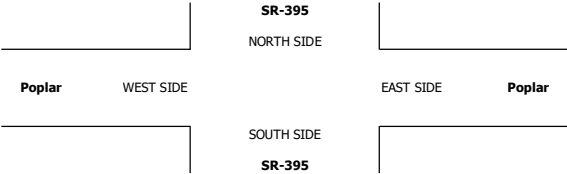
◀
W
▶

◀
E
▶

▲
S
▼

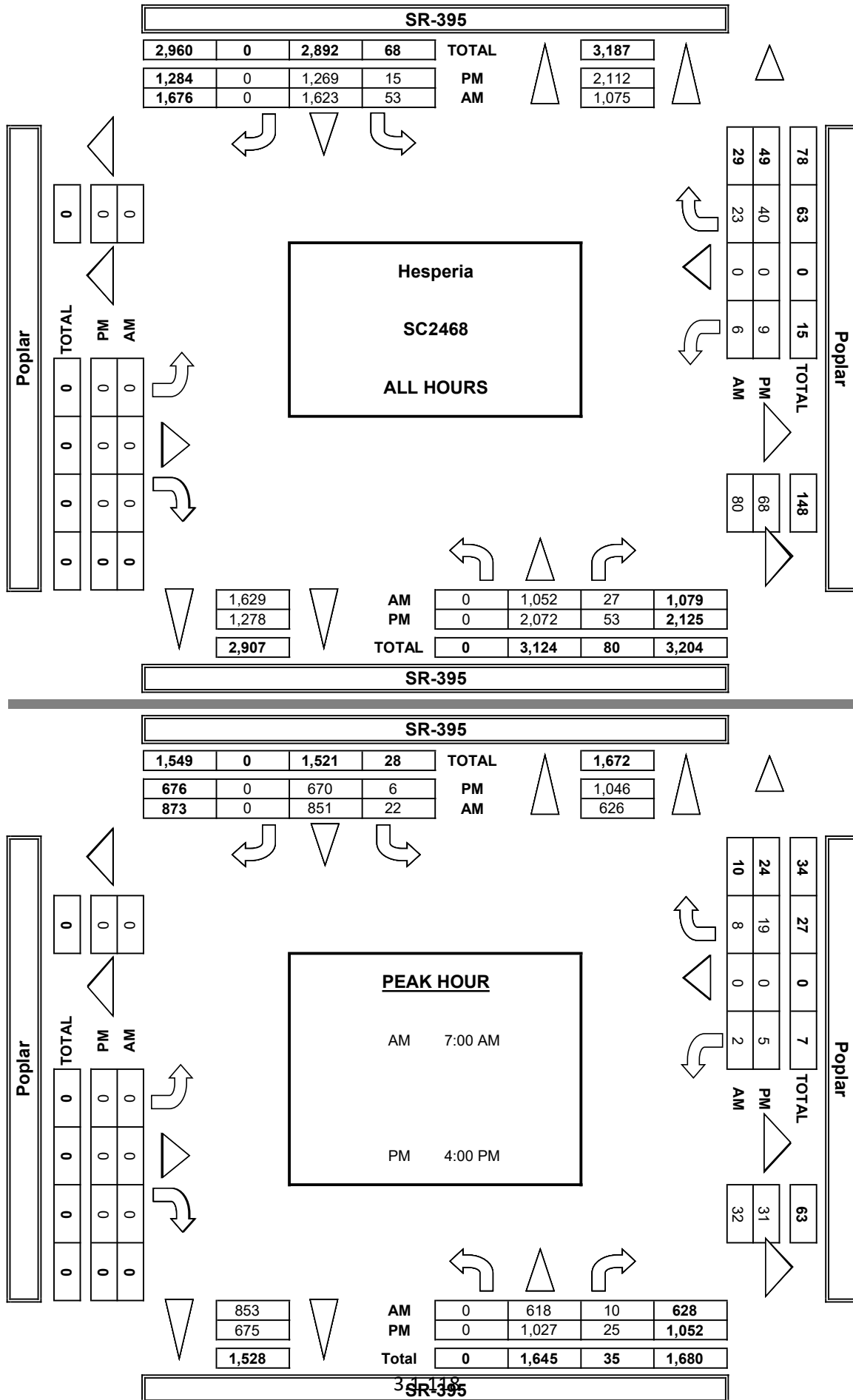
☐ Add U-Turns to Left Turns

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	X	2	0	1	1	X	X	X	X	1	X	1	
AM	7:00 AM	0	142	3	7	245	0	0	0	0	0	1	398
	7:15 AM	0	166	4	3	231	0	0	0	1	0	1	406
	7:30 AM	0	174	3	2	195	0	0	0	0	0	3	377
	7:45 AM	0	136	0	10	180	0	0	0	1	0	3	330
	8:00 AM	0	94	3	5	207	0	0	0	1	0	2	312
	8:15 AM	0	104	6	14	228	0	0	0	1	0	7	360
	8:30 AM	0	126	2	6	172	0	0	0	0	0	2	308
	8:45 AM	0	110	6	6	165	0	0	0	2	0	4	293
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	1,052	27	53	1,623	0	0	0	0	6	0	23	2,784
APPROACH %	0%	97%	3%	3%	97%	0%	0%	0%	0%	21%	0%	79%	
APP/DEPART	1,079	/	1,075	1,676	/	1,629	0	/	80	29	/	0	0
BEGIN PEAK HR	7:00 AM	0	618	10	22	851	0	0	0	2	0	8	1,511
VOLUMES	0	618	10	22	851	0	0	0	0	2	0	8	1,511
APPROACH %	0%	98%	2%	3%	97%	0%	0%	0%	0%	20%	0%	80%	
PEAK HR FACTOR	0.887	0.887		0.866	0.866		0.000	0.000	0.000	0.625			0.930
APP/DEPART	628	/	626	873	/	853	0	/	32	10	/	0	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	261	7	1	163	0	0	0	2	0	6	440
	4:15 PM	0	243	7	3	191	0	0	0	1	0	3	448
	4:30 PM	0	250	4	1	172	0	0	0	1	0	4	432
	4:45 PM	0	273	7	1	144	0	0	0	1	0	6	432
	5:00 PM	0	250	8	3	143	0	0	0	3	0	11	418
	5:15 PM	0	255	7	3	163	0	0	0	1	0	1	430
	5:30 PM	0	256	6	1	132	0	0	0	0	0	6	401
	5:45 PM	0	284	7	2	161	0	0	0	0	0	3	457
VOLUMES	0	2,072	53	15	1,269	0	0	0	0	9	0	40	3,458
APPROACH %	0%	98%	2%	1%	99%	0%	0%	0%	0%	18%	0%	82%	
APP/DEPART	2,125	/	2,112	1,284	/	1,278	0	/	68	49	/	0	0
BEGIN PEAK HR	4:00 PM	0	1,027	25	6	670	0	0	0	5	0	19	1,752
VOLUMES	0	1,027	25	6	670	0	0	0	0	5	0	19	1,752
APPROACH %	0%	98%	2%	1%	99%	0%	0%	0%	0%	21%	0%	79%	
PEAK HR FACTOR	0.939	0.939		0.871	0.871		0.000	0.000	0.000	0.750			0.978
APP/DEPART	1,052	/	1,046	676	/	675	0	/	31	24	/	0	0



	ALL PED AND BIKE					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	ES	WS	SS	NS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Poplar	PROJECT #: LOCATION #: CONTROL:	SC2468 14 STOP W
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▶ E ▼
--	---------------	----------------------------------	--------------------------------

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Poplar			Poplar			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	0	1	1	X	X	X	X	1	X	1	

AM	7:00 AM	0	113	2	7	223	0	0	0	0	0	1	346
	7:15 AM	0	129	3	3	205	0	0	0	0	0	1	341
	7:30 AM	0	143	3	2	166	0	0	0	0	0	2	316
	7:45 AM	0	101	0	7	149	0	0	0	0	0	3	260
	8:00 AM	0	66	3	5	175	0	0	0	1	0	2	252
	8:15 AM	0	82	4	12	204	0	0	0	1	0	3	306
	8:30 AM	0	93	2	6	147	0	0	0	0	0	2	250
	8:45 AM	0	74	5	4	142	0	0	0	2	0	0	227
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	801	22	46	1,411	0	0	0	4	0	14	2,298
	APPROACH %	0%	97%	3%	3%	97%	0%	0%	0%	22%	0%	78%	
	APP/DEPART	823	/	815	1,457	/	1,415	0	/	68	18	/	0
PM	BEGIN PEAK HR	7:00 AM											
	VOLUMES	0	486	8	19	743	0	0	0	0	0	7	1,263
	APPROACH %	0%	98%	2%	2%	98%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR	0.846			0.828			0.000			0.583		
	APP/DEPART	494	/	493	762	/	743	0	/	27	7	/	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	226	7	1	130	0	0	0	1	0	5	370
	4:15 PM	0	219	6	1	155	0	0	0	1	0	3	385
	4:30 PM	0	227	4	1	147	0	0	0	1	0	3	383
	4:45 PM	0	241	6	0	122	0	0	0	1	0	2	372
	5:00 PM	0	227	8	3	118	0	0	0	3	0	9	368
	5:15 PM	0	234	7	3	141	0	0	0	1	0	0	386
	5:30 PM	0	240	5	0	108	0	0	0	0	0	6	359
	5:45 PM	0	271	6	2	130	0	0	0	0	0	2	411
	VOLUMES	0	1,885	49	11	1,051	0	0	0	8	0	30	3,034
	APPROACH %	0%	97%	3%	1%	99%	0%	0%	0%	21%	0%	79%	
	APP/DEPART	1,934	/	1,915	1,062	/	1,059	0	/	60	38	/	0
	BEGIN PEAK HR	5:00 PM											
	VOLUMES	0	972	26	8	497	0	0	0	4	0	17	1,524
	APPROACH %	0%	97%	3%	2%	98%	0%	0%	0%	19%	0%	81%	
	PEAK HR FACTOR	0.901			0.877			0.000			0.438		
	APP/DEPART	998	/	989	505	/	501	0	/	34	21	/	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR
X	X	X	X

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

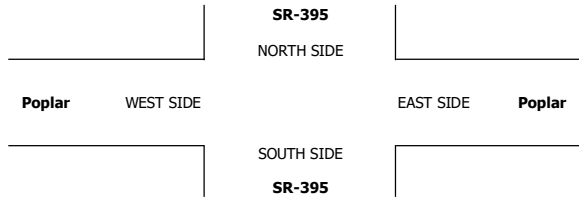
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Poplar	PROJECT #: LOCATION #: CONTROL:	SC2468 14 STOP W
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM		▲	
		PM		N	
		MD	◀ W		E ▶
		OTHER:		S	
		OTHER:		▼	

	NORTHBOUND SR-395			SOUTHBOUND SR-395			EASTBOUND Poplar			WESTBOUND Poplar			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	0	1	1	X	X	X	X	1	X	1	

AM	7:00 AM	0	18	0	0	11	0	0	0	0	0	0	29	
	7:15 AM	0	17	1	0	12	0	0	0	0	1	0	31	
	7:30 AM	0	13	0	0	11	0	0	0	0	0	0	25	
	7:45 AM	0	17	0	2	10	0	0	0	0	0	0	29	
	8:00 AM	0	13	0	0	12	0	0	0	0	0	0	25	
	8:15 AM	0	8	2	1	7	0	0	0	0	0	0	1	19
	8:30 AM	0	9	0	0	5	0	0	0	0	0	0	0	14
	8:45 AM	0	15	1	0	10	0	0	0	0	0	0	1	27
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	110	4	3	78	0	0	0	0	1	0	3	199
APPROACH %	0%	96%	4%	4%	96%	0%	0%	0%	0%	25%	0%	75%		
APP/DEPART	114	/	113	81	/	79	0	/	7	4	/	0	0	
BEGIN PEAK HR	7:00 AM													
VOLUMES	0	65	1	2	44	0	0	0	0	1	0	1	114	
APPROACH %	0%	98%	2%	4%	96%	0%	0%	0%	0%	50%	0%	50%		
PEAK HR FACTOR	0.917			0.958			0.000			0.500			0.919	
APP/DEPART	66	/	66	46	/	45	0	/	3	2	/	0	0	
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	18	0	0	9	0	0	0	0	0	0	1	28
	4:15 PM	0	12	1	0	11	0	0	0	0	0	0	0	24
	4:30 PM	0	11	0	0	6	0	0	0	0	0	0	0	17
	4:45 PM	0	14	1	1	8	0	0	0	0	0	0	4	28
	5:00 PM	0	7	0	0	7	0	0	0	0	0	0	2	16
	5:15 PM	0	7	0	0	4	0	0	0	0	0	0	0	11
	5:30 PM	0	7	1	0	3	0	0	0	0	0	0	0	11
	5:45 PM	0	6	0	0	4	0	0	0	0	0	0	0	10
	VOLUMES	0	82	3	1	52	0	0	0	0	0	0	7	145
APPROACH %	0%	96%	4%	2%	98%	0%	0%	0%	0%	0%	0%	100%		
APP/DEPART	85	/	89	53	/	52	0	/	4	7	/	0	0	
BEGIN PEAK HR	4:00 PM													
VOLUMES	0	55	2	1	34	0	0	0	0	0	0	5	97	
APPROACH %	0%	96%	4%	3%	97%	0%	0%	0%	0%	0%	0%	100%		
PEAK HR FACTOR	0.792			0.795			0.000			0.313			0.866	
APP/DEPART	57	/	60	35	/	34	0	/	3	5	/	0	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR
X	X	X	X

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

	SR-395	
	NORTH SIDE	
Poplar	WEST SIDE	EAST SIDE
	Poplar	
	SOUTH SIDE	
	SR-395	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Poplar	PROJECT #: LOCATION #: CONTROL:	SC2468 14 STOP W
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 3: 3-AXLE TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
------------------------------	--------	----------------------------------	-------------------------	-----

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Poplar			Poplar			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

AM	7:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:15 AM	0	1	0	0	1	0	0	0	0	0	0	2
	7:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:45 AM	0	0	0	1	3	0	0	0	0	0	0	4
	8:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	8:15 AM	0	1	0	0	3	0	0	0	0	0	0	4
	8:30 AM	0	3	0	0	5	0	0	0	0	0	0	8
	8:45 AM	0	0	0	1	1	0	0	0	0	0	0	2
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	5	0	2	16	0	0	0	0	0	0	23
	APPROACH %	0%	100%	0%	11%	89%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	5	/	5	18	/	16	0	/	2	0	/	0
PM	BEGIN PEAK HR	7:45 AM											
	VOLUMES	0	4	0	1	12	0	0	0	0	0	0	17
	APPROACH %	0%	100%	0%	8%	92%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.333											
	APP/DEPART	4	/	4	13	/	12	0	/	1	0	/	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	2	0	0	3	0	0	0	0	0	0	5
	4:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	2	0	0	0	0	0	0	2
	4:45 PM	0	2	0	0	1	0	0	0	0	0	0	3
	5:00 PM	0	0	0	0	3	0	0	0	0	0	0	3
	5:15 PM	0	3	0	0	2	0	0	0	0	0	0	5
	5:30 PM	0	2	0	0	4	0	0	0	0	0	0	6
	5:45 PM	0	1	0	0	2	0	0	0	0	0	0	3
	VOLUMES	0	10	0	0	18	0	0	0	0	0	0	28
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	10	/	10	18	/	18	0	/	0	0	/	0
	BEGIN PEAK HR	4:45 PM											
	VOLUMES	0	7	0	0	10	0	0	0	0	0	0	17
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.583											
	APP/DEPART	7	/	7	10	/	10	0	/	0	0	/	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

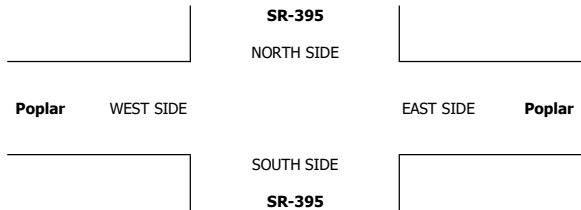
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Poplar	PROJECT #: LOCATION #: CONTROL:	SC2468 14 STOP W
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM PM MD OTHER: OTHER:	▲ N ◀ W S ▼	E ▶
--	---------------	------------------------------------	-------------------------	-----

	NORTHBOUND SR-395			SOUTHBOUND SR-395			EASTBOUND Poplar			WESTBOUND Poplar			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	0	1	1	X	X	X	X	1	X	1	

AM	7:00 AM	0	11	1	0	0	10	0	0	0	0	0	0	22
	7:15 AM	0	18	0	0	0	12	0	0	0	0	0	0	30
	7:30 AM	0	17	0	0	0	17	0	0	0	0	0	0	34
	7:45 AM	0	18	0	0	0	18	0	0	0	1	0	0	37
	8:00 AM	0	15	0	0	0	19	0	0	0	0	0	0	34
	8:15 AM	0	12	0	0	0	13	0	0	0	0	0	3	28
	8:30 AM	0	20	0	0	0	15	0	0	0	0	0	0	35
	8:45 AM	0	20	0	0	0	12	0	0	0	0	0	2	34
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	131	1	0	0	116	0	0	0	1	0	5	254
	APPROACH %	0%	99%	1%	0%	0%	100%	0%	0%	0%	17%	0%	83%	
PM	APP/DEPART	132	/	136	116	/	117	0	/	1	6	/	0	0
	BEGIN PEAK HR	7:15 AM												
	VOLUMES	0	68	0	0	0	66	0	0	0	1	0	0	135
	APPROACH %	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR	0.944												
	APP/DEPART	68	/	68	66	/	67	0	/	0	1	/	0	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	15	0	0	0	21	0	0	0	1	0	0	37
	4:15 PM	0	12	0	2	0	23	0	0	0	0	0	0	37
	4:30 PM	0	11	0	0	0	16	0	0	0	0	0	1	28
	4:45 PM	0	15	0	0	0	13	0	0	0	0	0	0	28
	5:00 PM	0	16	0	0	0	15	0	0	0	0	0	0	31
	5:15 PM	0	11	0	0	0	15	0	0	0	0	0	1	27
	5:30 PM	0	7	0	1	0	17	0	0	0	0	0	0	25
	5:45 PM	0	6	1	0	0	23	0	0	0	0	0	1	31
	VOLUMES	0	93	1	3	0	143	0	0	0	1	0	3	244
	APPROACH %	0%	99%	1%	2%	0%	98%	0%	0%	0%	25%	0%	75%	
	APP/DEPART	94	/	96	146	/	144	0	/	4	4	/	0	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	53	0	2	0	73	0	0	0	1	0	1	130
	APPROACH %	0%	100%	0%	3%	0%	97%	0%	0%	0%	50%	0%	50%	
	PEAK HR FACTOR	0.883												
	APP/DEPART	53	/	54	75	/	74	0	/	2	2	/	0	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR
X	X	X	X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

SR-395		NORTH SIDE	
Poplar	WEST SIDE	EAST SIDE	Poplar
SR-395		SOUTH SIDE	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Poplar	PROJECT #: LOCATION #: CONTROL:	SC2468 14 STOP W
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 5: RV	NOTES:	AM PM MD OTHER:	▲ N ◀ W S ▶ E ▼
----------------	--------	--------------------------	--------------------------------

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Poplar			Poplar			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

VOLUMES	0	1	0	0	0	0	0	0	0	0	0	0	1
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	1	/	1	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR	8:00 AM												
VOLUMES	0	1	0	0	0	0	0	0	0	0	0	0	1
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.250			0.000			0.000			0.000			0.250
APP/DEPART	1	/	1	0	/	0	0	/	0	0	/	0	0

03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2

VOLUMES	0	1	0	0	3	0	0	0	0	0	0	0	4
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	1	/	1	3	/	3	0	/	0	0	/	0	0
BEGIN PEAK HR	5:00 PM												
VOLUMES	0	0	0	0	3	0	0	0	0	0	0	0	3
APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.000			0.375			0.000			0.000			0.375
APP/DEPART	0	/	0	3	/	3	0	/	0	0	/	0	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

SR-395		NORTH SIDE	
Poplar	WEST SIDE	EAST SIDE	Poplar
SR-395		SOUTH SIDE	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Poplar	PROJECT #: LOCATION #: CONTROL:	SC2468 14 STOP W
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 6:	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶
BUSES			

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Poplar			Poplar			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

	X	2	0	1	1	X	X	X	X	1	X	1	
--	---	---	---	---	---	---	---	---	---	---	---	---	--

AM

7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	1	1	0	0	0	0	0	0	0	3
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	1	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

VOLUMES	0	4	0	2	2	0	0	0	0	0	0	1	9
---------	---	---	---	---	---	---	---	---	---	---	---	---	---

APPROACH %	0%	100%	0%	50%	50%	0%	0%	0%	0%	0%	0%	100%	
------------	----	------	----	-----	-----	----	----	----	----	----	----	------	--

APP/DEPART	4	/	5	4	/	2	0	/	2	1	/	0	0
------------	---	---	---	---	---	---	---	---	---	---	---	---	---

BEGIN PEAK HR	8:00 AM												
---------------	---------	--	--	--	--	--	--	--	--	--	--	--	--

VOLUMES	0	2	0	2	1	0	0	0	0	0	0	1	6
---------	---	---	---	---	---	---	---	---	---	---	---	---	---

APPROACH %	0%	100%	0%	67%	33%	0%	0%	0%	0%	0%	0%	100%	
------------	----	------	----	-----	-----	----	----	----	----	----	----	------	--

PEAK HR FACTOR	0.500			0.375			0.000			0.250			0.500
----------------	-------	--	--	-------	--	--	-------	--	--	-------	--	--	-------

APP/DEPART	2	/	3	3	/	1	0	/	2	1	/	0	0
------------	---	---	---	---	---	---	---	---	---	---	---	---	---

PM

03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

VOLUMES	0	1	0	0	2	0	0	0	0	0	0	0	3
---------	---	---	---	---	---	---	---	---	---	---	---	---	---

APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
------------	----	------	----	----	------	----	----	----	----	----	----	----	--

APP/DEPART	1	/	1	2	/	2	0	/	0	0	/	0	0
------------	---	---	---	---	---	---	---	---	---	---	---	---	---

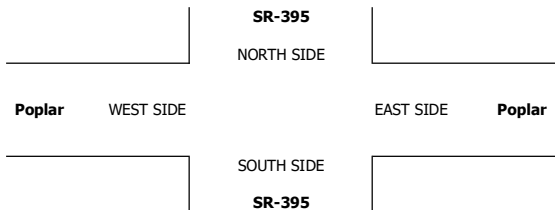
BEGIN PEAK HR	3:45 PM												
---------------	---------	--	--	--	--	--	--	--	--	--	--	--	--

VOLUMES	0	1	0	0	2	0	0	0	0	0	0	0	3
---------	---	---	---	---	---	---	---	---	---	---	---	---	---

APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
------------	----	------	----	----	------	----	----	----	----	----	----	----	--

PEAK HR FACTOR	0.250			0.500			0.000			0.000			0.375
----------------	-------	--	--	-------	--	--	-------	--	--	-------	--	--	-------

APP/DEPART	1	/	1	2	/	2	0	/	0	0	/	0	0
------------	---	---	---	---	---	---	---	---	---	---	---	---	---



U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

INTERSECTION TURNING MOVEMENT COUNTS

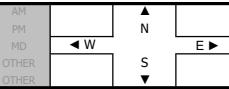
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

PROJECT #: SC2468
LOCATION #: 15
CONTROL: SIGNAL

LOCATION: Hesperia
NORTH & SOUTH: SR-395
EAST & WEST: Three Flags

DATE:
Tue, Jan 7, 20

NOTES:

☒ Add U-Turns to Left Turns

	NORTHBOUND SR-395			SOUTHBOUND SR-395			EASTBOUND Three Flgs			WESTBOUND Three Flgs			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL

U-TURNS				
NB 0	SB 0	EB 0	WB 0	TTU 0

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

AM	7:00 AM	5	145	9	0	225	16	5	0	23	17	0	6	451
	7:15 AM	3	158	10	0	208	17	1	0	16	12	1	5	431
	7:30 AM	2	168	9	5	169	22	4	1	21	18	0	4	423
	7:45 AM	6	129	15	4	153	17	5	0	16	10	0	2	357
	8:00 AM	3	85	15	5	182	28	8	1	23	17	1	4	372
	8:15 AM	3	108	13	6	196	20	5	1	27	17	1	4	401
	8:30 AM	5	113	10	0	153	20	5	0	16	13	1	4	340
	8:45 AM	1	104	16	0	148	17	2	1	20	13	1	5	328
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLTIMES	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTALS	28	1010	97	20	1434	157	35	4	167	117	5	34	3103

[illegible]

1	5	8	3
2	4	10	2
2	8	9	2
6	2	7	1
3	11	10	2
3	4	11	0
1	3	11	4
4	2	10	3
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
22	39	76	17

APPROACH %	2%	89%	9%	1%	89%	10%	17%	2%	81%	75%	3%	22%	0
APP/DEPART	1,135	/	1,078	1,611	/	1,713	201	/	121	156	/	191	0
BEGIN PEAK HR		7:00 AM											
VOLUMES	16	600	43	9	755	72	15	1	76	57	1	17	1,662
APPROACH %	2%	91%	7%	1%	90%	9%	16%	1%	83%	76%	1%	23%	
PEAK HR FACTOR		0.920			0.867			0.821			0.815		0.921
APP/DEPART	659	/	632	836	/	888	92	/	53	75	/	89	0

5	6	7	8	9	10
---	---	---	---	---	----

11	19	34	8
----	----	----	---

PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	7	271	16	4	148	11	5	0	13	14	0	2		491	
	4:15 PM	6	230	14	3	167	9	11	0	11	11	2	0		464	
	4:30 PM	11	244	16	3	164	15	6	1	11	13	0	3		487	
	4:45 PM	8	263	15	2	122	19	11	0	20	18	2	7		487	
	5:00 PM	8	251	11	2	136	9	6	1	11	8	2	2		447	
	5:15 PM	5	248	10	5	146	12	5	1	10	13	0	5		460	
	5:30 PM	8	282	7	3	118	10	9	0	11	5	1	3		457	
	5:45 PM	6	254	6	2	144	9	8	1	11	9	0	3		453	
VOLUMES	59	2,043	95	24	1,145	94	61	4	98	91	7	25		3,746		
APPROACH %	3%	93%	4%	2%	91%	7%	37%	2%	60%	74%	6%	20%				
APP/DEPART	2,197	/	2,129	1,263	/	1,334	163	/	123	123	/	160		0		
BEGIN PEAK HR	4:00 PM															
VOLUMES	32	1,008	61	12	601	54	33	1	55	56	4	12		1,929		
APPROACH %	3%	92%	6%	2%	90%	8%	37%	1%	62%	78%	6%	17%				
PEAK HR FACTOR	0.936				0.916		0.718				0.667		0.982			
APP/DEPART	1,101	/	1,053	667	/	712	89	/	74	72	/	90		0		

[illegible]

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	9	2
0	2	7	0
1	9	9	2
4	6	15	2
1	1	5	0
2	0	8	4
0	0	8	1
1	2	7	1
10	20	68	12

	SR-395	
	NORTH SIDE	

1

6	17	40	6
---	----	----	---

SR-395

NORTH SIDE

Three Flags

WEST SIDE

EAST SIDE

Three Flags

SOUTH SIDE

SR-395

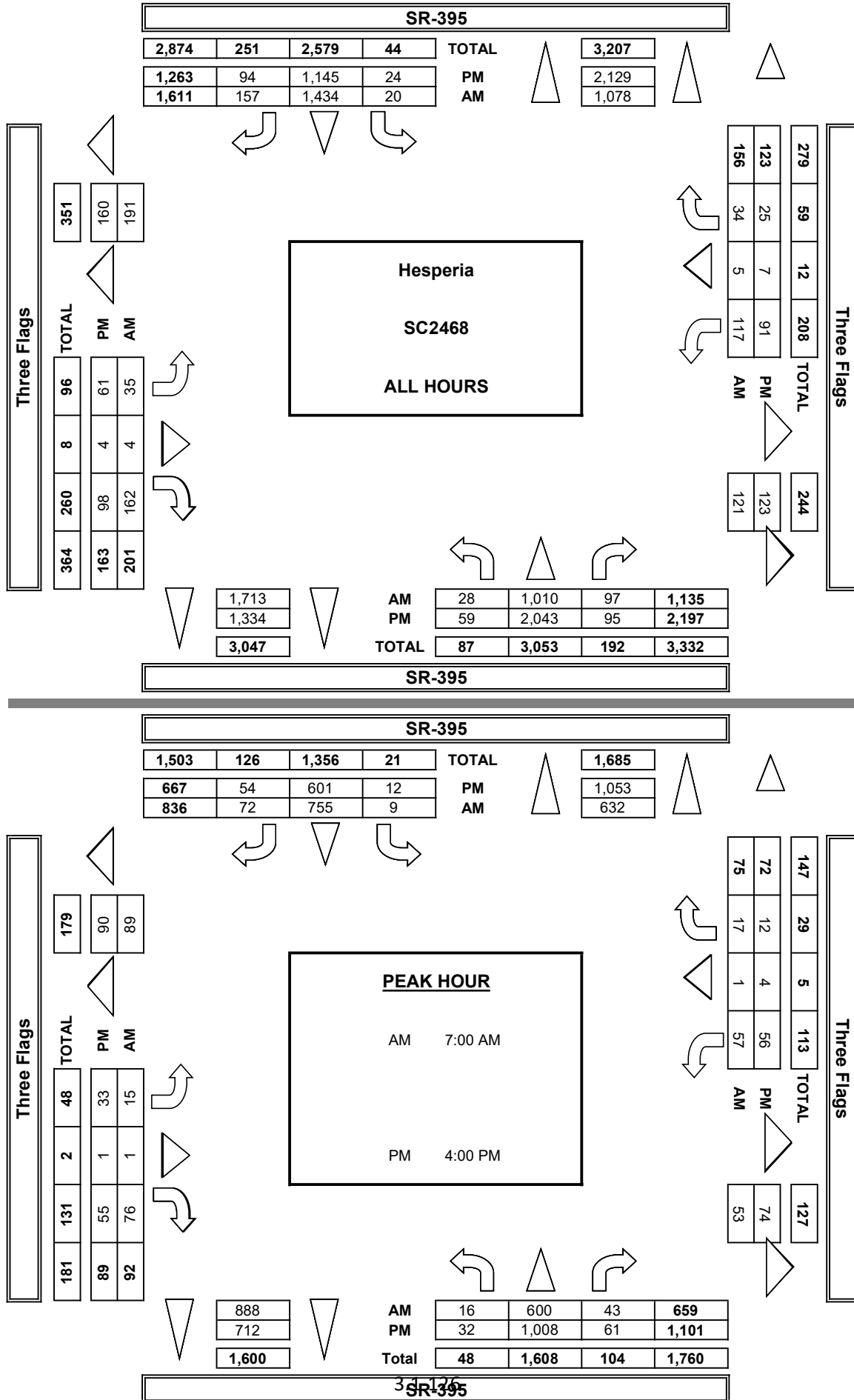
		AM	PM
		7:00 AM	
		7:15 AM	
		7:30 AM	
		7:45 AM	
		8:00 AM	
		8:15 AM	
		8:30 AM	
		8:45 AM	
		9:00 AM	
		9:15 AM	
		9:30 AM	
		9:45 AM	
		TOTAL	
			3:00 PM
			3:15 PM
			3:30 PM
			3:45 PM
			4:00 PM
			4:15 PM
			4:30 PM
			4:45 PM
			5:00 PM
			5:15 PM
			5:30 PM
			5:45 PM
			TOTAL

ALL PED AND BIKE				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	1
0	0	0	0	0
0	0	0	0	0
1	0	0	1	2
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	1	0	2	5
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	1	2
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	1	0	2	5
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1

[illegible]

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Three Flags	PROJECT #: LOCATION #: CONTROL:	SC2468 15 SIGNAL
----------------------------	---	-----------------------------------	---------------------------------------	------------------------

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
--	---------------	----------------------------------	-------------------------	-----

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Three Flags			Three Flags			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL

AM	7:00 AM	3	121	3	0	202	16	3	0	22	1	0	0	371
	7:15 AM	1	124	2	0	178	17	1	0	14	1	0	1	339
	7:30 AM	0	149	1	3	143	20	0	1	19	0	0	2	338
	7:45 AM	4	101	6	0	125	17	2	0	15	0	0	1	271
	8:00 AM	3	66	4	2	158	24	5	0	19	0	1	0	282
	8:15 AM	3	88	5	2	175	20	4	1	25	2	1	1	327
	8:30 AM	5	86	3	0	129	18	4	0	15	2	1	1	264
	8:45 AM	1	73	2	0	128	13	2	1	17	3	1	0	241
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	20	808	26	7	1,238	145	21	3	146	9	4	6	2,433
	APPROACH %	2%	95%	3%	1%	89%	10%	12%	2%	86%	47%	21%	32%	
	APP/DEPART	854	/	834	1,390	/	1,393	170	/	36	19	/	170	0
PM	BEGIN PEAK HR	7:00 AM												
	VOLUMES	8	495	12	3	648	70	6	1	70	2	0	4	1,319
	APPROACH %	2%	96%	2%	0%	90%	10%	8%	1%	91%	33%	0%	67%	
	PEAK HR FACTOR		0.858			0.827			0.770			0.750		0.889
	APP/DEPART	515	/	505	721	/	720	77	/	16	6	/	78	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	6	241	5	1	120	11	4	0	11	6	0	0	405
	4:15 PM	5	204	5	0	130	9	10	0	11	1	2	0	377
	4:30 PM	11	219	3	0	141	15	6	1	11	7	0	0	414
	4:45 PM	8	242	3	0	105	16	10	0	18	3	2	0	407
	5:00 PM	7	228	2	0	111	9	6	1	11	5	1	0	381
	5:15 PM	5	225	2	0	122	12	4	0	10	4	0	2	386
	5:30 PM	8	260	1	0	96	10	8	0	11	3	0	0	397
	5:45 PM	6	237	2	0	114	9	8	1	10	1	0	1	389
	VOLUMES	56	1,856	23	1	939	91	56	3	93	30	5	3	3,156
	APPROACH %	3%	96%	1%	0%	91%	9%	37%	2%	61%	79%	13%	8%	
	APP/DEPART	1,935	/	1,915	1,031	/	1,062	152	/	27	38	/	152	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	30	906	16	1	496	51	30	1	51	17	4	0	1,603
	APPROACH %	3%	95%	2%	0%	91%	9%	37%	1%	62%	81%	19%	0%	
	PEAK HR FACTOR		0.941			0.878			0.732			0.750		0.968
	APP/DEPART	952	/	936	548	/	564	82	/	18	21	/	85	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

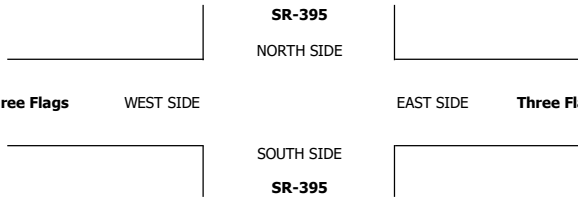
1	5	8	0
1	4	9	0
1	7	8	1
2	2	7	1
0	11	9	0
1	4	11	0
1	3	11	1
0	2	10	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
7	38	73	3

5	18	32	2
---	----	----	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	8	0
0	2	7	0
1	9	9	0
1	5	14	0
0	1	5	0
0	0	8	1
0	0	8	0
0	2	6	1
3	19	65	2

3	16	38	0
---	----	----	---



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Three Flags	PROJECT #: LOCATION #: CONTROL:	SC2468 15 SIGNAL
----------------------------	---	-----------------------------------	---------------------------------------	------------------------

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER: OTHER:	▲ N ◀ W S ▼	E ▶
--	---------------	------------------------------------	-------------------------	-----

	NORTHBOUND SR-395			SOUTHBOUND SR-395			EASTBOUND Three Flags			WESTBOUND Three Flags			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL

AM	7:00 AM	1	16	0	0	12	0	2	0	0	0	0	31
	7:15 AM	1	21	0	0	17	0	0	0	2	0	1	42
	7:30 AM	2	5	1	0	9	2	3	0	1	1	0	24
	7:45 AM	2	13	0	0	11	0	1	0	1	0	0	28
	8:00 AM	0	7	0	0	7	3	3	0	3	1	0	24
	8:15 AM	0	6	1	0	7	0	1	0	1	0	0	16
	8:30 AM	0	10	1	0	5	1	0	0	0	0	0	17
	8:45 AM	0	13	0	0	9	2	0	0	2	1	0	28
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	6	91	3	0	77	8	10	0	10	3	1	210
	APPROACH %	6%	91%	3%	0%	91%	9%	50%	0%	50%	60%	20%	20%
	APP/DEPART	100	/	102	85	/	90	20	/	3	5	/	15
PM	BEGIN PEAK HR	7:00 AM											
	VOLUMES	6	55	1	0	49	2	6	0	4	1	1	125
	APPROACH %	10%	89%	2%	0%	96%	4%	60%	0%	40%	50%	50%	0%
	PEAK HR FACTOR	0.705											
	APP/DEPART	62	/	61	51	/	54	10	/	1	2	/	9
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	1	16	0	0	8	0	1	0	2	0	0	28
	4:15 PM	1	14	0	0	17	0	1	0	0	0	0	33
	4:30 PM	0	13	0	0	3	0	0	0	1	0	0	17
	4:45 PM	0	10	2	0	6	2	1	0	1	1	0	25
	5:00 PM	0	8	1	0	10	0	0	0	0	0	1	20
	5:15 PM	0	13	1	0	10	0	0	0	0	0	0	24
	5:30 PM	0	15	0	0	3	0	1	0	0	0	0	19
	5:45 PM	0	12	0	0	5	0	0	0	1	1	0	19
	VOLUMES	2	101	4	0	62	2	4	0	4	3	0	185
	APPROACH %	2%	94%	4%	0%	97%	3%	50%	0%	50%	50%	0%	50%
	APP/DEPART	107	/	108	64	/	69	8	/	4	6	/	4
	BEGIN PEAK HR	4:00 PM											
	VOLUMES	2	53	2	0	34	2	3	0	3	2	0	103
	APPROACH %	4%	93%	4%	0%	94%	6%	50%	0%	50%	50%	0%	50%
	PEAK HR FACTOR	0.838											
	APP/DEPART	57	/	58	36	/	39	6	/	2	4	/	4

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

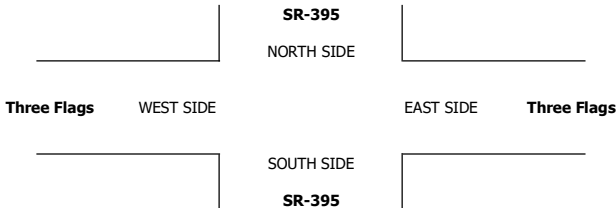
0	0	0	0
0	0	1	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	1	1	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
1	1	1	2
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
1	1	3	2

1	1	2	2
---	---	---	---



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Three Flags	PROJECT #: LOCATION #: CONTROL:	SC2468 15 SIGNAL
----------------------------	---	-----------------------------------	---------------------------------------	------------------------

CLASS 3: 3-AXLE TRUCKS	NOTES:	AM PM OTHER OTHER	▲ N ◀ W S ▼	▶ E
------------------------------	--------	----------------------------	-------------------------	-----

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Three Flags			Three Flags			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

AM	7:00 AM	0	1	0	0	1	0	0	0	0	0	0	2
	7:15 AM	0	1	0	0	1	0	0	0	0	0	0	1
	7:30 AM	0	0	0	1	1	0	0	0	1	0	0	3
	7:45 AM	0	0	1	0	3	0	0	0	1	0	0	5
	8:00 AM	0	0	1	1	0	0	0	0	0	0	0	2
	8:15 AM	0	3	0	1	2	0	0	0	2	0	0	8
	8:30 AM	0	1	0	0	4	1	0	0	1	0	0	8
	8:45 AM	0	1	2	0	1	0	0	0	2	0	0	6
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	7	4	3	12	1	0	0	2	6	0	35
	APPROACH %	0%	64%	36%	19%	75%	6%	0%	0%	100%	100%	0%	0%
	APP/DEPART	11	/	7	16	/	20	2	/	7	6	/	1
PM	BEGIN PEAK HR	8:00 AM											
	VOLUMES	0	5	3	2	7	1	0	0	1	5	0	24
	APPROACH %	0%	63%	38%	20%	70%	10%	0%	0%	100%	100%	0%	0%
	PEAK HR FACTOR	0.667			0.500			0.250			0.625		
	APP/DEPART	8	/	5	10	/	13	1	/	5	5	/	1
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	2	0	0	2	0	0	0	0	0	0	4
	4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
	4:30 PM	0	0	1	1	2	0	0	0	0	0	0	4
	4:45 PM	0	2	0	0	1	0	0	0	0	1	0	5
	5:00 PM	1	0	0	0	4	0	0	0	0	1	0	6
	5:15 PM	0	3	0	0	2	0	1	1	0	0	0	7
	5:30 PM	0	2	0	0	5	0	0	0	0	1	0	8
	5:45 PM	0	1	0	0	1	0	0	0	0	0	0	2
	VOLUMES	1	10	1	1	17	0	1	1	0	2	2	37
	APPROACH %	8%	83%	8%	6%	94%	0%	50%	50%	0%	40%	40%	20%
	APP/DEPART	12	/	12	18	/	19	2	/	3	5	/	3
	BEGIN PEAK HR	4:45 PM											
	VOLUMES	1	7	0	0	12	0	1	1	0	1	2	26
	APPROACH %	13%	88%	0%	0%	100%	0%	50%	50%	0%	25%	50%	25%
	PEAK HR FACTOR	0.667			0.600			0.250			0.500		
	APP/DEPART	8	/	9	12	/	13	2	/	1	4	/	3

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

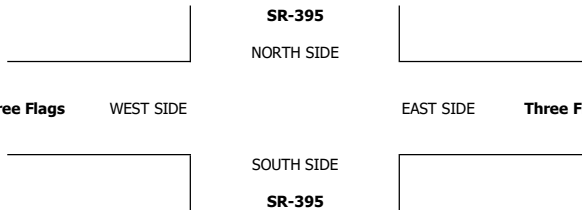
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	1	0

1	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Three Flags	PROJECT #: LOCATION #: CONTROL:	SC2468 15 SIGNAL
----------------------------	---	-----------------------------------	---------------------------------------	------------------------

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM PM MD OTHER: OTHER:	▲ N ◀ W S ▼	E ▶
--	---------------	------------------------------------	-------------------------	-----

	NORTHBOUND SR-395			SOUTHBOUND SR-395			EASTBOUND Three Flags			WESTBOUND Three Flags			TOTAL
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	

AM	7:00 AM	1	7	5	0	10	0	0	0	1	16	0	6	46
	7:15 AM	1	12	8	0	12	0	0	0	0	11	0	3	47
	7:30 AM	0	13	7	1	16	0	1	0	0	17	0	2	57
	7:45 AM	0	15	8	4	14	0	2	0	0	9	0	1	53
	8:00 AM	0	12	10	2	17	1	0	1	1	16	0	4	64
	8:15 AM	0	9	7	3	11	0	0	0	1	13	0	3	47
	8:30 AM	0	16	6	0	15	0	1	0	0	10	0	3	51
	8:45 AM	0	16	12	0	10	2	0	0	1	7	0	4	52
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	2	100	63	10	105	3	4	1	4	99	0	26	417
	APPROACH %	1%	61%	38%	8%	89%	3%	44%	11%	44%	79%	0%	21%	
PM	APP/DEPART	165	/	130	118	/	208	9	/	74	125	/	5	0
	BEGIN PEAK HR	7:15 AM												
	VOLUMES	1	52	33	7	59	1	3	1	1	53	0	10	221
	APPROACH %	1%	60%	38%	10%	88%	1%	60%	20%	20%	84%	0%	16%	
	PEAK HR FACTOR	0.935												
	APP/DEPART	86	/	65	67	/	113	5	/	41	63	/	2	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	12	11	3	18	0	0	0	0	8	0	2	54
	4:15 PM	0	12	9	3	19	0	0	0	0	9	0	0	52
	4:30 PM	0	11	12	2	17	0	0	0	0	4	0	3	49
	4:45 PM	0	8	10	2	10	1	0	0	1	13	0	4	49
	5:00 PM	0	15	8	2	11	0	0	0	0	3	0	1	40
	5:15 PM	0	7	7	5	11	0	0	0	0	9	0	3	42
	5:30 PM	0	5	6	3	14	0	0	0	0	2	0	3	33
	5:45 PM	0	4	4	2	22	0	0	0	0	7	0	2	41
	VOLUMES	0	74	67	22	122	1	0	0	1	55	0	18	360
	APPROACH %	0%	52%	48%	15%	84%	1%	0%	0%	100%	75%	0%	25%	
	APP/DEPART	141	/	92	145	/	178	1	/	89	73	/	1	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	43	42	10	64	1	0	0	1	34	0	9	204
	APPROACH %	0%	51%	49%	13%	85%	1%	0%	0%	100%	79%	0%	21%	
	PEAK HR FACTOR	0.924												
	APP/DEPART	85	/	52	75	/	99	1	/	52	43	/	1	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

0	0	0	3
1	0	0	1
1	0	0	1
4	0	0	0
2	0	1	2
2	0	0	0
0	0	0	3
4	0	0	3
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
14	0	1	13

8	0	1	4
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	2
0	0	0	0
0	0	0	2
2	0	0	0
1	0	0	0
2	0	0	3
0	0	0	1
1	0	0	0
6	0	0	8

2	0	0	4
---	---	---	---

SR-395		NORTH SIDE	
Three Flags	WEST SIDE	EAST SIDE	Three Flags
SR-395		SOUTH SIDE	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Three Flags	PROJECT #: LOCATION #: CONTROL:	SC2468 15 SIGNAL
----------------------------	---	-----------------------------------	---------------------------------------	------------------------

CLASS 5: RV	NOTES:	AM PM MD OTHER:	▲ N ◀ W S ▶ E ▼
----------------	--------	--------------------------	--------------------------------

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Three Flags			Three Flags			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

VOLUMES	0	1	0	0	0	0	0	0	0	0	0	0	1
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	1	/	1	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR	8:00 AM												
VOLUMES	0	1	0	0	0	0	0	0	0	0	0	0	1
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.250			0.000			0.000			0.000			0.250
APP/DEPART	1	/	1	0	/	0	0	/	0	0	/	0	0

03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2

VOLUMES	0	1	0	0	3	0	0	0	0	1	0	0	5
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	
APP/DEPART	1	/	1	3	/	4	0	/	0	1	/	0	0
BEGIN PEAK HR	5:00 PM												
VOLUMES	0	0	0	0	3	0	0	0	0	0	0	0	3
APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.000			0.375			0.000			0.000			0.375
APP/DEPART	0	/	0	3	/	3	0	/	0	0	/	0	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

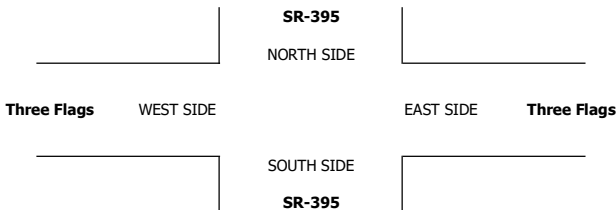
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Three Flags	PROJECT #: LOCATION #: CONTROL:	SC2468 15 SIGNAL
----------------------------	---	-----------------------------------	---------------------------------------	------------------------

CLASS 6:	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶
BUSES			

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Three Flags			Three Flags			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	1	2
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

VOLUMES	0	3	1	0	2	0	0	0	0	0	0	1	7
APPROACH %	0%	75%	25%	0%	100%	0%	0%	0%	0%	0%	0%	100%	
APP/DEPART	4	/	4	2	/	2	0	/	1	1	/	0	0
BEGIN PEAK HR	7:00 AM												
VOLUMES	0	3	0	0	1	0	0	0	0	0	0	0	4
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.375			0.250			0.000			0.000			0.333
APP/DEPART	3	/	3	1	/	1	0	/	0	0	/	0	0

03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

VOLUMES	0	1	0	0	2	0	0	0	0	0	0	0	3
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	1	/	1	2	/	2	0	/	0	0	/	0	0
BEGIN PEAK HR	3:45 PM												
VOLUMES	0	1	0	0	2	0	0	0	0	0	0	0	3
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.250			0.500			0.000			0.000			0.375
APP/DEPART	1	/	1	2	/	2	0	/	0	0	/	0	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

SR-395

NORTH SIDE

Three Flags

WEST SIDE

EAST SIDE

Three Flags

SOUTH SIDE

SR-395

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

PROJECT #: SC2468
LOCATION #: 16
CONTROL: SIGNAL

SC2468
16
SIGNAL

DATE:
Tue, Jan 7, 20

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Hesperia
SR-395
Joshua

NOTES:

AM
PM
MD
OTHER
OTHER

◀ W	

☒ Add U-Turns to Left Turns

	NORTHBOUND						SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	SR-395			SR-395			Joshua			Joshua						
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR				
LANES:	1	2	1	1	2	1	1	0.5	0.5		1	1	1			
7:00 AM	2	141	9	15	241	9	3	6	0		15	3	15	459		
7:15 AM	1	145	9	17	214	5	10	3	1		14	3	16	438		
7:30 AM	2	154	15	18	180	10	6	8	1		17	3	19	433		
7:45 AM	0	126	4	12	170	2	3	8	1		17	2	20	365		
8:00 AM	0	89	7	17	203	2	1	4	0		12	7	13	355		
8:15 AM	1	102	9	14	219	7	5	7	1		25	6	17	413		
8:30 AM	0	105	11	14	165	3	6	4	2		25	4	17	356		
8:45 AM	0	100	3	11	167	3	1	3	3		17	5	18	331		
9:00 AM	0	0	0	0	0	0	0	0	0		0	0	0	0		
9:15 AM	0	0	0	0	0	0	0	0	0		0	0	0	0		
9:30 AM	0	0	0	0	0	0	0	0	0		0	0	0	0		
9:45 AM	0	0	0	0	0	0	0	0	0		0	0	0	0		
VOLUMES	6	962	67	118	1,559	41	35	43	9		142	33	135	3,150		
APPROACH %	1%	93%	6%	7%	91%	2%	40%	49%	10%		46%	11%	44%			
APP/DEPART	1,035	/	1,133	1,718	/	1,710	87	/	227		310	/	80	0		
BEGIN PEAK HR	7:00 AM															
VOLUMES	5	566	37	62	805	26	22	25	3		63	11	70	1,695		
APPROACH %	1%	93%	6%	7%	90%	3%	44%	50%	6%		44%	8%	49%			
PEAK HR FACTOR		0.889			0.842			0.833				0.923		0.923		
APP/DEPART	608	/	659	893	/	871	50	/	123		144	/	42	0		
03:00 PM	0	0	0	0	0	0	0	0	0		0	0	0	0		
3:15 PM	0	0	0	0	0	0	0	0	0		0	0	0	0		
3:30 PM	0	0	0	0	0	0	0	0	0		0	0	0	0		
3:45 PM	0	0	0	0	0	0	0	0	0		0	0	0	0		
4:00 PM	7	253	14	16	153	6	13	16	1		15	4	28	526		
4:15 PM	3	217	21	10	177	2	11	5	4		17	2	24	493		
4:30 PM	7	245	15	8	174	6	8	16	1		10	2	18	510		
4:45 PM	5	251	16	13	140	7	18	8	2		17	11	17	505		
5:00 PM	7	234	16	16	136	3	14	9	1		15	4	22	477		
5:15 PM	9	232	15	15	151	3	13	21	0		10	2	18	489		
5:30 PM	10	261	10	13	119	2	19	21	3		11	3	17	489		
5:45 PM	6	220	22	13	148	3	23	18	2		7	5	23	490		
VOLUMES	54	1,913	129	104	1,198	32	119	114	14		102	33	167	3,979		
APPROACH %	3%	91%	6%	8%	90%	2%	48%	46%	6%		34%	11%	55%			
APP/DEPART	2,096	/	2,199	1,334	/	1,314	247	/	347		302	/	119	0		
BEGIN PEAK HR	4:00 PM															
VOLUMES	22	966	66	47	644	21	50	45	8		59	19	87	2,034		
APPROACH %	2%	92%	6%	7%	90%	3%	49%	44%	8%		36%	12%	53%			
PEAK HR FACTOR		0.962			0.942			0.858				0.878		0.967		
APP/DEPART	1,054	/	1,103	712	/	711	103	/	158		165	/	62	0		

U-TURNS				
NB 0	SB 0	EB 0	WB 0	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0
1	3	0	12
6	1	1	8
4	1	1	13
2	0	1	17
1	1	0	10
1	0	0	9
3	1	1	12
0	0	0	11
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
18	7	4	92

13	5	3	50
----	---	---	----

[illegible]

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
2	2	0	14
3	1	1	19
2	2	1	10
5	2	1	13
7	1	1	12
0	2	0	6
2	1	1	8
6	2	0	6
27	13	5	88

12	7	3	56
----	---	---	----

SR-395

NORTH SIDE

Joshua

WEST SIDE

EAST SIDE

Joshua

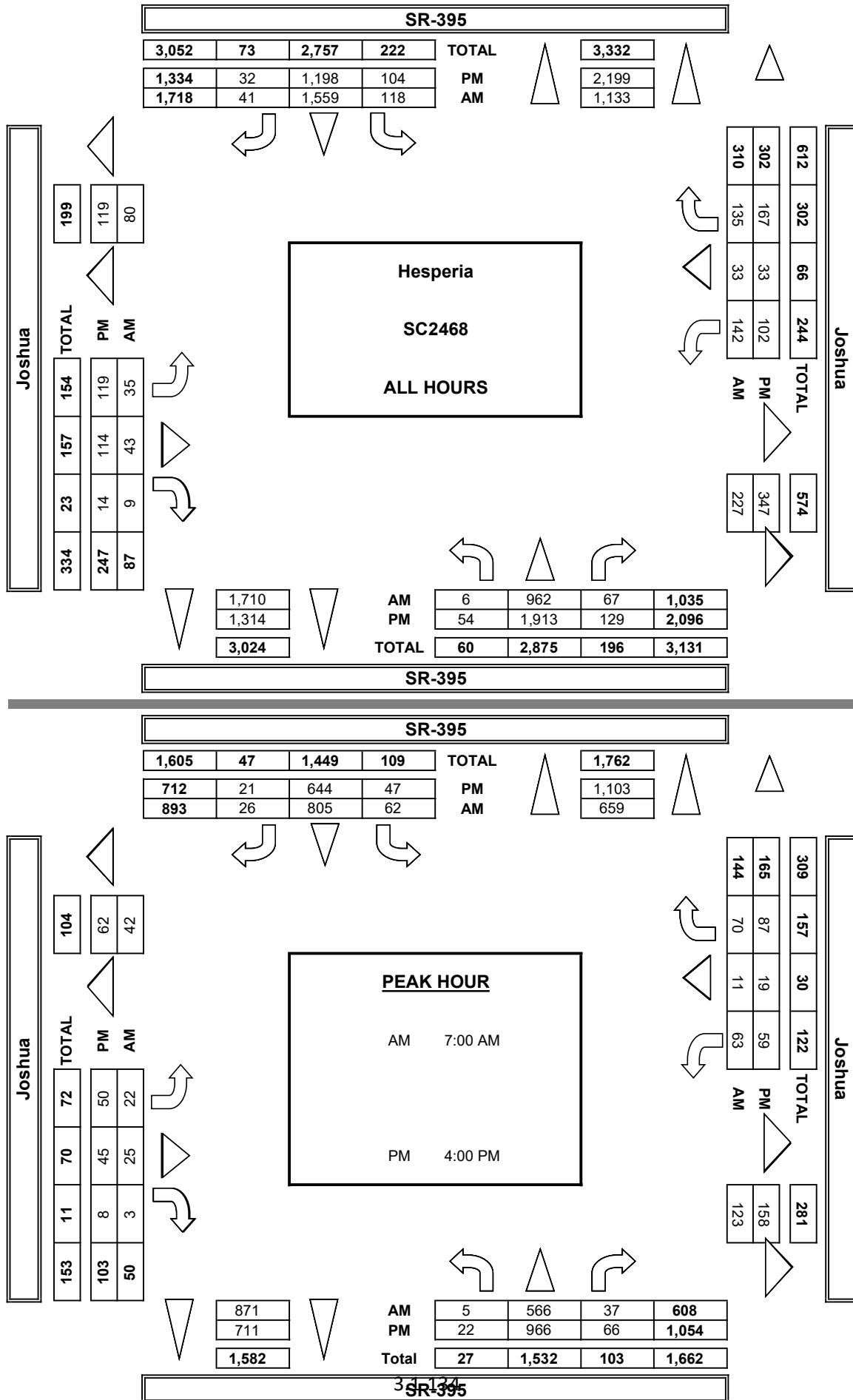
SOUTH SIDE

SR-395

		AM		PM	
		7:00 AM		3:00 PM	
		7:15 AM		3:15 PM	
		7:30 AM		3:30 PM	
		7:45 AM		3:45 PM	
		8:00 AM		4:00 PM	
		8:15 AM		4:15 PM	
		8:30 AM		4:30 PM	
		8:45 AM		4:45 PM	
		9:00 AM		5:00 PM	
		9:15 AM		5:15 PM	
		9:30 AM		5:30 PM	
		9:45 AM		5:45 PM	
		TOTAL		TOTAL	

[illegible][illegible][illegible]

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Joshua	PROJECT #: LOCATION #: CONTROL:	SC2468 16 SIGNAL
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
--	---------------	----------------------------------	-------------------------	-----

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Joshua			Joshua			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 0.5	ER 0.5	WL 1	WT 1	WR 1	TOTAL

AM	7:00 AM	1	113	5	9	209	7	3	4	0	11	3	11	376
	7:15 AM	0	109	5	13	177	3	8	2	1	11	2	10	341
	7:30 AM	2	130	9	10	144	8	4	8	1	12	3	16	347
	7:45 AM	0	98	2	9	134	2	2	7	1	12	2	10	279
	8:00 AM	0	66	4	12	163	2	1	3	0	11	7	6	275
	8:15 AM	1	81	5	10	186	6	3	5	1	16	6	12	332
	8:30 AM	0	78	7	12	131	3	4	2	1	16	3	12	269
	8:45 AM	0	63	3	9	136	3	0	3	2	12	4	11	246
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	4	738	40	84	1,280	34	25	34	7	101	30	88	2,465
	APPROACH %	1%	94%	5%	6%	92%	2%	38%	52%	11%	46%	14%	40%	
	APP/DEPART	782	/	852	1,398	/	1,388	66	/	157	219	/	68	0
PM	BEGIN PEAK HR	7:00 AM												
	VOLUMES	3	450	21	40	664	20	17	21	3	46	10	47	1,343
	APPROACH %	1%	95%	4%	6%	92%	3%	41%	51%	7%	45%	10%	46%	
	PEAK HR FACTOR	0.840			0.806			0.788			0.831			0.893
	APP/DEPART	474	/	515	725	/	713	41	/	82	103	/	33	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	7	218	11	13	118	6	12	15	1	10	4	22	437
	4:15 PM	3	184	15	5	136	1	11	4	3	12	2	21	397
	4:30 PM	5	209	12	6	147	6	8	15	1	5	2	16	432
	4:45 PM	5	223	15	10	109	7	17	8	2	14	11	13	434
	5:00 PM	7	208	11	13	111	3	11	9	1	12	4	18	408
	5:15 PM	9	206	9	9	124	3	13	21	0	8	2	13	417
	5:30 PM	10	237	7	10	98	2	19	21	3	8	3	13	431
	5:45 PM	6	203	15	10	113	2	23	18	1	6	5	19	421
	VOLUMES	52	1,688	95	76	956	30	114	111	12	75	33	135	3,377
	APPROACH %	3%	92%	5%	7%	90%	3%	48%	47%	5%	31%	14%	56%	
	APP/DEPART	1,835	/	1,937	1,062	/	1,043	237	/	282	243	/	115	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	20	834	53	34	510	20	48	42	7	41	19	72	1,700
	APPROACH %	2%	92%	6%	6%	90%	4%	49%	43%	7%	31%	14%	55%	
	PEAK HR FACTOR	0.933			0.887			0.866			0.868			0.973
	APP/DEPART	907	/	954	564	/	558	97	/	129	132	/	59	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

RTOR			
NRR	SRR	ERR	WRR

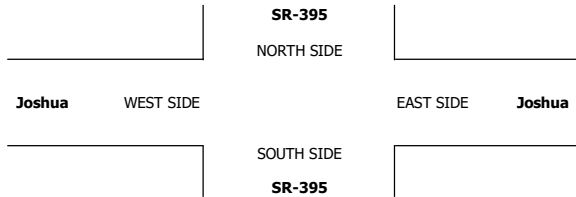
0	3	0	8
3	1	1	5
3	1	1	11
1	0	1	9
1	1	0	4
1	0	0	7
2	1	1	8
0	0	0	7
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
12	7	4	59

8	5	3	33
---	---	---	----

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
2	2	0	11
2	1	1	18
2	2	1	10
5	2	1	10
5	1	1	10
0	2	0	5
2	1	1	6
6	1	0	6
24	12	5	76

11	7	3	49
----	---	---	----



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Joshua	PROJECT #: LOCATION #: CONTROL:	SC2468 16 SIGNAL
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM		▲	
		PM		N	
		MD	◀ W		E ▶
		OTHER:		S	
		OTHER:		▼	

	NORTHBOUND SR-395			SOUTHBOUND SR-395			EASTBOUND Joshua			WESTBOUND Joshua			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	0.5	0.5	1	1	1	

AM	7:00 AM	0	15	2	1	10	1	0	2	0	1	0	2	34
	7:15 AM	1	19	1	0	19	0	2	0	0	0	1	1	44
	7:30 AM	0	6	2	0	10	1	1	0	0	1	0	1	22
	7:45 AM	0	11	2	0	12	0	0	0	0	1	0	4	30
	8:00 AM	0	6	1	2	9	0	0	0	0	1	0	1	20
	8:15 AM	0	4	0	1	7	0	1	1	0	5	0	2	21
	8:30 AM	0	8	0	0	5	0	0	2	0	2	1	3	21
	8:45 AM	0	12	0	0	12	0	1	0	0	2	0	0	27
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	1	81	8	4	84	2	5	5	0	13	2	14	219
APPROACH %	1%	90%	9%	4%	93%	2%	50%	50%	0%	45%	7%	48%		
APP/DEPART	90	/	100	90	/	97	10	/	17	29	/	5	0	
BEGIN PEAK HR	7:00 AM													
VOLUMES	1	51	7	1	51	2	3	2	0	3	1	8	130	
APPROACH %	2%	86%	12%	2%	94%	4%	60%	40%	0%	25%	8%	67%		
PEAK HR FACTOR	0.702													
APP/DEPART	59	/	62	54	/	54	5	/	10	12	/	4	0	
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	17	1	0	10	0	0	1	0	4	0	0	33
	4:15 PM	0	15	1	1	16	0	0	1	0	1	0	0	35
	4:30 PM	1	13	0	0	4	0	0	1	0	3	0	0	22
	4:45 PM	0	11	1	0	8	0	1	0	0	0	0	0	21
	5:00 PM	0	6	1	1	9	0	2	0	0	1	0	1	21
	5:15 PM	0	13	0	0	10	0	0	0	0	1	0	1	25
	5:30 PM	0	14	0	1	2	0	0	0	0	1	0	1	19
	5:45 PM	0	12	3	0	7	0	0	0	0	0	0	0	22
	VOLUMES	1	101	7	3	66	0	3	3	0	11	0	3	198
APPROACH %	1%	93%	6%	4%	96%	0%	50%	50%	0%	79%	0%	21%		
APP/DEPART	109	/	107	69	/	77	6	/	13	14	/	1	0	
BEGIN PEAK HR	4:00 PM													
VOLUMES	1	56	3	1	38	0	1	3	0	8	0	0	111	
APPROACH %	2%	93%	5%	3%	97%	0%	25%	75%	0%	100%	0%	0%		
PEAK HR FACTOR	0.833													
APP/DEPART	60	/	57	39	/	46	4	/	7	8	/	1	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

2	0	0	7
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

	SR-395	
	NORTH SIDE	
Joshua	WEST SIDE	EAST SIDE Joshua
	SOUTH SIDE	
	SR-395	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Joshua	PROJECT #: LOCATION #: CONTROL:	SC2468 16 SIGNAL
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 3: 3-AXLE TRUCKS	NOTES:	AM PM OTHER OTHER	▲ N ◀ W S ▼	▶ E
------------------------------	--------	----------------------------	-------------------------	-----

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Joshua			Joshua			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

	1	2	1	1	2	1	1	0.5	0.5	1	1	1	
--	---	---	---	---	---	---	---	-----	-----	---	---	---	--

AM	7:00 AM	0	1	0	1	0	0	0	0	0	0	0	3
	7:15 AM	0	1	0	0	0	0	0	0	1	0	0	1
	7:30 AM	0	0	0	1	1	0	0	0	0	0	0	2
	7:45 AM	0	0	0	0	4	0	0	0	0	0	1	5
	8:00 AM	0	0	1	0	0	0	0	0	0	0	1	2
	8:15 AM	0	1	0	0	4	0	1	0	2	0	1	9
	8:30 AM	0	1	0	0	6	0	0	0	0	0	0	7
	8:45 AM	0	3	0	0	3	0	0	0	0	0	0	6
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	7	1	2	18	0	1	0	3	0	3	35
	APPROACH %	0%	88%	13%	10%	90%	0%	100%	0%	50%	0%	50%	
	APP/DEPART	8	/	11	20	/	21	1	/	3	6	/	0
	BEGIN PEAK HR	8:00 AM											
	VOLUMES	0	5	1	0	13	0	1	0	0	2	0	24
	APPROACH %	0%	83%	17%	0%	100%	0%	100%	0%	0%	50%	0%	
	PEAK HR FACTOR	0.500											
	APP/DEPART	6	/	8	13	/	15	1	/	1	4	/	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	1	0	0	2	0	0	0	0	0	1	4
	4:15 PM	0	0	1	1	0	0	0	0	1	0	0	3
	4:30 PM	0	1	0	0	2	0	0	0	1	0	0	4
	4:45 PM	0	2	0	1	1	0	0	0	0	0	0	4
	5:00 PM	0	0	1	0	4	0	1	0	0	0	0	6
	5:15 PM	0	3	0	0	2	0	0	0	0	0	0	5
	5:30 PM	0	2	0	0	5	0	0	0	1	0	0	8
	5:45 PM	0	1	0	0	1	0	0	0	0	0	0	2
	VOLUMES	0	10	2	2	17	0	1	0	3	0	1	36
	APPROACH %	0%	83%	17%	11%	89%	0%	100%	0%	75%	0%	25%	
	APP/DEPART	12	/	12	19	/	20	1	/	4	4	/	0
	BEGIN PEAK HR	4:45 PM											
	VOLUMES	0	7	1	1	12	0	1	0	0	1	0	23
	APPROACH %	0%	88%	13%	8%	92%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR	0.667											
	APP/DEPART	8	/	8	13	/	13	1	/	2	1	/	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	2
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

1	0	0	0
---	---	---	---

	SR-395	
	NORTH SIDE	
Joshua	WEST SIDE	EAST SIDE Joshua
	SOUTH SIDE	
	SR-395	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Joshua	PROJECT #: LOCATION #: CONTROL:	SC2468 16 SIGNAL
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM PM MD OTHER: OTHER:	▲ N ◀ W S ▼	E ▶
--	---------------	------------------------------------	-------------------------	-----

	NORTHBOUND SR-395			SOUTHBOUND SR-395			EASTBOUND Joshua			WESTBOUND Joshua			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 0.5	ER 0.5	WL 1	WT 1	WR 1	TOTAL

AM	7:00 AM	1	11	2	4	22	1	0	0	0	2	0	2	45
	7:15 AM	0	16	3	4	18	1	0	1	0	3	0	5	51
	7:30 AM	0	18	4	7	25	1	0	0	0	4	0	2	61
	7:45 AM	0	17	0	3	20	0	1	1	0	4	0	5	51
	8:00 AM	0	17	1	3	31	0	0	1	0	0	0	5	58
	8:15 AM	0	14	4	3	22	0	0	1	0	2	0	2	48
	8:30 AM	0	18	4	2	23	0	2	0	0	7	0	2	58
	8:45 AM	0	21	0	2	16	0	0	0	1	3	1	7	51
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	1	132	18	28	177	3	3	4	1	25	1	30	423
	APPROACH %	1%	87%	12%	13%	85%	1%	38%	50%	13%	45%	2%	54%	
PM	APP/DEPART	151	/	165	208	/	203	8	/	50	56	/	5	0
	BEGIN PEAK HR	7:15 AM												
	VOLUMES	0	68	8	17	94	2	1	3	0	11	0	17	221
	APPROACH %	0%	89%	11%	15%	83%	2%	25%	75%	0%	39%	0%	61%	
	PEAK HR FACTOR	0.864			0.831			0.500			0.778			0.906
	APP/DEPART	76	/	86	113	/	105	4	/	28	28	/	2	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	17	2	3	23	0	1	0	0	1	0	5	52
	4:15 PM	0	18	4	3	25	0	0	0	1	3	0	3	57
	4:30 PM	1	21	3	1	20	0	0	0	0	1	0	2	49
	4:45 PM	0	15	0	2	22	0	0	0	0	3	0	3	45
	5:00 PM	0	20	3	2	12	0	0	0	0	2	0	3	42
	5:15 PM	0	10	6	6	14	0	0	0	0	1	0	4	41
	5:30 PM	0	8	3	2	14	0	0	0	0	1	0	3	31
	5:45 PM	0	4	4	2	27	0	0	0	0	1	0	4	42
	VOLUMES	1	113	25	21	157	0	1	0	1	13	0	27	359
	APPROACH %	1%	81%	18%	12%	88%	0%	50%	0%	50%	33%	0%	68%	
	APP/DEPART	139	/	141	178	/	171	2	/	46	40	/	1	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	1	71	9	9	90	0	1	0	1	8	0	13	203
	APPROACH %	1%	88%	11%	9%	91%	0%	50%	0%	50%	38%	0%	62%	
	PEAK HR FACTOR	0.810			0.884			0.500			0.875			0.890
	APP/DEPART	81	/	85	99	/	99	2	/	18	21	/	1	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

0	0	0	2
2	0	0	2
1	0	0	1
0	0	0	4
0	0	0	4
0	0	0	0
0	0	0	0
1	0	0	2
0	0	0	4
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
4	0	0	19

3	0	0	11
---	---	---	----

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	2
1	0	0	1
0	0	0	0
0	0	0	2
0	0	0	2
0	0	0	1
0	0	0	2
0	0	0	0
1	0	0	10

1	0	0	5
---	---	---	---

SR-395		NORTH SIDE	
Joshua	WEST SIDE	EAST SIDE	Joshua
SOUTH SIDE		SR-395	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Joshua	PROJECT #: LOCATION #: CONTROL:	SC2468 16 SIGNAL
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 5: RV	NOTES:	AM PM MD OTHER:	▲ N ◀ W S ▶ E ▼
----------------	--------	--------------------------	--------------------------------

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Joshua			Joshua			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 0.5	ER 0.5	WL 1	WT 1	WR 1	TOTAL

AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	1	0	0	0	0	0	0	0	0	0	1
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	1	0	0	0	0	0	0	0	0	0	1
	APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	1	/	1	0	/	0	0	/	0	0	/	0
	BEGIN PEAK HR	8:00 AM											
PM	VOLUMES	0	1	0	0	0	0	0	0	0	0	0	1
	APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.250			0.000			0.000			0.000		
	APP/DEPART	1	/	1	0	/	0	0	/	0	0	/	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	1	0	0	0	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	1	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	1	0	1	0	0	1	0	0	3
	VOLUMES	0	0	0	2	1	1	0	0	1	0	0	6
	APPROACH %	0%	0%	0%	50%	25%	25%	0%	0%	100%	0%	0%	100%
	APP/DEPART	0	/	1	4	/	2	1	/	2	1	/	1
	BEGIN PEAK HR	5:00 PM											
	VOLUMES	0	0	0	1	1	1	0	0	1	0	0	4
	APPROACH %	0%	0%	0%	33%	33%	33%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR	0.000			0.375			0.250			0.000		
	APP/DEPART	0	/	0	3	/	2	1	/	1	0	/	1

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
---	---	---	---

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	1	0	0
---	---	---	---

	SR-395	
	NORTH SIDE	
Joshua	WEST SIDE	EAST SIDE Joshua
	SOUTH SIDE	
	SR-395	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/7/20 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia SR-395 Joshua	PROJECT #: LOCATION #: CONTROL:	SC2468 16 SIGNAL
----------------------------	---	------------------------------	---------------------------------------	------------------------

CLASS 6:	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶
BUSES			

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	SR-395			SR-395			Joshua			Joshua			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	1	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

VOLUMES	0	3	0	0	0	2	1	0	1	0	0	0	7
APPROACH %	0%	100%	0%	0%	0%	100%	50%	0%	50%	0%	0%	0%	
APP/DEPART	3	/	4	2	/	1	2	/	0	0	/	2	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	0	2	0	0	0	1	0	0	1	0	0	0	4
APPROACH %	0%	100%	0%	0%	0%	100%	0%	0%	100%	0%	0%	0%	
PEAK HR FACTOR	0.250			0.250			0.250			0.000			0.333
APP/DEPART	2	/	2	1	/	1	1	/	0	0	/	1	0

03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

VOLUMES	0	1	0	0	1	1	0	0	0	0	0	0	3
APPROACH %	0%	100%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	
APP/DEPART	1	/	1	2	/	1	0	/	0	0	/	1	0
BEGIN PEAK HR	3:45 PM												
VOLUMES	0	1	0	0	1	1	0	0	0	0	0	0	3
APPROACH %	0%	100%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.250			0.500			0.000			0.000			0.375
APP/DEPART	1	/	1	2	/	1	0	/	0	0	/	1	0

U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

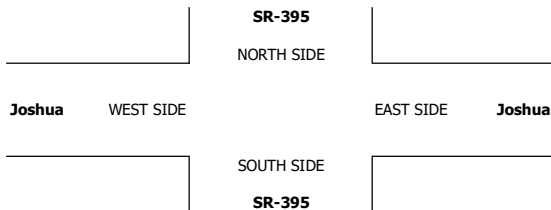
RTOR			
NRR	SRR	ERR	WRR

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

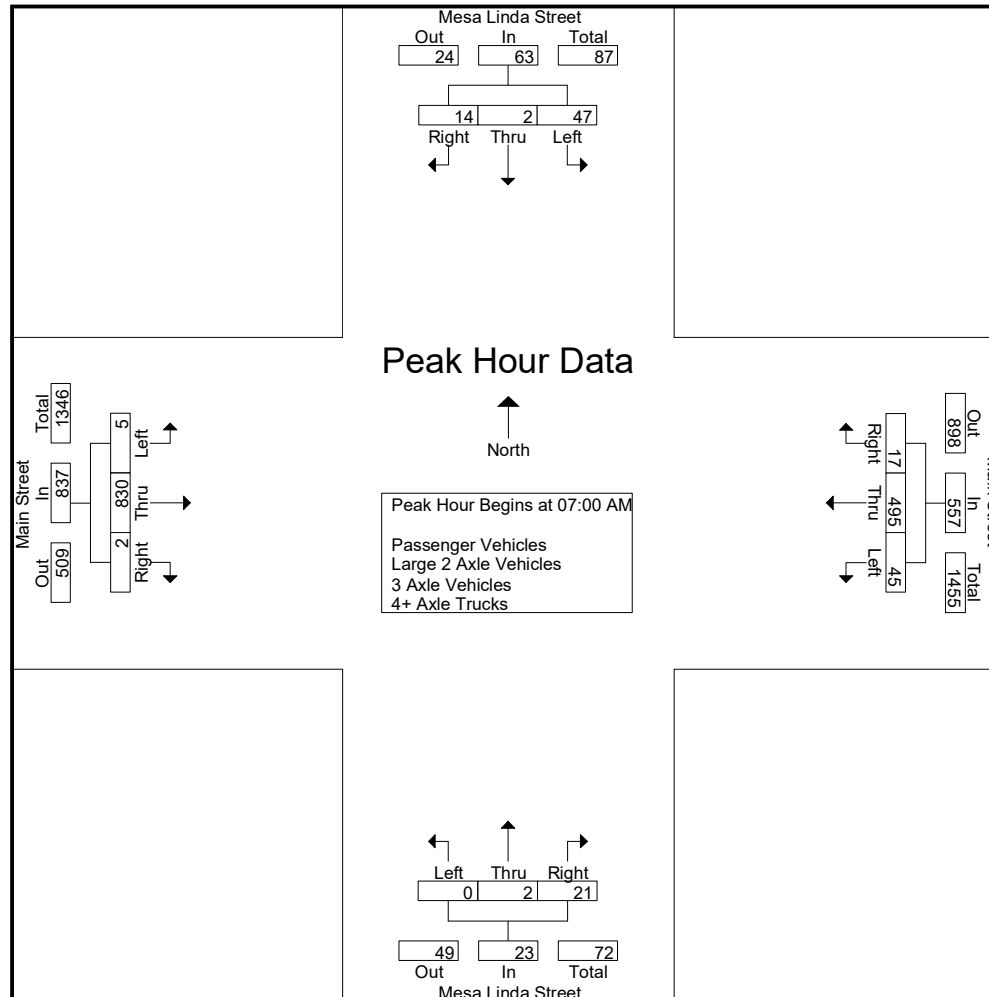
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	16	0	3	3	19	5	113	3	2	121	0	0	4	3	4	2	205	0	0	207	8	351	359
07:15 AM	12	0	4	2	16	7	116	4	3	127	0	1	5	4	6	1	182	1	0	184	9	333	342
07:30 AM	9	1	3	3	13	10	172	6	2	188	0	1	7	6	8	1	226	0	0	227	11	436	447
07:45 AM	10	1	4	4	15	23	94	4	0	121	0	0	5	5	5	1	217	1	0	219	9	360	369
Total	47	2	14	12	63	45	495	17	7	557	0	2	21	18	23	5	830	2	0	837	37	1480	1517
08:00 AM	8	0	0	0	8	11	97	7	0	115	1	0	8	6	9	0	170	1	0	171	6	303	309
08:15 AM	8	0	0	0	8	18	102	8	5	128	0	0	12	9	12	2	174	2	0	178	14	326	340
08:30 AM	14	0	2	1	16	12	111	3	1	126	1	0	9	8	10	0	203	2	0	205	10	357	367
08:45 AM	3	0	1	1	4	7	88	3	2	98	2	0	8	8	10	1	165	1	0	167	11	279	290
Total	33	0	3	2	36	48	398	21	8	467	4	0	37	31	41	3	712	6	0	721	41	1265	1306
Grand Total	80	2	17	14	99	93	893	38	15	1024	4	2	58	49	64	8	1542	8	0	1558	78	2745	2823
Apprch %	80.8	2	17.2			9.1	87.2	3.7			6.2	3.1	90.6			0.5	99	0.5					
Total %	2.9	0.1	0.6		3.6	3.4	32.5	1.4		37.3	0.1	0.1	2.1		2.3	0.3	56.2	0.3		56.8	2.8	97.2	
Passenger Vehicles	79	2	17		112	85	851	36		986	4	2	50		99	8	1502	7		1517	0	0	2714
% Passenger Vehicles	98.8	100	100	100	99.1	91.4	95.3	94.7	93.3	94.9	100	100	86.2	87.8	87.6	100	97.4	87.5	0	97.4	0	0	96.1
Large 2 Axle Vehicles	0	0	0		0	4	27	1		33	0	0	4		8	0	19	1		20	0	0	61
% Large 2 Axle Vehicles	0	0	0	0	0	4.3	3	2.6	6.7	3.2	0	0	6.9	8.2	7.1	0	1.2	12.5	0	1.3	0	0	2.2
3 Axle Vehicles	1	0	0		1	1	7	1		9	0	0	1		2	0	9	0		9	0	0	21
% 3 Axle Vehicles	1.2	0	0	0	0.9	1.1	0.8	2.6	0	0.9	0	0	1.7	2	1.8	0	0.6	0	0	0.6	0	0	0.7
4+ Axle Trucks	0	0	0		0	3	8	0		11	0	0	3		4	0	12	0		12	0	0	27
% 4+ Axle Trucks	0	0	0	0	0	3.2	0.9	0	0	1.1	0	0	5.2	2	3.5	0	0.8	0	0	0.8	0	0	1

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	16	0	3	19	5	113	3	121	0	0	4	4	2	205	0	207	351
07:15 AM	12	0	4	16	7	116	4	127	0	1	5	6	1	182	1	184	333
07:30 AM	9	1	3	13	10	172	6	188	0	1	7	8	1	226	0	227	436
07:45 AM	10	1	4	15	23	94	4	121	0	0	5	5	1	217	1	219	360
Total Volume	47	2	14	63	45	495	17	557	0	2	21	23	5	830	2	837	1480
% App. Total	74.6	3.2	22.2		8.1	88.9	3.1		0	8.7	91.3		0.6	99.2	0.2		
PHF	.734	.500	.875	.829	.489	.719	.708	.741	.000	.500	.750	.719	.625	.918	.500	.922	.849

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				08:00 AM				07:00 AM				
+0 mins.	16	0	3	19	5	113	3	121	1	0	8	9	2	205	0	207	
+15 mins.	12	0	4	16	7	116	4	127	0	0	12	12	1	182	1	184	
+30 mins.	9	1	3	13	10	172	6	188	1	0	9	10	1	226	0	227	
+45 mins.	10	1	4	15	23	94	4	121	2	0	8	10	1	217	1	219	
Total Volume	47	2	14	63	45	495	17	557	4	0	37	41	5	830	2	837	
% App. Total	74.6	3.2	22.2		8.1	88.9	3.1		9.8	0	90.2		0.6	99.2	0.2		
PHF	.734	.500	.875	.829	.489	.719	.708	.741	.500	.000	.771	.854	.625	.918	.500	.922	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

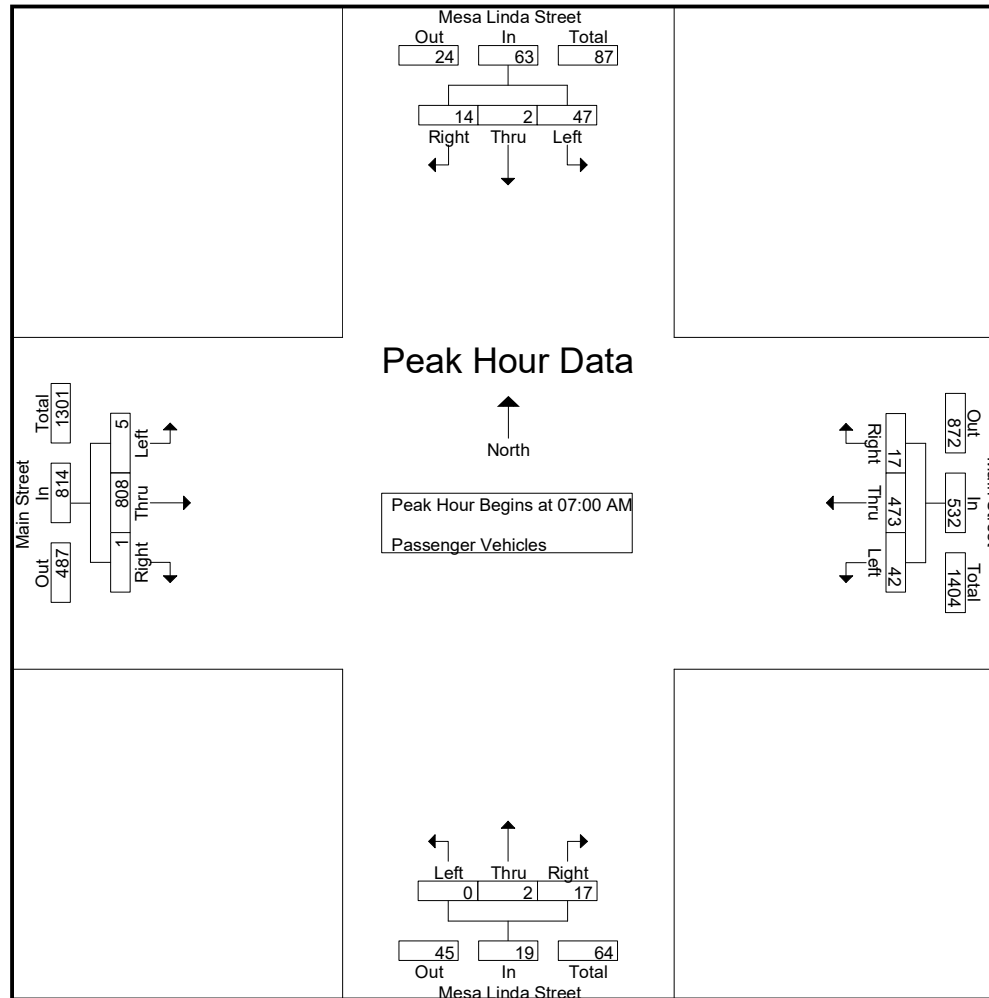
Groups Printed- Passenger Vehicles

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	16	0	3	3	19	5	109	3	2	117	0	0	3	3	3	2	199	0	0	201	8	340	348
07:15 AM	12	0	4	2	16	7	111	4	3	122	0	1	3	3	4	1	178	1	0	180	8	322	330
07:30 AM	9	1	3	3	13	8	164	6	2	178	0	1	6	5	7	1	222	0	0	223	10	421	431
07:45 AM	10	1	4	4	15	22	89	4	0	115	0	0	5	5	5	1	209	0	0	210	9	345	354
Total	47	2	14	12	63	42	473	17	7	532	0	2	17	16	19	5	808	1	0	814	35	1428	1463
08:00 AM	7	0	0	0	7	11	93	6	0	110	1	0	7	5	8	0	163	1	0	164	5	289	294
08:15 AM	8	0	0	0	8	17	96	7	4	120	0	0	12	9	12	2	173	2	0	177	13	317	330
08:30 AM	14	0	2	1	16	10	105	3	1	118	1	0	8	7	9	0	196	2	0	198	9	341	350
08:45 AM	3	0	1	1	4	5	84	3	2	92	2	0	6	6	8	1	162	1	0	164	9	268	277
Total	32	0	3	2	35	43	378	19	7	440	4	0	33	27	37	3	694	6	0	703	36	1215	1251
Grand Total	79	2	17	14	98	85	851	36	14	972	4	2	50	43	56	8	1502	7	0	1517	71	2643	2714
Apprch %	80.6	2	17.3			8.7	87.6	3.7			7.1	3.6	89.3			0.5	99	0.5					
Total %	3	0.1	0.6		3.7	3.2	32.2	1.4		36.8	0.2	0.1	1.9		2.1	0.3	56.8	0.3		57.4	2.6	97.4	

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	16	0	3	19	5	109	3	117	0	0	3	3	2	199	0	201	340
07:15 AM	12	0	4	16	7	111	4	122	0	1	3	4	1	178	1	180	322
07:30 AM	9	1	3	13	8	164	6	178	0	1	6	7	1	222	0	223	421
07:45 AM	10	1	4	15	22	89	4	115	0	0	5	5	1	209	0	210	345
Total Volume	47	2	14	63	42	473	17	532	0	2	17	19	5	808	1	814	1428
% App. Total	74.6	3.2	22.2		7.9	88.9	3.2		0	10.5	89.5		0.6	99.3	0.1		
PHF	.734	.500	.875	.829	.477	.721	.708	.747	.000	.500	.708	.679	.625	.910	.250	.913	.848

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	16	0	3	19	5	109	3	117	0	0	3	3	2	199	0	201	
+15 mins.	12	0	4	16	7	111	4	122	0	1	3	4	1	178	1	180	
+30 mins.	9	1	3	13	8	164	6	178	0	1	6	7	1	222	0	223	
+45 mins.	10	1	4	15	22	89	4	115	0	0	5	5	1	209	0	210	
Total Volume	47	2	14	63	42	473	17	532	0	2	17	19	5	808	1	814	
% App. Total	74.6	3.2	22.2		7.9	88.9	3.2		0	10.5	89.5		0.6	99.3	0.1		
PHF	.734	.500	.875	.829	.477	.721	.708	.747	.000	.500	.708	.679	.625	.910	.250	.913	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

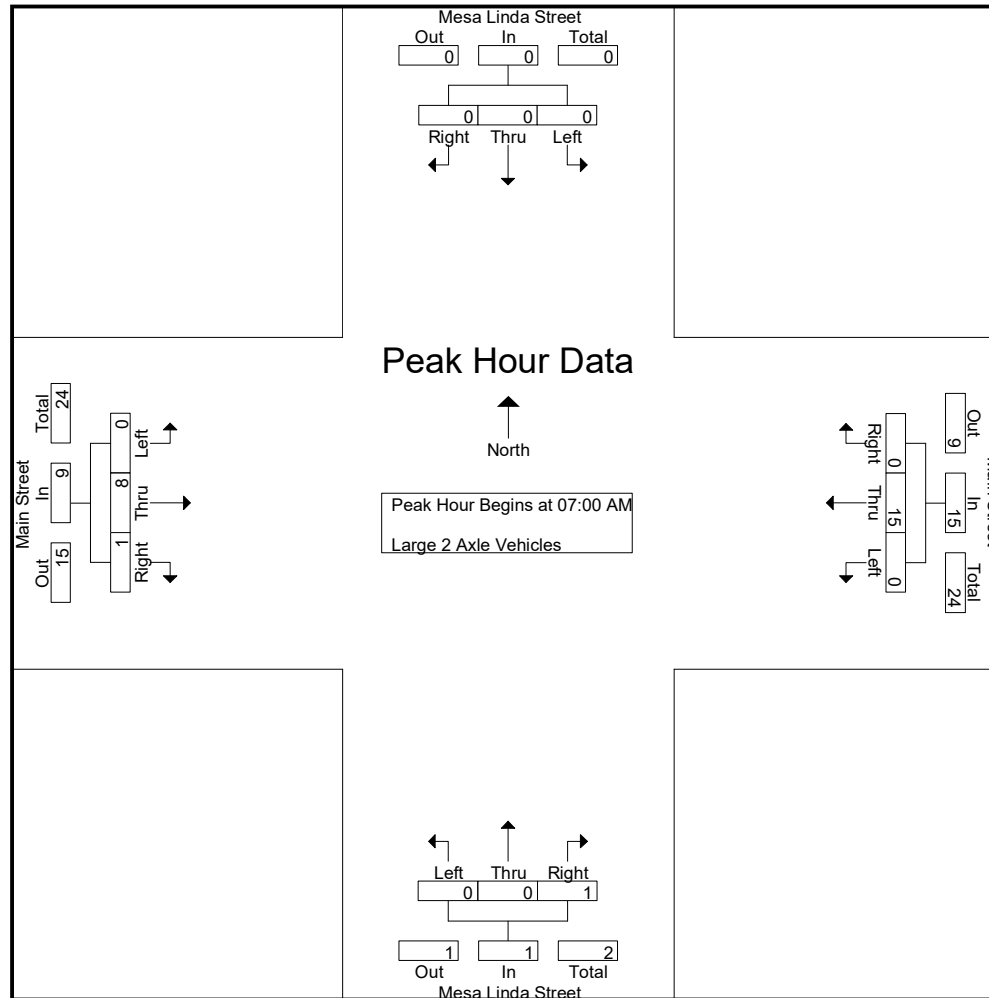
Groups Printed- Large 2 Axle Vehicles

Start Time	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	5	5
07:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	5	5
07:30 AM	0	0	0	0	0	0	5	0	0	5	0	0	1	1	1	0	1	0	0	1	1	7	8
07:45 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	3	1	0	4	0	8	8
Total	0	0	0	0	0	0	15	0	0	15	0	0	1	1	1	0	8	1	0	9	1	25	26
08:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	1	1	0	4	0	0	4	1	7	8
08:15 AM	0	0	0	0	0	1	4	1	1	6	0	0	0	0	0	0	0	0	0	0	1	6	7
08:30 AM	0	0	0	0	0	1	4	0	0	5	0	0	1	1	1	0	5	0	0	5	1	11	12
08:45 AM	0	0	0	0	0	2	2	0	0	4	0	0	1	1	1	0	2	0	0	2	1	7	8
Total	0	0	0	0	0	4	12	1	1	17	0	0	3	3	3	0	11	0	0	11	4	31	35
Grand Total	0	0	0	0	0	4	27	1	1	32	0	0	4	4	4	0	19	1	0	20	5	56	61
Apprch %	0	0	0			12.5	84.4	3.1			0	0	100			0	95	5					
Total %	0	0	0			7.1	48.2	1.8		57.1	0	0	7.1		7.1	0	33.9	1.8		35.7	8.2	91.8	

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
07:30 AM	0	0	0	0	0	5	0	5	0	0	1	1	0	1	0	1	7
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	1	4	8
Total Volume	0	0	0	0	0	15	0	15	0	0	1	1	0	8.9	1	9	25
% App. Total	0	0	0		0	100	0		0	0	100		0	88.9	11.1		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.250	.250	.000	.667	.250	.563	.781

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	
+30 mins.	0	0	0	0	0	5	0	5	0	0	1	1	0	1	0	1	
+45 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	3	1	4	
Total Volume	0	0	0	0	0	15	0	15	0	0	1	1	0	8	1	9	
% App. Total	0	0	0		0	100	0		0	0	100		0	88.9	11.1		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.250	.250	.000	.667	.250	.563	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

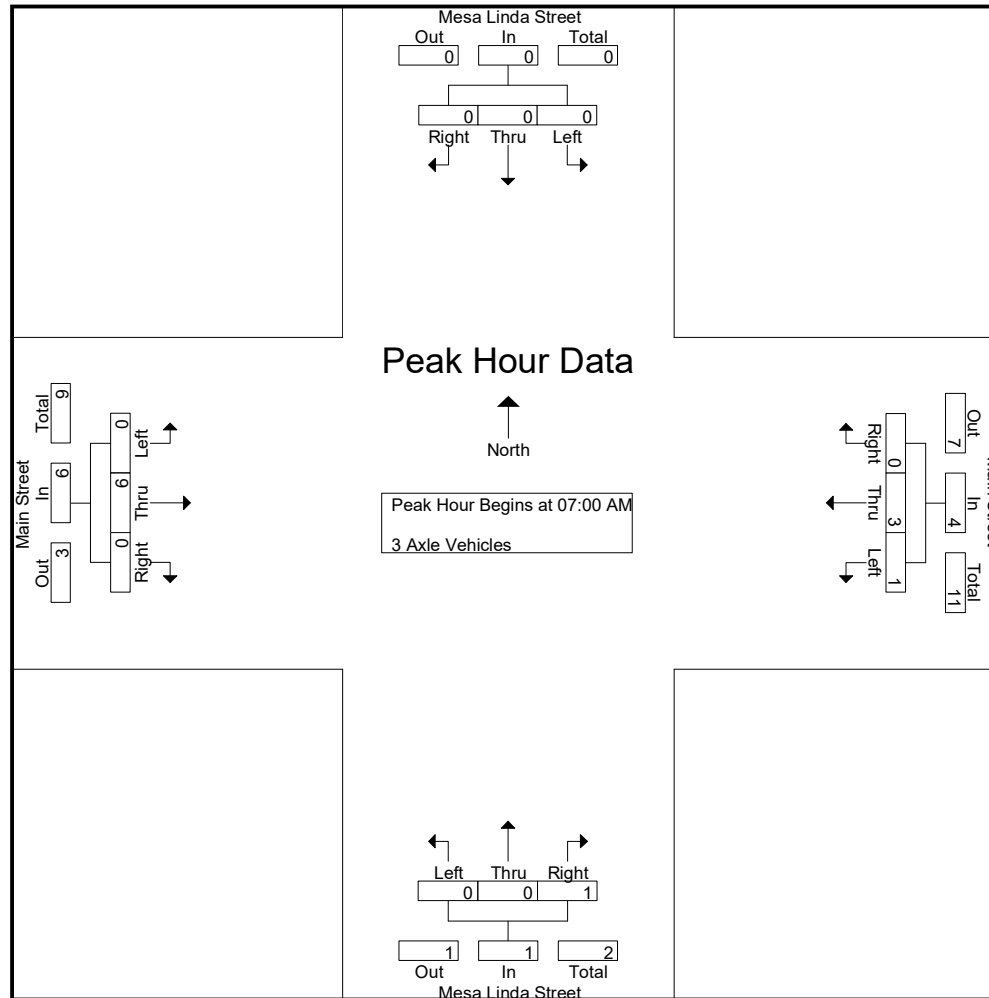
Groups Printed- 3 Axle Vehicles

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	1	1	2	3
07:30 AM	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
Total	0	0	0	0	0	1	3	0	0	4	0	0	1	1	1	0	6	0	0	6	1	11	12
08:00 AM	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	4	4
08:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
08:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
Total	1	0	0	0	1	0	4	1	0	5	0	0	0	0	0	0	3	0	0	3	0	9	9
Grand Total	1	0	0	0	1	1	7	1	0	9	0	0	1	1	1	0	9	0	0	9	1	20	21
Apprch %	100	0	0			11.1	77.8	11.1			0	0	100			0	100	0					
Total %	5	0	0		5	5	35	5		45	0	0	5		5	0	45	0		45	4.8	95.2	

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
07:30 AM	0	0	0	0	1	2	0	3	0	0	0	0	0	1	0	1	4
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total Volume	0	0	0	0	1	3	0	4	0	0	1	1	0	6	0	6	11
% App. Total	0	0	0		25	75	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.250	.375	.000	.333	.000	.000	.250	.250	.000	.750	.000	.750	.688

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	
+30 mins.	0	0	0	0	1	2	0	3	0	0	0	0	0	1	0	1	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	
Total Volume	0	0	0	0	1	3	0	4	0	0	1	1	0	6	0	6	
% App. Total	0	0	0		25	75	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.250	.375	.000	.333	.000	.000	.250	.250	.000	.750	.000	.750	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

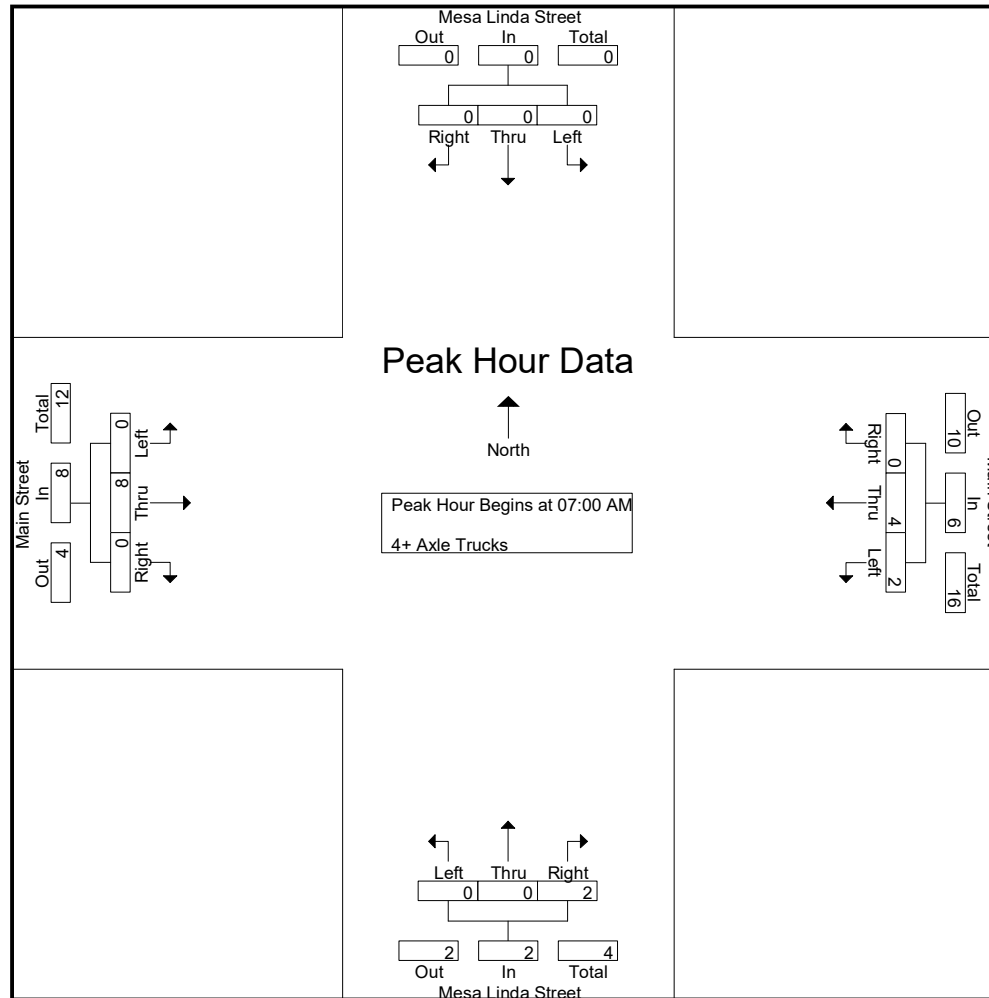
Groups Printed- 4+ Axle Trucks

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound								
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	0	0	3	0	4	4
07:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	0	0	4	4
07:30 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	2	0	0	0	2	0	4	4
07:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	0	0	0	3	0	4	4
Total	0	0	0	0	0	2	4	0	0	6	0	0	2	0	2	0	8	0	0	0	8	0	16	16
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	0	2	0	3	3
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	0	1	0	3	3
08:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	1	1	0	0	0	0	0	0	1	3	4
Total	0	0	0	0	0	1	4	0	0	5	0	0	1	1	1	0	4	0	0	0	4	1	10	11
Grand Total	0	0	0	0	0	3	8	0	0	11	0	0	3	1	3	0	12	0	0	0	12	1	26	27
Apprch %	0	0	0			27.3	72.7	0			0	0	100			0	100	0						
Total %	0	0	0			11.5	30.8	0		42.3	0	0	11.5		11.5	0	46.2	0		46.2	3.7	96.3		

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	3	0	3	4
07:15 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	0	0	0	4
07:30 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	2	0	2	4
07:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	3	0	3	4
Total Volume	0	0	0	0	2	4	0	6	0	0	2	2	0	8	0	8	16
% App. Total	0	0	0		33.3	66.7	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.500	.333	.000	.500	.000	.000	.500	.500	.000	.667	.000	.667	1.00

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main AM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	3	0	3	
+15 mins.	0	0	0	0	0	3	0	3	0	0	1	1	0	0	0	0	
+30 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	2	0	2	
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	3	0	3	
Total Volume	0	0	0	0	2	4	0	6	0	0	2	2	0	8	0	8	
% App. Total	0	0	0		33.3	66.7	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.500	.333	.000	.500	.000	.000	.500	.500	.000	.667	.000	.667	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

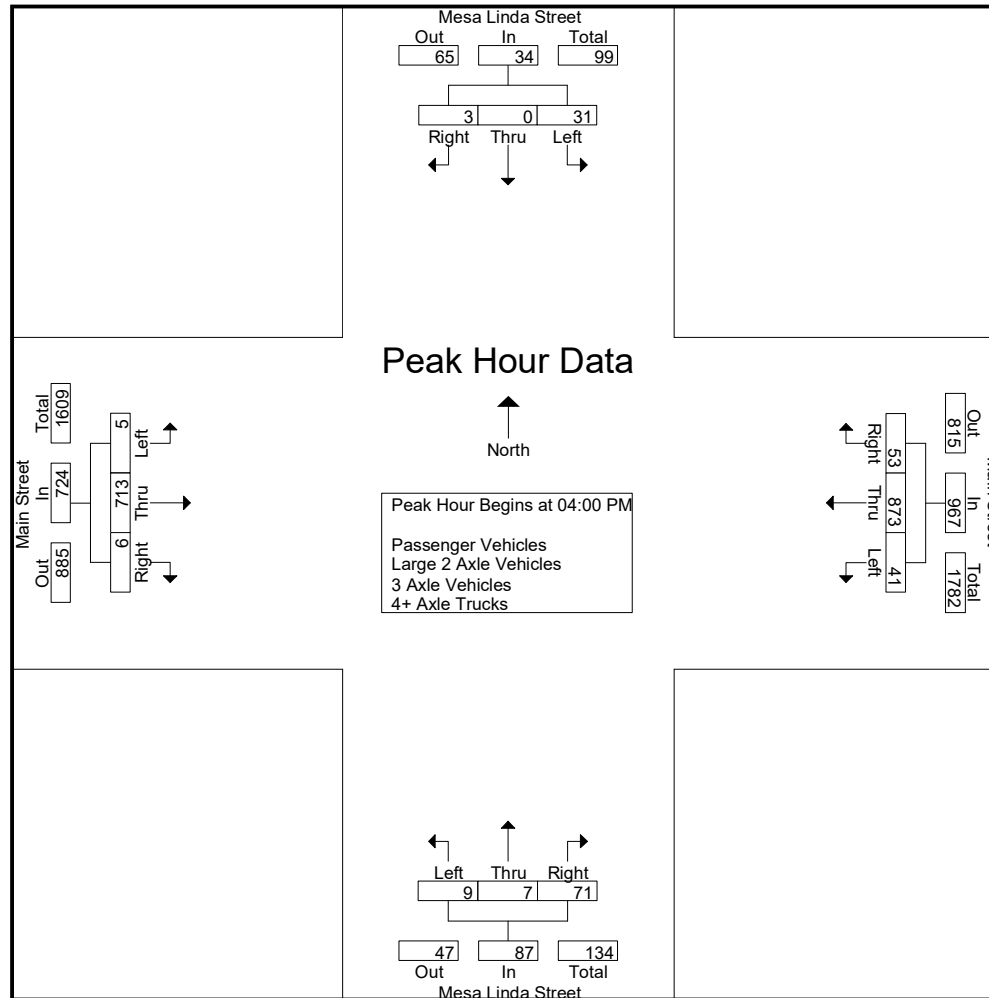
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	5	0	0	0	5	10	221	19	3	250	4	2	15	10	21	1	194	0	0	195	13	471	484
04:15 PM	8	0	2	2	10	9	232	10	1	251	0	0	14	13	14	2	177	2	0	181	16	456	472
04:30 PM	8	0	0	0	8	10	188	14	2	212	2	5	28	22	35	0	173	3	0	176	24	431	455
04:45 PM	10	0	1	0	11	12	232	10	2	254	3	0	14	12	17	2	169	1	1	172	15	454	469
Total	31	0	3	2	34	41	873	53	8	967	9	7	71	57	87	5	713	6	1	724	68	1812	1880
05:00 PM	7	0	3	3	10	7	226	11	2	244	6	0	15	11	21	2	181	2	0	185	16	460	476
05:15 PM	6	1	2	1	9	14	211	10	1	235	1	1	14	13	16	2	199	3	0	204	15	464	479
05:30 PM	3	0	0	0	3	7	219	10	0	236	1	2	23	20	26	1	159	4	0	164	20	429	449
05:45 PM	6	0	1	1	7	5	202	11	1	218	3	1	11	10	15	2	147	1	0	150	12	390	402
Total	22	1	6	5	29	33	858	42	4	933	11	4	63	54	78	7	686	10	0	703	63	1743	1806
Grand Total	53	1	9	7	63	74	1731	95	12	1900	20	11	134	111	165	12	1399	16	1	1427	131	3555	3686
Apprch %	84.1	1.6	14.3			3.9	91.1	5			12.1	6.7	81.2			0.8	98	1.1					
Total %	1.5	0	0.3		1.8	2.1	48.7	2.7		53.4	0.6	0.3	3.8		4.6	0.3	39.4	0.5		40.1	3.6	96.4	
Passenger Vehicles	53	1	9		70	68	1704	94		1878	19	11	126		261	12	1353	16		1382	0	0	3591
% Passenger Vehicles	100	100	100	100	100	91.9	98.4	98.9	100	98.2	95	100	94	94.6	94.6	100	96.7	100	100	96.8	0	0	97.4
Large 2 Axle Vehicles	0	0	0		0	1	14	1		16	1	0	1		3	0	31	0		31	0	0	50
% Large 2 Axle Vehicles	0	0	0	0	0	1.4	0.8	1.1	0	0.8	5	0	0.7	0.9	1.1	0	2.2	0	0	2.2	0	0	1.4
3 Axle Vehicles	0	0	0		0	2	3	0		5	0	0	2		4	0	0	0		0	0	0	9
% 3 Axle Vehicles	0	0	0	0	0	2.7	0.2	0	0	0.3	0	0	1.5	1.8	1.4	0	0	0	0	0	0	0	0.2
4+ Axle Trucks	0	0	0		0	3	10	0		13	0	0	5		8	0	15	0		15	0	0	36
% 4+ Axle Trucks	0	0	0	0	0	4.1	0.6	0	0	0.7	0	0	3.7	2.7	2.9	0	1.1	0	0	1.1	0	0	1

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	5	0	0	5	10	221	19	250	4	2	15	21	1	194	0	195	471
04:15 PM	8	0	2	10	9	232	10	251	0	0	14	14	2	177	2	181	456
04:30 PM	8	0	0	8	10	188	14	212	2	5	28	35	0	173	3	176	431
04:45 PM	10	0	1	11	12	232	10	254	3	0	14	17	2	169	1	172	454
Total Volume	31	0	3	34	41	873	53	967	9	7	71	87	5	713	6	724	1812
% App. Total	91.2	0	8.8		4.2	90.3	5.5		10.3	8	81.6		0.7	98.5	0.8		
PHF	.775	.000	.375	.773	.854	.941	.697	.952	.563	.350	.634	.621	.625	.919	.500	.928	.962

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:45 PM				04:30 PM				04:30 PM				
+0 mins.	8	0	2	10	12	232	10	254	2	5	28	35	0	173	3	176	
+15 mins.	8	0	0	8	7	226	11	244	3	0	14	17	2	169	1	172	
+30 mins.	10	0	1	11	14	211	10	235	6	0	15	21	2	181	2	185	
+45 mins.	7	0	3	10	7	219	10	236	1	1	14	16	2	199	3	204	
Total Volume	33	0	6	39	40	888	41	969	12	6	71	89	6	722	9	737	
% App. Total	84.6	0	15.4		4.1	91.6	4.2		13.5	6.7	79.8		0.8	98	1.2		
PHF	.825	.000	.500	.886	.714	.957	.932	.954	.500	.300	.634	.636	.750	.907	.750	.903	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

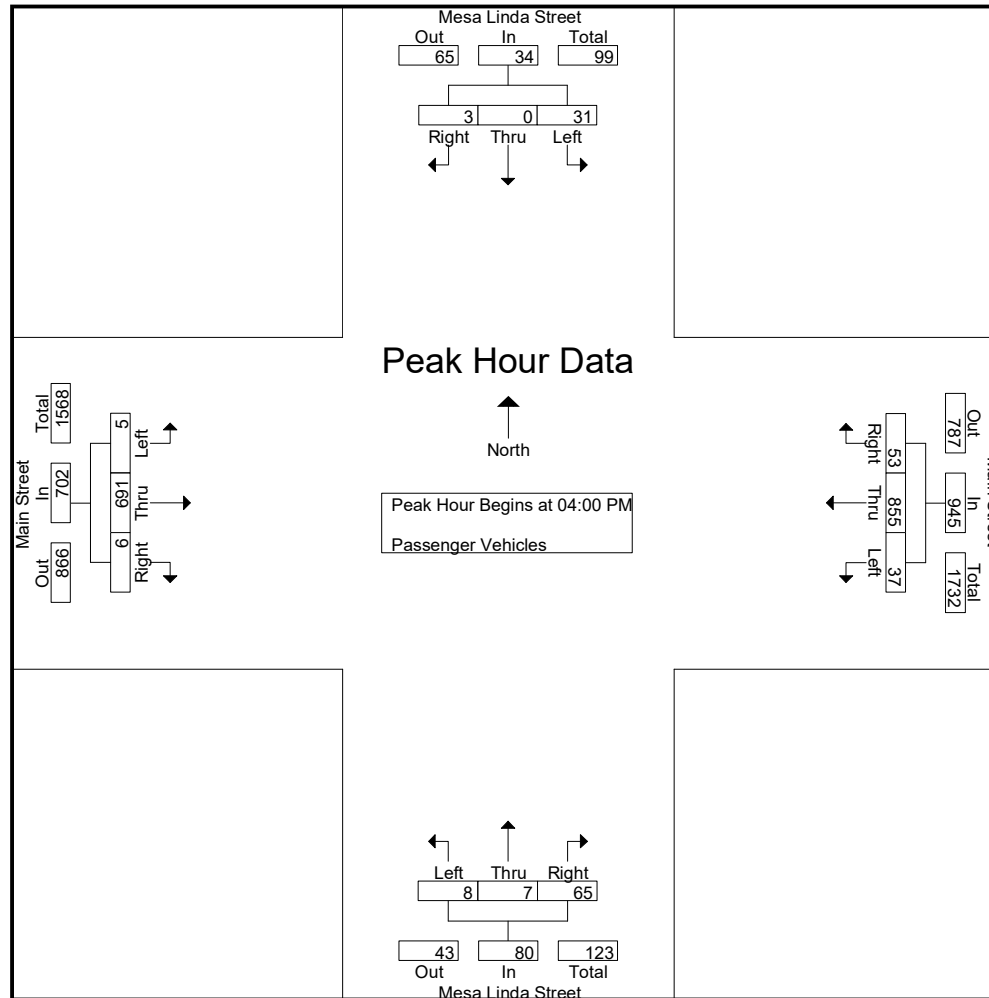
Groups Printed- Passenger Vehicles

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	5	0	0	0	5	9	218	19	3	246	3	2	12	7	17	1	189	0	0	190	10	458	468
04:15 PM	8	0	2	2	10	7	226	10	1	243	0	0	12	11	12	2	173	2	0	177	14	442	456
04:30 PM	8	0	0	0	8	9	183	14	2	206	2	5	28	22	35	0	165	3	0	168	24	417	441
04:45 PM	10	0	1	0	11	12	228	10	2	250	3	0	13	12	16	2	164	1	1	167	15	444	459
Total	31	0	3	2	34	37	855	53	8	945	8	7	65	52	80	5	691	6	1	702	63	1761	1824
05:00 PM	7	0	3	3	10	6	222	10	2	238	6	0	15	11	21	2	174	2	0	178	16	447	463
05:15 PM	6	1	2	1	9	13	208	10	1	231	1	1	14	13	16	2	194	3	0	199	15	455	470
05:30 PM	3	0	0	0	3	7	219	10	0	236	1	2	21	19	24	1	154	4	0	159	19	422	441
05:45 PM	6	0	1	1	7	5	200	11	1	216	3	1	11	10	15	2	140	1	0	143	12	381	393
Total	22	1	6	5	29	31	849	41	4	921	11	4	61	53	76	7	662	10	0	679	62	1705	1767
Grand Total	53	1	9	7	63	68	1704	94	12	1866	19	11	126	105	156	12	1353	16	1	1381	125	3466	3591
Apprch %	84.1	1.6	14.3			3.6	91.3	5			12.2	7.1	80.8			0.9	98	1.2					
Total %	1.5	0	0.3		1.8	2	49.2	2.7		53.8	0.5	0.3	3.6		4.5	0.3	39	0.5		39.8	3.5	96.5	

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	5	0	0	5	9	218	19	246	3	2	12	17	1	189	0	190	458
04:15 PM	8	0	2	10	7	226	10	243	0	0	12	12	2	173	2	177	442
04:30 PM	8	0	0	8	9	183	14	206	2	5	28	35	0	165	3	168	417
04:45 PM	10	0	1	11	12	228	10	250	3	0	13	16	2	164	1	167	444
Total Volume	31	0	3	34	37	855	53	945	8	7	65	80	5	691	6	702	1761
% App. Total	91.2	0	8.8		3.9	90.5	5.6		10	8.8	81.2		0.7	98.4	0.9		
PHF	.775	.000	.375	.773	.771	.938	.697	.945	.667	.350	.580	.571	.625	.914	.500	.924	.961

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	5	0	0	5	9	218	19	246	3	2	12	17	1	189	0	190	
+15 mins.	8	0	2	10	7	226	10	243	0	0	12	12	2	173	2	177	
+30 mins.	8	0	0	8	9	183	14	206	2	5	28	35	0	165	3	168	
+45 mins.	10	0	1	11	12	228	10	250	3	0	13	16	2	164	1	167	
Total Volume	31	0	3	34	37	855	53	945	8	7	65	80	5	691	6	702	
% App. Total	91.2	0	8.8		3.9	90.5	5.6		10	8.8	81.2		0.7	98.4	0.9		
PHF	.775	.000	.375	.773	.771	.938	.697	.945	.667	.350	.580	.571	.625	.914	.500	.924	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

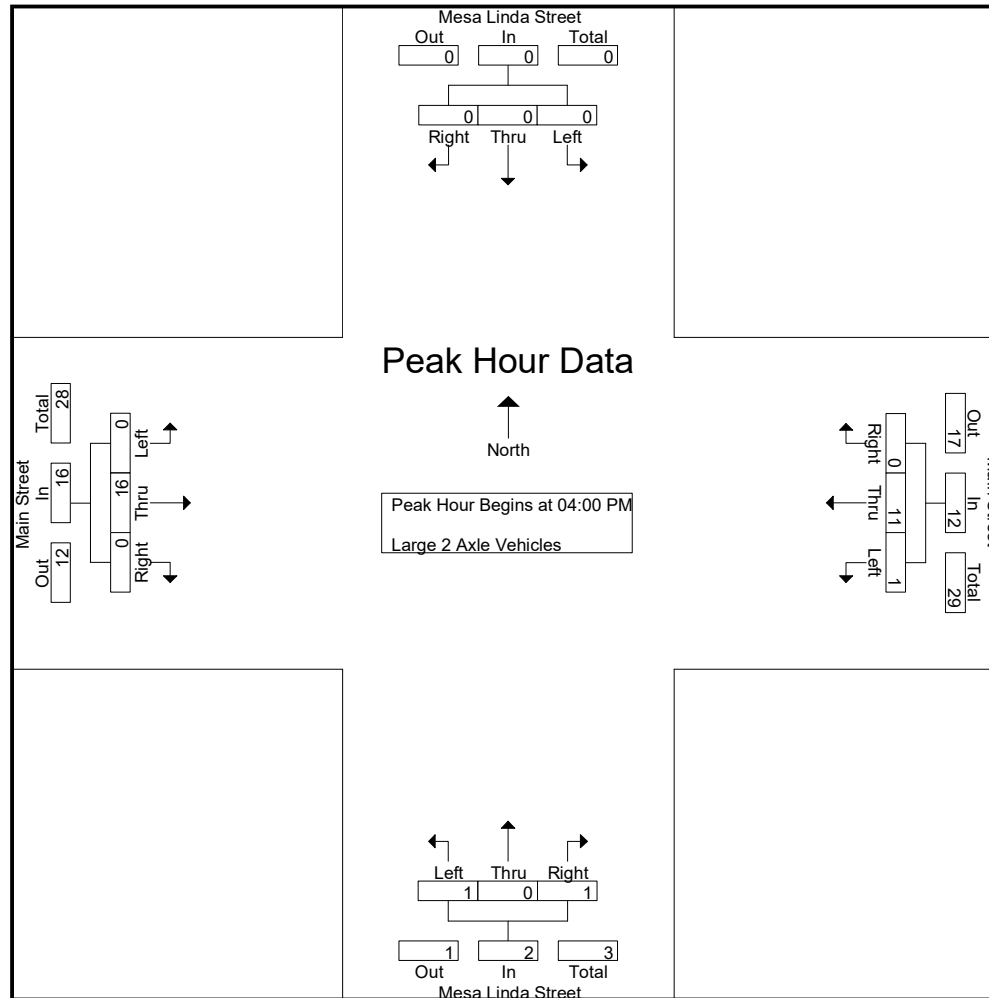
Groups Printed- Large 2 Axle Vehicles

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	2	0	0	2	0	4	4
04:15 PM	0	0	0	0	0	0	4	0	0	4	0	0	1	1	1	0	3	0	0	3	1	8	9
04:30 PM	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	6	0	0	6	0	11	11
04:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	7	7
Total	0	0	0	0	0	1	11	0	0	12	1	0	1	1	2	0	16	0	0	16	1	30	31
05:00 PM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	6	0	0	6	0	9	9
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	5	5
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
Total	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	15	0	0	15	0	19	19
Grand Total	0	0	0	0	0	1	14	1	0	16	1	0	1	1	2	0	31	0	0	31	1	49	50
Apprch %	0	0	0			6.2	87.5	6.2			50	0	50			0	100	0					
Total %	0	0	0			2	28.6	2		32.7	2	0	2		4.1	0	63.3	0		63.3	2	98	

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	4
04:15 PM	0	0	0	0	0	4	0	4	0	0	1	1	0	3	0	3	8
04:30 PM	0	0	0	0	1	4	0	5	0	0	0	0	0	6	0	6	11
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
Total Volume	0	0	0	0	1	11	0	12	1	0	1	2	0	16	0	16	30
% App. Total	0	0	0		8.3	91.7	0		50	0	50		0	100	0		
PHF	.000	.000	.000	.000	.250	.688	.000	.600	.250	.000	.250	.500	.000	.667	.000	.667	.682

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	
+15 mins.	0	0	0	0	0	4	0	4	0	0	1	1	0	3	0	3	
+30 mins.	0	0	0	0	1	4	0	5	0	0	0	0	0	6	0	6	
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	
Total Volume	0	0	0	0	1	11	0	12	1	0	1	2	0	16	0	16	
% App. Total	0	0	0		8.3	91.7	0		50	0	50		0	100	0		
PHF	.000	.000	.000	.000	.250	.688	.000	.600	.250	.000	.250	.500	.000	.667	.000	.667	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

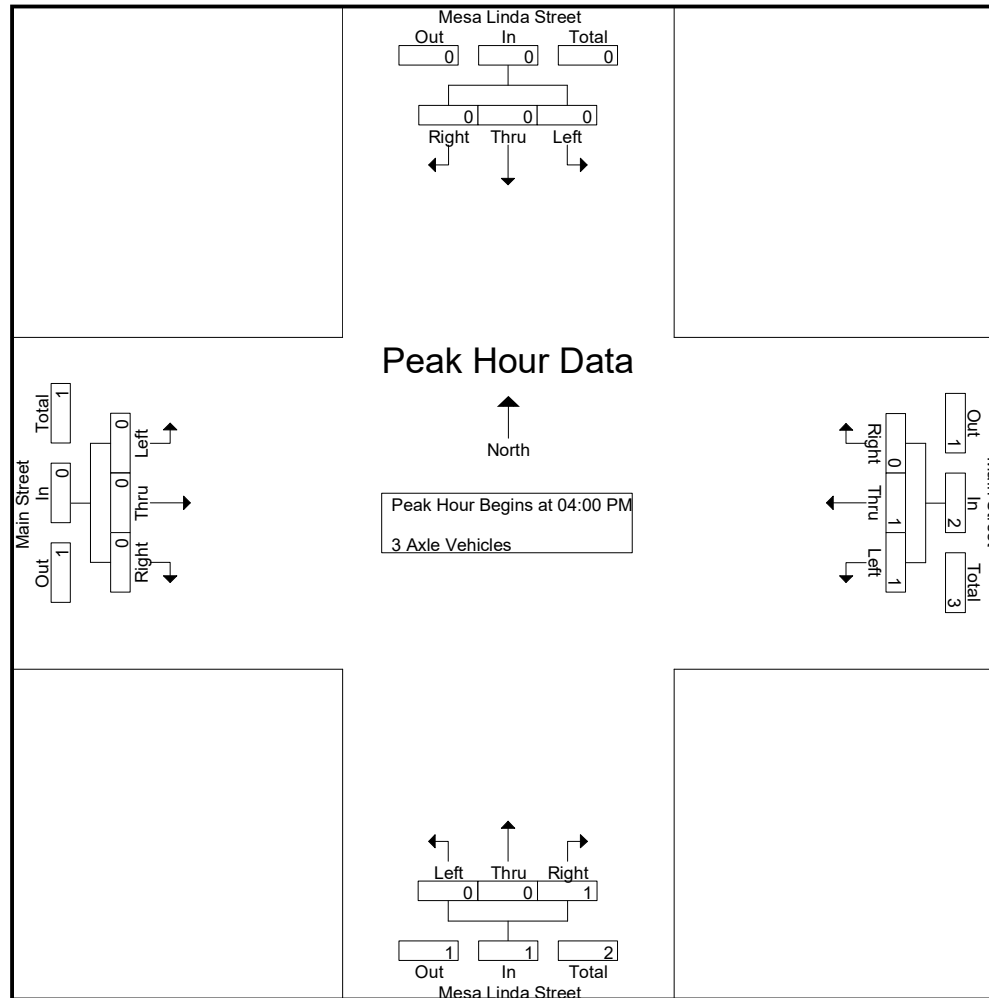
Groups Printed- 3 Axle Vehicles

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	1	2
04:15 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	1	0	0	2	0	0	1	1	1	0	0	0	0	0	1	3	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	1	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	2	0	0	3	0	0	1	1	1	0	0	0	0	0	1	4	5
Grand Total	0	0	0	0	0	2	3	0	0	5	0	0	2	2	2	0	0	0	0	0	2	7	9
Apprch %	0	0	0			40	60	0			0	0	100			0	0	0					
Total %	0	0	0			28.6	42.9	0		71.4	0	0	28.6		28.6	0	0	0		0	22.2	77.8	

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:15 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0	3
% App. Total	0	0	0		50	50	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000	.375

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	
+15 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0	
% App. Total	0	0	0		50	50	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000	

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 1

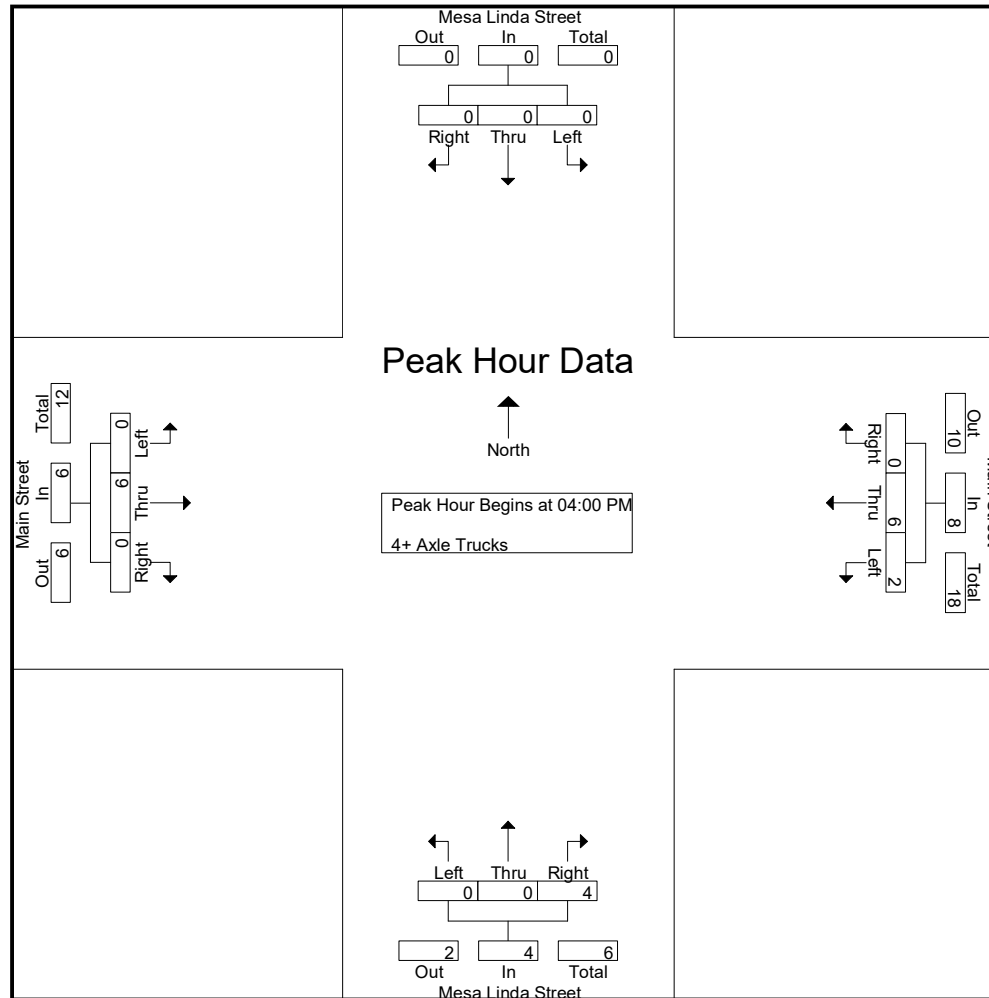
Groups Printed- 4+ Axle Trucks

	Mesa Linda Street Southbound					Main Street Westbound					Mesa Linda Street Northbound					Main Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	1	2	0	0	3	0	0	2	2	2	0	3	0	0	3	2	8	10
04:15 PM	0	0	0	0	0	1	1	0	0	2	0	0	1	1	1	0	1	0	0	1	1	4	5
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
04:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	3	3
Total	0	0	0	0	0	2	6	0	0	8	0	0	4	3	4	0	6	0	0	6	3	18	21
05:00 PM	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	7	7
Total	0	0	0	0	0	1	4	0	0	5	0	0	1	0	1	0	9	0	0	9	0	15	15
Grand Total	0	0	0	0	0	3	10	0	0	13	0	0	5	3	5	0	15	0	0	15	3	33	36
Apprch %	0	0	0			23.1	76.9	0			0	0	100			0	100	0					
Total %	0	0	0			9.1	30.3	0		39.4	0	0	15.2		15.2	0	45.5	0		45.5	8.3	91.7	

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	1	2	0	3	0	0	2	2	0	3	0	3	8
04:15 PM	0	0	0	0	1	1	0	2	0	0	1	1	0	1	0	1	4
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:45 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	0	0	0	3
Total Volume	0	0	0	0	2	6	0	8	0	0	4	4	0	6	0	6	18
% App. Total	0	0	0		25	75	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.500	.750	.000	.667	.000	.000	.500	.500	.000	.500	.000	.500	.563

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 2



Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hesperia
N/S: Mesa Linda Street
E/W: Main Street
Weather: Clear

File Name : 09_HES_Mesa Linda_Main PM
Site Code : 05119658
Start Date : 9/28/2019
Page No : 3

	Mesa Linda Street Southbound				Main Street Westbound				Mesa Linda Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	1	2	0	3	0	0	2	2	0	3	0	3	
+15 mins.	0	0	0	0	1	1	0	2	0	0	1	1	0	1	0	1	
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	
+45 mins.	0	0	0	0	0	2	0	2	0	0	1	1	0	0	0	0	
Total Volume	0	0	0	0	2	6	0	8	0	0	4	4	0	6	0	6	
% App. Total	0	0	0		25	75	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.500	.750	.000	.667	.000	.000	.500	.500	.000	.500	.000	.500	

Location: Hesperia
 N/S: Mesa Linda Street
 E/W: Main Street



Date: 9/28/2019
 Day: Saturday

PEDESTRIANS

	North Leg Mesa Linda Street Pedestrians	East Leg Main Street Pedestrians	South Leg Mesa Linda Street Pedestrians	West Leg Main Street Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	1	1	0	2
TOTAL VOLUMES:	0	2	1	0	3

	North Leg Mesa Linda Street Pedestrians	East Leg Main Street Pedestrians	South Leg Mesa Linda Street Pedestrians	West Leg Main Street Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Hesperia
 N/S: Mesa Linda Street
 E/W: Main Street



Date: 9/28/2019
 Day: Saturday

BICYCLES

		Southbound Mesa Linda Street			Westbound Main Street			Northbound Mesa Linda Street			Eastbound Main Street			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	0	0	0

		Southbound Mesa Linda Street			Westbound Main Street			Northbound Mesa Linda Street			Eastbound Main Street			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	0	0	0

Location: Hesperia
 N/S: US-395
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

Total Volume

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	145	3	3	235	0	0	0	0	0	0	1	387
7:15 AM		0	184	2	6	264	0	0	0	0	0	0	1	457
7:30 AM		0	175	3	10	201	0	0	0	0	0	0	2	391
7:45 AM		0	161	0	11	211	0	0	0	0	1	4	0	388
8:00 AM		0	137	2	3	199	0	0	0	0	1	0	1	343
8:15 AM		0	135	4	2	207	0	0	0	0	4	0	3	355
8:30 AM		0	133	9	3	218	0	0	0	0	0	0	0	363
8:45 AM		0	159	2	6	162	0	0	0	0	2	0	2	333
TOTAL VOLUMES:		0	1229	25	44	1697	0	0	0	0	8	4	10	3017

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	665	8	30	911	0	0	0	0	1	4	4	1623

PEAK HR FACTOR:	0.905	0.871	0.000	0.450	0.888
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	225	4	1	174	0	0	0	0	1	0	6	411
4:15 PM		0	238	4	6	197	0	0	0	0	0	0	3	448
4:30 PM		0	233	8	3	163	0	0	0	0	1	0	1	409
4:45 PM		0	260	11	0	188	0	0	0	0	2	0	2	463
5:00 PM		0	255	11	1	188	0	0	0	0	0	0	3	458
5:15 PM		0	264	7	2	155	0	0	0	0	2	0	4	434
5:30 PM		0	290	3	2	152	0	0	0	0	0	0	6	453
5:45 PM		0	256	8	5	142	0	0	0	0	2	0	6	419
TOTAL VOLUMES:		0	2021	56	20	1359	0	0	0	0	8	0	31	3495

PM Peak Hr Begins at: 445 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	1069	32	5	683	0	0	0	0	4	0	15	1808

PEAK HR FACTOR:	0.939	0.910	0.000	0.792	0.976
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

Passenger Vehicles

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	123	3	2	209	0	0	0	0	0	0	1	338
7:15 AM		0	157	2	6	238	0	0	0	0	0	0	1	404
7:30 AM		0	156	3	7	179	0	0	0	0	0	0	2	347
7:45 AM		0	139	0	10	189	0	0	0	0	1	0	0	339
8:00 AM		0	122	2	2	181	0	0	0	0	1	0	1	309
8:15 AM		0	120	3	2	188	0	0	0	0	2	0	2	317
8:30 AM		0	119	8	3	197	0	0	0	0	0	0	0	327
8:45 AM		0	140	2	5	144	0	0	0	0	2	0	2	295
TOTAL VOLUMES:		0	1076	23	37	1525	0	0	0	0	6	0	9	2676

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	575	8	25	815	0	0	0	0	1	0	4	1428

PEAK HR FACTOR:	0.917	0.861	0.000	0.625	0.884
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	211	4	1	152	0	0	0	0	1	0	4	373
4:15 PM		0	219	4	2	176	0	0	0	0	0	0	3	404
4:30 PM		0	217	7	3	152	0	0	0	0	1	0	0	380
4:45 PM		0	249	10	0	164	0	0	0	0	2	0	2	427
5:00 PM		0	233	11	0	172	0	0	0	0	0	0	3	419
5:15 PM		0	252	7	2	140	0	0	0	0	2	0	3	406
5:30 PM		0	283	3	2	126	0	0	0	0	0	0	6	420
5:45 PM		0	237	8	2	127	0	0	0	0	2	0	5	381
TOTAL VOLUMES:		0	1901	54	12	1209	0	0	0	0	8	0	26	3210

PM Peak Hr Begins at: 445 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	1017	31	4	602	0	0	0	0	4	0	14	1672

PEAK HR FACTOR:	0.916	0.881	0.000	0.750	0.979
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

Large 2 Axle Vehicles

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	6	0	0	2	0	0	0	0	0	0	0	8
7:15 AM		0	10	0	0	3	0	0	0	0	0	0	0	13
7:30 AM		0	5	0	0	0	0	0	0	0	0	0	0	5
7:45 AM		0	3	0	0	3	0	0	0	0	0	0	0	6
8:00 AM		0	5	0	0	2	0	0	0	0	0	0	0	7
8:15 AM		0	5	1	0	4	0	0	0	0	1	0	0	11
8:30 AM		0	3	0	0	1	0	0	0	0	0	0	0	4
8:45 AM		0	4	0	0	1	0	0	0	0	0	0	0	5
TOTAL VOLUMES:		0	41	1	0	16	0	0	0	0	1	0	0	59

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	24	0	0	8	0	0	0	0	0	0	0	32

PEAK HR FACTOR:	0.600	0.667	0.000	0.000	0.615
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	1	0	0	6	0	0	0	0	0	0	1	8
4:15 PM		0	2	0	0	4	0	0	0	0	0	0	0	6
4:30 PM		0	5	0	0	0	0	0	0	0	0	0	0	5
4:45 PM		0	0	0	0	3	0	0	0	0	0	0	0	3
5:00 PM		0	7	0	0	0	0	0	0	0	0	0	0	7
5:15 PM		0	0	0	0	4	0	0	0	0	0	0	0	4
5:30 PM		0	0	0	0	5	0	0	0	0	0	0	0	5
5:45 PM		0	4	0	0	1	0	0	0	0	0	0	0	5
TOTAL VOLUMES:		0	19	0	0	23	0	0	0	0	0	0	1	43

PM Peak Hr Begins at: 445 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	8	0	0	13	0	0	0	0	0	0	1	22

PEAK HR FACTOR:	0.400	0.542	0.000	0.250	0.688
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

3 Axle Vehicles

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	1	0	0	0	0	0	0	0	0	1
7:15 AM		0	1	0	0	2	0	0	0	0	0	0	0	3
7:30 AM		0	2	0	2	0	0	0	0	0	0	0	0	4
7:45 AM		0	1	0	1	1	0	0	0	0	0	4	0	7
8:00 AM		0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM		0	1	0	0	2	0	0	0	0	0	0	1	4
8:30 AM		0	2	0	0	1	0	0	0	0	0	0	0	3
8:45 AM		0	1	0	0	2	0	0	0	0	0	0	0	3
TOTAL VOLUMES:		0	8	0	4	9	0	0	0	0	0	4	1	26

AM Peak Hr Begins at: 730 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	4	0	3	4	0	0	0	0	0	4	1	16

PEAK HR FACTOR:	0.500	0.875	0.000	0.313	0.571
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM		0	3	0	0	2	0	0	0	0	0	0	0	5
4:30 PM		0	1	0	0	1	0	0	0	0	0	0	1	3
4:45 PM		0	2	0	0	1	0	0	0	0	0	0	0	3
5:00 PM		0	0	0	1	1	0	0	0	0	0	0	0	2
5:15 PM		0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM		0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM		0	3	0	1	3	0	0	0	0	0	0	0	7
TOTAL VOLUMES:		0	11	0	2	9	0	0	0	0	0	0	1	23

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	6	0	1	5	0	0	0	0	0	0	1	13

PEAK HR FACTOR:	0.500	0.750	0.000	0.250	0.650
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

4+ Axle Trucks

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	16	0	0	24	0	0	0	0	0	0	0	40
7:15 AM		0	16	0	0	21	0	0	0	0	0	0	0	37
7:30 AM		0	12	0	1	22	0	0	0	0	0	0	0	35
7:45 AM		0	18	0	0	18	0	0	0	0	0	0	0	36
8:00 AM		0	10	0	1	15	0	0	0	0	0	0	0	26
8:15 AM		0	9	0	0	13	0	0	0	0	1	0	0	23
8:30 AM		0	9	1	0	19	0	0	0	0	0	0	0	29
8:45 AM		0	14	0	1	15	0	0	0	0	0	0	0	30
TOTAL VOLUMES:		0	104	1	3	147	0	0	0	0	1	0	0	256

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	62	0	1	85	0	0	0	0	0	0	0	148

PEAK HR FACTOR:	0.861	0.896	0.000	0.000	0.925
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	12	0	0	16	0	0	0	0	0	0	1	29
4:15 PM		0	14	0	4	15	0	0	0	0	0	0	0	33
4:30 PM		0	10	1	0	10	0	0	0	0	0	0	0	21
4:45 PM		0	9	1	0	20	0	0	0	0	0	0	0	30
5:00 PM		0	15	0	0	15	0	0	0	0	0	0	0	30
5:15 PM		0	11	0	0	11	0	0	0	0	0	0	1	23
5:30 PM		0	7	0	0	20	0	0	0	0	0	0	0	27
5:45 PM		0	12	0	2	11	0	0	0	0	0	0	1	26
TOTAL VOLUMES:		0	90	2	6	118	0	0	0	0	0	0	3	219

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	48	2	4	60	0	0	0	0	0	0	0	114

PEAK HR FACTOR:	0.833	0.800	0.000	0.000	0.864
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Poplar Street



Date: 7/14/2021
 Date: Wednesday

PEDESTRIANS

	North Leg US-395	South Leg US-395	East Leg Poplar Street	West Leg Poplar Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

AM Total Volume Peak Hr Begins At: 700 AM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

	North Leg US-395	South Leg US-395	East Leg Poplar Street	West Leg Poplar Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

PM Total Volume Peak Hr Begins At: 415 PM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

Date: 7/14/2021
Date: Wednesday

[illegible][illegible]PM Total Volume Peak Hr Begins At: 445 PM[illegible]

Location: Hesperia
 N/S: Lassen Road
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

Total Volume

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		1	0	3	0	0	0	0	1	1	4	1	0	11
7:15 AM		2	0	4	0	0	0	0	2	4	4	3	0	19
7:30 AM		0	0	1	0	0	0	0	2	9	13	2	0	27
7:45 AM		2	0	3	0	0	0	0	1	6	12	2	0	26
8:00 AM		1	0	1	0	0	0	0	1	4	11	0	0	18
8:15 AM		5	0	6	0	0	0	0	2	4	17	2	0	36
8:30 AM		1	0	4	0	0	2	0	6	5	10	0	0	28
8:45 AM		2	0	5	0	0	0	0	1	5	3	1	0	17
TOTAL VOLUMES:		14	0	27	0	0	2	0	16	38	74	11	0	182

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	9	0	14	0	0	2	0	10	19	50	4	0	108

PEAK HR FACTOR:	0.523	0.250	0.659	0.711	0.750
-----------------	-------	-------	-------	-------	-------

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		5	0	12	0	0	0	0	4	1	6	1	0	29
4:15 PM		3	0	12	0	0	0	0	4	6	7	0	0	32
4:30 PM		1	0	15	0	0	0	0	8	3	7	2	0	36
4:45 PM		2	0	10	0	0	0	0	13	1	2	4	0	32
5:00 PM		3	0	18	0	0	0	0	7	3	7	0	0	38
5:15 PM		5	0	12	0	0	0	0	7	0	5	1	0	30
5:30 PM		5	0	20	0	0	0	0	4	1	7	2	0	39
5:45 PM		3	0	10	0	0	0	0	9	4	6	2	0	34
TOTAL VOLUMES:		27	0	109	0	0	0	0	56	19	47	12	0	270

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	16	0	60	0	0	0	0	27	8	25	5	0	141

PEAK HR FACTOR:	0.760	0.000	0.673	0.833	0.904
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: Lassen Road
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

Passenger Vehicles

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		1	0	3	0	0	0	0	1	1	4	1	0	11
7:15 AM		1	0	4	0	0	0	0	2	4	4	3	0	18
7:30 AM		0	0	0	0	0	0	0	2	6	11	2	0	21
7:45 AM		0	0	3	0	0	0	0	1	6	12	2	0	24
8:00 AM		1	0	0	0	0	0	0	1	2	11	0	0	15
8:15 AM		4	0	5	0	0	0	0	2	4	16	2	0	33
8:30 AM		1	0	2	0	0	2	0	6	3	8	0	0	22
8:45 AM		2	0	5	0	0	0	0	1	4	3	1	0	16
TOTAL VOLUMES:		10	0	22	0	0	2	0	16	30	69	11	0	160

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	6	0	10	0	0	2	0	10	15	47	4	0	94

PEAK HR FACTOR:	0.444	0.250	0.694	0.708	0.712
-----------------	-------	-------	-------	-------	-------

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		3	0	11	0	0	0	0	4	1	5	0	0	24
4:15 PM		3	0	9	0	0	0	0	4	3	7	0	0	26
4:30 PM		0	0	13	0	0	0	0	6	3	5	2	0	29
4:45 PM		2	0	10	0	0	0	0	13	0	2	4	0	31
5:00 PM		3	0	17	0	0	0	0	7	2	6	0	0	35
5:15 PM		4	0	9	0	0	0	0	7	0	3	1	0	24
5:30 PM		5	0	19	0	0	0	0	4	1	7	2	0	38
5:45 PM		2	0	9	0	0	0	0	9	1	5	2	0	28
TOTAL VOLUMES:		22	0	97	0	0	0	0	54	11	40	11	0	235

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	14	0	55	0	0	0	0	31	3	18	7	0	128

PEAK HR FACTOR:	0.719	0.000	0.654	0.694	0.842
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: Lassen Road
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

Large 2 Axle Vehicles

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM		0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM		0	0	1	0	0	0	0	0	0	0	0	0	1
8:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	1	0	0	0	0	0	1	0	0	0	2

AM Peak Hr Begins at: 730 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	1	0	0	0	0	0	1	0	0	0	2

PEAK HR FACTOR:	0.250	0.000	0.250	0.000	0.500
-----------------	-------	-------	-------	-------	-------

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM		0	0	1	0	0	0	0	0	0	0	0	0	1
4:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		1	0	1	0	0	0	0	0	0	0	0	0	2

PM Peak Hr Begins at: 400 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	1	0	1	0	0	0	0	0	0	0	0	0	2

PEAK HR FACTOR:	0.500	0.000	0.000	0.000	0.500
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
N/S: Lassen Road
E/W: Poplar Street



Date: 7/14/2021
Day: Wednesday

3 Axle Vehicles

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	2	2	0	0	4
	7:45 AM	2	0	0	0	0	0	0	0	0	0	0	0	2
	8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
	8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	8:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	2
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		2	0	3	0	0	0	0	0	2	3	0	0	10

AM Peak Hr Begins at: AM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	0	1	0	0	0	0	0	2	3	0	0	8

PEAK HR FACTOR:	0.375	0.000	0.250	0.375	0.500
-----------------	-------	-------	-------	-------	-------

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	1	0	1	0	0	0	0	0	0	1	0	0	3
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	2
	5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	2
TOTAL VOLUMES:		1	0	3	0	0	0	0	0	2	3	0	0	9

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	0	2	0	0	0	0	0	1	2	0	0	6

PEAK HR FACTOR:	0.375	0.000	0.250	0.500	0.500
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: Lassen Road
 E/W: Poplar Street



Date: 7/14/2021
 Day: Wednesday

4+ Axle Trucks

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		1	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM		0	0	1	0	0	0	0	0	1	0	0	0	2
7:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM		0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM		1	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM		0	0	0	0	0	0	0	0	2	2	0	0	4
8:45 AM		0	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES:		2	0	1	0	0	0	0	0	5	2	0	0	10

AM Peak Hr Begins at: 745 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	1	0	0	0	0	0	0	0	4	2	0	0	7

PEAK HR FACTOR:	0.250	0.000	0.500	0.250	0.438
-----------------	-------	-------	-------	-------	-------

		Lassen Road Northbound			Lassen Road Southbound			Poplar Street Eastbound			Poplar Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		1	0	0	0	0	0	0	0	0	1	1	0	3
4:15 PM		0	0	2	0	0	0	0	0	3	0	0	0	5
4:30 PM		0	0	1	0	0	0	0	2	0	1	0	0	4
4:45 PM		0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM		0	0	1	0	0	0	0	0	0	0	0	0	1
5:15 PM		1	0	2	0	0	0	0	0	0	2	0	0	5
5:30 PM		0	0	1	0	0	0	0	0	0	0	0	0	1
5:45 PM		1	0	1	0	0	0	0	0	2	0	0	0	4
TOTAL VOLUMES:		3	0	8	0	0	0	0	2	6	4	1	0	24

PM Peak Hr Begins at: 400 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	1	0	3	0	0	0	0	2	4	2	1	0	13

PEAK HR FACTOR:	0.500	0.000	0.500	0.375	0.650
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: Lassen Road
 E/W: Poplar Street



Date: 7/14/2021
 Date: Wednesday

PEDESTRIANS

	North Leg Lassen Road	South Leg Lassen Road	East Leg Poplar Street	West Leg Poplar Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

AM Total Volume Peak Hr Begins At: 700 AM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

	North Leg Lassen Road	South Leg Lassen Road	East Leg Poplar Street	West Leg Poplar Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

PM Total Volume Peak Hr Begins At: 1600 PM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

Date: 7/14/2021
Date: Wednesday

[illegible][illegible][illegible][illegible]

Location: Hesperia
 N/S: US-395
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Total Volume

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		1	155	6	11	233	3	4	4	0	8	7	11	443
7:15 AM		1	154	11	9	253	3	5	7	3	20	2	14	482
7:30 AM		1	160	11	18	189	6	1	4	1	18	3	20	432
7:45 AM		0	163	7	10	193	4	3	6	0	18	3	11	418
8:00 AM		1	132	12	21	201	3	2	3	2	13	6	18	414
8:15 AM		0	126	8	11	202	4	1	5	2	22	6	14	401
8:30 AM		4	147	9	21	207	4	3	4	1	20	0	17	437
8:45 AM		2	147	6	13	157	1	2	7	0	21	3	13	372
TOTAL VOLUMES:		10	1184	70	114	1635	28	21	40	9	140	30	118	3399

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	3	632	35	48	868	16	13	21	4	64	15	56	1775

PEAK HR FACTOR:	0.974	0.879	0.633	0.823	0.921
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		7	232	16	14	190	10	5	11	1	14	6	6	512
4:15 PM		5	228	18	16	162	9	5	14	0	24	8	20	509
4:30 PM		6	211	13	14	178	1	14	12	2	18	3	20	492
4:45 PM		2	254	13	14	167	5	9	11	1	14	3	17	510
5:00 PM		5	253	14	15	194	3	12	8	0	14	3	19	540
5:15 PM		5	265	21	16	141	2	5	15	1	19	2	20	512
5:30 PM		3	271	14	11	145	2	24	12	1	14	1	17	515
5:45 PM		3	248	12	17	157	3	4	6	1	12	1	20	484
TOTAL VOLUMES:		36	1962	121	117	1334	35	78	89	7	129	27	139	4074

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	15	1043	62	56	647	12	50	46	3	61	9	73	2077

PEAK HR FACTOR:	0.962	0.843	0.669	0.872	0.962
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Passenger Vehicles

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	133	6	5	204	3	3	4	0	6	6	8	378
7:15 AM		1	134	10	5	225	3	4	7	2	13	2	8	414
7:30 AM		1	138	11	11	155	6	1	3	0	14	3	20	363
7:45 AM		0	139	7	7	168	3	3	6	0	15	3	6	357
8:00 AM		1	117	9	16	177	3	2	3	2	12	3	13	358
8:15 AM		0	117	8	8	175	3	0	5	1	20	5	10	352
8:30 AM		2	129	8	15	179	4	3	4	1	20	0	12	377
8:45 AM		2	126	5	8	130	1	2	7	0	19	3	12	315
TOTAL VOLUMES:		7	1033	64	75	1413	26	18	39	6	119	25	89	2914

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	2	544	34	28	752	15	11	20	2	48	14	42	1512

PEAK HR FACTOR:	0.967	0.853	0.635	0.703	0.913
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		6	213	11	8	164	9	5	11	1	14	6	3	451
4:15 PM		5	208	12	11	141	8	5	14	0	20	8	12	444
4:30 PM		5	194	11	6	156	1	14	12	2	17	3	16	437
4:45 PM		1	238	13	9	143	5	9	11	1	13	3	12	458
5:00 PM		5	227	12	13	165	3	12	7	0	13	3	13	473
5:15 PM		5	245	17	10	122	2	5	15	1	17	2	16	457
5:30 PM		2	256	13	7	119	2	24	12	1	12	1	13	462
5:45 PM		3	228	11	13	134	3	4	6	1	10	1	15	429
TOTAL VOLUMES:		32	1809	100	77	1144	33	78	88	7	116	27	100	3611

PM Peak Hr Begins at: 445 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	13	966	55	39	549	12	50	45	3	55	9	54	1850

PEAK HR FACTOR:	0.954	0.829	0.662	0.843	0.978
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Large 2 Axle Vehicles

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		1	6	0	0	3	0	1	0	0	0	0	2	13
7:15 AM		0	8	0	0	2	0	1	0	0	1	0	0	12
7:30 AM		0	6	0	0	0	0	0	0	0	1	0	0	7
7:45 AM		0	2	0	0	1	1	0	0	0	1	0	0	5
8:00 AM		0	5	0	0	0	0	0	0	0	1	1	0	7
8:15 AM		0	2	0	0	5	0	1	0	0	1	0	0	9
8:30 AM		1	2	0	0	1	0	0	0	0	0	0	0	4
8:45 AM		0	4	0	0	1	0	0	0	0	1	0	0	6
TOTAL VOLUMES:		2	35	0	0	13	1	3	0	0	6	1	2	63

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	1	22	0	0	6	1	2	0	0	3	0	2	37

PEAK HR FACTOR:	0.719	0.583	0.500	0.625	0.712
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	2	3	0	5	0	0	0	0	0	0	0	10
4:15 PM		0	0	0	1	3	0	0	0	0	0	0	2	6
4:30 PM		0	1	0	1	2	0	0	0	0	0	0	1	5
4:45 PM		0	0	0	0	3	0	0	0	0	1	0	0	4
5:00 PM		0	4	0	0	1	0	0	0	0	1	0	3	9
5:15 PM		0	0	0	1	3	0	0	0	0	1	0	0	5
5:30 PM		0	1	0	0	4	0	0	0	0	0	0	1	6
5:45 PM		0	2	0	0	1	0	0	0	0	1	0	0	4
TOTAL VOLUMES:		0	10	3	3	22	0	0	0	0	4	0	7	49

PM Peak Hr Begins at: 400 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	3	3	2	13	0	0	0	0	1	0	3	25

PEAK HR FACTOR:	0.300	0.750	0.000	0.500	0.625
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

3 Axle Vehicles

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	7:30 AM	0	2	0	0	0	0	0	1	0	0	0	0	3
	7:45 AM	0	2	0	1	1	0	0	0	0	0	0	0	4
	8:00 AM	0	0	0	1	0	0	0	0	0	0	1	0	2
	8:15 AM	0	1	0	0	1	1	0	0	0	0	1	1	5
	8:30 AM	0	3	0	0	2	0	0	0	0	0	0	1	6
	8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:		0	10	0	2	6	1	0	1	0	0	2	2	24

AM Peak Hr Begins at: 745 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	6	0	2	4	1	0	0	0	0	2	2	17

PEAK HR FACTOR:	0.500	0.875	0.000	0.500	0.708
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	4:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	2
	4:15 PM	0	2	0	0	2	0	0	0	0	1	0	0	5
	4:30 PM	0	2	0	1	1	0	0	0	0	0	0	1	5
	4:45 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
	5:00 PM	0	0	0	0	2	0	0	1	0	0	0	1	4
	5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	5:45 PM	0	3	0	0	6	0	0	0	0	0	0	0	9
TOTAL VOLUMES:		0	10	0	2	16	0	0	1	0	1	0	2	32

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	6	0	1	6	0	0	1	0	1	0	2	17

PEAK HR FACTOR:	0.750	0.875	0.250	0.750	0.850
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

4+ Axle Trucks

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	15	0	6	26	0	0	0	0	2	1	1	51
7:15 AM		0	11	1	4	25	0	0	0	1	6	0	6	54
7:30 AM		0	14	0	7	34	0	0	0	1	3	0	0	59
7:45 AM		0	20	0	2	23	0	0	0	0	2	0	5	52
8:00 AM		0	10	3	4	24	0	0	0	0	0	1	5	47
8:15 AM		0	6	0	3	21	0	0	0	1	1	0	3	35
8:30 AM		1	13	1	6	25	0	0	0	0	0	0	4	50
8:45 AM		0	17	1	5	25	0	0	0	0	1	0	1	50
TOTAL VOLUMES:		1	106	6	37	203	0	0	0	3	15	2	25	398

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	60	1	19	108	0	0	0	2	13	1	12	216

PEAK HR FACTOR:	0.763	0.774	0.500	0.542	0.915
-----------------	-------	-------	-------	-------	-------

		US-395 Northbound			US-395 Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		1	16	2	5	21	1	0	0	0	0	0	3	49
4:15 PM		0	18	6	4	16	1	0	0	0	3	0	6	54
4:30 PM		1	14	2	6	19	0	0	0	0	1	0	2	45
4:45 PM		1	14	0	5	20	0	0	0	0	0	0	5	45
5:00 PM		0	22	2	2	26	0	0	0	0	0	0	2	54
5:15 PM		0	20	4	5	14	0	0	0	0	1	0	4	48
5:30 PM		1	14	1	4	20	0	0	0	0	2	0	3	45
5:45 PM		0	15	1	4	16	0	0	0	0	1	0	5	42
TOTAL VOLUMES:		4	133	18	35	152	2	0	0	0	8	0	30	382

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	2	68	10	17	81	1	0	0	0	4	0	15	198

PEAK HR FACTOR:	0.833	0.884	0.000	0.528	0.917
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: US-395
 E/W: Joshua Street



Date: 7/14/2021
 Date: Wednesday

PEDESTRIANS

	North Leg US-395	South Leg US-395	East Leg Joshua Street	West Leg Joshua Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

AM Total Volume Peak Hr Begins At: 700 AM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

	North Leg US-395	South Leg US-395	East Leg Joshua Street	West Leg Joshua Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	1	0	0	0	1
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	2	0	0	0	2

PM Total Volume Peak Hr Begins At: 500 PM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	2	0	0	0	2

BICYCLES

[illegible]

AM Total Volume Peak Hr Begins At: 700 AM

[illegible][illegible]

PM Total Volume Peak Hr Begins At: 400 PM

[illegible]

Location: Hesperia
 N/S: I-15 SB Off Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Total Volume

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	1	0	21	0	12	0	0	2	0	36
7:15 AM		0	0	0	1	0	23	0	15	0	0	4	0	43
7:30 AM		0	0	0	2	0	24	0	20	0	0	6	0	52
7:45 AM		0	0	0	2	0	18	0	18	0	0	9	0	47
8:00 AM		0	0	0	0	0	20	0	19	0	0	6	0	45
8:15 AM		0	0	0	0	0	18	0	11	0	0	12	0	41
8:30 AM		0	0	0	2	0	28	0	23	0	0	11	0	64
8:45 AM		0	0	0	2	0	14	0	21	0	0	6	0	43
TOTAL VOLUMES:		0	0	0	10	0	166	0	139	0	0	56	0	371

AM Peak Hr Begins at: 745 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	4	0	84	0	71	0	0	38	0	197

PEAK HR FACTOR:	0.000	0.733	0.772	0.792	0.770
-----------------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	3	0	27	0	20	0	0	4	0	54
4:15 PM		0	0	0	4	0	22	0	35	0	0	6	0	67
4:30 PM		0	0	0	6	0	25	0	29	0	0	15	0	75
4:45 PM		0	0	0	2	0	23	0	31	0	0	7	0	63
5:00 PM		0	0	0	2	0	24	0	23	0	0	6	0	55
5:15 PM		0	0	0	3	0	20	0	38	0	0	5	0	66
5:30 PM		0	0	0	3	0	20	0	27	0	0	7	0	57
5:45 PM		0	0	0	3	0	14	0	26	0	0	2	0	45
TOTAL VOLUMES:		0	0	0	26	0	175	0	229	0	0	52	0	482

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	14	0	94	0	118	0	0	34	0	260

PEAK HR FACTOR:	0.000	0.871	0.843	0.567	0.867
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 SB Off Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Passenger Vehicles

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	1	0	11	0	6	0	0	2	0	20
7:15 AM		0	0	0	1	0	15	0	11	0	0	4	0	31
7:30 AM		0	0	0	2	0	19	0	11	0	0	6	0	38
7:45 AM		0	0	0	2	0	11	0	13	0	0	7	0	33
8:00 AM		0	0	0	0	0	11	0	12	0	0	5	0	28
8:15 AM		0	0	0	0	0	10	0	8	0	0	11	0	29
8:30 AM		0	0	0	2	0	22	0	14	0	0	11	0	49
8:45 AM		0	0	0	2	0	12	0	14	0	0	6	0	34
TOTAL VOLUMES:		0	0	0	10	0	111	0	89	0	0	52	0	262

AM Peak Hr Begins at: 800 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	4	0	55	0	48	0	0	33	0	140

PEAK HR FACTOR:	0.000	0.615	0.857	0.750	0.714
-----------------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	3	0	19	0	14	0	0	4	0	40
4:15 PM		0	0	0	4	0	11	0	29	0	0	6	0	50
4:30 PM		0	0	0	6	0	15	0	19	0	0	14	0	54
4:45 PM		0	0	0	2	0	15	0	27	0	0	6	0	50
5:00 PM		0	0	0	2	0	17	0	18	0	0	4	0	41
5:15 PM		0	0	0	3	0	11	0	33	0	0	5	0	52
5:30 PM		0	0	0	3	0	12	0	23	0	0	7	0	45
5:45 PM		0	0	0	3	0	10	0	22	0	0	2	0	37
TOTAL VOLUMES:		0	0	0	26	0	110	0	185	0	0	48	0	369

PM Peak Hr Begins at: 430 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	13	0	58	0	97	0	0	29	0	197

PEAK HR FACTOR:	0.000	0.845	0.735	0.518	0.912
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 SB Off Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Large 2 Axle Vehicles

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	7:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	2
	7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	8:00 AM	0	0	0	0	0	3	0	1	0	0	0	0	4
	8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	3	0	0	0	0	0	0	3
	8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:		0	0	0	0	0	10	0	3	0	0	1	0	14

AM Peak Hr Begins at: 745 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	7	0	2	0	0		0	9

PEAK HR FACTOR:	0.000	3583.000	0.500	0.250	0.625
-----------------	-------	----------	-------	-------	-------

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	1	0	3	0	0	0	0	4
	4:30 PM	0	0	0	0	0	1	0	1	0	0	1	0	3
	4:45 PM	0	0	0	0	0	1	0	0	0	0	1	0	2
	5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	3	0	4	0	0	4	0	11

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	3	0	4	0	0	4	0	11

PEAK HR FACTOR:	0.000	0.750	0.333	0.500	0.688
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 SB Off Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

3 Axle Vehicles

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM		0	0	0	0	0	0	0	1	0	0	0	0	1
7:45 AM		0	0	0	0	0	0	0	1	0	0	1	0	2
8:00 AM		0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM		0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM		0	0	0	0	0	1	0	1	0	0	0	0	2
8:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	2	0	4	0	0	1	0	7

AM Peak Hr Begins at: 745 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	2	0	3	0	0	1	0	6

PEAK HR FACTOR:	0.000	0.500	0.750	0.250	0.750
-----------------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM		0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM		0	0	0	0	0	2	0	1	0	0	0	0	3
4:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM		0	0	0	0	0	1	0	1	0	0	0	0	2
5:15 PM		0	0	0	0	0	3	0	0	0	0	0	0	3
5:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	7	0	3	0	0	0	0	10

PM Peak Hr Begins at: 430 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	6	0	2	0	0	0	0	8

PEAK HR FACTOR:	0.000	0.500	0.500	0.000	0.667
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 SB Off Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

4+ Axle Trucks

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	8	0	6	0	0	0	0	14
7:15 AM		0	0	0	0	0	7	0	4	0	0	0	0	11
7:30 AM		0	0	0	0	0	5	0	8	0	0	0	0	13
7:45 AM		0	0	0	0	0	7	0	3	0	0	0	0	10
8:00 AM		0	0	0	0	0	6	0	5	0	0	1	0	12
8:15 AM		0	0	0	0	0	6	0	3	0	0	1	0	10
8:30 AM		0	0	0	0	0	2	0	8	0	0	0	0	10
8:45 AM		0	0	0	0	0	2	0	6	0	0	0	0	8
TOTAL VOLUMES:		0	0	0	0	0	43	0	43	0	0	2	0	88

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	27	0	21	0	0	0	0	48

PEAK HR FACTOR:	0.000	0.844	0.656	0.000	0.625
-----------------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 SB Off Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	0	0	8	0	5	0	0	0	0	13
4:15 PM		0	0	0	0	0	9	0	3	0	0	0	0	12
4:30 PM		0	0	0	0	0	7	0	8	0	0	0	0	15
4:45 PM		0	0	0	0	0	7	0	4	0	0	0	0	11
5:00 PM		0	0	0	0	0	6	0	4	0	0	0	0	10
5:15 PM		0	0	0	0	0	6	0	5	0	0	0	0	11
5:30 PM		0	0	0	0	0	8	0	4	0	0	0	0	12
5:45 PM		0	0	0	0	0	4	0	4	0	0	0	0	8
TOTAL VOLUMES:		0	0	0	0	0	55	0	37	0	0	0	0	92

PM Peak Hr Begins at: 400 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	31	0	20	0	0	0	0	51

PEAK HR FACTOR:	0.000	0.861	0.625	0.000	0.850
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 SB Off Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Date: Wednesday

PEDESTRIANS

	North Leg Dead End	South Leg I-15 SB Off Ramp	East Leg Joshua Street	West Leg Joshua Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

AM Total Volume Peak Hr Begins At: 700 AM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

	North Leg Dead End	South Leg I-15 SB Off Ramp	East Leg Joshua Street	West Leg Joshua Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

PM Total Volume Peak Hr Begins At: 400 PM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

Date: 7/14/2021
Date: Wednesday

[illegible][illegible][illegible]

Location: Hesperia
 N/S: I-15 NB On Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Total Volume

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	0	8	4	0	0	2	0	14
7:15 AM		0	0	0	0	0	0	13	2	0	0	4	2	21
7:30 AM		0	0	0	0	0	0	16	6	0	0	6	0	28
7:45 AM		0	0	0	0	0	0	14	7	0	0	9	3	33
8:00 AM		0	0	0	0	0	0	11	6	0	0	6	1	24
8:15 AM		0	0	0	0	0	0	9	6	0	0	12	1	28
8:30 AM		0	0	0	0	0	0	16	10	0	0	11	2	39
8:45 AM		0	0	0	0	0	0	18	5	0	0	6	2	31
TOTAL VOLUMES:		0	0	0	0	0	0	105	46	0	0	56	11	218

AM Peak Hr Begins at: 745 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	50	29	0	0	38	7	124

PEAK HR FACTOR:	0.000	0.000	0.760	0.865	0.795
-----------------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	0	0	0	10	12	0	0	4	1	27
4:15 PM		0	0	0	0	0	0	14	27	0	0	6	1	48
4:30 PM		0	0	0	0	0	0	17	14	0	0	14	1	46
4:45 PM		0	0	0	0	0	0	14	26	0	0	7	2	49
5:00 PM		0	0	0	0	0	0	13	17	0	0	9	2	41
5:15 PM		0	0	0	0	0	0	27	13	0	0	5	2	47
5:30 PM		0	0	0	0	0	0	11	20	0	0	6	2	39
5:45 PM		0	0	0	0	0	0	15	14	0	0	2	1	32
TOTAL VOLUMES:		0	0	0	0	0	0	121	143	0	0	53	12	329

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	58	84	0	0	36	6	184

PEAK HR FACTOR:	0.000	0.000	0.866	0.700	0.939
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 NB On Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Passenger Vehicles

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	0	2	4	0	0	2	0	8
7:15 AM		0	0	0	0	0	0	11	2	0	0	4	1	18
7:30 AM		0	0	0	0	0	0	5	6	0	0	6	0	17
7:45 AM		0	0	0	0	0	0	10	7	0	0	8	3	28
8:00 AM		0	0	0	0	0	0	6	6	0	0	5	1	18
8:15 AM		0	0	0	0	0	0	5	6	0	0	11	1	23
8:30 AM		0	0	0	0	0	0	8	9	0	0	11	2	30
8:45 AM		0	0	0	0	0	0	12	5	0	0	6	2	25
TOTAL VOLUMES:		0	0	0	0	0	0	59	45	0	0	53	10	167

AM Peak Hr Begins at: 745 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	29	28	0	0	35	7	99

PEAK HR FACTOR:	0.000	0.000	0.838	0.808	0.825
-----------------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	0	0	0	5	12	0	0	4	1	22
4:15 PM		0	0	0	0	0	0	10	26	0	0	6	1	43
4:30 PM		0	0	0	0	0	0	7	14	0	0	14	1	36
4:45 PM		0	0	0	0	0	0	9	26	0	0	6	2	43
5:00 PM		0	0	0	0	0	0	9	16	0	0	7	2	34
5:15 PM		0	0	0	0	0	0	22	13	0	0	5	2	42
5:30 PM		0	0	0	0	0	0	6	20	0	0	6	2	34
5:45 PM		0	0	0	0	0	0	11	14	0	0	2	1	28
TOTAL VOLUMES:		0	0	0	0	0	0	79	141	0	0	50	12	282

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	35	82	0	0	33	6	156

PEAK HR FACTOR:	0.000	0.000	0.813	0.650	0.907
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 NB On Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

Large 2 Axle Vehicles

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	0	0	0

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

PEAK HR FACTOR:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-----------------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM		0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM		0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM		0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM		0	0	0	0	0	0	0	0	0	0	2	0	2
5:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	1	1	0	0	3	0	5

PM Peak Hr Begins at: 415 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	1	1	0	0	3	0	5

PEAK HR FACTOR:	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.375	0.375	0.000	0.625
-----------------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 NB On Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

3 Axle Vehicles

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM		0	0	0	0	0	0	1	0	0	0	0	0	1
7:45 AM		0	0	0	0	0	0	1	0	0	0	1	0	2
8:00 AM		0	0	0	0	0	0	1	0	0	0	1	0	2
8:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM		0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	3	1	0	0	2	1	7

AM Peak Hr Begins at: 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	3	0	0	0	2	1	6

PEAK HR FACTOR:	0.000	0.000	0.750	0.750	0.750
-----------------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	0	0	0	1	0	0	0	0	0	1
4:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM		0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM		0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	2	1	0	0	0	0	3

PM Peak Hr Begins at: 400 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	2	0	0	0	0	0	2

PEAK HR FACTOR:	0.000	0.000	0.500	0.000	0.000
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 NB On Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Day: Wednesday

4+ Axle Trucks

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM		0	0	0	0	0	0	6	0	0	0	0	0	6
7:15 AM		0	0	0	0	0	0	2	0	0	0	0	0	2
7:30 AM		0	0	0	0	0	0	10	0	0	0	0	0	10
7:45 AM		0	0	0	0	0	0	3	0	0	0	0	0	3
8:00 AM		0	0	0	0	0	0	4	0	0	0	0	0	4
8:15 AM		0	0	0	0	0	0	4	0	0	0	1	0	5
8:30 AM		0	0	0	0	0	0	8	0	0	0	0	0	8
8:45 AM		0	0	0	0	0	0	6	0	0	0	0	0	6
TOTAL VOLUMES:		0	0	0	0	0	0	43	0	0	0	1	0	44

AM Peak Hr Begins at: 800 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	22	0	0	0	1	0	23

PEAK HR FACTOR:	0.000	0.000	0.688	0.250	0.719
-----------------	-------	-------	-------	-------	-------

		Dead End Northbound			I-15 NB On Ramp Southbound			Joshua Street Eastbound			Joshua Street Westbound			TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM		0	0	0	0	0	0	4	0	0	0	0	0	4
4:15 PM		0	0	0	0	0	0	4	0	0	0	0	0	4
4:30 PM		0	0	0	0	0	0	8	0	0	0	0	0	8
4:45 PM		0	0	0	0	0	0	5	0	0	0	0	0	5
5:00 PM		0	0	0	0	0	0	4	0	0	0	0	0	4
5:15 PM		0	0	0	0	0	0	5	0	0	0	0	0	5
5:30 PM		0	0	0	0	0	0	5	0	0	0	0	0	5
5:45 PM		0	0	0	0	0	0	4	0	0	0	0	0	4
TOTAL VOLUMES:		0	0	0	0	0	0	39	0	0	0	0	0	39

PM Peak Hr Begins at: 430 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	22	0	0	0	0	0	22

PEAK HR FACTOR:	0.000	0.000	0.688	0.000	0.000
-----------------	-------	-------	-------	-------	-------

Location: Hesperia
 N/S: I-15 NB On Ramp
 E/W: Joshua Street



Date: 7/14/2021
 Date: Wednesday

PEDESTRIANS

	North Leg Dead End	South Leg I-15 NB On Ramp	East Leg Joshua Street	West Leg Joshua Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

AM Total Volume Peak Hr Begins At: 700 AM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

	North Leg Dead End	South Leg I-15 NB On Ramp	East Leg Joshua Street	West Leg Joshua Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

PM Total Volume Peak Hr Begins At: 400 PM

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0



BICYCLES

AM Total Volume Peak Hr Begins At: 700 AM

PM Total Volume Peak Hr Begins At: 400 PM

PM Total Volume Peak Hr Begins At: 400 PM

[illegible]

Location: US395 @ Jashua ST

Designed By: NADER ARJOMANDI

System: Isolated

District: 08

Installed By: NADER ARJOMANDI

Master At:

I/C:

Service Info: NADER ARJOMANDI

Timing Change:

Date Start:

Date End:

Designed:

Installed:

4/8/2021

2/26/2002

9/23/2014

Intersection Layout

FLASH

- 1) SOUTH BOUND LEFT TURN
 P 2) NORTH BOUND THRU
 H 3)
 A 4) EAST BOUND THRU
 S 5) NORTH BOUND LEFT TURN
 E 6) SOUTH BOUND THRU
 7)
 8) WEST BOUND THRU

[]
 []
 []
 []
 []
 []
 []
 []

- O A)
 V B)
 E C)
 R D)
 L E)
 A F)
 P

[]
 []
 []
 []
 []
 []

Comments and Notes:

Yellow & Red time updated 4/8/2021. Nader

RAM Checksum

Page 2: 7B1A	Page 8: 85AF
Page 3: C6DD	Page 9: D2FD
Page 4: F29E	Page 10: C24F
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 398C	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	1 2 . 4 5 6 . 8
Restricted	.....

Phase Features (2-1-1-4)	
Double Entry	... 4 ... 8
Rest In Walk	.....
Rest In Red	.....
Walk 2	.....
Max Green 2	.....
Max Green 3	.....

Startup (2-1-1-5)	
First Green Phases	. 2 ... 6 ..
Yellow Start Phases	.....
Vehicle Calls	1 2 . 4 5 6 . 8
Pedestrian Calls	. 2 ... 6 . 8
Yellow Start Overlaps	.....
Startup All-Red	6.0

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 ... 6 ..
Vehicle Max	.....
Pedestrian	.....
Bicycle	.....

Phase Locks (2-1-1-3)	
Red	.....
Yellow	.....
Force/Max	.....

Call To Phase (2-1-2-1)		Omit On Green	
1	.....	1	.....
2	.....	2	.....
3	.....	3	.....
4	.....	4	.....
5	.....	5	.....
6	.....	6	.....
7	.....	7	.....
8	.....	8	.....

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	.....
Yellow Flash Overlap	.....
Flash In Red Phases	.....
Flash In Red Overlaps	.....

Special Operation (2-1-2-3)	
Single Exit Phase	.....
Driveway Signal Phases	.....
Driveway Signal Overlaps	.....
Leading Ped Phases	.....

Protected Permissive (2-1-2-4)	
Protected Permissive	.....

Pedestrian (2-1-3)	
P1	.....
P2	. 2
P3	.....
P4	.....
P5	.....
P6	 6 ..
P7	.....
P8	 8

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	.....	.....	.....	.....
B	.....	.....	.....	.....
C	.....	.....	.....	.....
D	.....	.....	.....	.....
E	.....	.....	.....	.....
F	.....	.....	.....	.....

P H A S E T I M I N G

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	7	0	0	0	7	0	7
Flash Don't Walk	0	24	0	0	0	24	0	34
Minimum Green	5	5	0	5	5	5	0	5
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	50	0	40	20	50	0	40
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.5	5.0	0.0	2.0	2.5	5.0	0.0	2.0
Maximum Gap	2.5	5.0	0.0	2.0	2.5	5.0	0.0	2.0
Minimum Gap	2.5	5.0	0.0	2.0	2.5	5.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.7	5.5	3.0	4.0	3.7	5.5	3.0	4.0
All-Red	1.0	2.0	0.0	1.0	1.0	2.0	0.0	1.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets]

Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor			.....											
Plan 2	Green Factor			.....											
Plan 3	Green Factor			.....											
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1								
Plan 2								
Plan 3								
Plan 4								
Plan 5								
Plan 6								
Plan 7								
Plan 8								
Plan 9								

Master Timer Sync (7-A)

Enable in Plans

1-9	.....
11-19	.....
21-29	.....

Master Sub Master

Input

Output

FREE PLAN PHASE FLAGS

(7-E) Free

Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
. 2 ... 6 ..	.....
Ped	Bike
.....	
Cond	Cond Grn
.....	10

MANUAL COMMANDS

Manual Plan (4-1)

Plan

OffSet

Plan: 1-9

15 or 254 = Flash

14 or 255 = Free

Offset A, B, or C

Special Function Override (4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset

(4-3)

Local Manual (4-4)

OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets]

Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11								
Plan 12								
Plan 13								
Plan 14								
Plan 15								
Plan 16								
Plan 17								
Plan 18								
Plan 19								

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets]

Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21								
Plan 22								
Plan 23								
Plan 24								
Plan 25								
Plan 26								
Plan 27								
Plan 28								
Plan 29								

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3			10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4			10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5			10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	.. 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	.. 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	... 4	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	... 4	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	... 4	NO	I7U	13			10	4.7
14	COUNT+CALL+EXTEND	... 4	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	... 4	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	... 4	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	.. 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	... 4	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	 5 ...	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	 5 ...	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	 6 ..	NO	J2U	23			10	1.2
24	COUNT+CALL+EXTEND	 6 ..	NO	J2L	24			10	1.6
25	COUNT+CALL+EXTEND	 6 ..	NO	J3U	25			10	4.6
26	COUNT+CALL+EXTEND	 6 ..	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	 6 ..	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	 6 ..	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33			10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	 5 ...	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	 6 ..	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	... 4	NO	I12L	42			10	5.3
43	PEDESTRIAN	 6 ..	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	.....
Detectors 9-16	.....
Detectors 17-24	.....
Detectors 25-32	.....
Detectors 33-40	.....
Detectors 41-44	.....

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	.....

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)			Table 2 (8-2-2)			Table 3 (8-2-3)			Table 4 (8-2-4)			Table 5 (8-2-5)			Table 6 (8-2-6)		
Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES
---------	-----

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

Action Codes:

- 0. None
- 1. Permitted
- 2. Restricted
- 4. Veh Min Recall
- 5. Veh Max Recall
- 6. Ped Recall
- 7. Bike Recall
- 8. Red Lock
- 9. Yellow Lock
- 10. Force/Max Lock
- 11. Double Entry
- 12. Y-Coord C
- 13. Y-Coord D
- 14. Free
- 15. Flashing
- 16. Walk 2
- 17. Max Green 2

- 18. Max Green 3
- 19. Rest in Walk
- 20. Rest in Red
- 21. Free Lag Phases
- 22. Special Functions
- 23. Truck Preempt
- 24. Conditional Service
- 25. Conditional Service
- 26. Leading Ped
- 27. Traffic Actuated Max 2
- 41. Protected Permissive
- 42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

- 0-Full Access
- 1-Status Only
- 2-Status, Set Pattern, Time
- 3-Status, Set Pattern, Time, Manual Plan
- 4-Reserved
- 5-Full Access with No Set Pattern
- 6-Full Access with No Set Time
- 7-Full Access with No Set Pattern, Manual Plan
- 8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	2
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	168	0	102
Netmask	255	255	255	0
Broadcast	192	168	0	255
Gateway	192	168	0	1

*Refer to User's Manual for Data and OP Codes

RAILROAD PREEMPTION

RR 1	(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	. 2 . . 5 . .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		.....	.....	1 2 3 4 5 6 7 8	.....	.....	.....	.....	.....	A B C D E F
	Exit		Exit Parameters (3-1-5)				Configuration (3-1-6)				
	Min Grn		Phase Green	Overlap Green	Vehicle Call	Ped Call	Primary Port	Secondary Port	Latching	Power-Up	
	Ped Clr		.....	.....	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8	2.5	0.0	YES	FLASHING	

RR 2	(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	. . . 4 . . 7 .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		1 2 3 . . 6 . .	.....	.....	. 2 . . . 6 . .	.....	. . . 4 . . . 8	.....	.....	.....
	Exit		Exit Parameters (3-2-5)				Configuration (3-2-6)				
	Min Grn		Phase Green	Overlap Green	Vehicle Call	Ped Call	Primary Port	Secondary Port	Latching	Power-up	
	Ped Clr		.....	.....	. . . 4 . . 7 .	.....	2.6	0.0	YES	DARK	

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		30	30	. 2 . . 5 . .	.....
	Port	Latching	Phase Termination		
	5.5	NO	ADVANCE		

EVB (3-B)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		30	30	. . . 4 . . 7 .	.....
	Port	Latching	Phase Termination		
	5.6	NO	ADVANCE		

EVC (3-C)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		30	30	1 6 . .	.....
	Port	Latching	Phase Termination		
	5.7	NO	ADVANCE		

EVD (3-D)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		30	30	. . 3 8	.....
	Port	Latching	Phase Termination		
	5.8	NO	ADVANCE		

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

OUTPUTS

Loadswitch Assignments (2-1-6)								+
A	1	2	22	3	4	24	9	
B	5	6	26	7	8	28	10	
X	13	14	0	11	12	0	0	

Loadswitch Codes:

0 Unused (no output)

1-8 Vehicle 1-8

9-14 Overlap A-F

21-28 Ped 1-8

41-47 Special Functions

41 Protected Permissive Flashing Phase 1

43 Protected Permissive Flashing Phase 3

45 Protected Permissive Flashing Phase 5

47 Protected Permissive Flashing Phase 7

51-57 Special Functions

71-72 Seven Wire I/C

+ middle output of
loadswitches 3 and 6
Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)		Indicator Output			
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	.....	0.0	OPT	0	0
Plan 11-19	.....	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	
	

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
						0.0	0.0	0.0	0	0.0	0

Location: US395 @ Phelan/Main RD

Designed By: NADER ARJOMANDI

System: Isolated

District: 08

Installed By: NADER ARJOMANDI

Master At:

I/C: NADER ARJO

Service Info: NADER ARJOMANDI

Timing Change:

Date Start:

Date End:

Designed:

Installed:

6/22/2021

3/16/2000

9/23/2014

Intersection Layout

FLASH

- 1) WEST BOUND LEFT TURN
 P 2) EAST BOUND THRU
 H 3) NORTH BOUND LEFT TURN
 A 4) SOUTH BOUND THRU
 S 5) EAST BOUND LEFT TURN
 E 6) WEST BOUND THRU
 7) SOUTH BOUND LEFT TURN
 8) NORTH BOUND THRU

[]
 []
 []
 []
 []
 []
 []
 []

- O A)
 V B)
 E C)
 R D)
 L E)
 A F)
 P

[]
 []
 []
 []
 []
 []

Comments and Notes:

YELLOW TIMING WAS UPDATED ON 06/22/2021. NADER

RAM Checksum

Page 2: 1DDF	Page 8: 85AF
Page 3: 6836	Page 9: D2FD
Page 4: F66F	Page 10: C24F
Page 5: 191A	Page 11: 3B99
Page 6: 191A	Page 12: D68F
Page 7: D622	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)								
Permitted	1	2	3	4	5	6	7	8
Restricted	.	.	.	.	.	.	.	.

Phase Features (2-1-1-4)	
Double Entry	.....
Rest In Walk	.....
Rest In Red	.....
Walk 2	.....
Max Green 2	.....
Max Green 3	.....

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	.....
Vehicle Calls	1 2 3 4 5 6 7 8
Pedestrian Calls	.....
Yellow Start Overlaps	.....
Startup All-Red	6.0

Phase Recalls (2-1-1-2)	
Vehicle Min	. . . 4 . . . 8
Vehicle Max	.....
Pedestrian	.....
Bicycle	.....

Phase Locks (2-1-1-3)	
Red	.....
Yellow	. 2 . . . 6 . .
Force/Max	.....

Call To Phase (2-1-2-1)		Omit On Green	
1	.....	1	.....
2	.....	2	.....
3	.....	3	.....
4	.....	4	.....
5	.....	5	.....
6	.....	6	.....
7	.....	7	.....
8	.....	8	.....

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	.....
Yellow Flash Overlap	.....
Flash In Red Phases	.....
Flash In Red Overlaps	.....

Special Operation (2-1-2-3)	
Single Exit Phase	.....
Driveway Signal Phases	.....
Driveway Signal Overlaps	.....
Leading Ped Phases	.....

Protected Permissive (2-1-2-4)	
Protected Permissive	.....

Pedestrian (2-1-3)	
P1	.....
P2	.....
P3	.....
P4	.....
P5	.....
P6	.....
P7	.....
P8	.....

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	.....	.....	.....	.....
B	.....	.....	.....	.....
C	.....	.....	.....	.....
D	.....	.....	.....	.....
E	.....	.....	.....	.....
F	.....	.....	.....	.....

P H A S E T I M I N G

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	0	0	0
Flash Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	5	28	5	28	5	28	5	28
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	20	45	30	20	20	30	30
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.5	3.0	2.5	3.5	2.5	3.0	2.5	3.5
Maximum Gap	2.5	3.0	2.5	3.5	2.5	3.0	2.5	3.5
Minimum Gap	2.5	3.0	2.5	3.5	2.5	3.0	2.5	3.5
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.7	5.5	3.7	5.5	3.7	5.5	3.7	5.5
All-Red	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets]

Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor			.....											
Plan 2	Green Factor			.....											
Plan 3	Green Factor			.....											
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1								
Plan 2								
Plan 3								
Plan 4								
Plan 5								
Plan 6								
Plan 7								
Plan 8								
Plan 9								

Master Timer Sync (7-A)

Enable in Plans

1-9	.....
11-19	.....
21-29	.....

Master Sub Master

Input

Output

FREE PLAN PHASE FLAGS

(7-E) Free

Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
... 4 ... 8	.....
Ped	Bike
.....	
Cond	Cond Grn
.....	10

MANUAL COMMANDS

Manual Plan (4-1)

Plan

OffSet

Plan: 1-9

15 or 254 = Flash

14 or 255 = Free

Offset A, B, or C

Special Function Override (4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset

(4-3)

Local Manual (4-4)

OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets]

Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11								
Plan 12								
Plan 13								
Plan 14								
Plan 15								
Plan 16								
Plan 17								
Plan 18								
Plan 19								

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets]

Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21								
Plan 22								
Plan 23								
Plan 24								
Plan 25								
Plan 26								
Plan 27								
Plan 28								
Plan 29								

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3		1.0	10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4		1.0	10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5		1.0	10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	. . . 4	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	. . . 4	NO	I7U	13		2.0	10	4.7
14	COUNT+CALL+EXTEND	. . . 4	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	. . . 4	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	. . . 4	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	 5	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	 5	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	 6	NO	J2U	23		1.0	10	1.2
24	COUNT+CALL+EXTEND	 6	NO	J2L	24		1.0	10	1.6
25	COUNT+CALL+EXTEND	 6	NO	J3U	25		1.0	10	4.6
26	COUNT+CALL+EXTEND	 6	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	 6	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	 6	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	 7	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	 7	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33		2.0	10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34		4.0	10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	 5	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	 7	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	 6	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4	NO	I12L	42			10	5.3
43	PEDESTRIAN	 6	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	.....
Detectors 9-16	.....
Detectors 17-24	.....
Detectors 25-32	.....
Detectors 33-40	.....
Detectors 41-44	.....

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	.....

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)			Table 2 (8-2-2)			Table 3 (8-2-3)			Table 4 (8-2-4)			Table 5 (8-2-5)			Table 6 (8-2-6)		
Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES
---------	-----

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

Action Codes:

- 0. None
- 1. Permitted
- 2. Restricted
- 4. Veh Min Recall
- 5. Veh Max Recall
- 6. Ped Recall
- 7. Bike Recall
- 8. Red Lock
- 9. Yellow Lock
- 10. Force/Max Lock
- 11. Double Entry
- 12. Y-Coord C
- 13. Y-Coord D
- 14. Free
- 15. Flashing
- 16. Walk 2
- 17. Max Green 2

- 18. Max Green 3
- 19. Rest in Walk
- 20. Rest in Red
- 21. Free Lag Phases
- 22. Special Functions
- 23. Truck Preempt
- 24. Conditional Service
- 25. Conditional Service
- 26. Leading Ped
- 27. Traffic Actuated Max 2
- 41. Protected Permissive
- 42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

- 0-Full Access
- 1-Status Only
- 2-Status, Set Pattern, Time
- 3-Status, Set Pattern, Time, Manual Plan
- 4-Reserved
- 5-Full Access with No Set Pattern
- 6-Full Access with No Set Time
- 7-Full Access with No Set Pattern, Manual Plan
- 8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	2
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	102
Netmask	255	.	255	.	255	.	0
Broadcast	192	.	168	.	0	.	255
Gateway	192	.	168	.	0	.	1

RAILROAD PREEMPTION

RR 1	(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	. 2 . . 5 . .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		.....	.....	1 2 3 4 5 6 7 8	.....	.....	.....	.....	.....	A B C D E F
	Exit		Exit Parameters (3-1-5)				Configuration (3-1-6)				
	Min Grn		Phase Green	Overlap Green	Vehicle Call	Ped Call	Primary Port	Secondary Port	Latching	Power-Up	
	Ped Clr		.....	.....	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8	2.5	0.0	YES	FLASHING	

RR 2	(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	. . . 4 . . 7 .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		1 2 3 . . 6 . .	.....	.....	. 2 . . . 6 . .	.....	. . . 4 . . . 8	.....	.....	.....
	Exit		Exit Parameters (3-2-5)				Configuration (3-2-6)				
	Min Grn		Phase Green	Overlap Green	Vehicle Call	Ped Call	Primary Port	Secondary Port	Latching	Power-up	
	Ped Clr		.....	.....	. . . 4 . . 7 .	.....	2.6	0.0	YES	DARK	

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		10	30	. 2 . . 5 . .	.....
	Port	Latching	Phase Termination		
	5.5	NO	ADVANCE		

EVB (3-B)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		10	30	. . . 4 . . 7 .	.....
	Port	Latching	Phase Termination		
	5.6	NO	ADVANCE		

EVC (3-C)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		10	30	1 6 . .	.....
	Port	Latching	Phase Termination		
	5.7	NO	ADVANCE		

EVD (3-D)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		10	30	. . 3 8	.....
	Port	Latching	Phase Termination		
	5.8	NO	ADVANCE		

INPUTS

7 Wire I/C (2-1-5-1)					
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

OUTPUTS

Loadswitch Assignments (2-1-6)								+
A	1	2	22	3	4	24	9	
B	5	6	26	7	8	28	10	
X	13	14	0	11	12	0	0	

Loadswitch Codes:

0 Unused (no output)

1-8 Vehicle 1-8

9-14 Overlap A-F

21-28 Ped 1-8

41-47 Special Functions

41 Protected Permissive Flashing Phase 1

43 Protected Permissive Flashing Phase 3

45 Protected Permissive Flashing Phase 5

47 Protected Permissive Flashing Phase 7

51-57 Special Functions

71-72 Seven Wire I/C

+ middle output of
loadswitches 3 and 6
Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)		Indicator Output			
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	.....	0.0	OPT	0	0
Plan 11-19	.....	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	
	

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
						0.0	0.0	0.0	0	0.0	0

Location: US395 @Three Flags PM: 4.710

Designed By: Nader Arjomandi

System:

District:

Installed By: Nader Arjomandi

Master At:

I/C:

Service Info:

Timing Change:

Date Start:

Date End:

Designed:

Installed:

6/22/2021

Intersection Layout

FLASH

- 1) SOUTH BOUND LEFT TURN
 P 2) NORTH BOUND THRU
 H 3)
 A 4) EAST BOUND THRU
 S 5) NORTH BOUND LEFT TURN
 E 6) SOUTH BOUND THRU
 7)
 8) WEST BOUND THRU

[]
 []
 []
 []
 []
 []
 []
 []

O A)
 V B)
 E C)
 R D)
 L E)
 A F)
 P

[]
 []
 []
 []
 []
 []

Comments and Notes:

Yellow time was updated on 6/22/2021

RAM Checksum

Page 2: EEE5	Page 8: 85AF
Page 3: 21B7	Page 9: D2FD
Page 4: F29E	Page 10: FEF5
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 398C	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	1 2 . 4 5 6 . 8
Restricted	.....

Phase Features (2-1-1-4)	
Double Entry	.....
Rest In Walk	.....
Rest In Red	.....
Walk 2	.....
Max Green 2	.....
Max Green 3	.....

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	.....
Vehicle Calls	1 2 . 4 5 6 . 8
Pedestrian Calls	. 2
Yellow Start Overlaps	.....
Startup All-Red	6.0

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	.....
Pedestrian	.....
Bicycle	.....

Phase Locks (2-1-1-3)	
Red	.....
Yellow	.....
Force/Max	.....

Call To Phase (2-1-2-1)		Omit On Green	
1	.....	1	.....
2	.....	2	.....
3	.....	3	.....
4	.....	4	.....
5	.....	5	.....
6	.....	6	.....
7	.....	7	.....
8	.....	8	.....

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	.....
Yellow Flash Overlap	.....
Flash In Red Phases	.....
Flash In Red Overlaps	.....

Special Operation (2-1-2-3)	
Single Exit Phase	.....
Driveway Signal Phases	.....
Driveway Signal Overlaps	.....
Leading Ped Phases	.....

Protected Permissive (2-1-2-4)	
Protected Permissive	.....

Pedestrian (2-1-3)	
P1	.....
P2	. 2
P3	.....
P4	.....
P5	.....
P6	.....
P7	.....
P8	.....

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	.....	.....	.....	.....
B	.....	.....	.....	.....
C	.....	.....	.....	.....
D	.....	.....	.....	.....
E	.....	.....	.....	.....
F	.....	.....	.....	.....

P H A S E T I M I N G

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	7	0	0	0	0	0	0
Flash Don't Walk	0	34	0	0	0	0	0	0
Minimum Green	5	5	0	5	5	5	0	5
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	50	0	20	20	50	0	20
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	3.0	0.0	2.0	2.0	3.0	0.0	2.0
Maximum Gap	2.0	3.0	0.0	2.0	2.0	3.0	0.0	2.0
Minimum Gap	2.0	3.0	0.0	2.0	2.0	3.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	5.5	3.0	5.0	4.0	5.5	3.0	5.0
All-Red	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

		[Offsets]			Green Factors or Press [F] to Select Force-Off										
		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor			.....											
Plan 2	Green Factor			.....											
Plan 3	Green Factor			.....											
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1								
Plan 2								
Plan 3								
Plan 4								
Plan 5								
Plan 6								
Plan 7								
Plan 8								
Plan 9								

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
. 2 ... 6 ..	.....
Ped	Bike
.....	
Cond	Cond Grn
.....	10

MANUAL COMMANDS

Manual Plan (4-1)		Plan: 1-9
Plan	OffSet	15 or 254 = Flash
	A	14 or 255 = Free
		Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets]

Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11								
Plan 12								
Plan 13								
Plan 14								
Plan 15								
Plan 16								
Plan 17								
Plan 18								
Plan 19								

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets]

Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21								
Plan 22								
Plan 23								
Plan 24								
Plan 25								
Plan 26								
Plan 27								
Plan 28								
Plan 29								

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3			10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4			10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5			10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	.. 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	.. 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	... 4	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	... 4	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	... 4	NO	I7U	13			10	4.7
14	COUNT+CALL+EXTEND	... 4	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	... 4	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	... 4	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	.. 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	... 4	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	 5 ...	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	 5 ...	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	 6 ..	NO	J2U	23			10	1.2
24	COUNT+CALL+EXTEND	 6 ..	NO	J2L	24			10	1.6
25	COUNT+CALL+EXTEND	 6 ..	NO	J3U	25			10	4.6
26	COUNT+CALL+EXTEND	 6 ..	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	 6 ..	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	 6 ..	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33			10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	 5 ...	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	 6 ..	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	... 4	NO	I12L	42			10	5.3
43	PEDESTRIAN	 6 ..	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	.....
Detectors 9-16	.....
Detectors 17-24	.....
Detectors 25-32	.....
Detectors 33-40	.....
Detectors 41-44	.....

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	.....

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)			Table 2 (8-2-2)			Table 3 (8-2-3)			Table 4 (8-2-4)			Table 5 (8-2-5)			Table 6 (8-2-6)		
Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES
---------	-----

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

Action Codes:

- 0. None
- 1. Permitted
- 2. Restricted
- 4. Veh Min Recall
- 5. Veh Max Recall
- 6. Ped Recall
- 7. Bike Recall
- 8. Red Lock
- 9. Yellow Lock
- 10. Force/Max Lock
- 11. Double Entry
- 12. Y-Coord C
- 13. Y-Coord D
- 14. Free
- 15. Flashing
- 16. Walk 2
- 17. Max Green 2

18. Max Green 3

- 19. Rest in Walk
- 20. Rest in Red
- 21. Free Lag Phases
- 22. Special Functions
- 23. Truck Preempt
- 24. Conditional Service
- 25. Conditional Service
- 26. Leading Ped
- 27. Traffic Actuated Max 2
- 41. Protected Permissive
- 42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

- 0-Full Access
- 1-Status Only
- 2-Status, Set Pattern, Time
- 3-Status, Set Pattern, Time, Manual Plan
- 4-Reserved
- 5-Full Access with No Set Pattern
- 6-Full Access with No Set Time
- 7-Full Access with No Set Pattern, Manual Plan
- 8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1	06.7	02	06.7				
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	1
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	101
Netmask	255	.	255	.	255	.	0
Broadcast	192	.	168	.	0	.	255
Gateway	192	.	168	.	0	.	1

*Refer to User's Manual for Data and OP Codes

RAILROAD PREEMPTION

RR 1	(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	. 2 . . 5 . .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		.....	.....	1 2 3 4 5 6 7 8	.....	.....	.....	.....	.....	A B C D E F
	Exit		Exit Parameters (3-1-5)				Configuration (3-1-6)				
	Min Grn		Phase Green	Overlap Green	Vehicle Call	Ped Call	Primary Port	Secondary Port	Latching	Power-Up	
	Ped Clr		.....	.....	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8	2.5	0.0	YES	FLASHING	

RR 2	(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	. . . 4 . . 7 .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		1 2 3 . . 6 . .	.....	.....	. 2 . . . 6 . .	.....	. . . 4 . . . 8	.....	.....	.....
	Exit		Exit Parameters (3-2-5)				Configuration (3-2-6)				
	Min Grn		Phase Green	Overlap Green	Vehicle Call	Ped Call	Primary Port	Secondary Port	Latching	Power-up	
	Ped Clr		.....	.....	. . . 4 . . 7 .	.....	2.6	0.0	YES	DARK	

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		30	30	. 2 . . 5 . .	.....
	Port	Latching	Phase Termination		
	5.5	NO	ADVANCE		

EVB (3-B)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		30	30	. . . 4 . . 7 .	.....
	Port	Latching	Phase Termination		
	5.6	NO	ADVANCE		

EVC (3-C)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		30	30	1 6 . .	.....
	Port	Latching	Phase Termination		
	5.7	NO	ADVANCE		

EVD (3-D)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
		30	30	. . 3 8	.....
	Port	Latching	Phase Termination		
	5.8	NO	ADVANCE		

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

OUTPUTS

Loadswitch Assignments (2-1-6)								+
A	1	2	22	3	4	24	9	
B	5	6	26	7	8	28	10	
X	13	14	0	11	12	0	0	

Loadswitch Codes:

0 Unused (no output)

1-8 Vehicle 1-8

9-14 Overlap A-F

21-28 Ped 1-8

41-47 Special Functions

41 Protected Permissive Flashing Phase 1

43 Protected Permissive Flashing Phase 3

45 Protected Permissive Flashing Phase 5

47 Protected Permissive Flashing Phase 7

51-57 Special Functions

71-72 Seven Wire I/C

+ middle output of
loadswitches 3 and 6
Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)		Indicator Output			
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	.....	0.0	OPT	0	0
Plan 11-19	.....	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	
	

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
						0.0	0.0	0.0	0	0.0	0

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Existing
Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	678	110	4	331	226	96	737	9	214	978	32
Future Volume (veh/h)	49	678	110	4	331	226	96	737	9	214	978	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	706	115	4	345	235	100	768	9	223	1019	33
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	14	821	134	51	590	394	129	1041	12	261	1276	41
Arrive On Green	0.01	0.26	0.29	0.03	0.28	0.28	0.07	0.28	0.28	0.14	0.36	0.36
Sat Flow, veh/h	1810	3108	506	1810	2071	1385	1810	3654	43	1810	3569	116
Grp Volume(v), veh/h	51	410	411	4	300	280	100	379	398	223	515	537
Grp Sat Flow(s),veh/h/ln	1810	1805	1809	1810	1805	1651	1810	1805	1892	1810	1805	1879
Q Serve(g_s), s	0.8	21.3	21.2	0.2	14.0	14.4	5.3	18.7	18.7	11.8	25.3	25.3
Cycle Q Clear(g_c), s	0.8	21.3	21.2	0.2	14.0	14.4	5.3	18.7	18.7	11.8	25.3	25.3
Prop In Lane	1.00		0.28	1.00		0.84	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	14	477	478	51	514	470	129	514	539	261	645	672
V/C Ratio(X)	3.65	0.86	0.86	0.08	0.58	0.60	0.77	0.74	0.74	0.85	0.80	0.80
Avail Cap(c_a), veh/h	368	936	938	423	991	907	883	991	1039	607	991	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	34.4	34.0	46.5	30.2	30.3	44.9	31.8	31.8	41.1	28.4	28.4
Incr Delay (d2), s/veh	1222.2	4.7	4.7	0.5	1.1	1.2	7.1	2.5	2.4	6.0	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	9.1	9.1	0.1	5.7	5.4	2.5	7.8	8.2	5.4	10.3	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1270.9	39.1	38.7	47.0	31.2	31.5	52.0	34.4	34.3	47.0	31.5	31.4
LnGrp LOS	F	D	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h	872			584			877			1275		
Approach Delay, s/veh	111.0			31.5			36.3			34.2		
Approach LOS	F			C			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.5	36.5	11.7	42.7	8.5	35.5	18.9	35.5				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	23.0	* 54	* 48	54.0	23.0	* 54	* 33	54.0				
Max Q Clear Time (g_c+I1), s	2.2	24.3	7.3	27.3	3.8	16.4	13.8	20.7				
Green Ext Time (p_c), s	0.0	4.7	0.2	7.9	0.1	3.3	0.4	5.5				

Intersection Summary

HCM 6th Ctrl Delay	52.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Existing
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	5	891	3	52	535	18	0	2	131	49	2	15
Future Volume (veh/h)	5	891	3	52	535	18	0	2	131	49	2	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	6	1048	4	61	629	21	0	2	154	58	2	18
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	13	2986	11	79	3105	964	0	259	218	271	8	219
Arrive On Green	0.01	0.59	0.59	0.05	0.63	0.63	0.00	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1619	5053	19	1619	4914	1525	0	1800	1519	1209	54	1525
Grp Volume(v), veh/h	6	679	373	61	629	21	0	2	154	60	0	18
Grp Sat Flow(s), veh/h/ln	1619	1638	1797	1619	1638	1525	0	1800	1519	1263	0	1525
Q Serve(g_s), s	0.3	7.8	7.8	2.7	3.9	0.4	0.0	0.1	7.0	3.0	0.0	0.7
Cycle Q Clear(g_c), s	0.3	7.8	7.8	2.7	3.9	0.4	0.0	0.1	7.0	3.1	0.0	0.7
Prop In Lane	1.00		0.01	1.00		1.00	0.00		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	13	1936	1062	79	3105	964	0	259	218	279	0	219
V/C Ratio(X)	0.47	0.35	0.35	0.77	0.20	0.02	0.00	0.01	0.71	0.21	0.00	0.08
Avail Cap(c_a), veh/h	121	1936	1062	277	3105	964	0	929	784	296	0	240
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.8	7.7	7.7	34.1	5.6	5.0	0.0	26.6	29.6	27.9	0.0	26.9
Incr Delay (d2), s/veh	24.8	0.5	0.9	14.6	0.1	0.0	0.0	0.0	4.1	0.4	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	2.0	2.3	1.3	0.9	0.1	0.0	0.0	2.7	0.9	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.6	8.2	8.6	48.7	5.8	5.0	0.0	26.6	33.7	28.3	0.0	27.0
LnGrp LOS	E	A	A	D	A	A	A	C	C	C	A	C
Approach Vol, veh/h	1058			711			156			78		
Approach Delay, s/veh	8.6			9.4			33.6			28.0		
Approach LOS	A			A			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	49.3			15.0	5.2	52.3		15.0				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	12.4	38.5		11.4	5.4	* 46		37.4				
Max Q Clear Time (g_c+I), s	9.8			5.1	2.3	5.9		9.0				
Green Ext Time (p_c), s	0.1	6.6		0.1	0.0	4.1		0.5				

Intersection Summary

HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Existing
Timing Plan: AM Peak Hour

Intersection							
Int Delay, s/veh	0.2						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations							
Traffic Vol, veh/h	1	6	835	8	33	1059	
Future Vol, veh/h	1	6	835	8	33	1059	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	0	-	-	375	-	
Veh in Median Storage, #	0	-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	93	93	93	93	93	93	
Heavy Vehicles, %	0	0	0	0	0	0	
Mvmt Flow	1	6	898	9	35	1139	
Major/Minor	Minor1	Major1		Major2			
Conflicting Flow All	2112	454	0	0	907	0	
Stage 1	903	-	-	-	-	-	
Stage 2	1209	-	-	-	-	-	
Critical Hdwy	6.6	6.9	-	-	4.1	-	
Critical Hdwy Stg 1	5.8	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.3	-	-	2.2	-	
Pot Cap-1 Maneuver	50	559	-	-	759	-	
Stage 1	361	-	-	-	-	-	
Stage 2	285	-	-	-	-	-	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	48	559	-	-	759	-	
Mov Cap-2 Maneuver	48	-	-	-	-	-	
Stage 1	361	-	-	-	-	-	
Stage 2	272	-	-	-	-	-	
Approach	WB	NB		SB			
HCM Control Delay, s	21.5	0		0.3			
HCM LOS	C						
Minor Lane/Major Mvmt		NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)		-	-	48	559	759	-
HCM Lane V/C Ratio		-	-	0.022	0.012	0.047	-
HCM Control Delay (s)		-	-	81.7	11.5	10	-
HCM Lane LOS		-	-	F	B	A	-
HCM 95th %tile Q(veh)		-	-	0.1	0	0.1	-

HCM 6th TWSC
4: Lassen Road & Poplar Street

Existing
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	33	59	4	0	13	0	14	0	0	2
Future Vol, veh/h	0	10	33	59	4	0	13	0	14	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	75	75	75	75	92	75	92	75	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	13	44	79	5	0	17	0	19	0	0	2
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	57	0	0	199	198	35	208	220	5
Stage 1	-	-	-	-	-	-	35	35	-	163	163	-
Stage 2	-	-	-	-	-	-	164	163	-	45	57	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1630	-	-	1560	-	-	764	701	1044	754	682	1084
Stage 1	-	-	-	-	-	-	986	870	-	844	767	-
Stage 2	-	-	-	-	-	-	843	767	-	974	851	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1630	-	-	1560	-	-	733	665	1044	712	647	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	733	665	-	712	647	-
Stage 1	-	-	-	-	-	-	986	870	-	844	728	-
Stage 2	-	-	-	-	-	-	798	728	-	957	851	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			7			9.3			8.3		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	867	1630	-	-	1560	-	-	1084				
HCM Lane V/C Ratio	0.042	-	-	-	0.05	-	-	0.002				
HCM Control Delay (s)	9.3	0	-	-	7.4	0	-	8.3				
HCM Lane LOS	A	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0.2	-	-	0				

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Existing
Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	1	83	168	2	42	23	762	103	20	956	74
Future Volume (veh/h)	24	1	83	168	2	42	23	762	103	20	956	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	26	1	90	183	2	46	25	828	112	22	1039	80
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	448	4	341	371	407	345	53	1538	686	47	1527	681
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.03	0.43	0.43	0.03	0.42	0.42
Sat Flow, veh/h	1455	18	1595	1400	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	26	0	91	183	2	46	25	828	112	22	1039	80
Grp Sat Flow(s),veh/h/ln	1455	0	1613	1400	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.8	0.0	2.5	6.6	0.0	1.2	0.7	9.0	2.2	0.6	12.2	1.6
Cycle Q Clear(g_c), s	0.8	0.0	2.5	9.0	0.0	1.2	0.7	9.0	2.2	0.6	12.2	1.6
Prop In Lane	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	448	0	345	371	407	345	53	1538	686	47	1527	681
V/C Ratio(X)	0.06	0.00	0.26	0.49	0.00	0.13	0.47	0.54	0.16	0.47	0.68	0.12
Avail Cap(c_a), veh/h	775	0	708	686	833	706	794	3649	1628	794	3649	1628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	17.2	20.9	16.2	16.7	25.1	11.2	9.3	25.2	12.3	9.2
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.4	0.0	0.1	2.5	0.3	0.1	2.6	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.8	2.0	0.0	0.4	0.3	2.4	0.5	0.3	3.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.5	0.0	17.3	21.3	16.2	16.7	27.5	11.5	9.4	27.8	12.8	9.3
LnGrp LOS	B	A	B	C	B	B	C	B	A	C	B	A
Approach Vol, veh/h	117				231				965			
Approach Delay, s/veh	17.1				20.3				11.7			
Approach LOS	B				C				B			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.4	28.8	17.2		6.5	28.7	17.2					
Change Period (Y+Rc), s	5.0	6.5	6.0		5.0	6.5	6.0					
Max Green Setting (Gmax), s	23.0	53.0	23.0		23.0	53.0	23.0					
Max Q Clear Time (g_c+l1), s	2.6	11.0	4.5		2.7	14.2	11.0					
Green Ext Time (p_c), s	0.0	6.1	0.3		0.0	8.0	0.3					
Intersection Summary												
HCM 6th Ctrl Delay	13.3											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Existing
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	20	8	92	21	87	4	787	37	89	1099	19
Future Volume (veh/h)	14	20	8	92	21	87	4	787	37	89	1099	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	15	22	9	100	23	95	4	855	40	97	1195	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	275	154	63	281	228	193	10	1834	818	128	2070	923
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.51	0.51	0.07	0.57	0.57
Sat Flow, veh/h	1366	1281	524	1478	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	15	0	31	100	23	95	4	855	40	97	1195	21
Grp Sat Flow(s), veh/h/ln	1366	0	1806	1478	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.6	0.0	0.9	3.7	0.6	3.1	0.1	8.7	0.7	3.0	12.0	0.3
Cycle Q Clear(g_c), s	1.2	0.0	0.9	4.6	0.6	3.1	0.1	8.7	0.7	3.0	12.0	0.3
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	0	216	281	228	193	10	1834	818	128	2070	923
V/C Ratio(X)	0.05	0.00	0.14	0.36	0.10	0.49	0.41	0.47	0.05	0.76	0.58	0.02
Avail Cap(c_a), veh/h	1141	0	1361	1217	1432	1213	729	3227	1439	729	3227	1439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	0.0	22.5	24.5	22.4	23.5	28.3	9.0	7.1	26.0	7.8	5.3
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.1	0.7	19.2	0.4	0.1	6.7	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	0.0	0.4	1.2	0.3	1.2	0.1	2.2	0.2	1.3	2.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.9	0.0	22.6	24.8	22.4	24.2	47.5	9.4	7.1	32.7	8.3	5.3
LnGrp LOS	C	A	C	C	C	C	D	A	A	C	A	A
Approach Vol, veh/h	46			218			899			1313		
Approach Delay, s/veh	22.7			24.3			9.5			10.1		
Approach LOS	C			C			A			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	36.5		11.8	5.0	40.2		11.8				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	23	51.0		43.0	* 23	51.0		43.0				
Max Q Clear Time (g_c+I), s	15.0	10.7		3.2	2.1	14.0		6.6				
Green Ext Time (p_c), s	0.1	12.7		0.1	0.0	18.7		0.4				

Intersection Summary

HCM 6th Ctrl Delay 11.4

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Existing
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Traffic Vol, veh/h	0	120	35	0	4	151
Future Vol, veh/h	0	120	35	0	4	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	156	45	0	5	196
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	201	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	792	1031
Stage 1	0	-	-	0	983	-
Stage 2	0	-	-	0	877	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	792	1031
Mov Cap-2 Maneuver	-	-	-	-	792	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	877	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		9.3		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	792	1031		
HCM Lane V/C Ratio	-	-	0.007	0.19		
HCM Control Delay (s)	-	-	9.6	9.3		
HCM Lane LOS	-	-	A	A		
HCM 95th %tile Q(veh)	-	-	0	0.7		

HCM 6th TWSC
9: Lassen Road & Driveway A

Existing
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	2
Future Vol, veh/h	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	2
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	2	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1026	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1026	-	-	-	-	-
Platoon blocked, %		-	-	-	-	-
Mov Cap-1 Maneuver	1026	-	-	-	-	-
Mov Cap-2 Maneuver	1026	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1026	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-	-
HCM Lane LOS	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-	-

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Existing
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	24	63	0
Future Vol, veh/h	0	0	0	24	63	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	26	68	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	94	68	68	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	26	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	911	1001	1546	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	1002	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	911	1001	1546	-	-	-
Mov Cap-2 Maneuver	911	-	-	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	1002	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1546	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Existing
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	2	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	2	2	2	0	0	2	2	0	0
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	2	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2	2	2	2	2	0	2	0	0	0	0	0
Stage 1	2	2	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	2	2	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.52	6.2	7.12	6.52	6.22	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.018	3.3	3.518	4.018	3.318	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	1026	894	1088	1020	894	-	1634	-	-	-	-	-
Stage 1	1026	894	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1021	894	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	894	1088	1020	894	-	1634	-	-	-	-	-
Mov Cap-2 Maneuver	-	894	-	1020	894	-	-	-	-	-	-	-
Stage 1	1026	894	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1021	894	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		0		0		0					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1634	-	-	-	-	-	-					
HCM Lane V/C Ratio	-	-	-	-	-	-	-					
HCM Control Delay (s)	0	-	-	0	0	0	-	-				
HCM Lane LOS	A	-	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Existing
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	24	63	0
Future Vol, veh/h	0	0	0	24	63	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	26	68	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	94	68	68	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	26	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	911	1001	1546	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	1002	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	911	1001	1546	-	-	-
Mov Cap-2 Maneuver	911	-	-	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	1002	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1546	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Existing
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	580	71	9	681	265	169	1130	27	195	808	48
Future Volume (veh/h)	47	580	71	9	681	265	169	1130	27	195	808	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	49	611	75	9	717	279	178	1189	28	205	851	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	16	676	83	209	802	312	204	1289	30	231	1288	77
Arrive On Green	0.01	0.21	0.23	0.12	0.32	0.32	0.11	0.36	0.36	0.13	0.37	0.37
Sat Flow, veh/h	1810	3237	397	1810	2539	988	1810	3605	85	1810	3460	207
Grp Volume(v), veh/h	49	340	346	9	510	486	178	595	622	205	444	458
Grp Sat Flow(s),veh/h/ln	1810	1805	1829	1810	1805	1722	1810	1805	1885	1810	1805	1863
Q Serve(g_s), s	1.3	26.5	26.6	0.6	38.8	38.8	13.9	45.5	45.6	16.1	29.5	29.5
Cycle Q Clear(g_c), s	1.3	26.5	26.6	0.6	38.8	38.8	13.9	45.5	45.6	16.1	29.5	29.5
Prop In Lane	1.00		0.22	1.00		0.57	1.00		0.05	1.00		0.11
Lane Grp Cap(c), veh/h	16	377	382	209	570	544	204	646	674	231	672	694
V/C Ratio(X)	3.01	0.90	0.91	0.04	0.89	0.89	0.87	0.92	0.92	0.89	0.66	0.66
Avail Cap(c_a), veh/h	251	639	647	289	677	645	603	677	706	414	677	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.4	55.6	55.3	56.6	47.0	47.0	62.9	44.3	44.4	61.8	37.6	37.6
Incr Delay (d2), s/veh	930.0	9.7	9.9	0.1	12.9	13.4	8.4	17.9	17.4	8.5	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	12.6	12.8	0.3	18.6	17.9	6.7	22.5	23.4	7.7	12.9	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1001.4	65.2	65.1	56.7	59.9	60.4	71.3	62.3	61.8	70.4	40.2	40.1
LnGrp LOS	F	E	E	E	E	E	E	E	E	E	D	D
Approach Vol, veh/h	735			1005			1395			1107		
Approach Delay, s/veh	127.6			60.2			63.2			45.7		
Approach LOS	F			E			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.4	40.6	21.0	61.1	9.0	53.0	23.1	59.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	23.0	* 54	* 48	54.0	23.0	* 54	* 33	54.0				
Max Q Clear Time (g_c+I1), s	2.6	29.5	15.9	31.5	4.3	40.8	18.1	47.6				
Green Ext Time (p_c), s	0.0	3.6	0.3	6.1	0.1	4.7	0.3	4.0				

Intersection Summary

HCM 6th Ctrl Delay 69.1

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Existing
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	5	790	6	49	943	56	10	7	84	32	0	3
Future Volume (veh/h)	5	790	6	49	943	56	10	7	84	32	0	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	5	823	6	51	982	58	10	7	88	33	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	10	2751	20	69	2863	889	81	38	321	112	0	322
Arrive On Green	0.01	0.55	0.55	0.04	0.58	0.58	0.21	0.21	0.21	0.21	0.00	0.21
Sat Flow, veh/h	1619	5033	37	1619	4914	1525	37	178	1521	96	0	1525
Grp Volume(v), veh/h	5	536	293	51	982	58	17	0	88	33	0	3
Grp Sat Flow(s), veh/h/ln	1619	1638	1793	1619	1638	1525	215	0	1521	96	0	1525
Q Serve(g_s), s	0.2	7.0	7.0	2.4	8.2	1.3	0.2	0.0	3.8	1.2	0.0	0.1
Cycle Q Clear(g_c), s	0.2	7.0	7.0	2.4	8.2	1.3	16.1	0.0	3.8	16.6	0.0	0.1
Prop In Lane	1.00		0.02	1.00		1.00	0.59		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	1791	980	69	2863	889	118	0	321	112	0	322
V/C Ratio(X)	0.48	0.30	0.30	0.74	0.34	0.07	0.14	0.00	0.27	0.29	0.00	0.01
Avail Cap(c_a), veh/h	111	1791	980	255	2863	889	532	0	724	112	0	322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.9	9.7	9.7	37.2	8.6	7.1	26.0	0.0	26.0	38.9	0.0	24.5
Incr Delay (d2), s/veh	30.0	0.4	0.8	14.7	0.3	0.1	0.6	0.0	0.5	1.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	2.0	2.3	1.2	2.2	0.3	0.3	0.0	1.4	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.0	10.1	10.4	51.9	8.9	7.3	26.6	0.0	26.4	40.4	0.0	24.5
LnGrp LOS	E	B	B	D	A	A	C	A	C	D	A	C
Approach Vol, veh/h	834			1091			105			36		
Approach Delay, s/veh	10.6			10.8			26.4			39.1		
Approach LOS	B			B			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	49.5		21.9	5.1	52.3		21.9				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	12.4	38.5		11.4	5.4	* 46		37.4				
Max Q Clear Time (g_c+I), s	14.4	9.0		18.6	2.2	10.2		18.1				
Green Ext Time (p_c), s	0.0	4.9		0.0	0.0	7.1		0.3				

Intersection Summary

HCM 6th Ctrl Delay 12.0

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Existing
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	20	1306	37	19	870
Future Vol, veh/h	4	20	1306	37	19	870
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	375	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	20	1333	38	19	888
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2278	686	0	0	1371	0
Stage 1	1352	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Critical Hdwy	6.6	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	39	395	-	-	507	-
Stage 1	209	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	38	395	-	-	507	-
Mov Cap-2 Maneuver	38	-	-	-	-	-
Stage 1	209	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	30.6	0	0.3			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 38 395	507	-		
HCM Lane V/C Ratio	-	- 0.107 0.052	0.038	-		
HCM Control Delay (s)	-	- 110.8 14.6	12.4	-		
HCM Lane LOS	-	- F B	B	-		
HCM 95th %tile Q(veh)	-	- 0.3 0.2	0.1	-		

HCM 6th TWSC
4: Lassen Road & Poplar Street

Existing
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	37	17	28	10	0	21	0	70	0	0	0
Future Vol, veh/h	0	37	17	28	10	0	21	0	70	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	41	19	31	11	0	23	0	78	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	11	0	0	60	0	0	124	124	51	163	133	11
Stage 1	-	-	-	-	-	-	51	51	-	73	73	-
Stage 2	-	-	-	-	-	-	73	73	-	90	60	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1621	-	-	1556	-	-	855	770	1023	806	761	1076
Stage 1	-	-	-	-	-	-	967	856	-	942	838	-
Stage 2	-	-	-	-	-	-	942	838	-	922	849	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1621	-	-	1556	-	-	842	755	1023	733	746	1076
Mov Cap-2 Maneuver	-	-	-	-	-	-	842	755	-	733	746	-
Stage 1	-	-	-	-	-	-	967	856	-	942	821	-
Stage 2	-	-	-	-	-	-	923	821	-	852	849	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.4	9.1	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	975	1621	-	-	1556	-	-	-
HCM Lane V/C Ratio	0.104	-	-	-	0.02	-	-	-
HCM Control Delay (s)	9.1	0	-	-	7.4	0	-	0
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	-

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Existing
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1	60	130	4	33	34	1233	150	34	775	58
Future Volume (veh/h)	36	1	60	130	4	33	34	1233	150	34	775	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	37	1	61	133	4	34	35	1258	153	35	791	59
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	358	4	253	307	302	256	68	1785	796	68	1785	796
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.49	0.49	0.04	0.49	0.49
Sat Flow, veh/h	1469	26	1588	1437	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	37	0	62	133	4	34	35	1258	153	35	791	59
Grp Sat Flow(s),veh/h/ln	1469	0	1614	1437	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	1.2	0.0	1.9	5.1	0.1	1.0	1.1	15.3	3.0	1.1	8.0	1.1
Cycle Q Clear(g_c), s	1.3	0.0	1.9	7.0	0.1	1.0	1.1	15.3	3.0	1.1	8.0	1.1
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	358	0	257	307	302	256	68	1785	796	68	1785	796
V/C Ratio(X)	0.10	0.00	0.24	0.43	0.01	0.13	0.52	0.70	0.19	0.52	0.44	0.07
Avail Cap(c_a), veh/h	721	0	656	663	772	654	735	3378	1507	735	3378	1507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	0.0	20.8	23.9	20.1	20.5	26.8	11.1	8.0	26.8	9.3	7.5
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.4	0.0	0.1	2.3	0.5	0.1	2.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	1.6	0.0	0.4	0.4	3.9	0.7	0.4	2.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	21.0	24.2	20.1	20.5	29.0	11.6	8.1	29.0	9.4	7.5
LnGrp LOS	C	A	C	C	C	C	C	B	A	C	A	A
Approach Vol, veh/h	99				171				1446			
Approach Delay, s/veh	20.9				23.4				11.7			
Approach LOS	C				C				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	34.5		15.0	7.1	34.5		15.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	23.0	53.0		23.0	23.0	53.0		23.0				
Max Q Clear Time (g_c+l1), s	3.1	17.3		3.9	3.1	10.0		9.0				
Green Ext Time (p_c), s	0.0	10.7		0.2	0.0	5.5		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	12.3											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Existing
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	47	3	71	9	114	19	1251	90	98	852	16
Future Volume (veh/h)	53	47	3	71	9	114	19	1251	90	98	852	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	48	3	73	9	118	20	1290	93	101	878	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	247	190	12	227	204	173	42	2037	909	133	2218	990
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.02	0.56	0.56	0.07	0.61	0.61
Sat Flow, veh/h	1355	1769	111	1452	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	55	0	51	73	9	118	20	1290	93	101	878	16
Grp Sat Flow(s), veh/h/ln	1355	0	1880	1452	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	2.6	0.0	1.7	3.3	0.3	4.8	0.7	16.4	1.8	3.7	8.4	0.3
Cycle Q Clear(g_c), s	2.8	0.0	1.7	5.0	0.3	4.8	0.7	16.4	1.8	3.7	8.4	0.3
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	0	202	227	204	173	42	2037	909	133	2218	990
V/C Ratio(X)	0.22	0.00	0.25	0.32	0.04	0.68	0.48	0.63	0.10	0.76	0.40	0.02
Avail Cap(c_a), veh/h	964	0	1198	995	1210	1026	617	2728	1217	617	2728	1217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	27.6	29.9	27.0	29.0	32.6	10.0	6.8	30.7	6.6	5.1
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.3	0.0	1.8	6.1	0.7	0.1	6.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.7	1.1	0.1	1.8	0.4	4.4	0.4	1.7	2.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	0.0	27.9	30.2	27.0	30.8	38.7	10.7	6.9	37.2	6.9	5.1
LnGrp LOS	C	A	C	C	C	C	D	B	A	D	A	A
Approach Vol, veh/h	106			200			1403			995		
Approach Delay, s/veh	28.2			30.4			10.8			9.9		
Approach LOS	C			C			B			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	45.6		12.3	6.3	49.0		12.3				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	23	51.0		43.0	* 23	51.0		43.0				
Max Q Clear Time (g_c+1/5), s	15.7	18.4		4.8	2.7	10.4		7.0				
Green Ext Time (p_c), s	0.1	19.7		0.2	0.0	13.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Existing
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Traffic Vol, veh/h	0	201	35	0	14	168
Future Vol, veh/h	0	201	35	0	14	168
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	231	40	0	16	193
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	271	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	231	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	723	1037
Stage 1	0	-	-	0	988	-
Stage 2	0	-	-	0	812	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	723	1037
Mov Cap-2 Maneuver	-	-	-	-	723	-
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	812	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		9.4		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	723	1037		
HCM Lane V/C Ratio	-	-	0.022	0.186		
HCM Control Delay (s)	-	-	10.1	9.3		
HCM Lane LOS	-	-	B	A		
HCM 95th %tile Q(veh)	-	-	0.1	0.7		

HCM 6th TWSC
9: Lassen Road & Driveway A

Existing
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1027	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Platoon blocked, %		-	-	-	-	-
Mov Cap-1 Maneuver	1027	-	-	-	-	-
Mov Cap-2 Maneuver	1027	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s)	-	-	0	0		
HCM Lane LOS	-	-	A	A		
HCM 95th %tile Q(veh)	-	-	-	-		

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Existing
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	107	38	0
Future Vol, veh/h	0	0	0	107	38	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	116	41	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	157	41	41	0	-	0
Stage 1	41	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	839	1036	1581	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	839	1036	1581	-	-	-
Mov Cap-2 Maneuver	839	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1581	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Existing
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	2	2	2	0	0	2	2	0	0
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1	1	1	1	1	0	1	0	0	0	0	0
Stage 1	1	1	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.52	6.2	7.12	6.52	6.22	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.018	3.3	3.518	4.018	3.318	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	1027	895	1090	1022	895	-	1635	-	-	-	-	-
Stage 1	1027	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	895	1090	1022	895	-	1635	-	-	-	-	-
Mov Cap-2 Maneuver	-	895	-	1022	895	-	-	-	-	-	-	-
Stage 1	1027	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	1022	895	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		0			0			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1635	-	-	-	-	-	-	-				
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-				
HCM Control Delay (s)	0	-	-	0	0	0	-	-				
HCM Lane LOS	A	-	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Existing
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	107	38	0
Future Vol, veh/h	0	0	0	107	38	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	116	41	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	157	41	41	0	-	0
Stage 1	41	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	839	1036	1581	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	839	1036	1581	-	-	-
Mov Cap-2 Maneuver	839	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1581	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Existing plus Project
Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	681	113	4	332	229	97	741	9	227	994	32
Future Volume (veh/h)	49	681	113	4	332	229	97	741	9	227	994	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	709	118	4	346	239	101	772	9	236	1035	33
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	14	823	137	44	581	394	130	1032	12	274	1291	41
Arrive On Green	0.01	0.27	0.30	0.02	0.28	0.28	0.07	0.28	0.28	0.15	0.36	0.36
Sat Flow, veh/h	1810	3097	515	1810	2058	1396	1810	3655	43	1810	3571	114
Grp Volume(v), veh/h	51	413	414	4	303	282	101	381	400	236	523	545
Grp Sat Flow(s),veh/h/ln	1810	1805	1807	1810	1805	1649	1810	1805	1892	1810	1805	1880
Q Serve(g_s), s	0.8	21.6	21.6	0.2	14.3	14.7	5.4	19.1	19.1	12.6	25.8	25.8
Cycle Q Clear(g_c), s	0.8	21.6	21.6	0.2	14.3	14.7	5.4	19.1	19.1	12.6	25.8	25.8
Prop In Lane	1.00		0.29	1.00		0.85	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	14	480	480	44	510	465	130	510	534	274	653	680
V/C Ratio(X)	3.62	0.86	0.86	0.09	0.59	0.61	0.77	0.75	0.75	0.86	0.80	0.80
Avail Cap(c_a), veh/h	365	928	929	420	983	898	876	983	1030	602	983	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	34.7	34.3	47.3	30.7	30.8	45.2	32.4	32.4	41.1	28.5	28.5
Incr Delay (d2), s/veh	1204.5	4.7	4.7	0.7	1.1	1.3	7.1	2.7	2.6	6.0	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	9.3	9.2	0.1	5.9	5.5	2.6	8.0	8.4	5.7	10.6	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1253.7	39.3	39.0	48.0	31.8	32.1	52.3	35.1	34.9	47.1	31.8	31.7
LnGrp LOS	F	D	D	D	C	C	D	D	C	D	C	C
Approach Vol, veh/h	878			589			882			1304		
Approach Delay, s/veh	109.7			32.1			37.0			34.5		
Approach LOS	F			C			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	36.9	11.8	43.4	8.5	35.5	19.7	35.5				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	23.0	* 54	* 48	54.0	23.0	* 54	* 33	54.0				
Max Q Clear Time (g_c+I1), s	2.2	24.6	7.4	27.8	3.8	16.7	14.6	21.1				
Green Ext Time (p_c), s	0.0	4.8	0.2	8.0	0.1	3.3	0.4	5.5				

Intersection Summary

HCM 6th Ctrl Delay	52.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Existing plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰		↰	↰		↰	↰
Traffic Volume (veh/h)	5	891	18	89	535	18	3	2	137	49	2	15
Future Volume (veh/h)	5	891	18	89	535	18	3	2	137	49	2	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	6	1048	21	105	629	21	4	2	161	58	2	18
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	12	2136	43	128	2469	766	75	24	484	99	2	485
Arrive On Green	0.01	0.43	0.43	0.08	0.50	0.50	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1619	4959	99	1619	4914	1525	29	77	1523	66	7	1525
Grp Volume(v), veh/h	6	692	377	105	629	21	6	0	161	60	0	18
Grp Sat Flow(s), veh/h/ln	1619	1638	1782	1619	1638	1525	106	0	1523	73	0	1525
Q Serve(g_s), s	0.3	13.9	13.9	5.8	6.7	0.6	0.1	0.0	7.4	1.6	0.0	0.7
Cycle Q Clear(g_c), s	0.3	13.9	13.9	5.8	6.7	0.6	28.2	0.0	7.4	29.0	0.0	0.7
Prop In Lane	1.00		0.06	1.00		1.00	0.67		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	12	1411	768	128	2469	766	99	0	484	101	0	485
V/C Ratio(X)	0.49	0.49	0.49	0.82	0.25	0.03	0.06	0.00	0.33	0.60	0.00	0.04
Avail Cap(c_a), veh/h	96	1411	768	220	2469	766	240	0	625	101	0	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.1	18.7	18.7	41.3	12.9	11.4	25.3	0.0	23.7	44.6	0.0	21.5
Incr Delay (d2), s/veh	26.9	1.2	2.2	12.0	0.2	0.1	0.3	0.0	0.4	9.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	4.8	5.4	2.6	2.1	0.2	0.1	0.0	2.6	1.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	72.0	19.9	21.0	53.3	13.2	11.5	25.6	0.0	24.1	53.8	0.0	21.5
LnGrp LOS	E	B	C	D	B	B	C	A	C	D	A	C
Approach Vol, veh/h	1075			755			167			78		
Approach Delay, s/veh	20.6			18.7			24.2			46.3		
Approach LOS	C			B			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	1.9	45.7		34.4	5.3	52.3		34.4				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	12.4	38.5		11.4	5.4	* 46		37.4				
Max Q Clear Time (g_c+I1), s	15.9			31.0	2.3	8.7		30.2				
Green Ext Time (p_c), s	0.1	6.3		0.0	0.0	4.1		0.3				

Intersection Summary

HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Existing plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	10	835	94	51	1059
Future Vol, veh/h	15	10	835	94	51	1059
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	375	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	11	898	101	55	1139
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	2198	500	0	0	999	0
Stage 1	949	-	-	-	-	-
Stage 2	1249	-	-	-	-	-
Critical Hdwy	6.6	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	44	522	-	-	701	-
Stage 1	341	-	-	-	-	-
Stage 2	273	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	41	522	-	-	701	-
Mov Cap-2 Maneuver	41	-	-	-	-	-
Stage 1	341	-	-	-	-	-
Stage 2	252	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	89.5	0		0.5		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	41	522	701	-
HCM Lane V/C Ratio	-	-	0.393	0.021	0.078	-
HCM Control Delay (s)	-	-	141.2	12	10.6	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	1.4	0.1	0.3	-

HCM 6th TWSC
4: Lassen Road & Poplar Street

Existing plus Project
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	55	33	59	12	0	13	0	14	0	0	13
Future Vol, veh/h	60	55	33	59	12	0	13	0	14	0	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	75	75	75	75	92	75	92	75	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	65	73	44	79	16	0	17	0	19	0	0	14
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	16	0	0	117	0	0	406	399	95	409	421	16
Stage 1	-	-	-	-	-	-	225	225	-	174	174	-
Stage 2	-	-	-	-	-	-	181	174	-	235	247	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1615	-	-	1484	-	-	559	542	967	556	527	1069
Stage 1	-	-	-	-	-	-	782	721	-	833	759	-
Stage 2	-	-	-	-	-	-	825	759	-	773	706	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1615	-	-	1484	-	-	511	491	967	506	477	1069
Mov Cap-2 Maneuver	-	-	-	-	-	-	511	491	-	506	477	-
Stage 1	-	-	-	-	-	-	748	690	-	797	718	-
Stage 2	-	-	-	-	-	-	770	718	-	725	676	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.6			6.3			10.6			8.4		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	676	1615	-	-	1484	-	-	1069				
HCM Lane V/C Ratio	0.053	0.04	-	-	0.053	-	-	0.013				
HCM Control Delay (s)	10.6	7.3	0	-	7.6	0	-	8.4				
HCM Lane LOS	B	A	A	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.2	-	-	0				

HCM 6th Signalized Intersection Summary 5: US Hwy 395 & Three Flags Road

Existing plus Project
Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	1	83	168	2	42	23	848	103	20	970	74
Future Volume (veh/h)	24	1	83	168	2	42	23	848	103	20	970	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	26	1	90	183	2	46	25	922	112	22	1054	80
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	446	4	341	369	406	344	53	1552	692	47	1542	688
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.03	0.43	0.43	0.03	0.43	0.43
Sat Flow, veh/h	1455	18	1595	1400	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	26	0	91	183	2	46	25	922	112	22	1054	80
Grp Sat Flow(s),veh/h/ln	1455	0	1613	1400	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.8	0.0	2.5	6.6	0.0	1.2	0.7	10.4	2.3	0.6	12.5	1.6
Cycle Q Clear(g_c), s	0.8	0.0	2.5	9.1	0.0	1.2	0.7	10.4	2.3	0.6	12.5	1.6
Prop In Lane	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	446	0	345	369	406	344	53	1552	692	47	1542	688
V/C Ratio(X)	0.06	0.00	0.26	0.50	0.00	0.13	0.48	0.59	0.16	0.47	0.68	0.12
Avail Cap(c_a), veh/h	766	0	700	678	825	699	785	3610	1610	785	3610	1610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	17.4	21.2	16.4	16.9	25.3	11.6	9.3	25.4	12.3	9.2
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.4	0.0	0.1	2.5	0.4	0.1	2.6	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.9	2.0	0.0	0.4	0.3	2.8	0.5	0.3	3.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	17.5	21.6	16.4	16.9	27.8	11.9	9.4	28.1	12.8	9.2
LnGrp LOS	B	A	B	C	B	B	C	B	A	C	B	A
Approach Vol, veh/h	117		231				1059				1156	
Approach Delay, s/veh	17.3		20.6				12.0				12.9	
Approach LOS	B		C				B				B	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.4	29.3	17.3		6.5	29.1	17.3					
Change Period (Y+Rc), s	5.0	6.5	6.0		5.0	6.5	6.0					
Max Green Setting (Gmax), s	23.0	53.0	23.0		23.0	53.0	23.0					
Max Q Clear Time (g_c+I1), s	2.6	12.4	4.5		2.7	14.5	11.1					
Green Ext Time (p_c), s	0.0	6.9	0.3		0.0	8.1	0.3					
Intersection Summary												
HCM 6th Ctrl Delay	13.4											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Existing plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	20	8	92	21	133	4	827	37	97	1105	19
Future Volume (veh/h)	14	20	8	92	21	133	4	827	37	97	1105	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	15	22	9	100	23	145	4	899	40	105	1201	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	277	164	67	290	243	206	10	1803	804	139	2060	919
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.01	0.50	0.50	0.08	0.57	0.57
Sat Flow, veh/h	1305	1281	524	1478	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	15	0	31	100	23	145	4	899	40	105	1201	21
Grp Sat Flow(s), veh/h/ln	1305	0	1806	1478	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	0.6	0.0	0.9	3.7	0.6	5.0	0.1	9.6	0.7	3.3	12.4	0.3
Cycle Q Clear(g_c), s	1.2	0.0	0.9	4.6	0.6	5.0	0.1	9.6	0.7	3.3	12.4	0.3
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	0	231	290	243	206	10	1803	804	139	2060	919
V/C Ratio(X)	0.05	0.00	0.13	0.34	0.09	0.71	0.41	0.50	0.05	0.76	0.58	0.02
Avail Cap(c_a), veh/h	1077	0	1338	1197	1408	1193	717	3172	1415	717	3172	1415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	0.0	22.5	24.5	22.3	24.3	28.8	9.7	7.5	26.3	8.0	5.4
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.1	1.7	19.3	0.5	0.1	6.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.4	1.2	0.3	1.9	0.1	2.5	0.2	1.4	2.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	0.0	22.6	24.8	22.4	25.9	48.0	10.1	7.5	32.4	8.6	5.4
LnGrp LOS	C	A	C	C	C	C	D	B	A	C	A	A
Approach Vol, veh/h	46			268			943			1327		
Approach Delay, s/veh	22.7			25.2			10.2			10.4		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.5			12.4	5.0	40.6		12.4				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	23	51.0		43.0	* 23	51.0		43.0				
Max Q Clear Time (g_c+1/3), s	11.6			3.2	2.1	14.4		7.0				
Green Ext Time (p_c), s	0.1	13.5		0.1	0.0	18.7		0.4				

Intersection Summary

HCM 6th Ctrl Delay 12.1

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Existing plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Traffic Vol, veh/h	0	128	54	0	4	178
Future Vol, veh/h	0	128	54	0	4	178
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	166	70	0	5	231
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	236	70
Stage 1	-	-	-	-	70	-
Stage 2	-	-	-	-	166	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	757	998
Stage 1	0	-	-	0	958	-
Stage 2	0	-	-	0	868	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	757	998
Mov Cap-2 Maneuver	-	-	-	-	757	-
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	868	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		9.7		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	757	998		
HCM Lane V/C Ratio	-	-	0.007	0.232		
HCM Control Delay (s)	-	-	9.8	9.7		
HCM Lane LOS	-	-	A	A		
HCM 95th %tile Q(veh)	-	-	0	0.9		

HCM 6th TWSC
9: Lassen Road & Driveway A

Existing plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	1	2	35	4	17
Future Vol, veh/h	6	1	2	35	4	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	1	2	38	4	18
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	47	21	0	0	40	0
Stage 1	21	-	-	-	-	-
Stage 2	26	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	968	1062	-	-	1583	-
Stage 1	1007	-	-	-	-	-
Stage 2	1002	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	965	1062	-	-	1583	-
Mov Cap-2 Maneuver	965	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	8.7	0	1.4			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	978	1583	-	
HCM Lane V/C Ratio	-	-	0.008	0.003	-	
HCM Control Delay (s)	-	-	8.7	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Existing plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	6	32	29	90	7
Future Vol, veh/h	1	6	32	29	90	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	7	35	32	98	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	204	102	106	0	-	0
Stage 1	102	-	-	-	-	-
Stage 2	102	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	789	959	1498	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	927	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	770	959	1498	-	-	-
Mov Cap-2 Maneuver	770	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	927	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.9	3.9		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1498	-	927	-	-	
HCM Lane V/C Ratio	0.023	-	0.008	-	-	
HCM Control Delay (s)	7.5	0	8.9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Existing plus Project
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	4	0	2	0	35	24	15	8	0
Future Vol, veh/h	0	0	0	4	0	2	0	35	24	15	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	2	2	2	0	0	2	2	0	0
Mvmt Flow	0	0	0	4	0	2	0	38	26	16	9	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	93	105	9	92	92	51	9	0	0	64	0	0
Stage 1	41	41	-	51	51	-	-	-	-	-	-	-
Stage 2	52	64	-	41	41	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.52	6.2	7.12	6.52	6.22	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.018	3.3	3.518	4.018	3.318	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	895	785	1079	892	798	1017	1624	-	-	1538	-	-
Stage 1	979	861	-	962	852	-	-	-	-	-	-	-
Stage 2	966	842	-	974	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	886	777	1079	885	790	1017	1624	-	-	1538	-	-
Mov Cap-2 Maneuver	886	777	-	885	790	-	-	-	-	-	-	-
Stage 1	979	852	-	962	852	-	-	-	-	-	-	-
Stage 2	964	842	-	964	852	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		8.9		0		4.8					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1624	-	-	-	925	1538	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.007	0.011	-	-				
HCM Control Delay (s)	0	-	-	0	8.9	7.4	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Existing plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	2	12	56	69	27
Future Vol, veh/h	5	2	12	56	69	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	2	13	61	75	29
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	177	90	104	0	-	0
Stage 1	90	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	817	973	1500	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	810	973	1500	-	-	-
Mov Cap-2 Maneuver	810	-	-	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.3	1.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1500	-	851	-	-	
HCM Lane V/C Ratio	0.009	-	0.009	-	-	
HCM Control Delay (s)	7.4	0	9.3	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Existing plus Project
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	581	72	9	684	277	172	1145	27	198	812	48
Future Volume (veh/h)	47	581	72	9	684	277	172	1145	27	198	812	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	49	612	76	9	720	292	181	1205	28	208	855	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	16	676	84	215	799	324	207	1287	30	233	1286	77
Arrive On Green	0.01	0.21	0.23	0.12	0.32	0.32	0.11	0.36	0.36	0.13	0.37	0.37
Sat Flow, veh/h	1810	3232	401	1810	2506	1016	1810	3606	84	1810	3461	206
Grp Volume(v), veh/h	49	341	347	9	519	493	181	603	630	208	446	460
Grp Sat Flow(s),veh/h/ln	1810	1805	1828	1810	1805	1717	1810	1805	1885	1810	1805	1863
Q Serve(g_s), s	1.3	27.1	27.2	0.6	40.4	40.4	14.5	47.4	47.4	16.6	30.3	30.3
Cycle Q Clear(g_c), s	1.3	27.1	27.2	0.6	40.4	40.4	14.5	47.4	47.4	16.6	30.3	30.3
Prop In Lane	1.00		0.22	1.00		0.59	1.00		0.04	1.00		0.11
Lane Grp Cap(c), veh/h	16	377	382	215	575	547	207	644	673	233	671	692
V/C Ratio(X)	3.01	0.90	0.91	0.04	0.90	0.90	0.88	0.94	0.94	0.89	0.66	0.66
Avail Cap(c_a), veh/h	246	627	635	283	663	631	591	663	693	406	671	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.8	56.7	56.4	57.3	47.8	47.8	64.0	45.6	45.6	63.0	38.5	38.5
Incr Delay (d2), s/veh	928.8	10.4	10.6	0.1	14.3	14.9	8.5	20.6	20.1	9.6	2.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	13.0	13.2	0.3	19.6	18.7	7.0	23.8	24.8	8.0	13.3	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1001.6	67.1	67.0	57.4	62.1	62.7	72.6	66.2	65.7	72.6	41.2	41.1
LnGrp LOS	F	E	E	E	E	E	E	E	E	E	D	D
Approach Vol, veh/h	737			1021			1414			1114		
Approach Delay, s/veh	129.2			62.4			66.8			47.0		
Approach LOS	F			E			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.1	41.2	21.5	62.1	9.0	54.3	23.6	59.9				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	23.0	* 54	* 48	54.0	23.0	* 54	* 33	54.0				
Max Q Clear Time (g_c+I1), s	2.6	30.1	16.5	32.3	4.3	42.4	18.6	49.4				
Green Ext Time (p_c), s	0.0	3.6	0.3	6.1	0.1	4.5	0.3	3.0				

Intersection Summary

HCM 6th Ctrl Delay	71.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Existing plus Project
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩ ↑↑↑			↩ ↑↑↑		↩		↩			↩	↩
Traffic Volume (veh/h)	5	790	10	56	943	56	25	7	119	32	0	3
Future Volume (veh/h)	5	790	10	56	943	56	25	7	119	32	0	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	5	823	10	58	982	58	26	7	124	33	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	10	2276	28	71	2418	751	83	14	507	92	0	508
Arrive On Green	0.01	0.45	0.45	0.04	0.49	0.49	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1619	5004	61	1619	4914	1525	40	42	1523	44	0	1525
Grp Volume(v), veh/h	5	539	294	58	982	58	33	0	124	33	0	3
Grp Sat Flow(s), veh/h/ln	1619	1638	1789	1619	1638	1525	83	0	1523	44	0	1525
Q Serve(g_s), s	0.3	10.0	10.0	3.3	11.8	1.9	1.1	0.0	5.5	1.1	0.0	0.1
Cycle Q Clear(g_c), s	0.3	10.0	10.0	3.3	11.8	1.9	31.0	0.0	5.5	31.0	0.0	0.1
Prop In Lane	1.00		0.03	1.00		1.00	0.79		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	1490	814	71	2418	751	97	0	507	92	0	508
V/C Ratio(X)	0.48	0.36	0.36	0.82	0.41	0.08	0.34	0.00	0.24	0.36	0.00	0.01
Avail Cap(c_a), veh/h	94	1490	814	216	2418	751	200	0	612	92	0	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.1	16.5	16.6	44.1	15.0	12.5	36.6	0.0	22.5	46.3	0.0	20.8
Incr Delay (d2), s/veh	31.2	0.7	1.2	20.3	0.5	0.2	2.1	0.0	0.2	2.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	3.4	3.8	1.6	3.8	0.6	0.8	0.0	2.0	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	77.3	17.2	17.8	64.4	15.5	12.7	38.6	0.0	22.8	48.6	0.0	20.8
LnGrp LOS	E	B	B	E	B	B	D	A	C	D	A	C
Approach Vol, veh/h	838			1098			157			36		
Approach Delay, s/veh	17.8			17.9			26.1			46.3		
Approach LOS	B			B			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	48.8		36.6	5.2	52.3		36.6				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	12.4	38.5		11.4	5.4	* 46		37.4				
Max Q Clear Time (g_c+I), s	15.3	12.0		33.0	2.3	13.8		33.0				
Green Ext Time (p_c), s	0.0	4.8		0.0	0.0	7.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay 19.0

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Existing plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	28.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	81	38	1306	54	24	870
Future Vol, veh/h	81	38	1306	54	24	870
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	375	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	83	39	1333	55	24	888
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	2297	694	0	0	1388	0
Stage 1	1361	-	-	-	-	-
Stage 2	936	-	-	-	-	-
Critical Hdwy	6.6	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 38	390	-	-	500	-
Stage 1	207	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 36	390	-	-	500	-
Mov Cap-2 Maneuver	~ 36	-	-	-	-	-
Stage 1	207	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	570.2	0		0.3		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	36	390	500	-
HCM Lane V/C Ratio	-	-	2.296	0.099	0.049	-
HCM Control Delay (s)	-	-	\$ 830.6	15.2	12.6	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	9.2	0.3	0.2	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

HCM 6th TWSC
4: Lassen Road & Poplar Street

Existing plus Project
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	46	17	28	50	0	21	0	70	0	0	55
Future Vol, veh/h	13	46	17	28	50	0	21	0	70	0	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	51	19	31	56	0	23	0	78	0	0	61
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	56	0	0	70	0	0	238	207	61	246	216	56
Stage 1	-	-	-	-	-	-	89	89	-	118	118	-
Stage 2	-	-	-	-	-	-	149	118	-	128	98	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1562	-	-	1544	-	-	721	693	1010	712	685	1016
Stage 1	-	-	-	-	-	-	923	825	-	891	802	-
Stage 2	-	-	-	-	-	-	858	802	-	881	818	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1562	-	-	1544	-	-	662	672	1010	642	664	1016
Mov Cap-2 Maneuver	-	-	-	-	-	-	662	672	-	642	664	-
Stage 1	-	-	-	-	-	-	915	818	-	883	785	-
Stage 2	-	-	-	-	-	-	789	785	-	806	811	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			2.6			9.5			8.8		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	901	1562	-	-	1544	-	-	1016				
HCM Lane V/C Ratio	0.112	0.009	-	-	0.02	-	-	0.06				
HCM Control Delay (s)	9.5	7.3	0	-	7.4	0	-	8.8				
HCM Lane LOS	A	A	A	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.2				

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Existing plus Project
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1	60	130	4	33	34	1250	150	34	852	58
Future Volume (veh/h)	36	1	60	130	4	33	34	1250	150	34	852	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	37	1	61	133	4	34	35	1276	153	35	869	59
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	356	4	252	305	302	256	67	1800	803	67	1800	803
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.50	0.50	0.04	0.50	0.50
Sat Flow, veh/h	1469	26	1588	1437	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	37	0	62	133	4	34	35	1276	153	35	869	59
Grp Sat Flow(s),veh/h/ln	1469	0	1614	1437	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	1.2	0.0	1.9	5.1	0.1	1.0	1.1	15.7	3.0	1.1	9.1	1.1
Cycle Q Clear(g_c), s	1.4	0.0	1.9	7.0	0.1	1.0	1.1	15.7	3.0	1.1	9.1	1.1
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	356	0	256	305	302	256	67	1801	803	67	1801	803
V/C Ratio(X)	0.10	0.00	0.24	0.44	0.01	0.13	0.52	0.71	0.19	0.52	0.48	0.07
Avail Cap(c_a), veh/h	712	0	647	654	762	646	726	3337	1488	726	3337	1488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	21.1	24.2	20.3	20.7	27.1	11.1	8.0	27.1	9.5	7.5
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.4	0.0	0.1	2.3	0.5	0.1	2.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	1.6	0.0	0.4	0.4	4.0	0.7	0.4	2.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	0.0	21.3	24.5	20.3	20.8	29.4	11.7	8.1	29.4	9.7	7.5
LnGrp LOS	C	A	C	C	C	C	C	B	A	C	A	A
Approach Vol, veh/h	99				171				1464			
Approach Delay, s/veh	21.2				23.7				11.7			
Approach LOS	C				C				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	35.1		15.1	7.1	35.1		15.1				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	23.0	53.0		23.0	23.0	53.0		23.0				
Max Q Clear Time (g_c+l1), s	3.1	17.7		3.9	3.1	11.1		9.0				
Green Ext Time (p_c), s	0.0	10.9		0.2	0.0	6.2		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	12.3											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Existing plus Project
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	47	3	71	9	123	19	1259	90	139	888	16
Future Volume (veh/h)	53	47	3	71	9	123	19	1259	90	139	888	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	48	3	73	9	127	20	1298	93	143	915	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	241	192	12	222	207	175	41	1983	884	184	2267	1011
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.02	0.55	0.55	0.10	0.63	0.63
Sat Flow, veh/h	1344	1769	111	1452	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	55	0	51	73	9	127	20	1298	93	143	915	16
Grp Sat Flow(s), veh/h/ln	1344	0	1880	1452	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	2.7	0.0	1.8	3.5	0.3	5.5	0.8	18.1	2.0	5.5	9.0	0.3
Cycle Q Clear(g_c), s	3.0	0.0	1.8	5.2	0.3	5.5	0.8	18.1	2.0	5.5	9.0	0.3
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	0	204	222	207	175	41	1983	884	184	2267	1011
V/C Ratio(X)	0.23	0.00	0.25	0.33	0.04	0.73	0.48	0.65	0.11	0.78	0.40	0.02
Avail Cap(c_a), veh/h	903	0	1130	937	1142	968	582	2574	1148	582	2574	1148
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	0.0	29.2	31.6	28.5	30.8	34.5	11.3	7.7	31.3	6.6	5.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.3	0.0	2.1	6.3	0.8	0.1	5.2	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.9	0.0	0.8	1.2	0.1	2.1	0.4	5.2	0.5	2.4	2.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.1	0.0	29.4	31.9	28.6	33.0	40.8	12.1	7.8	36.6	6.9	5.0
LnGrp LOS	C	A	C	C	C	C	D	B	A	D	A	A
Approach Vol, veh/h	106			209			1411			1074		
Approach Delay, s/veh	29.8			32.4			12.3			10.8		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.0	46.8		12.8	6.3	52.4		12.8				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	23	51.0		43.0	* 23	51.0		43.0				
Max Q Clear Time (g_c+17), s	20.1			5.0	2.8	11.0		7.5				
Green Ext Time (p_c), s	0.2	19.2		0.2	0.0	13.6		0.3				

Intersection Summary

HCM 6th Ctrl Delay 13.9

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Existing plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	242	39	0	14	173
Future Vol, veh/h	0	242	39	0	14	173
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	278	45	0	16	199
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	323	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	278	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	675	1031
Stage 1	0	-	-	0	983	-
Stage 2	0	-	-	0	774	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	675	1031
Mov Cap-2 Maneuver	-	-	-	-	675	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	774	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		9.4		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	675	1031		
HCM Lane V/C Ratio	-	-	0.024	0.193		
HCM Control Delay (s)	-	-	10.5	9.3		
HCM Lane LOS	-	-	B	A		
HCM 95th %tile Q(veh)	-	-	0.1	0.7		

HCM 6th TWSC
9: Lassen Road & Driveway A

Existing plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	5.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	4	14	7	1	3
Future Vol, veh/h	32	4	14	7	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	35	4	15	8	1	3
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	24	19	0	0	23	0
Stage 1	19	-	-	-	-	-
Stage 2	5	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	997	1065	-	-	1605	-
Stage 1	1009	-	-	-	-	-
Stage 2	1023	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	996	1065	-	-	1605	-
Mov Cap-2 Maneuver	996	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	1022	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.7	0		1.8		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 1003		1605	-	
HCM Lane V/C Ratio	-	- 0.039		0.001	-	
HCM Control Delay (s)	-	- 8.7		7.2	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Existing plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	29	7	133	44	1
Future Vol, veh/h	6	29	7	133	44	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	32	8	145	48	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	210	49	49	0	-	0
Stage 1	49	-	-	-	-	-
Stage 2	161	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	783	1025	1571	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	873	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	778	1025	1571	-	-	-
Mov Cap-2 Maneuver	778	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	873	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.9	0.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1571	-	972	-	-	
HCM Lane V/C Ratio	0.005	-	0.039	-	-	
HCM Control Delay (s)	7.3	0	8.9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Existing plus Project
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	23	0	14	0	7	5	3	32	0
Future Vol, veh/h	0	0	0	23	0	14	0	7	5	3	32	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	2	2	2	0	0	2	2	0	0
Mvmt Flow	0	0	0	25	0	15	0	8	5	3	35	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	59	54	35	52	52	11	35	0	0	13	0	0
Stage 1	41	41	-	11	11	-	-	-	-	-	-	-
Stage 2	18	13	-	41	41	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.52	6.2	7.12	6.52	6.22	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.018	3.3	3.518	4.018	3.318	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	942	837	1044	947	839	1070	1589	-	-	1606	-	-
Stage 1	979	861	-	1010	886	-	-	-	-	-	-	-
Stage 2	1006	885	-	974	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	927	835	1044	945	837	1070	1589	-	-	1606	-	-
Mov Cap-2 Maneuver	927	835	-	945	837	-	-	-	-	-	-	-
Stage 1	979	859	-	1010	886	-	-	-	-	-	-	-
Stage 2	992	885	-	972	859	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		8.8			0			0.6			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1589	-	-	-	989	1606	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.041	0.002	-	-				
HCM Control Delay (s)	0	-	-	0	8.8	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Existing plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	11	2	114	67	6
Future Vol, veh/h	26	11	2	114	67	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	12	2	124	73	7
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	205	77	80	0	-	0
Stage 1	77	-	-	-	-	-
Stage 2	128	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	788	990	1531	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	787	990	1531	-	-	-
Mov Cap-2 Maneuver	787	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.5	0.1		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1531	-	838	-	-	
HCM Lane V/C Ratio	0.001	-	0.048	-	-	
HCM Control Delay (s)	7.4	0	9.5	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Timing Plan: AM Peak Hour
Opening Year (2024)

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	877	204	12	1163	552	204	974	11	375	1205	43
Future Volume (veh/h)	63	877	204	12	1163	552	204	974	11	375	1205	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	66	914	212	12	1211	575	212	1015	11	391	1255	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	21	993	230	147	995	447	156	861	9	271	1061	38
Arrive On Green	0.01	0.34	0.36	0.08	0.41	0.41	0.09	0.24	0.24	0.15	0.30	0.30
Sat Flow, veh/h	1810	2909	674	1810	2421	1088	1810	3658	40	1810	3555	127
Grp Volume(v), veh/h	66	567	559	12	885	901	212	501	525	391	637	663
Grp Sat Flow(s),veh/h/ln	1810	1805	1779	1810	1805	1704	1810	1805	1893	1810	1805	1877
Q Serve(g_s), s	1.6	42.9	42.9	0.9	58.5	58.5	12.3	33.5	33.5	21.3	42.5	42.5
Cycle Q Clear(g_c), s	1.6	42.9	42.9	0.9	58.5	58.5	12.3	33.5	33.5	21.3	42.5	42.5
Prop In Lane	1.00		0.38	1.00		0.64	1.00		0.02	1.00		0.07
Lane Grp Cap(c), veh/h	21	616	607	147	742	700	156	425	446	271	539	560
V/C Ratio(X)	3.18	0.92	0.92	0.08	1.19	1.29	1.36	1.18	1.18	1.44	1.18	1.18
Avail Cap(c_a), veh/h	55	733	722	147	742	700	156	425	446	271	539	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.4	45.0	44.5	60.5	41.9	41.9	65.0	54.4	54.4	60.5	49.9	49.9
Incr Delay (d2), s/veh	1094.8	15.2	15.6	0.2	100.0	139.3	195.9	102.4	101.6	219.4	99.5	99.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	20.8	20.5	0.4	44.9	50.0	14.0	26.6	27.8	25.9	33.1	34.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1165.1	60.2	60.0	60.7	142.0	181.2	260.9	156.8	156.0	280.0	149.5	149.5
LnGrp LOS	F	E	E	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h	1192				1798				1238			
Approach Delay, s/veh	121.3				161.1				174.3			
Approach LOS	F				F				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.2	59.1	17.0	50.0	9.3	66.0	26.0	41.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 61	* 12	42.5	7.3	* 59	* 21	33.5				
Max Q Clear Time (g_c+I1), s	2.9	45.9	14.3	44.5	4.6	60.5	23.3	35.5				
Green Ext Time (p_c), s	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 161.1
HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Timing Plan: AM Peak Hour
Opening Year (2024)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰		↰	↰		↰	↰
Traffic Volume (veh/h)	6	1242	12	307	1695	19	5	2	201	52	2	15
Future Volume (veh/h)	6	1242	12	307	1695	19	5	2	201	52	2	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	7	1461	14	361	1994	22	6	2	236	61	2	18
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	14	1612	15	372	2665	827	57	11	476	68	1	477
Arrive On Green	0.01	0.32	0.32	0.23	0.54	0.54	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1619	5019	48	1619	4914	1525	8	36	1522	19	4	1525
Grp Volume(v), veh/h	7	954	521	361	1994	22	8	0	236	63	0	18
Grp Sat Flow(s), veh/h/ln	1619	1638	1791	1619	1638	1525	44	0	1522	23	0	1525
Q Serve(g_s), s	0.5	32.0	32.0	25.4	35.9	0.8	0.2	0.0	14.5	0.6	0.0	0.9
Cycle Q Clear(g_c), s	0.5	32.0	32.0	25.4	35.9	0.8	35.8	0.0	14.5	35.9	0.0	0.9
Prop In Lane	1.00		0.03	1.00		1.00	0.75		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	14	1052	575	372	2665	827	69	0	476	69	0	477
V/C Ratio(X)	0.50	0.91	0.91	0.97	0.75	0.03	0.12	0.00	0.50	0.92	0.00	0.04
Avail Cap(c_a), veh/h	70	1052	575	372	2665	827	70	0	477	69	0	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.7	37.3	37.3	43.9	20.3	12.2	32.6	0.0	32.1	56.8	0.0	27.5
Incr Delay (d2), s/veh	24.8	12.7	20.4	38.7	2.0	0.1	0.7	0.0	0.8	79.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	13.7	16.2	13.6	12.3	0.3	0.2	0.0	5.4	3.3	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	81.5	50.1	57.7	82.6	22.2	12.3	33.4	0.0	32.9	136.3	0.0	27.5
LnGrp LOS	F	D	E	F	C	B	C	A	C	F	A	C
Approach Vol, veh/h	1482			2377			244			81		
Approach Delay, s/veh	52.9			31.3			33.0			112.1		
Approach LOS	D			C			C			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.0	43.4		40.5	5.6	68.8		40.5				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	26.4	36.9		10.4	5.0	* 59		36.0				
Max Q Clear Time (g_c+0.7), s	27.4	34.0		37.9	2.5	37.9		37.8				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	13.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay 40.6

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Timing Plan: AM Peak Hour
Opening Year (2024)

Intersection												
Int Delay, s/veh	918.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	29	105	8	21	71	1160	464	93	1298	29
Future Vol, veh/h	5	0	29	105	8	21	71	1160	464	93	1298	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	-	375	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	92	93	92	93	93	93	93	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	0	32	113	9	23	77	1247	499	100	1396	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2394	3512	1412	3279	3279	873	1428	0	0	1746	0	0
Stage 1	1612	1612	-	1651	1651	-	-	-	-	-	-	-
Stage 2	782	1900	-	1628	1628	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	21	6	171	~ 4	9	297	482	-	-	364	-	-
Stage 1	133	165	-	~ 105	158	-	-	-	-	-	-	-
Stage 2	358	119	-	130	162	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	4	171	~ 2	~ 5	297	482	-	-	364	-	-
Mov Cap-2 Maneuver	-	4	-	~ 2	~ 5	-	-	-	-	-	-	-
Stage 1	112	120	-	~ 88	133	-	-	-	-	-	-	-
Stage 2	260	100	-	~ 77	117	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		\$ 22484	0.6	1.2
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	482	-	-	-	171	2	17	364	-	-
HCM Lane V/C Ratio	0.16	-	-	-	0.184	56.452	1.84	0.275	-	-
HCM Control Delay (s)	13.9	-	-	-	\$ 28472.9	\$ 865.1	18.6	-	-	-
HCM Lane LOS	B	-	-	-	D	F	F	C	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-	0.7	16.4	4.4	1.1	-	-

Notes										
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon							

HCM 6th TWSC
4: Lassen Road & Poplar Street

Timing Plan: AM Peak Hour
Opening Year (2024)

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	373	38	129	179	0	19	0	40	0	0	32
Future Vol, veh/h	96	373	38	129	179	0	19	0	40	0	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	75	75	75	75	92	75	92	75	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	104	497	51	172	239	0	25	0	53	0	0	35
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	239	0	0	548	0	0	1332	1314	523	1340	1339	239
Stage 1	-	-	-	-	-	-	731	731	-	583	583	-
Stage 2	-	-	-	-	-	-	601	583	-	757	756	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1340	-	-	1032	-	-	133	160	558	131	154	805
Stage 1	-	-	-	-	-	-	416	430	-	502	502	-
Stage 2	-	-	-	-	-	-	491	502	-	403	419	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1340	-	-	1032	-	-	99	115	558	93	111	805
Mov Cap-2 Maneuver	-	-	-	-	-	-	99	115	-	93	111	-
Stage 1	-	-	-	-	-	-	369	382	-	446	406	-
Stage 2	-	-	-	-	-	-	380	406	-	324	372	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			3.8			29.5			9.7		
HCM LOS							D			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	224	1340	-	-	1032	-	-	805				
HCM Lane V/C Ratio	0.351	0.078	-	-	0.167	-	-	0.043				
HCM Control Delay (s)	29.5	7.9	0	-	9.2	0	-	9.7				
HCM Lane LOS	D	A	A	-	A	A	-	A				
HCM 95th %tile Q(veh)	1.5	0.3	-	-	0.6	-	-	0.1				

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Timing Plan: AM Peak Hour
Opening Year (2024)

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1	88	302	2	44	25	1608	187	22	1318	79
Future Volume (veh/h)	26	1	88	302	2	44	25	1608	187	22	1318	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	1	96	328	2	48	27	1748	203	24	1433	86
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	430	4	392	349	467	396	48	1987	886	44	1979	883
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.03	0.55	0.55	0.02	0.55	0.55
Sat Flow, veh/h	1453	17	1596	1392	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	28	0	97	328	2	48	27	1748	203	24	1433	86
Grp Sat Flow(s),veh/h/ln	1453	0	1613	1392	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	1.4	0.0	4.7	19.3	0.1	2.3	1.4	41.2	6.3	1.3	29.0	2.5
Cycle Q Clear(g_c), s	1.5	0.0	4.7	24.0	0.1	2.3	1.4	41.2	6.3	1.3	29.0	2.5
Prop In Lane	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	430	0	397	349	467	396	48	1987	886	44	1979	883
V/C Ratio(X)	0.07	0.00	0.24	0.94	0.00	0.12	0.56	0.88	0.23	0.54	0.72	0.10
Avail Cap(c_a), veh/h	430	0	397	349	467	396	93	2164	965	93	2164	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	29.5	40.7	27.8	28.6	46.9	19.1	11.3	47.1	16.5	10.5
Incr Delay (d2), s/veh	0.0	0.0	0.1	32.6	0.0	0.1	3.8	4.3	0.1	3.8	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.8	11.1	0.0	0.9	0.7	15.0	1.9	0.6	10.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	29.6	73.3	27.8	28.7	50.7	23.4	11.4	50.8	17.6	10.6
LnGrp LOS	C	A	C	E	C	C	D	C	B	D	B	B
Approach Vol, veh/h	125			378			1978			1543		
Approach Delay, s/veh	29.4			67.4			22.6			17.8		
Approach LOS	C			E			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	60.2		30.0	7.6	60.0		30.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	5.0	58.5		24.0	5.0	58.5		24.0				
Max Q Clear Time (g_c+I1), s	3.3	43.2		6.7	3.4	31.0		26.0				
Green Ext Time (p_c), s	0.0	10.5		0.3	0.0	11.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	25.1											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Timing Plan: AM Peak Hour
Opening Year (2024)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	70	17	97	216	455	37	1341	39	216	1324	168
Future Volume (veh/h)	56	70	17	97	216	455	37	1341	39	216	1324	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	61	76	18	105	235	495	40	1458	42	235	1439	183
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	216	455	108	429	582	493	52	1524	680	259	1935	863
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.03	0.42	0.42	0.14	0.54	0.54
Sat Flow, veh/h	778	1485	352	1396	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	61	0	94	105	235	495	40	1458	42	235	1439	183
Grp Sat Flow(s),veh/h/ln	778	0	1837	1396	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	9.0	0.0	5.0	8.0	13.1	41.0	2.9	52.4	2.1	17.1	41.1	8.0
Cycle Q Clear(g_c), s	22.1	0.0	5.0	13.0	13.1	41.0	2.9	52.4	2.1	17.1	41.1	8.0
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	0	563	429	582	493	52	1524	680	259	1935	863
V/C Ratio(X)	0.28	0.00	0.17	0.24	0.40	1.00	0.76	0.96	0.06	0.91	0.74	0.21
Avail Cap(c_a), veh/h	216	0	563	429	582	493	85	1530	682	261	1935	863
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	0.0	33.9	38.7	36.7	46.4	64.5	37.5	22.9	56.5	23.9	16.2
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.2	41.3	15.6	14.3	0.1	32.3	1.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.3	2.8	6.2	21.9	1.5	24.4	0.8	9.8	16.3	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.7	0.0	34.0	38.8	36.9	87.7	80.1	51.8	23.0	88.8	25.9	16.5
LnGrp LOS	D	A	C	D	D	F	F	D	C	F	C	B
Approach Vol, veh/h	155			835			1540			1857		
Approach Delay, s/veh	38.6			67.3			51.7			32.9		
Approach LOS	D			E			D			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.8	64.0		46.0	8.6	79.2		46.0				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	19.0	56.7		41.0	* 6.3	69.7		41.0				
Max Q Clear Time (g_c+1/9, s)	19.0	54.4		24.1	4.9	43.1		43.0				
Green Ext Time (p_c), s	0.0	2.1		0.5	0.0	19.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay 46.3

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Timing Plan: AM Peak Hour
Opening Year (2024)

Intersection						
Int Delay, s/veh	21.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	298	147	0	12	607
Future Vol, veh/h	0	298	147	0	12	607
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	387	191	0	16	788
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	578	191
Stage 1	-	-	-	-	191	-
Stage 2	-	-	-	-	387	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	481	856
Stage 1	0	-	-	0	846	-
Stage 2	0	-	-	0	691	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	481	856
Mov Cap-2 Maneuver	-	-	-	-	481	-
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	691	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		36.3		
HCM LOS	E					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	481	856		
HCM Lane V/C Ratio	-	-	0.032	0.921		
HCM Control Delay (s)	-	-	12.7	36.8		
HCM Lane LOS	-	-	B	E		
HCM 95th %tile Q(veh)	-	-	0.1	13.5		

HCM 6th TWSC
9: Lassen Road & Driveway A

Timing Plan: AM Peak Hour
Opening Year (2024)

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	96	0	0	32
Future Vol, veh/h	0	0	96	0	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	104	0	0	35
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	139	104	0	0	104	0
Stage 1	104	-	-	-	-	-
Stage 2	35	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	859	956	-	-	1500	-
Stage 1	925	-	-	-	-	-
Stage 2	993	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	859	956	-	-	1500	-
Mov Cap-2 Maneuver	859	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	993	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1500	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Timing Plan: AM Peak Hour
Opening Year (2024)

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	413	308	0
Future Vol, veh/h	0	0	0	413	308	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	449	335	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	784	335	335	0	-	0
Stage 1	335	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	365	712	1236	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	647	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	365	712	1236	-	-	-
Mov Cap-2 Maneuver	365	-	-	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	647	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1236	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Timing Plan: AM Peak Hour
Opening Year (2024)

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	14	0	0	0	81	15	0	0	19	0
Future Vol, veh/h	0	0	14	0	0	0	81	15	0	0	19	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	15	0	0	0	88	16	0	0	21	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	213	213	21	221	213	16	21	0	0	16	0	0
Stage 1	21	21	-	192	192	-	-	-	-	-	-	-
Stage 2	192	192	-	29	21	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	748	688	1062	739	688	1069	1608	-	-	1615	-	-
Stage 1	1003	882	-	814	745	-	-	-	-	-	-	-
Stage 2	814	745	-	993	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	717	650	1062	698	650	1069	1608	-	-	1615	-	-
Mov Cap-2 Maneuver	717	650	-	698	650	-	-	-	-	-	-	-
Stage 1	948	882	-	769	704	-	-	-	-	-	-	-
Stage 2	769	704	-	979	882	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	8.4		0		6.2		0					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1608	-	-	1062	-	1615	-	-				
HCM Lane V/C Ratio	0.055	-	-	0.014	-	-	-	-				
HCM Control Delay (s)	7.4	0	-	8.4	0	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0.2	-	-	0	-	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Timing Plan: AM Peak Hour
Opening Year (2024)

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	413	308	0
Future Vol, veh/h	0	0	0	413	308	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	449	335	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	784	335	335	0	-	0
Stage 1	335	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	365	712	1236	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	647	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	365	712	1236	-	-	-
Mov Cap-2 Maneuver	365	-	-	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	647	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1236	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Opening Year (2024)
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1292	187	14	936	426	264	1376	36	615	1063	62
Future Volume (veh/h)	61	1292	187	14	936	426	264	1376	36	615	1063	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	64	1360	197	15	985	448	278	1448	38	647	1119	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	20	968	139	42	770	344	280	1041	27	345	1128	65
Arrive On Green	0.01	0.31	0.33	0.02	0.32	0.32	0.15	0.29	0.29	0.19	0.33	0.33
Sat Flow, veh/h	1810	3168	455	1810	2426	1084	1810	3594	94	1810	3467	201
Grp Volume(v), veh/h	64	770	787	15	729	704	278	726	760	647	582	602
Grp Sat Flow(s),veh/h/ln	1810	1805	1818	1810	1805	1705	1810	1805	1883	1810	1805	1864
Q Serve(g_s), s	1.6	43.8	43.8	1.2	45.5	45.5	22.0	41.5	41.5	27.3	46.1	46.1
Cycle Q Clear(g_c), s	1.6	43.8	43.8	1.2	45.5	45.5	22.0	41.5	41.5	27.3	46.1	46.1
Prop In Lane	1.00		0.25	1.00		0.64	1.00		0.05	1.00		0.11
Lane Grp Cap(c), veh/h	20	552	556	42	573	541	280	523	545	345	587	606
V/C Ratio(X)	3.15	1.40	1.42	0.36	1.27	1.30	0.99	1.39	1.39	1.88	0.99	0.99
Avail Cap(c_a), veh/h	42	552	556	63	573	541	280	523	545	345	587	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.8	49.8	49.4	69.0	48.9	48.9	60.5	50.9	50.9	58.0	48.2	48.2
Incr Delay (d2), s/veh	1083.8	188.6	198.1	3.8	135.4	148.7	51.3	186.9	187.9	405.5	35.0	34.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	47.7	49.4	0.6	41.0	40.7	13.7	45.0	47.1	50.8	25.4	26.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1154.6	238.4	247.5	72.8	184.3	197.6	111.8	237.8	238.8	463.5	83.2	82.9
LnGrp LOS	F	F	F	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h	1621			1448			1764			1831		
Approach Delay, s/veh	279.0			189.6			218.4			217.5		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	54.3	26.9	54.1	9.3	53.0	32.0	49.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 47	* 22	46.6	6.3	* 46	* 27	41.5				
Max Q Clear Time (g_c+I1), s	3.2	46.8	24.0	48.1	4.6	47.5	29.3	43.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			226.6									
HCM 6th LOS			F									
Notes												

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Opening Year (2024)
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	6	1929	9	145	1332	60	48	8	325	34	0	3
Future Volume (veh/h)	6	1929	9	145	1332	60	48	8	325	34	0	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	6	2009	9	151	1388	62	50	8	339	35	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	12	2234	10	175	2669	828	58	5	477	62	0	478
Arrive On Green	0.01	0.44	0.44	0.11	0.54	0.54	0.31	0.31	0.31	0.31	0.00	0.31
Sat Flow, veh/h	1619	5049	23	1619	4914	1525	0	16	1523	0	0	1525
Grp Volume(v), veh/h	6	1303	715	151	1388	62	58	0	339	35	0	3
Grp Sat Flow(s), veh/h/ln	1619	1638	1796	1619	1638	1525	16	0	1523	0	0	1525
Q Serve(g_s), s	0.4	42.5	42.5	10.6	20.7	2.2	0.0	0.0	22.7	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.4	42.5	42.5	10.6	20.7	2.2	36.1	0.0	22.7	36.1	0.0	0.2
Prop In Lane	1.00		0.01	1.00		1.00	0.86		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	1449	795	175	2669	828	63	0	477	62	0	478
V/C Ratio(X)	0.49	0.90	0.90	0.86	0.52	0.07	0.92	0.00	0.71	0.56	0.00	0.01
Avail Cap(c_a), veh/h	70	1449	795	177	2669	828	63	0	477	62	0	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	29.8	29.8	50.6	16.8	12.5	54.5	0.0	35.0	57.6	0.0	27.2
Incr Delay (d2), s/veh	27.1	9.2	15.2	32.4	0.7	0.2	84.7	0.0	4.9	10.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	16.8	19.8	5.7	7.0	0.7	3.2	0.0	9.0	1.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	84.1	39.0	44.9	83.0	17.5	12.7	139.2	0.0	39.9	68.5	0.0	27.2
LnGrp LOS	F	D	D	F	B	B	F	A	D	E	A	C
Approach Vol, veh/h	2024			1601			397			38		
Approach Delay, s/veh	41.2			23.5			54.4			65.2		
Approach LOS	D			C			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	57.5		40.7	5.5	69.1		40.7				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	12.6	51.0		10.0	5.0	* 59		36.1				
Max Q Clear Time (g_c+1/2, s)	12.6	44.5		38.1	2.4	22.7		38.1				
Green Ext Time (p_c), s	0.0	5.2		0.0	0.0	11.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay 35.7
HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Opening Year (2024)
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	3524.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	0	56	361	0	73	5	1579	133	37	1212	15
Future Vol, veh/h	25	0	56	361	0	73	5	1579	133	37	1212	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	-	375	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	98	92	98	92	98	98	98	98	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	0	61	368	0	74	5	1611	136	38	1237	16
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2137	3078	1245	3041	3018	874	1253	0	0	1747	0	0
Stage 1	1321	1321	-	1689	1689	-	-	-	-	-	-	-
Stage 2	816	1757	-	1352	1329	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	32	12	214	~ 7	13	297	562	-	-	364	-	-
Stage 1	195	228	-	~ 99	151	-	-	-	-	-	-	-
Stage 2	341	140	-	~ 187	226	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 22	11	214	~ 5	12	297	562	-	-	364	-	-
Mov Cap-2 Maneuver	~ 22	11	-	~ 5	12	-	-	-	-	-	-	-
Stage 1	193	204	-	~ 98	150	-	-	-	-	-	-	-
Stage 2	253	139	-	~ 120	202	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	182.5		\$ 28403.1			0			0.5			
HCM LOS	F		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	562	-	-	22	214	5	297	364	-	-		
HCM Lane V/C Ratio	0.01	-	-	1.235	0.284	73.673	0.251	0.104	-	-		
HCM Control Delay (s)	11.5	-	-	\$ 527.7	\$ 4142.4	21.1	16	-	-	-		
HCM Lane LOS	B	-	-	F	D	F	C	C	-	-		
HCM 95th %tile Q(veh)	0	-	-	3.5	1.1	48.3	1	0.3	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	4.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	200	24	72	275	0	27	0	136	0	0	98
Future Vol, veh/h	19	200	24	72	275	0	27	0	136	0	0	98
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	21	222	27	80	306	0	30	0	151	0	0	109
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	306	0	0	249	0	0	799	744	236	819	757	306
Stage 1	-	-	-	-	-	-	278	278	-	466	466	-
Stage 2	-	-	-	-	-	-	521	466	-	353	291	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1266	-	-	1328	-	-	306	345	808	297	339	739
Stage 1	-	-	-	-	-	-	733	684	-	581	566	-
Stage 2	-	-	-	-	-	-	542	566	-	668	675	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1266	-	-	1328	-	-	243	314	808	225	308	739
Mov Cap-2 Maneuver	-	-	-	-	-	-	243	314	-	225	308	-
Stage 1	-	-	-	-	-	-	719	671	-	570	525	-
Stage 2	-	-	-	-	-	-	428	525	-	533	662	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			1.6			13.9			10.7		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	583	1266	-	-	1328	-	-	739				
HCM Lane V/C Ratio	0.311	0.017	-	-	0.06	-	-	0.147				
HCM Control Delay (s)	13.9	7.9	0	-	7.9	0	-	10.7				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	1.3	0.1	-	-	0.2	-	-	0.5				

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Opening Year (2024)
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	1	64	233	4	35	36	1627	286	36	1550	62
Future Volume (veh/h)	38	1	64	233	4	35	36	1627	286	36	1550	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	1	65	238	4	36	37	1660	292	37	1582	63
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	404	5	350	351	419	355	62	1959	874	62	1959	874
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	0.54	0.54	0.03	0.54	0.54
Sat Flow, veh/h	1466	24	1589	1432	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	39	0	66	238	4	36	37	1660	292	37	1582	63
Grp Sat Flow(s),veh/h/ln	1466	0	1614	1432	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	1.8	0.0	2.9	14.0	0.1	1.5	1.7	33.6	8.7	1.7	30.8	1.6
Cycle Q Clear(g_c), s	2.0	0.0	2.9	16.9	0.1	1.5	1.7	33.6	8.7	1.7	30.8	1.6
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	404	0	356	351	419	355	62	1959	874	62	1959	874
V/C Ratio(X)	0.10	0.00	0.19	0.68	0.01	0.10	0.60	0.85	0.33	0.60	0.81	0.07
Avail Cap(c_a), veh/h	472	0	430	417	506	429	482	2217	989	482	2217	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	27.3	34.2	26.3	26.8	41.1	16.7	11.0	41.1	16.1	9.4
Incr Delay (d2), s/veh	0.0	0.0	0.1	2.2	0.0	0.0	3.4	3.0	0.2	3.4	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.1	5.0	0.1	0.6	0.8	11.5	2.5	0.8	10.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	0.0	27.4	36.4	26.3	26.9	44.6	19.7	11.2	44.6	18.1	9.4
LnGrp LOS	C	A	C	D	C	C	D	B	B	D	B	A
Approach Vol, veh/h	105			278			1989			1682		
Approach Delay, s/veh	27.3			35.0			18.9			18.4		
Approach LOS	C			D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	53.3		25.0	7.9	53.3		25.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	23.0	53.0		23.0	23.0	53.0		23.0				
Max Q Clear Time (g_c+I1), s	3.7	35.6		4.9	3.7	32.8		18.9				
Green Ext Time (p_c), s	0.0	11.3		0.2	0.0	11.0		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	20.0											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Opening Year (2024)
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	242	35	75	81	271	32	1502	95	422	1346	81
Future Volume (veh/h)	194	242	35	75	81	271	32	1502	95	422	1346	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	200	249	36	77	84	279	33	1548	98	435	1388	84
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	285	392	57	182	459	389	50	1531	683	346	2121	946
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	0.42	0.42	0.19	0.59	0.59
Sat Flow, veh/h	1092	1623	235	1173	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	200	0	285	77	84	279	33	1548	98	435	1388	84
Grp Sat Flow(s), veh/h/ln	1092	0	1858	1173	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	21.4	0.0	16.5	7.6	4.2	19.1	2.2	51.0	4.5	23.0	31.0	2.7
Cycle Q Clear(g_c), s	25.6	0.0	16.5	24.1	4.2	19.1	2.2	51.0	4.5	23.0	31.0	2.7
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	0	449	182	459	389	50	1531	683	346	2121	946
V/C Ratio(X)	0.70	0.00	0.64	0.42	0.18	0.72	0.66	1.01	0.14	1.26	0.65	0.09
Avail Cap(c_a), veh/h	412	0	664	318	679	576	346	1531	683	346	2121	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	40.9	51.6	36.2	41.8	57.9	34.6	21.2	48.6	16.6	10.8
Incr Delay (d2), s/veh	1.2	0.0	0.6	0.6	0.1	0.9	10.3	25.8	0.2	137.0	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.0	7.6	2.3	2.0	7.7	1.1	25.7	1.6	23.0	11.3	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	0.0	41.4	52.2	36.3	42.8	68.2	60.4	21.4	185.7	17.6	10.9
LnGrp LOS	D	A	D	D	D	D	E	F	C	F	B	B
Approach Vol, veh/h	485			440			1679			1907		
Approach Delay, s/veh	43.9			43.2			58.3			55.7		
Approach LOS	D			D			E			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	37.7	58.5		34.1	8.0	78.2		34.1				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	23	51.0		43.0	* 23	51.0		43.0				
Max Q Clear Time (g_c+25.0), s	25.0	53.0		27.6	4.2	33.0		26.1				
Green Ext Time (p_c), s	0.0	0.0		1.4	0.0	13.6		0.9				

Intersection Summary

HCM 6th Ctrl Delay 54.1
HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Opening Year (2024)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	723	103	0	50	334
Future Vol, veh/h	0	723	103	0	50	334
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	831	118	0	57	384
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	949	118
Stage 1	-	-	-	-	118	-
Stage 2	-	-	-	-	831	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	291	939
Stage 1	0	-	-	0	912	-
Stage 2	0	-	-	0	431	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	291	939
Mov Cap-2 Maneuver	-	-	-	-	291	-
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	431	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		12.7		
HCM LOS	B					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	291	939		
HCM Lane V/C Ratio	-	-	0.197	0.409		
HCM Control Delay (s)	-	-	20.4	11.5		
HCM Lane LOS	-	-	C	B		
HCM 95th %tile Q(veh)	-	-	0.7	2		

HCM 6th TWSC
9: Lassen Road & Driveway A

Opening Year (2024)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	19	0	0	98
Future Vol, veh/h	0	0	19	0	0	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	21	0	0	107
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	128	21	0	0	21	0
Stage 1	21	-	-	-	-	-
Stage 2	107	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	871	1062	-	-	1608	-
Stage 1	1007	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	871	1062	-	-	1608	-
Mov Cap-2 Maneuver	871	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1608	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Opening Year (2024)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	336	346	0
Future Vol, veh/h	0	0	0	336	346	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	365	376	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	741	376	376	0	-	0
Stage 1	376	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	387	675	1194	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	387	675	1194	-	-	-
Mov Cap-2 Maneuver	387	-	-	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1194	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Opening Year (2024)
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	71	0	0	0	16	3	0	0	27	0
Future Vol, veh/h	0	0	71	0	0	0	16	3	0	0	27	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	77	0	0	0	17	3	0	0	29	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	66	66	29	105	66	3	29	0	0	3	0	0
Stage 1	29	29	-	37	37	-	-	-	-	-	-	-
Stage 2	37	37	-	68	29	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	932	829	1052	880	829	1087	1597	-	-	1632	-	-
Stage 1	993	875	-	984	868	-	-	-	-	-	-	-
Stage 2	984	868	-	947	875	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	925	820	1052	809	820	1087	1597	-	-	1632	-	-
Mov Cap-2 Maneuver	925	820	-	809	820	-	-	-	-	-	-	-
Stage 1	982	875	-	973	858	-	-	-	-	-	-	-
Stage 2	973	858	-	878	875	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.7		0			6.1			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1597	-	-	1052	-	1632	-	-				
HCM Lane V/C Ratio	0.011	-	-	0.073	-	-	-	-				
HCM Control Delay (s)	7.3	0	-	8.7	0	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Opening Year (2024)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	336	346	0
Future Vol, veh/h	0	0	0	336	346	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	365	376	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	741	376	376	0	-	0
Stage 1	376	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	387	675	1194	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	387	675	1194	-	-	-
Mov Cap-2 Maneuver	387	-	-	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1194	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	880	207	12	1164	555	205	978	11	388	1221	43
Future Volume (veh/h)	63	880	207	12	1164	555	205	978	11	388	1221	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	66	917	216	12	1212	578	214	1019	11	404	1272	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	21	992	233	133	977	441	156	861	9	284	1087	38
Arrive On Green	0.01	0.34	0.36	0.07	0.40	0.40	0.09	0.24	0.24	0.16	0.31	0.31
Sat Flow, veh/h	1810	2900	682	1810	2418	1091	1810	3658	39	1810	3557	126
Grp Volume(v), veh/h	66	570	563	12	887	903	214	503	527	404	645	672
Grp Sat Flow(s),veh/h/ln	1810	1805	1777	1810	1805	1704	1810	1805	1893	1810	1805	1877
Q Serve(g_s), s	1.6	43.3	43.3	0.9	57.5	57.5	12.3	33.5	33.5	22.3	43.5	43.5
Cycle Q Clear(g_c), s	1.6	43.3	43.3	0.9	57.5	57.5	12.3	33.5	33.5	22.3	43.5	43.5
Prop In Lane	1.00		0.38	1.00		0.64	1.00		0.02	1.00		0.07
Lane Grp Cap(c), veh/h	21	618	608	133	729	688	156	425	446	284	552	574
V/C Ratio(X)	3.18	0.92	0.93	0.09	1.22	1.31	1.37	1.18	1.18	1.43	1.17	1.17
Avail Cap(c_a), veh/h	55	720	709	133	729	688	156	425	446	284	552	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.4	45.0	44.5	61.5	42.4	42.4	65.0	54.4	54.4	60.0	49.4	49.4
Incr Delay (d2), s/veh	1094.8	16.1	16.6	0.2	109.7	150.6	201.1	104.2	103.4	210.6	94.4	94.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	21.1	20.8	0.4	46.1	51.4	14.2	26.9	28.1	26.4	33.1	34.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1165.1	61.1	61.0	61.7	152.1	193.1	266.1	158.6	157.8	270.6	143.8	143.9
LnGrp LOS	F	E	E	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h	1199			1802			1244			1721		
Approach Delay, s/veh	121.9			172.0			176.7			173.6		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	59.2	17.0	51.0	9.3	65.0	27.0	41.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 60	* 12	43.5	7.3	* 58	* 22	33.5				
Max Q Clear Time (g_c+I1), s	2.9	46.3	14.3	45.5	4.6	59.5	24.3	35.5				
Green Ext Time (p_c), s	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			163.4									
HCM 6th LOS			F									
Notes												

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	6	1242	27	344	1695	19	8	2	207	52	2	15
Future Volume (veh/h)	6	1242	27	344	1695	19	8	2	207	52	2	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	7	1461	32	405	1994	22	9	2	244	61	2	18
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	14	1633	36	426	2871	891	52	6	432	56	1	432
Arrive On Green	0.01	0.33	0.33	0.26	0.58	0.58	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1619	4948	108	1619	4914	1525	1	22	1522	1	3	1525
Grp Volume(v), veh/h	7	967	526	405	1994	22	11	0	244	63	0	18
Grp Sat Flow(s), veh/h/ln	1619	1638	1780	1619	1638	1525	24	0	1522	5	0	1525
Q Serve(g_s), s	0.5	35.6	35.6	31.2	36.0	0.8	0.0	0.0	17.4	0.0	0.0	1.1
Cycle Q Clear(g_c), s	0.5	35.6	35.6	31.2	36.0	0.8	36.0	0.0	17.4	36.0	0.0	1.1
Prop In Lane	1.00		0.06	1.00		1.00	0.82		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	14	1081	588	426	2871	891	58	0	432	57	0	432
V/C Ratio(X)	0.50	0.89	0.89	0.95	0.69	0.02	0.19	0.00	0.57	1.10	0.00	0.04
Avail Cap(c_a), veh/h	64	1081	588	439	2871	891	58	0	432	57	0	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.7	40.4	40.4	46.0	18.5	11.1	43.0	0.0	38.8	62.9	0.0	33.0
Incr Delay (d2), s/veh	25.3	11.4	18.7	30.5	1.4	0.1	1.5	0.0	1.7	150.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	15.2	17.7	15.5	12.3	0.2	0.3	0.0	6.7	4.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	88.0	51.8	59.1	76.5	19.9	11.2	44.5	0.0	40.5	213.0	0.0	33.0
LnGrp LOS	F	D	E	E	B	B	D	A	D	F	A	C
Approach Vol, veh/h	1500			2421			255			81		
Approach Delay, s/veh	54.6			29.3			40.7			173.0		
Approach LOS	D			C			D			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	38.0	48.4		40.6	5.7	80.7		40.6				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	34.4	41.9		17.4	5.0	* 72		36.0				
Max Q Clear Time (g_c+Q), s	33.2	37.6		38.0	2.5	38.0		38.0				
Green Ext Time (p_c), s	0.2	3.0		0.0	0.0	18.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay 41.6

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	1124.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	29	119	8	25	71	1160	550	111	1298	29
Future Vol, veh/h	5	0	29	119	8	25	71	1160	550	111	1298	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	-	375	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	92	93	92	93	93	93	93	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	0	32	128	9	27	77	1247	591	119	1396	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2432	3642	1412	3363	3363	919	1428	0	0	1838	0	0
Stage 1	1650	1650	-	1697	1697	-	-	-	-	-	-	-
Stage 2	782	1992	-	1666	1666	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	19	5	171	~ 4	~ 8	277	482	-	-	336	-	-
Stage 1	126	158	-	~ 98	150	-	-	-	-	-	-	-
Stage 2	358	107	-	~ 123	155	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	3	171	~ 2	~ 4	277	482	-	-	336	-	-
Mov Cap-2 Maneuver	-	3	-	~ 2	~ 4	-	-	-	-	-	-	-
Stage 1	106	102	-	~ 82	126	-	-	-	-	-	-	-
Stage 2	253	90	-	~ 65	100	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		\$ 25165.2	0.6	1.7
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	482	-	-	-	171	2	16	336	-	-
HCM Lane V/C Ratio	0.16	-	-	-	0.184	63.978	2.224	0.355	-	-
HCM Control Delay (s)	13.9	-	-	-	\$ 1869.1	\$ 1053.9		21.5	-	-
HCM Lane LOS	B	-	-	-	D	F	F	C	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-	0.7	18.4	5.1	1.6	-	-

Notes										
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
4: Lassen Road & Poplar Street

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	156	418	38	129	187	0	19	0	40	0	0	43
Future Vol, veh/h	156	418	38	129	187	0	19	0	40	0	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	75	75	75	75	92	75	92	75	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	170	557	51	172	249	0	25	0	53	0	0	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	249	0	0	608	0	0	1540	1516	583	1542	1541	249
Stage 1	-	-	-	-	-	-	923	923	-	593	593	-
Stage 2	-	-	-	-	-	-	617	593	-	949	948	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1328	-	-	980	-	-	95	121	516	95	116	795
Stage 1	-	-	-	-	-	-	326	351	-	496	497	-
Stage 2	-	-	-	-	-	-	481	497	-	315	342	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1328	-	-	980	-	-	64	78	516	61	74	795
Mov Cap-2 Maneuver	-	-	-	-	-	-	64	78	-	61	74	-
Stage 1	-	-	-	-	-	-	262	283	-	399	396	-
Stage 2	-	-	-	-	-	-	360	396	-	227	275	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	3.9	48.5	9.8
HCM LOS			E	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	158	1328	-	-	980	-	-	795
HCM Lane V/C Ratio	0.498	0.128	-	-	0.176	-	-	0.059
HCM Control Delay (s)	48.5	8.1	0	-	9.5	0	-	9.8
HCM Lane LOS	E	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	2.4	0.4	-	-	0.6	-	-	0.2

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1	88	302	2	44	25	1694	187	22	1332	79
Future Volume (veh/h)	26	1	88	302	2	44	25	1694	187	22	1332	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	1	96	328	2	48	27	1841	203	24	1448	86
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	433	4	409	352	487	413	45	2061	919	42	2054	916
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.57	0.57	0.02	0.57	0.57
Sat Flow, veh/h	1453	17	1596	1392	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	28	0	97	328	2	48	27	1841	203	24	1448	86
Grp Sat Flow(s),veh/h/ln	1453	0	1613	1392	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	1.7	0.0	5.6	24.4	0.1	2.7	1.7	52.3	7.2	1.5	33.8	2.8
Cycle Q Clear(g_c), s	1.8	0.0	5.6	30.0	0.1	2.7	1.7	52.3	7.2	1.5	33.8	2.8
Prop In Lane	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	433	0	413	352	487	413	45	2061	919	42	2054	916
V/C Ratio(X)	0.06	0.00	0.23	0.93	0.00	0.12	0.60	0.89	0.22	0.57	0.70	0.09
Avail Cap(c_a), veh/h	433	0	413	352	487	413	93	2237	998	77	2206	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	0.0	34.4	47.7	32.4	33.3	56.5	22.0	12.3	56.6	18.1	11.5
Incr Delay (d2), s/veh	0.0	0.0	0.1	30.5	0.0	0.0	4.6	4.8	0.1	4.5	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.2	12.7	0.0	1.1	0.8	20.1	2.3	0.7	12.4	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	0.0	34.5	78.1	32.4	33.4	61.1	26.8	12.4	61.1	19.1	11.5
LnGrp LOS	C	A	C	E	C	C	E	C	B	E	B	B
Approach Vol, veh/h	125			378			2071			1558		
Approach Delay, s/veh	34.2			72.2			25.8			19.3		
Approach LOS	C			E			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	73.3		36.0	7.9	73.1		36.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	5.0	72.5		30.0	6.0	71.5		30.0				
Max Q Clear Time (g_c+I1), s	3.5	54.3		7.6	3.7	35.8		32.0				
Green Ext Time (p_c), s	0.0	12.6		0.4	0.0	12.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				27.9								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	70	17	97	216	501	37	1381	39	224	1330	168
Future Volume (veh/h)	56	70	17	97	216	501	37	1381	39	224	1330	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	61	76	18	105	235	545	40	1501	42	243	1446	183
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	229	489	116	464	625	530	53	1410	629	269	1840	821
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.03	0.39	0.39	0.15	0.51	0.51
Sat Flow, veh/h	743	1485	352	1396	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	61	0	94	105	235	545	40	1501	42	243	1446	183
Grp Sat Flow(s),veh/h/ln	743	0	1837	1396	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	8.9	0.0	4.7	7.5	12.4	43.0	2.9	51.0	2.1	17.2	42.8	8.2
Cycle Q Clear(g_c), s	21.3	0.0	4.7	12.2	12.4	43.0	2.9	51.0	2.1	17.2	42.8	8.2
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	0	605	464	625	530	53	1410	629	269	1840	821
V/C Ratio(X)	0.27	0.00	0.16	0.23	0.38	1.03	0.75	1.06	0.07	0.90	0.79	0.22
Avail Cap(c_a), veh/h	229	0	605	464	625	530	319	1410	629	319	1840	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	0.0	31.0	35.3	33.5	43.8	62.9	39.8	24.9	54.7	26.2	17.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.1	46.5	14.7	43.3	0.1	24.2	2.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.1	2.6	5.8	23.8	1.5	29.4	0.8	9.3	17.3	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	0.0	31.0	35.4	33.7	90.3	77.7	83.1	25.0	78.8	28.9	18.0
LnGrp LOS	D	A	C	D	C	F	E	F	C	E	C	B
Approach Vol, veh/h	155			885			1583			1872		
Approach Delay, s/veh	35.3			68.7			81.5			34.3		
Approach LOS	D			E			F			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.1	58.5		48.0	8.5	74.1		48.0				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	23	51.0		43.0	* 23	51.0		43.0				
Max Q Clear Time (g_c+1/9), s	119.2	53.0		23.3	4.9	44.8		45.0				
Green Ext Time (p_c), s	0.2	0.0		0.6	0.0	5.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay 57.7

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	29.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	306	166	0	12	634
Future Vol, veh/h	0	306	166	0	12	634
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	397	216	0	16	823
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	613	216
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	397	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	459	829
Stage 1	0	-	-	0	825	-
Stage 2	0	-	-	0	683	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	459	829
Mov Cap-2 Maneuver	-	-	-	-	459	-
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	683	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		51.2		
HCM LOS	F					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	459	829		
HCM Lane V/C Ratio	-	-	0.034	0.993		
HCM Control Delay (s)	-	-	13.1	51.9		
HCM Lane LOS	-	-	B	F		
HCM 95th %tile Q(veh)	-	-	0.1	17.2		

HCM 6th TWSC
9: Lassen Road & Driveway A

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	1	98	35	4	47
Future Vol, veh/h	6	1	98	35	4	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	1	107	38	4	51
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	185	126	0	0	145	0
Stage 1	126	-	-	-	-	-
Stage 2	59	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	809	930	-	-	1450	-
Stage 1	905	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	807	930	-	-	1450	-
Mov Cap-2 Maneuver	807	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.4	0	0.6			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	823	1450	-	
HCM Lane V/C Ratio	-	-	0.009	0.003	-	
HCM Control Delay (s)	-	-	9.4	7.5	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	6	32	418	335	7
Future Vol, veh/h	1	6	32	418	335	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	7	35	454	364	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	892	368	372	0	-	0
Stage 1	368	-	-	-	-	-
Stage 2	524	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	315	682	1198	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	303	682	1198	-	-	-
Mov Cap-2 Maneuver	303	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.3	0.6		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1198	-	579	-	-	
HCM Lane V/C Ratio	0.029	-	0.013	-	-	
HCM Control Delay (s)	8.1	0	11.3	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	14	4	0	2	81	50	24	15	25	0
Future Vol, veh/h	0	0	14	4	0	2	81	50	24	15	25	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	15	4	0	2	88	54	26	16	27	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	303	315	27	310	302	67	27	0	0	80	0	0
Stage 1	59	59	-	243	243	-	-	-	-	-	-	-
Stage 2	244	256	-	67	59	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	653	604	1054	646	614	1002	1600	-	-	1531	-	-
Stage 1	958	850	-	765	708	-	-	-	-	-	-	-
Stage 2	764	699	-	948	850	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	618	563	1054	603	572	1002	1600	-	-	1531	-	-
Mov Cap-2 Maneuver	618	563	-	603	572	-	-	-	-	-	-	-
Stage 1	902	841	-	721	667	-	-	-	-	-	-	-
Stage 2	718	658	-	924	841	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	8.5		10.2		3.9		2.8					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1600	-	-	1054	695	1531	-	-				
HCM Lane V/C Ratio	0.055	-	-	0.014	0.009	0.011	-	-				
HCM Control Delay (s)	7.4	0	-	8.5	10.2	7.4	0	-				
HCM Lane LOS	A	A	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0.2	-	-	0	0	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Opening Year (2024) plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	2	12	445	314	27
Future Vol, veh/h	5	2	12	445	314	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	2	13	484	341	29
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	866	356	370	0	-	0
Stage 1	356	-	-	-	-	-
Stage 2	510	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	326	693	1200	-	-	-
Stage 1	713	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	321	693	1200	-	-	-
Mov Cap-2 Maneuver	321	-	-	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.7	0.2		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1200	-	379	-	-	
HCM Lane V/C Ratio	0.011	-	0.02	-	-	
HCM Control Delay (s)	8	0	14.7	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1293	188	14	939	438	267	1391	36	618	1067	62
Future Volume (veh/h)	61	1293	188	14	939	438	267	1391	36	618	1067	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	64	1361	198	15	988	461	281	1464	38	651	1123	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	20	968	140	42	764	350	278	1041	27	345	1133	66
Arrive On Green	0.01	0.31	0.33	0.02	0.32	0.32	0.15	0.29	0.29	0.19	0.33	0.33
Sat Flow, veh/h	1810	3166	457	1810	2405	1101	1810	3595	93	1810	3468	201
Grp Volume(v), veh/h	64	771	788	15	737	712	281	734	768	651	584	604
Grp Sat Flow(s),veh/h/ln	1810	1805	1818	1810	1805	1702	1810	1805	1883	1810	1805	1864
Q Serve(g_s), s	1.6	43.8	43.8	1.2	45.5	45.5	22.0	41.5	41.5	27.3	46.2	46.2
Cycle Q Clear(g_c), s	1.6	43.8	43.8	1.2	45.5	45.5	22.0	41.5	41.5	27.3	46.2	46.2
Prop In Lane	1.00		0.25	1.00		0.65	1.00		0.05	1.00		0.11
Lane Grp Cap(c), veh/h	20	552	556	42	573	540	278	523	545	345	589	609
V/C Ratio(X)	3.15	1.40	1.42	0.36	1.29	1.32	1.01	1.40	1.41	1.89	0.99	0.99
Avail Cap(c_a), veh/h	42	552	556	63	573	540	278	523	545	345	589	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.8	49.8	49.4	69.0	48.9	48.9	60.7	50.9	50.9	58.0	48.0	48.1
Incr Delay (d2), s/veh	1083.8	189.4	199.0	3.8	141.3	155.9	57.0	193.3	194.4	410.6	34.7	34.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	47.8	49.5	0.6	41.9	41.7	14.1	45.9	48.1	51.3	25.4	26.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1154.6	239.1	248.4	72.8	190.2	204.9	117.6	244.2	245.3	468.7	82.8	82.4
LnGrp LOS	F	F	F	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h	1623			1464			1783			1839		
Approach Delay, s/veh	279.7			196.1			224.7			219.3		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	54.3	26.7	54.3	9.3	53.0	32.0	49.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 47	* 22	46.8	6.3	* 46	* 27	41.5				
Max Q Clear Time (g_c+I1), s	3.2	46.8	24.0	48.2	4.6	47.5	29.3	43.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 230.3
HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	6	1929	13	152	1332	60	63	8	360	34	0	3
Future Volume (veh/h)	6	1929	13	152	1332	60	63	8	360	34	0	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	6	2009	14	158	1388	62	66	8	375	35	0	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	12	2205	15	182	2669	828	59	4	477	62	0	478
Arrive On Green	0.01	0.44	0.44	0.11	0.54	0.54	0.31	0.31	0.31	0.31	0.00	0.31
Sat Flow, veh/h	1619	5035	35	1619	4914	1525	0	12	1523	0	0	1525
Grp Volume(v), veh/h	6	1307	716	158	1388	62	74	0	375	35	0	3
Grp Sat Flow(s), veh/h/ln	1619	1638	1794	1619	1638	1525	12	0	1523	0	0	1525
Q Serve(g_s), s	0.4	43.0	43.0	11.1	20.7	2.2	0.0	0.0	25.9	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.4	43.0	43.0	11.1	20.7	2.2	36.1	0.0	25.9	36.1	0.0	0.2
Prop In Lane	1.00		0.02	1.00		1.00	0.89		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	1435	786	182	2669	828	63	0	477	62	0	478
V/C Ratio(X)	0.49	0.91	0.91	0.87	0.52	0.07	1.18	0.00	0.79	0.56	0.00	0.01
Avail Cap(c_a), veh/h	70	1435	786	184	2669	828	63	0	477	62	0	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	30.3	30.3	50.3	16.8	12.5	55.5	0.0	36.1	57.6	0.0	27.2
Incr Delay (d2), s/veh	27.1	10.2	16.6	32.4	0.7	0.2	169.3	0.0	8.5	10.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	17.2	20.3	5.9	7.0	0.7	4.8	0.0	10.6	1.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	84.1	40.5	46.9	82.7	17.5	12.7	224.8	0.0	44.6	68.5	0.0	27.3
LnGrp LOS	F	D	D	F	B	B	F	A	D	E	A	C
Approach Vol, veh/h	2029			1608			449			38		
Approach Delay, s/veh	42.9			23.7			74.3			65.2		
Approach LOS	D			C			E			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	57.0		40.7	5.5	69.1		40.7				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	50.5			10.0	5.0	* 59		36.1				
Max Q Clear Time (g_c+11.3), s	45.0			38.1	2.4	22.7		38.1				
Green Ext Time (p_c), s	0.0	4.5		0.0	0.0	11.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay 39.0

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	4993											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	0	56	438	0	91	5	1579	150	42	1212	15
Future Vol, veh/h	25	0	56	438	0	91	5	1579	150	42	1212	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	-	375	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	98	92	98	92	98	98	98	98	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	0	61	447	0	93	5	1611	153	43	1237	16

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2147	3105	1245	3060	3037	882	1253	0	0	1764	0	0
Stage 1	1331	1331	-	1698	1698	-	-	-	-	-	-	-
Stage 2	816	1774	-	1362	1339	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	32	12	214	~ 7	13	293	562	-	-	359	-	-
Stage 1	192	226	-	~ 98	150	-	-	-	-	-	-	-
Stage 2	341	137	-	~ 185	224	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 20	10	214	~ 5	11	293	562	-	-	359	-	-
Mov Cap-2 Maneuver	~ 20	10	-	~ 5	11	-	-	-	-	-	-	-
Stage 1	190	199	-	~ 97	149	-	-	-	-	-	-	-
Stage 2	231	136	-	~ 117	197	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	207	\$ 34128.9	0	0.5
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	562	-	-	20	214	5	293	359	-	-
HCM Lane V/C Ratio	0.01	-	-	1.359	0.284	89.388	0.317	0.119	-	-
HCM Control Delay (s)	11.5	-	-	\$ 607.1	2\$ 41214.8	22.9	16.4	-	-	-
HCM Lane LOS	B	-	-	F	D	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	3.7	1.1	58.1	1.3	0.4	-	-

Notes										
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined						*: All major volume in platoon		

HCM 6th TWSC
4: Lassen Road & Poplar Street

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	209	24	72	315	0	27	0	136	0	0	153
Future Vol, veh/h	32	209	24	72	315	0	27	0	136	0	0	153
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	36	232	27	80	350	0	30	0	151	0	0	170
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	350	0	0	259	0	0	913	828	246	903	841	350
Stage 1	-	-	-	-	-	-	318	318	-	510	510	-
Stage 2	-	-	-	-	-	-	595	510	-	393	331	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1220	-	-	1317	-	-	256	309	798	260	303	698
Stage 1	-	-	-	-	-	-	698	657	-	550	541	-
Stage 2	-	-	-	-	-	-	494	541	-	636	649	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1220	-	-	1317	-	-	178	276	798	193	271	698
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	276	-	193	271	-
Stage 1	-	-	-	-	-	-	674	634	-	531	500	-
Stage 2	-	-	-	-	-	-	346	500	-	498	626	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.5			16			11.8		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	506	1220	-	-	1317	-	-	698				
HCM Lane V/C Ratio	0.358	0.029	-	-	0.061	-	-	0.244				
HCM Control Delay (s)	16	8	0	-	7.9	0	-	11.8				
HCM Lane LOS	C	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	1.6	0.1	-	-	0.2	-	-	1				

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	1	64	233	4	35	36	1644	286	36	1627	62
Future Volume (veh/h)	38	1	64	233	4	35	36	1644	286	36	1627	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	1	65	238	4	36	37	1678	292	37	1660	63
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	403	5	350	350	418	355	61	1966	877	61	1966	877
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	0.54	0.54	0.03	0.54	0.54
Sat Flow, veh/h	1466	24	1589	1432	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	39	0	66	238	4	36	37	1678	292	37	1660	63
Grp Sat Flow(s),veh/h/ln	1466	0	1614	1432	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	1.9	0.0	2.9	14.1	0.1	1.6	1.8	34.4	8.8	1.8	33.7	1.6
Cycle Q Clear(g_c), s	2.0	0.0	2.9	17.0	0.1	1.6	1.8	34.4	8.8	1.8	33.7	1.6
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	0	355	350	418	355	61	1966	877	61	1966	877
V/C Ratio(X)	0.10	0.00	0.19	0.68	0.01	0.10	0.60	0.85	0.33	0.60	0.84	0.07
Avail Cap(c_a), veh/h	468	0	427	414	502	426	478	2199	981	478	2199	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	0.0	27.6	34.5	26.5	27.1	41.5	16.9	11.0	41.5	16.7	9.4
Incr Delay (d2), s/veh	0.0	0.0	0.1	2.3	0.0	0.0	3.5	3.2	0.2	3.5	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.1	5.0	0.1	0.6	0.8	11.8	2.6	0.8	11.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	0.0	27.7	36.8	26.5	27.1	44.9	20.0	11.2	44.9	19.6	9.4
LnGrp LOS	C	A	C	D	C	C	D	C	B	D	B	A
Approach Vol, veh/h	105			278			2007			1760		
Approach Delay, s/veh	27.5			35.4			19.2			19.8		
Approach LOS	C			D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	53.9		25.2	8.0	53.9		25.2				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	23.0	53.0		23.0	23.0	53.0		23.0				
Max Q Clear Time (g_c+I1), s	3.8	36.4		4.9	3.8	35.7		19.0				
Green Ext Time (p_c), s	0.0	11.0		0.2	0.0	10.5		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	20.8											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	242	35	75	81	280	32	1510	95	463	1382	81
Future Volume (veh/h)	194	242	35	75	81	280	32	1510	95	463	1382	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	200	249	36	77	84	289	33	1557	98	477	1425	84
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	285	395	57	184	462	391	50	1528	682	345	2117	944
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	0.42	0.42	0.19	0.59	0.59
Sat Flow, veh/h	1082	1623	235	1173	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	200	0	285	77	84	289	33	1557	98	477	1425	84
Grp Sat Flow(s), veh/h/ln	1082	0	1858	1173	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	21.6	0.0	16.5	7.6	4.2	19.9	2.2	51.0	4.5	23.0	32.5	2.7
Cycle Q Clear(g_c), s	25.8	0.0	16.5	24.1	4.2	19.9	2.2	51.0	4.5	23.0	32.5	2.7
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	0	452	184	462	391	50	1528	682	345	2117	944
V/C Ratio(X)	0.70	0.00	0.63	0.42	0.18	0.74	0.66	1.02	0.14	1.38	0.67	0.09
Avail Cap(c_a), veh/h	408	0	663	318	678	575	345	1528	682	345	2117	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	40.8	51.5	36.1	42.1	58.0	34.7	21.3	48.7	17.0	10.9
Incr Delay (d2), s/veh	1.2	0.0	0.5	0.6	0.1	1.1	10.3	27.9	0.2	188.6	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.0	7.6	2.3	2.0	8.0	1.1	26.2	1.6	28.0	11.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	0.0	41.3	52.1	36.2	43.2	68.3	62.7	21.5	237.4	18.2	11.0
LnGrp LOS	D	A	D	D	D	D	E	F	C	F	B	B
Approach Vol, veh/h	485			450			1688			1986		
Approach Delay, s/veh	43.9			43.4			60.4			70.5		
Approach LOS	D			D			E			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	37.7	58.5		34.3	8.0	78.2		34.3				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	23	51.0		43.0	* 23	51.0		43.0				
Max Q Clear Time (g_c+Y), s	25.0	53.0		27.8	4.2	34.5		26.1				
Green Ext Time (p_c), s	0.0	0.0		1.4	0.0	12.9		0.9				

Intersection Summary

HCM 6th Ctrl Delay 61.3

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	764	107	0	50	339
Future Vol, veh/h	0	764	107	0	50	339
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	878	123	0	57	390
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	1001	123
Stage 1	-	-	-	-	123	-
Stage 2	-	-	-	-	878	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	271	933
Stage 1	0	-	-	0	907	-
Stage 2	0	-	-	0	410	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	271	933
Mov Cap-2 Maneuver	-	-	-	-	271	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	410	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		12.9		
HCM LOS				B		
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	271	933		
HCM Lane V/C Ratio	-	-	0.212	0.418		
HCM Control Delay (s)	-	-	21.8	11.6		
HCM Lane LOS	-	-	C	B		
HCM 95th %tile Q(veh)	-	-	0.8	2.1		

HCM 6th TWSC
9: Lassen Road & Driveway A

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	4	33	7	1	101
Future Vol, veh/h	32	4	33	7	1	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	35	4	36	8	1	110
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	152	40	0	0	44	0
Stage 1	40	-	-	-	-	-
Stage 2	112	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	844	1037	-	-	1577	-
Stage 1	988	-	-	-	-	-
Stage 2	918	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	843	1037	-	-	1577	-
Mov Cap-2 Maneuver	843	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	917	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.4	0		0.1		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	861		1577	-	
HCM Lane V/C Ratio	-	0.045		0.001	-	
HCM Control Delay (s)	-	9.4		7.3	0	
HCM Lane LOS	-	A		A	A	
HCM 95th %tile Q(veh)	-	0.1		0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	29	7	362	352	1
Future Vol, veh/h	6	29	7	362	352	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	32	8	393	383	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	793	384	384	0	-	0
Stage 1	384	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	360	668	1186	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	357	668	1186	-	-	-
Mov Cap-2 Maneuver	357	-	-	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.6	0.2		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1186	-	581	-	-	
HCM Lane V/C Ratio	0.006	-	0.065	-	-	
HCM Control Delay (s)	8.1	0	11.6	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	71	23	0	14	16	10	5	3	59	0
Future Vol, veh/h	0	0	71	23	0	14	16	10	5	3	59	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	77	25	0	15	17	11	5	3	64	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	125	120	64	157	118	14	64	0	0	16	0	0
Stage 1	70	70	-	48	48	-	-	-	-	-	-	-
Stage 2	55	50	-	109	70	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	854	774	1006	814	776	1072	1551	-	-	1615	-	-
Stage 1	945	841	-	971	859	-	-	-	-	-	-	-
Stage 2	962	857	-	901	841	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	834	764	1006	744	766	1072	1551	-	-	1615	-	-
Mov Cap-2 Maneuver	834	764	-	744	766	-	-	-	-	-	-	-
Stage 1	935	839	-	960	850	-	-	-	-	-	-	-
Stage 2	938	848	-	830	839	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.9		9.5			3.8			0.4			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1551	-	-	1006	841	1615	-	-				
HCM Lane V/C Ratio	0.011	-	-	0.077	0.048	0.002	-	-				
HCM Control Delay (s)	7.3	0	-	8.9	9.5	7.2	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Opening Year (2024) plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	11	2	343	375	6
Future Vol, veh/h	26	11	2	343	375	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	12	2	373	408	7
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	789	412	415	0	-	0
Stage 1	412	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	362	644	1155	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	361	644	1155	-	-	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	672	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.6	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1155	-	415	-	-	
HCM Lane V/C Ratio	0.002	-	0.097	-	-	
HCM Control Delay (s)	8.1	0	14.6	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.3	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Horizon Year (2040)

Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	97	981	354	21	1201	622	206	1092	10	365	2619	45
Future Volume (veh/h)	97	981	354	21	1201	622	206	1092	10	365	2619	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	1033	373	22	1264	655	217	1149	11	384	2757	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	33	833	297	42	768	367	117	1342	13	181	1457	25
Arrive On Green	0.02	0.32	0.34	0.02	0.32	0.32	0.06	0.37	0.37	0.10	0.40	0.40
Sat Flow, veh/h	1810	2607	930	1810	2369	1133	1810	3664	35	1810	3632	62
Grp Volume(v), veh/h	102	711	695	22	938	981	217	566	594	384	1366	1438
Grp Sat Flow(s),veh/h/ln	1810	1805	1733	1810	1805	1696	1810	1805	1894	1810	1805	1889
Q Serve(g_s), s	2.7	45.8	45.8	1.7	46.5	46.5	9.3	41.5	41.5	14.3	57.5	57.5
Cycle Q Clear(g_c), s	2.7	45.8	45.8	1.7	46.5	46.5	9.3	41.5	41.5	14.3	57.5	57.5
Prop In Lane	1.00		0.54	1.00		0.67	1.00		0.02	1.00		0.03
Lane Grp Cap(c), veh/h	33	577	554	42	585	550	117	661	694	181	724	758
V/C Ratio(X)	3.05	1.23	1.26	0.52	1.60	1.78	1.85	0.86	0.86	2.13	1.89	1.90
Avail Cap(c_a), veh/h	54	577	554	63	585	550	117	661	694	181	724	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.3	48.8	48.0	69.2	48.4	48.4	67.0	41.9	41.9	64.5	42.9	42.9
Incr Delay (d2), s/veh	994.4	119.5	129.1	7.1	278.9	359.6	412.7	10.9	10.5	525.5	404.3	409.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	38.7	38.5	0.9	65.2	73.6	17.6	19.5	20.4	32.7	105.3	111.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1064.8	168.3	177.0	76.3	327.3	408.1	479.8	52.9	52.4	590.0	447.2	452.0
LnGrp LOS	F	F	F	E	F	F	F	D	D	F	F	F
Approach Vol, veh/h	1508			1941			1377			3188		
Approach Delay, s/veh	232.9			365.3			120.0			466.6		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	56.3	14.0	65.0	10.3	54.0	19.0	60.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 49	* 9.3	57.5	7.3	* 47	* 14	52.5				
Max Q Clear Time (g_c+I1), s	3.7	48.8	11.3	59.5	5.7	48.5	16.3	43.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9				

Intersection Summary

HCM 6th Ctrl Delay 338.5

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Horizon Year (2040)
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	5	1106	0	276	1613	21	3	2	87	49	2	17
Future Volume (veh/h)	5	1106	0	276	1613	21	3	2	87	49	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	5	1164	0	291	1698	22	3	2	92	52	2	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	10	1601	0	325	2556	793	83	37	408	114	3	409
Arrive On Green	0.01	0.33	0.00	0.20	0.52	0.52	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1619	5076	0	1619	4914	1525	30	137	1522	79	10	1525
Grp Volume(v), veh/h	5	1164	0	291	1698	22	5	0	92	54	0	18
Grp Sat Flow(s), veh/h/ln	1619	1638	0	1619	1638	1525	166	0	1522	89	0	1525
Q Serve(g_s), s	0.2	16.0	0.0	13.4	19.4	0.5	0.1	0.0	3.6	1.3	0.0	0.7
Cycle Q Clear(g_c), s	0.2	16.0	0.0	13.4	19.4	0.5	19.9	0.0	3.6	20.5	0.0	0.7
Prop In Lane	1.00		0.00	1.00		1.00	0.60		1.00	0.96		1.00
Lane Grp Cap(c), veh/h	10	1601	0	325	2556	793	120	0	408	116	0	409
V/C Ratio(X)	0.48	0.73	0.00	0.89	0.66	0.03	0.04	0.00	0.23	0.46	0.00	0.04
Avail Cap(c_a), veh/h	106	1601	0	398	2556	793	434	0	717	116	0	409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.8	22.8	0.0	29.8	13.4	8.9	22.8	0.0	21.8	37.3	0.0	20.7
Incr Delay (d2), s/veh	30.2	2.9	0.0	19.3	1.4	0.1	0.1	0.0	0.3	2.9	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	5.7	0.0	6.3	5.7	0.2	0.1	0.0	1.3	1.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.0	25.7	0.0	49.1	14.8	9.0	22.9	0.0	22.1	40.2	0.0	20.8
LnGrp LOS	E	C	A	D	B	A	C	A	C	D	A	C
Approach Vol, veh/h	1169			2011			97			72		
Approach Delay, s/veh	25.9			19.7			22.1			35.3		
Approach LOS	C			B			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.1	31.4		25.7	5.1	46.4		25.7				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	30.8	24.9		10.0	5.0	* 39		36.0				
Max Q Clear Time (g_c+1/5.4), s	11.4	18.0		22.5	2.2	21.4		21.9				
Green Ext Time (p_c), s	0.3	3.8		0.0	0.0	10.3		0.2				

Intersection Summary

HCM 6th Ctrl Delay 22.3
HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Horizon Year (2040)
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	11.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↕		↰	↱	
Traffic Vol, veh/h	5	0	29	329	0	459	71	1131	467	433	2255	29
Future Vol, veh/h	5	0	29	329	0	459	71	1131	467	433	2255	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	375	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	95	92	95	92	95	95	95	95	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	0	32	346	0	483	77	1191	492	456	2374	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4052	5139	2390	4909	4909	842	2406	0	0	1683	0	0
Stage 1	3302	3302	-	1591	1591	-	-	-	-	-	-	-
Stage 2	750	1837	-	3318	3318	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 1	0	44	0	1	~ 312	202	-	-	~ 385	-	-
Stage 1	13	22	-	~ 114	169	-	-	-	-	-	-	-
Stage 2	374	128	-	~ 12	21	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	44	-	0	~ 312	202	-	-	~ 385	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	13	0	-	~ 114	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.5	21.9
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	202	-	-	-	44	-	312	~ 385	-	-
HCM Lane V/C Ratio	0.382	-	-	-	0.716	-	1.549	1.184	-	-
HCM Control Delay (s)	33.4	-	-	-	197.5	-	292.5	137.5	-	-
HCM Lane LOS	D	-	-	-	F	-	F	F	-	-
HCM 95th %tile Q(veh)	1.7	-	-	-	2.7	-	27.9	18.2	-	-

Notes										
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon							

HCM 6th TWSC
4: Lassen Road & Poplar Street

Horizon Year (2040)
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	7243.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	214	504	416	404	278	0	417	0	197	0	0	60
Future Vol, veh/h	214	504	416	404	278	0	417	0	197	0	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	225	531	438	425	293	0	439	0	207	0	0	63

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	293	0	0	969	0	0	2375	2343	750	2447	2562	293
Stage 1	-	-	-	-	-	-	1200	1200	-	1143	1143	-
Stage 2	-	-	-	-	-	-	1175	1143	-	1304	1419	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1280	-	-	719	-	-	~ 24	37	415	22	27	751
Stage 1	-	-	-	-	-	-	~ 228	261	-	246	277	-
Stage 2	-	-	-	-	-	-	~ 236	277	-	199	205	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1280	-	-	719	-	-	~ 7	6	415	3	5	751
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 7	6	-	3	5	-
Stage 1	-	-	-	-	-	-	~ 131	150	-	141	81	-
Stage 2	-	-	-	-	-	-	~ 64	81	-	57	118	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	10.1	\$ 29360.3	10.2
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	10	1280	-	-	719	-	-	751
HCM Lane V/C Ratio	64.632	0.176	-	-	0.591	-	-	0.084
HCM Control Delay (s)	\$ 29360.3	8.4	0	-	17	0	-	10.2
HCM Lane LOS	F	A	A	-	C	A	-	B
HCM 95th %tile Q(veh)	82.5	0.6	-	-	3.9	-	-	0.3

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Horizon Year (2040)

Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	11	83	237	2	56	31	2025	315	178	2085	123
Future Volume (veh/h)	36	11	83	237	2	56	31	2025	315	178	2085	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	12	87	249	2	59	33	2132	332	187	2195	129
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	308	35	256	227	338	286	48	2126	948	188	2405	1073
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.03	0.59	0.59	0.10	0.67	0.67
Sat Flow, veh/h	1438	199	1442	1390	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	38	0	99	249	2	59	33	2132	332	187	2195	129
Grp Sat Flow(s),veh/h/ln	1438	0	1641	1390	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	3.0	0.0	7.1	16.9	0.1	4.2	2.4	79.5	14.4	13.9	69.9	3.9
Cycle Q Clear(g_c), s	3.1	0.0	7.1	24.0	0.1	4.2	2.4	79.5	14.4	13.9	69.9	3.9
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	0	292	227	338	286	48	2126	948	188	2405	1073
V/C Ratio(X)	0.12	0.00	0.34	1.10	0.01	0.21	0.69	1.00	0.35	1.00	0.91	0.12
Avail Cap(c_a), veh/h	308	0	292	227	338	286	67	2126	948	188	2405	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	0.0	48.6	61.0	45.7	47.4	65.2	27.8	14.4	60.5	19.2	8.2
Incr Delay (d2), s/veh	0.1	0.0	0.3	88.0	0.0	0.1	6.6	20.2	0.2	64.6	5.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.0	13.4	0.1	1.7	1.2	35.4	4.8	9.5	25.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.0	0.0	48.8	149.1	45.7	47.5	71.7	48.0	14.6	125.1	25.0	8.2
LnGrp LOS	D	A	D	F	D	D	E	F	B	F	C	A
Approach Vol, veh/h	137			310			2497			2511		
Approach Delay, s/veh	48.3			129.1			43.8			31.6		
Approach LOS	D			F			D			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	86.0		30.0	8.5	96.5		30.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	14.0	79.5		24.0	5.0	88.5		24.0				
Max Q Clear Time (g_c+I1), s	15.9	81.5		9.1	4.4	71.9		26.0				
Green Ext Time (p_c), s	0.0	0.0		0.3	0.0	13.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				43.2								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Horizon Year (2040)

Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	85	13	76	202	453	56	1794	94	261	1888	485
Future Volume (veh/h)	82	85	13	76	202	453	56	1794	94	261	1888	485
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	89	14	80	213	477	59	1888	99	275	1987	511
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	205	453	71	383	537	455	66	1681	750	241	2029	905
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.04	0.47	0.47	0.13	0.56	0.56
Sat Flow, veh/h	808	1603	252	1385	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	86	0	103	80	213	477	59	1888	99	275	1987	511
Grp Sat Flow(s), veh/h/ln	808	0	1855	1385	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	14.0	0.0	6.1	6.8	13.1	41.0	4.7	67.5	5.1	19.3	77.7	29.5
Cycle Q Clear(g_c), s	27.1	0.0	6.1	12.9	13.1	41.0	4.7	67.5	5.1	19.3	77.7	29.5
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	0	524	383	537	455	66	1681	750	241	2029	905
V/C Ratio(X)	0.42	0.00	0.20	0.21	0.40	1.05	0.89	1.12	0.13	1.14	0.98	0.56
Avail Cap(c_a), veh/h	205	0	524	383	537	455	66	1681	750	241	2029	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	0.0	39.5	44.4	42.0	52.0	69.6	38.8	22.1	62.8	30.9	20.4
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.1	0.2	55.2	73.3	64.0	0.2	101.6	15.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	2.8	2.4	6.3	23.5	3.5	42.5	1.9	15.4	34.5	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	0.0	39.6	44.5	42.2	107.2	142.9	102.8	22.2	164.4	46.4	21.7
LnGrp LOS	D	A	D	D	D	F	F	F	C	F	D	C
Approach Vol, veh/h	189			770			2046			2773		
Approach Delay, s/veh	45.9			82.7			100.0			53.5		
Approach LOS	D			F			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.0	75.0		46.0	10.0	89.0		46.0				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	19.0	67.5		41.0	* 5.3	81.5		41.0				
Max Q Clear Time (g_c+Y), s	11.3	69.5		29.1	6.7	79.7		43.0				
Green Ext Time (p_c), s	0.0	0.0		0.5	0.0	1.7		0.0				

Intersection Summary

HCM 6th Ctrl Delay 73.6

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Horizon Year (2040)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	13.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↘	↗
Traffic Vol, veh/h	0	347	18	0	17	808
Future Vol, veh/h	0	347	18	0	17	808
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	365	19	0	18	851
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	384	19
Stage 1	-	-	-	-	19	-
Stage 2	-	-	-	-	365	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	623	1065
Stage 1	0	-	-	0	1009	-
Stage 2	0	-	-	0	707	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	623	1065
Mov Cap-2 Maneuver	-	-	-	-	623	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	707	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		20		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	623	1065		
HCM Lane V/C Ratio	-	-	0.029	0.799		
HCM Control Delay (s)	-	-	10.9	20.2		
HCM Lane LOS	-	-	B	C		
HCM 95th %tile Q(veh)	-	-	0.1	8.9		

HCM 6th TWSC
9: Lassen Road & Driveway A

Horizon Year (2040)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	214	0	0	60
Future Vol, veh/h	0	0	214	0	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	225	0	0	63
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	288	225	0	0	225	0
Stage 1	225	-	-	-	-	-
Stage 2	63	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	707	819	-	-	1356	-
Stage 1	817	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	707	819	-	-	1356	-
Mov Cap-2 Maneuver	707	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1356	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Horizon Year (2040)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	701	682	0
Future Vol, veh/h	0	0	0	701	682	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	738	718	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1456	718	718	0	-	0
Stage 1	718	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	144	432	892	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	144	432	892	-	-	-
Mov Cap-2 Maneuver	144	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	892	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Horizon Year (2040)
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	14	0	0	0	81	158	0	0	52	0
Future Vol, veh/h	0	0	14	0	0	0	81	158	0	0	52	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	15	0	0	0	85	166	0	0	55	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	391	391	55	399	391	166	55	0	0	166	0	0
Stage 1	55	55	-	336	336	-	-	-	-	-	-	-
Stage 2	336	336	-	63	55	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	572	548	1018	565	548	884	1563	-	-	1424	-	-
Stage 1	962	853	-	682	645	-	-	-	-	-	-	-
Stage 2	682	645	-	953	853	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	546	515	1018	531	515	884	1563	-	-	1424	-	-
Mov Cap-2 Maneuver	546	515	-	531	515	-	-	-	-	-	-	-
Stage 1	904	853	-	641	606	-	-	-	-	-	-	-
Stage 2	641	606	-	939	853	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	8.6		0		2.5		0					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1563	-	-	1018	-	1424	-	-				
HCM Lane V/C Ratio	0.055	-	-	0.014	-	-	-	-				
HCM Control Delay (s)	7.4	0	-	8.6	0	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0.2	-	-	0	-	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Horizon Year (2040)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	701	682	0
Future Vol, veh/h	0	0	0	701	682	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	738	718	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1456	718	718	0	-	0
Stage 1	718	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	144	432	892	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	144	432	892	-	-	-
Mov Cap-2 Maneuver	144	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	892	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Horizon Year (2040)

Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1050	165	11	685	344	402	2621	81	635	1455	91
Future Volume (veh/h)	50	1050	165	11	685	344	402	2621	81	635	1455	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	1105	174	12	721	362	423	2759	85	668	1532	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	755	119	51	606	304	180	1402	43	267	1521	95
Arrive On Green	0.01	0.24	0.26	0.03	0.26	0.26	0.10	0.39	0.39	0.15	0.44	0.44
Sat Flow, veh/h	1810	3126	491	1810	2328	1167	1810	3576	110	1810	3451	215
Grp Volume(v), veh/h	53	637	642	12	559	524	423	1386	1458	668	798	830
Grp Sat Flow(s),veh/h/ln	1810	1805	1812	1810	1805	1690	1810	1805	1880	1810	1805	1861
Q Serve(g_s), s	1.4	34.8	34.8	0.9	37.5	37.5	14.3	56.5	56.5	21.3	63.5	63.5
Cycle Q Clear(g_c), s	1.4	34.8	34.8	0.9	37.5	37.5	14.3	56.5	56.5	21.3	63.5	63.5
Prop In Lane	1.00		0.27	1.00		0.69	1.00		0.06	1.00		0.12
Lane Grp Cap(c), veh/h	18	436	438	51	470	440	180	708	737	267	795	820
V/C Ratio(X)	3.01	1.46	1.47	0.23	1.19	1.19	2.36	1.96	1.98	2.50	1.00	1.01
Avail Cap(c_a), veh/h	29	436	438	63	470	440	180	708	737	267	795	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.4	54.7	54.2	68.5	53.3	53.3	64.9	43.8	43.8	61.4	40.3	40.3
Incr Delay (d2), s/veh	1039.4	219.8	222.7	1.7	105.0	106.8	627.0	436.1	445.1	684.9	32.6	34.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	41.8	42.2	0.4	30.0	28.3	37.7	109.4	115.8	60.3	33.4	34.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1110.8	274.4	276.9	70.2	158.3	160.1	691.9	479.9	488.9	746.3	72.9	74.8
LnGrp LOS	F	F	F	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h	1332			1095			3267			2296		
Approach Delay, s/veh	308.9			158.2			511.4			269.5		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	45.3	19.0	71.0	9.1	45.0	26.0	64.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 38	* 14	63.5	5.3	* 38	* 21	56.5				
Max Q Clear Time (g_c+l1), s	2.9	37.8	16.3	65.5	4.4	39.5	23.3	58.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 359.7

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Horizon Year (2040)
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	9	1848	10	138	1255	55	25	10	296	32	1	3
Future Volume (veh/h)	9	1848	10	138	1255	55	25	10	296	32	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	9	1945	11	145	1321	58	26	11	312	34	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	2235	13	169	2639	819	54	13	480	62	1	481
Arrive On Green	0.01	0.44	0.44	0.10	0.54	0.54	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1619	5042	29	1619	4914	1525	0	42	1523	0	3	1525
Grp Volume(v), veh/h	9	1264	692	145	1321	58	37	0	312	35	0	3
Grp Sat Flow(s), veh/h/ln	1619	1638	1795	1619	1638	1525	43	0	1523	3	0	1525
Q Serve(g_s), s	0.6	40.0	40.1	10.1	19.5	2.1	0.0	0.0	20.2	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.6	40.0	40.1	10.1	19.5	2.1	36.1	0.0	20.2	36.1	0.0	0.2
Prop In Lane	1.00		0.02	1.00		1.00	0.70		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	18	1452	796	169	2639	819	67	0	480	63	0	481
V/C Ratio(X)	0.51	0.87	0.87	0.86	0.50	0.07	0.55	0.00	0.65	0.56	0.00	0.01
Avail Cap(c_a), veh/h	71	1452	796	181	2639	819	67	0	480	63	0	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.4	28.9	28.9	50.4	16.8	12.8	44.5	0.0	33.8	56.3	0.0	26.9
Incr Delay (d2), s/veh	21.1	7.4	12.5	29.8	0.7	0.2	9.4	0.0	3.1	10.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.4	15.6	18.2	5.3	6.6	0.7	1.2	0.0	7.8	1.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	77.5	36.3	41.4	80.2	17.5	12.9	53.9	0.0	36.9	66.6	0.0	26.9
LnGrp LOS	E	D	D	F	B	B	D	A	D	E	A	C
Approach Vol, veh/h	1965			1524			349			38		
Approach Delay, s/veh	38.3			23.3			38.7			63.5		
Approach LOS	D			C			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	57.3		40.7	5.8	68.0		40.7				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	12.8	50.8		10.0	5.0	* 59		36.1				
Max Q Clear Time (g_c+1/2, s)	12.8	42.1		38.1	2.6	21.5		38.1				
Green Ext Time (p_c), s	0.0	6.6		0.0	0.0	10.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay 32.7
HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Horizon Year (2040)
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	111											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	0	56	443	0	397	37	2742	180	418	1136	15
Future Vol, veh/h	25	0	56	443	0	397	37	2742	180	418	1136	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	-	375	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	95	92	95	92	95	95	95	95	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	0	61	466	0	418	40	2886	189	440	1196	16

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3607	5239	1204	5176	5153	1538	1212	0	0	3075	0	0
Stage 1	2084	2084	-	3061	3061	-	-	-	-	-	-	-
Stage 2	1523	3155	-	2115	2092	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 2	0	227	0	0	~ 107	583	-	-	~ 109	-	-
Stage 1	70	96	-	~ 13	29	-	-	-	-	-	-	-
Stage 2	126	26	-	~ 67	95	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	0	227	-	0	~ 107	583	-	-	~ 109	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	65	0	-	~ 12	27	-	-	-	-	-	-	-
Stage 2	-	24	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.2	\$ 385.4
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	583	-	-	-	227	-	107	~ 109	-	-
HCM Lane V/C Ratio	0.069	-	-	-	0.268	-	3.906	4.037	-	-
HCM Control Delay (s)	11.6	-	-	-	26.6	\$ 1389.9	\$ 1447.1	-	-	-
HCM Lane LOS	B	-	-	-	D	-	F	F	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-	1	-	42.5	45	-	-

Notes										
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined						*: All major volume in platoon		

HCM 6th TWSC
4: Lassen Road & Poplar Street

Horizon Year (2040)
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	1224.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	382	364	294	329	0	337	0	225	0	0	162
Future Vol, veh/h	34	382	364	294	329	0	337	0	225	0	0	162
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	36	402	383	309	346	0	355	0	237	0	0	171
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	346	0	0	785	0	0	1716	1630	594	1748	1821	346
Stage 1	-	-	-	-	-	-	666	666	-	964	964	-
Stage 2	-	-	-	-	-	-	1050	964	-	784	857	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1224	-	-	843	-	-	~ 72	103	509	68	78	702
Stage 1	-	-	-	-	-	-	452	460	-	309	336	-
Stage 2	-	-	-	-	-	-	~ 277	336	-	389	377	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1224	-	-	843	-	-	~ 34	53	509	23	40	702
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 34	53	-	23	40	-
Stage 1	-	-	-	-	-	-	427	434	-	292	183	-
Stage 2	-	-	-	-	-	-	~ 115	183	-	196	356	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			5.5			\$ 4623.7			11.8		
HCM LOS							F			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	54	1224	-	-	843	-	-	702				
HCM Lane V/C Ratio	10.955	0.029	-	-	0.367	-	-	0.243				
HCM Control Delay (s)	\$ 4623.7	8	0	-	11.7	0	-	11.8				
HCM Lane LOS	F	A	A	-	B	A	-	B				
HCM 95th %tile Q(veh)	70.4	0.1	-	-	1.7	-	-	0.9				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Horizon Year (2040)

Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	5	60	261	21	480	36	2344	231	176	1563	72
Future Volume (veh/h)	79	5	60	261	21	480	36	2344	231	176	1563	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	5	63	275	22	505	38	2467	243	185	1645	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	222	23	291	275	367	311	49	2178	972	150	2379	1061
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.03	0.60	0.60	0.08	0.66	0.66
Sat Flow, veh/h	939	120	1509	1429	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	83	0	68	275	22	505	38	2467	243	185	1645	76
Grp Sat Flow(s),veh/h/ln	939	0	1628	1429	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	11.5	0.0	5.1	22.9	1.4	28.0	3.0	87.5	10.2	12.0	41.4	2.4
Cycle Q Clear(g_c), s	12.8	0.0	5.1	28.0	1.4	28.0	3.0	87.5	10.2	12.0	41.4	2.4
Prop In Lane	1.00		0.93	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	0	314	275	367	311	49	2178	972	150	2379	1061
V/C Ratio(X)	0.37	0.00	0.22	1.00	0.06	1.62	0.77	1.13	0.25	1.24	0.69	0.07
Avail Cap(c_a), veh/h	222	0	314	275	367	311	100	2178	972	150	2379	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	0.0	49.3	63.1	47.8	58.5	70.1	28.8	13.4	66.5	15.5	8.8
Incr Delay (d2), s/veh	0.4	0.0	0.1	53.8	0.0	295.2	9.1	66.0	0.1	150.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.1	14.4	0.7	36.9	1.5	52.8	3.5	11.6	15.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	0.0	49.4	116.9	47.8	353.7	79.2	94.7	13.6	216.9	16.4	8.9
LnGrp LOS	D	A	D	F	D	F	E	F	B	F	B	A
Approach Vol, veh/h		151			802			2748			1906	
Approach Delay, s/veh		51.6			264.1			87.3			35.5	
Approach LOS		D			F			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	94.0		34.0	8.9	102.1		34.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	12.0	87.5		28.0	8.0	91.5		28.0				
Max Q Clear Time (g_c+l1), s	14.0	89.5		14.8	5.0	43.4		30.0				
Green Ext Time (p_c), s	0.0	0.0		0.4	0.0	17.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			94.0									
HCM 6th LOS			F									

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Horizon Year (2040)
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	329	79	253	111	461	42	1504	97	361	1490	89
Future Volume (veh/h)	552	329	79	253	111	461	42	1504	97	361	1490	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	581	346	83	266	117	485	44	1583	102	380	1568	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	346	562	135	245	721	611	57	1282	572	266	1699	758
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.03	0.36	0.36	0.15	0.47	0.47
Sat Flow, veh/h	876	1481	355	1028	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	581	0	429	266	117	485	44	1583	102	380	1568	94
Grp Sat Flow(s), veh/h/ln	876	0	1836	1028	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	49.1	0.0	27.4	27.6	5.9	38.8	3.5	51.5	6.3	21.3	58.9	4.8
Cycle Q Clear(g_c), s	55.0	0.0	27.4	55.0	5.9	38.8	3.5	51.5	6.3	21.3	58.9	4.8
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	346	0	696	245	721	611	57	1282	572	266	1699	758
V/C Ratio(X)	1.68	0.00	0.62	1.09	0.16	0.79	0.77	1.23	0.18	1.43	0.92	0.12
Avail Cap(c_a), veh/h	346	0	696	245	721	611	66	1282	572	266	1699	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	36.4	61.5	29.8	40.0	69.7	46.8	32.2	61.8	35.9	21.6
Incr Delay (d2), s/veh	317.2	0.0	1.2	82.1	0.0	6.6	35.0	112.5	0.3	213.7	9.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	43.5	0.0	12.6	14.8	2.8	16.5	2.1	41.9	2.4	25.2	26.2	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	368.7	0.0	37.7	143.6	29.8	46.6	104.7	159.3	32.5	275.5	45.1	21.7
LnGrp LOS	F	A	D	F	C	D	F	F	C	F	D	C
Approach Vol, veh/h	1010			868			1729			2042		
Approach Delay, s/veh	228.1			74.1			150.4			86.9		
Approach LOS	F			E			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.0	59.0		60.0	9.3	75.7		60.0				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	25	51.5		55.0	* 5.3	67.5		55.0				
Max Q Clear Time (g_c+Q3), s	23.3	53.5		57.0	5.5	60.9		57.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	5.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay	129.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Horizon Year (2040)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	8.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	813	295	0	64	518
Future Vol, veh/h	0	813	295	0	64	518
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	856	311	0	67	545
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	1167	311
Stage 1	-	-	-	-	311	-
Stage 2	-	-	-	-	856	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	216	734
Stage 1	0	-	-	0	748	-
Stage 2	0	-	-	0	420	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	216	734
Mov Cap-2 Maneuver	-	-	-	-	216	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	420	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		23.4		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	216	734		
HCM Lane V/C Ratio	-	-	0.312	0.743		
HCM Control Delay (s)	-	-	29	22.7		
HCM Lane LOS	-	-	D	C		
HCM 95th %tile Q(veh)	-	-	1.3	6.7		

HCM 6th TWSC
9: Lassen Road & Driveway A

Horizon Year (2040)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	34	0	0	162
Future Vol, veh/h	0	0	34	0	0	162
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	36	0	0	171
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	207	36	0	0	36	0
Stage 1	36	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	786	1042	-	-	1588	-
Stage 1	992	-	-	-	-	-
Stage 2	864	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	786	1042	-	-	1588	-
Mov Cap-2 Maneuver	786	-	-	-	-	-
Stage 1	992	-	-	-	-	-
Stage 2	864	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1588	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Horizon Year (2040)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	607	623	0
Future Vol, veh/h	0	0	0	607	623	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	639	656	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1295	656	656	0	-	0
Stage 1	656	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	181	469	941	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	181	469	941	-	-	-
Mov Cap-2 Maneuver	181	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	941	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Horizon Year (2040)
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	71	0	0	0	16	24	0	0	114	0
Future Vol, veh/h	0	0	71	0	0	0	16	24	0	0	114	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	75	0	0	0	17	25	0	0	120	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	179	179	120	217	179	25	120	0	0	25	0	0
Stage 1	120	120	-	59	59	-	-	-	-	-	-	-
Stage 2	59	59	-	158	120	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	787	718	937	744	718	1057	1480	-	-	1603	-	-
Stage 1	889	800	-	958	850	-	-	-	-	-	-	-
Stage 2	958	850	-	849	800	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	780	709	937	679	709	1057	1480	-	-	1603	-	-
Mov Cap-2 Maneuver	780	709	-	679	709	-	-	-	-	-	-	-
Stage 1	878	800	-	947	840	-	-	-	-	-	-	-
Stage 2	947	840	-	781	800	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.2		0			3			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1480	-	-	937	-	1603	-	-				
HCM Lane V/C Ratio	0.011	-	-	0.08	-	-	-	-				
HCM Control Delay (s)	7.5	0	-	9.2	0	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Horizon Year (2040)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	607	623	0
Future Vol, veh/h	0	0	0	607	623	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	639	656	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1295	656	656	0	-	0
Stage 1	656	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	181	469	941	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	181	469	941	-	-	-
Mov Cap-2 Maneuver	181	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	941	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	984	357	21	1202	625	207	1096	10	378	2635	45
Future Volume (veh/h)	97	984	357	21	1202	625	207	1096	10	378	2635	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	1036	376	22	1265	658	218	1154	11	398	2774	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	33	832	298	42	768	368	117	1342	13	181	1457	25
Arrive On Green	0.02	0.32	0.34	0.02	0.32	0.32	0.06	0.37	0.37	0.10	0.40	0.40
Sat Flow, veh/h	1810	2604	933	1810	2366	1135	1810	3664	35	1810	3633	61
Grp Volume(v), veh/h	102	714	698	22	940	983	218	568	597	398	1374	1447
Grp Sat Flow(s),veh/h/ln	1810	1805	1732	1810	1805	1696	1810	1805	1894	1810	1805	1889
Q Serve(g_s), s	2.7	45.8	45.8	1.7	46.5	46.5	9.3	41.8	41.8	14.3	57.5	57.5
Cycle Q Clear(g_c), s	2.7	45.8	45.8	1.7	46.5	46.5	9.3	41.8	41.8	14.3	57.5	57.5
Prop In Lane	1.00		0.54	1.00		0.67	1.00		0.02	1.00		0.03
Lane Grp Cap(c), veh/h	33	577	553	42	585	550	117	661	694	181	724	758
V/C Ratio(X)	3.05	1.24	1.26	0.52	1.60	1.79	1.86	0.86	0.86	2.20	1.90	1.91
Avail Cap(c_a), veh/h	54	577	553	63	585	550	117	661	694	181	724	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.3	48.8	48.0	69.2	48.4	48.4	67.0	42.0	42.0	64.5	42.9	42.9
Incr Delay (d2), s/veh	994.4	121.6	131.5	7.1	280.0	361.8	416.4	11.3	10.8	559.9	409.4	414.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	39.0	38.8	0.9	65.4	73.9	17.7	19.7	20.6	34.5	106.3	112.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1064.8	170.4	179.5	76.3	328.5	410.3	483.5	53.3	52.8	624.4	452.3	457.1
LnGrp LOS	F	F	F	E	F	F	F	D	D	F	F	F
Approach Vol, veh/h	1514			1945			1383			3219		
Approach Delay, s/veh	234.8			367.0			120.9			475.7		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	56.3	14.0	65.0	10.3	54.0	19.0	60.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 49	* 9.3	57.5	7.3	* 47	* 14	52.5				
Max Q Clear Time (g_c+I1), s	3.7	48.8	11.3	59.5	5.7	48.5	16.3	43.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8				

Intersection Summary

HCM 6th Ctrl Delay	343.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	5	1106	15	313	1613	21	6	2	93	49	2	17
Future Volume (veh/h)	5	1106	15	313	1613	21	6	2	93	49	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	5	1164	16	329	1698	22	6	2	98	52	2	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	10	1535	21	357	2561	795	88	18	424	108	3	425
Arrive On Green	0.01	0.31	0.31	0.22	0.52	0.52	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1619	4995	69	1619	4914	1525	36	65	1522	76	9	1525
Grp Volume(v), veh/h	5	763	417	329	1698	22	8	0	98	54	0	18
Grp Sat Flow(s), veh/h/ln	1619	1638	1788	1619	1638	1525	101	0	1522	85	0	1525
Q Serve(g_s), s	0.2	17.0	17.1	16.1	20.5	0.6	0.1	0.0	4.0	1.3	0.0	0.7
Cycle Q Clear(g_c), s	0.2	17.0	17.1	16.1	20.5	0.6	22.0	0.0	4.0	22.6	0.0	0.7
Prop In Lane	1.00		0.04	1.00		1.00	0.75		1.00	0.96		1.00
Lane Grp Cap(c), veh/h	10	1007	549	357	2561	795	106	0	424	111	0	425
V/C Ratio(X)	0.48	0.76	0.76	0.92	0.66	0.03	0.08	0.00	0.23	0.49	0.00	0.04
Avail Cap(c_a), veh/h	100	1007	549	376	2561	795	354	0	676	111	0	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.1	25.3	25.3	30.9	14.2	9.4	24.0	0.0	22.5	39.5	0.0	21.3
Incr Delay (d2), s/veh	30.5	5.3	9.5	27.2	1.4	0.1	0.3	0.0	0.3	3.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	6.5	7.7	8.3	6.2	0.2	0.1	0.0	1.4	1.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.6	30.7	34.8	58.1	15.6	9.5	24.3	0.0	22.8	42.8	0.0	21.4
LnGrp LOS	E	C	C	E	B	A	C	A	C	D	A	C
Approach Vol, veh/h	1185			2049			106			72		
Approach Delay, s/veh	32.3			22.3			22.9			37.4		
Approach LOS	C			C			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.6	31.4		27.9	5.1	48.9		27.9				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	18.8	24.9		10.0	5.0	* 39		36.0				
Max Q Clear Time (g_c+T1), s	19.1	19.1		24.6	2.2	22.5		24.0				
Green Ext Time (p_c), s	0.1	3.2		0.0	0.0	9.9		0.2				

Intersection Summary

HCM 6th Ctrl Delay 26.1
HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	17.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Vol, veh/h	5	0	29	343	0	463	71	1131	553	451	2255	29
Future Vol, veh/h	5	0	29	343	0	463	71	1131	553	451	2255	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	-	375	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	95	92	95	92	95	95	95	95	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	0	32	361	0	487	77	1191	582	475	2374	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4090	5267	2390	4992	4992	887	2406	0	0	1773	0	0
Stage 1	3340	3340	-	1636	1636	-	-	-	-	-	-	-
Stage 2	750	1927	-	3356	3356	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 1	0	44	0	1	~ 291	202	-	-	~ 356	-	-
Stage 1	12	21	-	~ 107	160	-	-	-	-	-	-	-
Stage 2	374	115	-	~ 12	20	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	44	-	0	~ 291	202	-	-	~ 356	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	7	0	-	~ 66	99	-	-	-	-	-	-	-
Stage 2	-	71	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.4	32.7
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	202	-	-	-	44	-	291	~ 356	-	-
HCM Lane V/C Ratio	0.382	-	-	-	0.716	-	1.675	1.334	-	-
HCM Control Delay (s)	33.4	-	-	-	197.5	-	349.1	198.3	-	-
HCM Lane LOS	D	-	-	-	F	-	F	F	-	-
HCM 95th %tile Q(veh)	1.7	-	-	-	2.7	-	30.5	22.7	-	-

Notes										
~: Volume exceeds capacity			\$: Delay exceeds 300s			+: Computation Not Defined			*: All major volume in platoon	

HCM 6th TWSC
4: Lassen Road & Poplar Street

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	11566.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	274	549	416	404	286	0	417	0	197	0	0	71
Future Vol, veh/h	274	549	416	404	286	0	417	0	197	0	0	71
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	288	578	438	425	301	0	439	0	207	0	0	75
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	301	0	0	1016	0	0	2562	2524	797	2628	2743	301
Stage 1	-	-	-	-	-	-	1373	1373	-	1151	1151	-
Stage 2	-	-	-	-	-	-	1189	1151	-	1477	1592	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1272	-	-	691	-	-	~ 18	28	390	16	20	743
Stage 1	-	-	-	-	-	-	~ 182	215	-	243	275	-
Stage 2	-	-	-	-	-	-	~ 231	275	-	159	169	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1272	-	-	691	-	-	~ 4	3	390	2	2	743
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 4	3	-	2	2	-
Stage 1	-	-	-	-	-	-	~ 76	89	-	101	72	-
Stage 2	-	-	-	-	-	-	~ 54	72	-	31	70	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			10.6			\$ 49226.9			10.4		
HCM LOS							F			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	6	1272	-	-	691	-	-	743				
HCM Lane V/C Ratio	107.719	0.227	-	-	0.615	-	-	0.101				
HCM Control Delay (s)	\$ 49226.9	8.7	0	-	18.2	0	-	10.4				
HCM Lane LOS	F	A	A	-	C	A	-	B				
HCM 95th %tile Q(veh)	83	0.9	-	-	4.3	-	-	0.3				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon						

HCM 6th Signalized Intersection Summary 5: US Hwy 395 & Three Flags Road

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	11	83	237	2	56	31	2111	315	178	2099	123
Future Volume (veh/h)	36	11	83	237	2	56	31	2111	315	178	2099	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	12	87	249	2	59	33	2222	332	187	2209	129
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	308	35	256	227	338	286	48	2126	948	188	2405	1073
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.03	0.59	0.59	0.10	0.67	0.67
Sat Flow, veh/h	1438	199	1442	1390	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	38	0	99	249	2	59	33	2222	332	187	2209	129
Grp Sat Flow(s),veh/h/ln	1438	0	1641	1390	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	3.0	0.0	7.1	16.9	0.1	4.2	2.4	79.5	14.4	13.9	71.0	3.9
Cycle Q Clear(g_c), s	3.1	0.0	7.1	24.0	0.1	4.2	2.4	79.5	14.4	13.9	71.0	3.9
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	0	292	227	338	286	48	2126	948	188	2405	1073
V/C Ratio(X)	0.12	0.00	0.34	1.10	0.01	0.21	0.69	1.05	0.35	1.00	0.92	0.12
Avail Cap(c_a), veh/h	308	0	292	227	338	286	67	2126	948	188	2405	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	0.0	48.6	61.0	45.7	47.4	65.2	27.8	14.4	60.5	19.4	8.2
Incr Delay (d2), s/veh	0.1	0.0	0.3	88.0	0.0	0.1	6.6	32.6	0.2	64.6	6.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.0	13.4	0.1	1.7	1.2	39.1	4.8	9.5	26.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.0	0.0	48.8	149.1	45.7	47.5	71.7	60.3	14.6	125.1	25.6	8.2
LnGrp LOS	D	A	D	F	D	D	E	F	B	F	C	A
Approach Vol, veh/h	137			310			2587			2525		
Approach Delay, s/veh	48.3			129.1			54.6			32.1		
Approach LOS	D			F			D			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	86.0		30.0	8.5	96.5		30.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	14.0	79.5		24.0	5.0	88.5		24.0				
Max Q Clear Time (g_c+I1), s	15.9	81.5		9.1	4.4	73.0		26.0				
Green Ext Time (p_c), s	0.0	0.0		0.3	0.0	12.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	48.4											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	85	13	76	202	499	56	1834	94	269	1894	485
Future Volume (veh/h)	82	85	13	76	202	499	56	1834	94	269	1894	485
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	89	14	80	213	525	59	1931	99	283	1994	511
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	198	453	71	383	537	455	66	1681	750	241	2029	905
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.04	0.47	0.47	0.13	0.56	0.56
Sat Flow, veh/h	772	1603	252	1385	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	86	0	103	80	213	525	59	1931	99	283	1994	511
Grp Sat Flow(s), veh/h/ln	772	0	1855	1385	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	14.7	0.0	6.1	6.8	13.1	41.0	4.7	67.5	5.1	19.3	78.4	29.5
Cycle Q Clear(g_c), s	27.8	0.0	6.1	12.9	13.1	41.0	4.7	67.5	5.1	19.3	78.4	29.5
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	0	524	383	537	455	66	1681	750	241	2029	905
V/C Ratio(X)	0.43	0.00	0.20	0.21	0.40	1.15	0.89	1.15	0.13	1.17	0.98	0.56
Avail Cap(c_a), veh/h	198	0	524	383	537	455	66	1681	750	241	2029	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	0.0	39.5	44.4	42.0	52.0	69.6	38.8	22.1	62.8	31.1	20.4
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.1	0.2	91.4	73.3	74.5	0.2	113.5	16.1	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	2.8	2.4	6.3	28.1	3.5	44.9	1.9	16.2	34.9	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	0.0	39.6	44.5	42.2	143.4	142.9	113.3	22.2	176.4	47.2	21.7
LnGrp LOS	D	A	D	D	D	F	F	F	C	F	D	C
Approach Vol, veh/h	189			818			2089			2788		
Approach Delay, s/veh	46.0			107.3			109.8			55.6		
Approach LOS	D			F			F			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	40.0	75.0		46.0	10.0	89.0		46.0				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	19.0	67.5		41.0	* 5.3	81.5		41.0				
Max Q Clear Time (g_c+Y), s	11.3	69.5		29.8	6.7	80.4		43.0				
Green Ext Time (p_c), s	0.0	0.0		0.5	0.0	1.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	81.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	16.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↘	↗
Traffic Vol, veh/h	0	355	37	0	17	835
Future Vol, veh/h	0	355	37	0	17	835
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	374	39	0	18	879
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	413	39
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	374	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	599	1038
Stage 1	0	-	-	0	989	-
Stage 2	0	-	-	0	700	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	599	1038
Mov Cap-2 Maneuver	-	-	-	-	599	-
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	700	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		23.8	
HCM LOS					C	
Minor Lane/Major Mvmt	EBT		WBT		SBLn1	SBLn2
Capacity (veh/h)	-		-		599	1038
HCM Lane V/C Ratio	-		-		0.03	0.847
HCM Control Delay (s)	-		-		11.2	24.1
HCM Lane LOS	-		-		B	C
HCM 95th %tile Q(veh)	-		-		0.1	10.8

HCM 6th TWSC
9: Lassen Road & Driveway A

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	1	216	35	4	75
Future Vol, veh/h	6	1	216	35	4	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	1	227	37	4	79
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	333	246	0	0	264	0
Stage 1	246	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	666	798	-	-	1312	-
Stage 1	800	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	664	798	-	-	1312	-
Mov Cap-2 Maneuver	664	-	-	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	938	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.4	0		0.4		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 680		1312	-	
HCM Lane V/C Ratio	-	- 0.011		0.003	-	
HCM Control Delay (s)	-	- 10.4		7.8	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 0		0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	6	32	706	709	7
Future Vol, veh/h	1	6	32	706	709	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	6	34	743	746	7
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1561	750	753	0	-	0
Stage 1	750	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	125	415	866	-	-	-
Stage 1	470	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	117	415	866	-	-	-
Mov Cap-2 Maneuver	117	-	-	-	-	-
Stage 1	439	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	17.1	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	866	-	304	-	-	
HCM Lane V/C Ratio	0.039	-	0.024	-	-	
HCM Control Delay (s)	9.3	0	17.1	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	14	4	0	2	81	193	24	15	58	0
Future Vol, veh/h	0	0	14	4	0	2	81	193	24	15	58	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	15	4	0	2	85	203	25	16	61	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	480	491	61	487	479	216	61	0	0	228	0	0
Stage 1	93	93	-	386	386	-	-	-	-	-	-	-
Stage 2	387	398	-	101	93	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	499	481	1010	494	489	829	1555	-	-	1352	-	-
Stage 1	919	822	-	641	614	-	-	-	-	-	-	-
Stage 2	641	606	-	910	822	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	470	445	1010	459	453	829	1555	-	-	1352	-	-
Mov Cap-2 Maneuver	470	445	-	459	453	-	-	-	-	-	-	-
Stage 1	861	812	-	601	575	-	-	-	-	-	-	-
Stage 2	599	568	-	886	812	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	8.6		11.8		2		1.6					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1555	-	-	1010	539	1352	-	-				
HCM Lane V/C Ratio	0.055	-	-	0.015	0.012	0.012	-	-				
HCM Control Delay (s)	7.4	0	-	8.6	11.8	7.7	0	-				
HCM Lane LOS	A	A	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0.2	-	-	0	0	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

Horizon Year (2040) plus Project
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	2	12	733	688	27
Future Vol, veh/h	5	2	12	733	688	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	2	13	772	724	28

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1536	738	752	0	-	0
Stage 1	738	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	129	421	867	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	447	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	126	421	867	-	-	-
Mov Cap-2 Maneuver	126	-	-	-	-	-
Stage 1	464	-	-	-	-	-
Stage 2	447	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.9	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	867	-	158	-	-
HCM Lane V/C Ratio	0.015	-	0.047	-	-
HCM Control Delay (s)	9.2	0	28.9	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary

1: US Hwy 395 & Phelan Road/Main Street

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	50	1051	166	11	688	356	405	2636	81	638	1459	91
Future Volume (veh/h)	50	1051	166	11	688	356	405	2636	81	638	1459	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	1106	175	12	724	375	426	2775	85	672	1536	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	754	119	51	599	310	180	1402	43	267	1521	95
Arrive On Green	0.01	0.24	0.26	0.03	0.26	0.26	0.10	0.39	0.39	0.15	0.44	0.44
Sat Flow, veh/h	1810	3123	493	1810	2301	1190	1810	3576	109	1810	3452	215
Grp Volume(v), veh/h	53	638	643	12	568	531	426	1393	1467	672	800	832
Grp Sat Flow(s),veh/h/ln	1810	1805	1811	1810	1805	1686	1810	1805	1880	1810	1805	1861
Q Serve(g_s), s	1.4	34.8	34.8	0.9	37.5	37.5	14.3	56.5	56.5	21.3	63.5	63.5
Cycle Q Clear(g_c), s	1.4	34.8	34.8	0.9	37.5	37.5	14.3	56.5	56.5	21.3	63.5	63.5
Prop In Lane	1.00		0.27	1.00		0.71	1.00		0.06	1.00		0.12
Lane Grp Cap(c), veh/h	18	436	437	51	470	439	180	708	737	267	795	820
V/C Ratio(X)	3.01	1.46	1.47	0.23	1.21	1.21	2.37	1.97	1.99	2.51	1.01	1.01
Avail Cap(c_a), veh/h	29	436	437	63	470	439	180	708	737	267	795	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.4	54.7	54.2	68.5	53.3	53.3	64.9	43.8	43.8	61.4	40.3	40.3
Incr Delay (d2), s/veh	1039.4	220.8	223.8	1.7	112.4	114.5	634.4	441.1	450.0	691.6	33.2	35.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	41.9	42.3	0.4	30.9	29.1	38.0	110.4	116.8	60.8	33.5	35.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1110.8	275.5	278.0	70.2	165.7	167.8	699.3	484.9	493.8	753.0	73.5	75.5
LnGrp LOS	F	F	F	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h	1334			1111			3286			2304		
Approach Delay, s/veh	309.9			165.7			516.7			272.4		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	45.3	19.0	71.0	9.1	45.0	26.0	64.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 38	* 14	63.5	5.3	* 38	* 21	56.5				
Max Q Clear Time (g_c+I1), s	2.9	37.8	16.3	65.5	4.4	39.5	23.3	58.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 363.8

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mesa Linda Street & Main Street

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳		↰ ↱ ↲ ↳	↰ ↱ ↲ ↳
Traffic Volume (veh/h)	9	1848	14	145	1255	55	40	10	331	32	1	3
Future Volume (veh/h)	9	1848	14	145	1255	55	40	10	331	32	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	9	1945	15	153	1321	58	42	11	348	34	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	2218	17	177	2651	823	56	8	477	62	1	478
Arrive On Green	0.01	0.44	0.44	0.11	0.54	0.54	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1619	5030	39	1619	4914	1525	0	26	1523	0	3	1525
Grp Volume(v), veh/h	9	1267	693	153	1321	58	53	0	348	35	0	3
Grp Sat Flow(s), veh/h/ln	1619	1638	1793	1619	1638	1525	26	0	1523	3	0	1525
Q Serve(g_s), s	0.6	40.6	40.6	10.7	19.5	2.1	0.0	0.0	23.4	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.6	40.6	40.6	10.7	19.5	2.1	36.1	0.0	23.4	36.1	0.0	0.2
Prop In Lane	1.00		0.02	1.00		1.00	0.79		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	18	1444	791	177	2651	823	64	0	477	63	0	478
V/C Ratio(X)	0.51	0.88	0.88	0.86	0.50	0.07	0.83	0.00	0.73	0.56	0.00	0.01
Avail Cap(c_a), veh/h	70	1444	791	180	2651	823	64	0	477	63	0	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.7	29.4	29.4	50.5	16.7	12.7	52.1	0.0	35.2	56.7	0.0	27.2
Incr Delay (d2), s/veh	21.2	7.8	13.1	32.2	0.7	0.2	56.2	0.0	5.6	10.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.4	15.9	18.6	5.7	6.6	0.7	2.5	0.0	9.3	1.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	77.8	37.1	42.5	82.6	17.4	12.9	108.3	0.0	40.8	67.4	0.0	27.2
LnGrp LOS	E	D	D	F	B	B	F	A	D	E	A	C
Approach Vol, veh/h	1969			1532			401			38		
Approach Delay, s/veh	39.2			23.7			49.7			64.2		
Approach LOS	D			C			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	57.3		40.7	5.9	68.7		40.7				
Change Period (Y+Rc), s	4.6	6.5		4.6	4.6	* 6.5		4.6				
Max Green Setting (Gmax), s	12.8	50.8		10.0	5.0	* 59		36.1				
Max Q Clear Time (g_c+11.2, s)	12.8	42.6		38.1	2.6	21.5		38.1				
Green Ext Time (p_c), s	0.0	6.2		0.0	0.0	10.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay 34.5
HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: US Hwy 395 & Poplar Street

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	112.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	0	56	520	0	415	37	2742	197	423	1136	15
Future Vol, veh/h	25	0	56	520	0	415	37	2742	197	423	1136	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	-	375	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	95	92	95	92	95	95	95	95	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	0	61	547	0	437	40	2886	207	445	1196	16
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3617	5267	1204	5195	5172	1547	1212	0	0	3093	0	0
Stage 1	2094	2094	-	3070	3070	-	-	-	-	-	-	-
Stage 2	1523	3173	-	2125	2102	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.2	7.3	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 2	0	227	0	0	~ 105	583	-	-	~ 108	-	-
Stage 1	69	95	-	~ 13	29	-	-	-	-	-	-	-
Stage 2	126	26	-	~ 66	94	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	227	-	0	~ 105	583	-	-	~ 108	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	64	0	-	~ 12	27	-	-	-	-	-	-	-
Stage 2	-	24	-	-	0	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s							0.1			\$ 399.3		
HCM LOS	-			-								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	583	-	-	-	227	-	105	~ 108	-	-		
HCM Lane V/C Ratio	0.069	-	-	-	0.268	-	4.16	4.123	-	-		
HCM Control Delay (s)	11.6	-	-	-	26.6	\$ 1505	\$ 1486.3	-	-	-		
HCM Lane LOS	B	-	-	-	D	-	F	F	-	-		
HCM 95th %tile Q(veh)	0.2	-	-	-	1	-	45.1	45.8	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

HCM 6th TWSC
4: Lassen Road & Poplar Street

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	1743.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	391	364	294	369	0	337	0	225	0	0	217
Future Vol, veh/h	47	391	364	294	369	0	337	0	225	0	0	217
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	49	412	383	309	388	0	355	0	237	0	0	228
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	388	0	0	795	0	0	1822	1708	604	1826	1899	388
Stage 1	-	-	-	-	-	-	702	702	-	1006	1006	-
Stage 2	-	-	-	-	-	-	1120	1006	-	820	893	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1182	-	-	835	-	-	~ 60	92	502	60	70	665
Stage 1	-	-	-	-	-	-	432	443	-	293	321	-
Stage 2	-	-	-	-	-	-	~ 253	321	-	372	363	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1182	-	-	835	-	-	~ 23	45	502	19	34	665
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 23	45	-	19	34	-
Stage 1	-	-	-	-	-	-	397	408	-	270	169	-
Stage 2	-	-	-	-	-	-	~ 88	169	-	181	334	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			5.2			\$ 6949.4			13.2		
HCM LOS							F			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	37	1182	-	-	835	-	-	665				
HCM Lane V/C Ratio	15.989	0.042	-	-	0.371	-	-	0.343				
HCM Control Delay (s)	\$ 6949.4	8.2	0	-	11.8	0	-	13.2				
HCM Lane LOS	F	A	A	-	B	A	-	B				
HCM 95th %tile Q(veh)	72.4	0.1	-	-	1.7	-	-	1.5				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

HCM 6th Signalized Intersection Summary

5: US Hwy 395 & Three Flags Road

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	5	60	261	21	480	36	2361	231	176	1640	72
Future Volume (veh/h)	79	5	60	261	21	480	36	2361	231	176	1640	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	5	63	275	22	505	38	2485	243	185	1726	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	222	23	291	275	367	311	49	2178	972	150	2379	1061
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.03	0.60	0.60	0.08	0.66	0.66
Sat Flow, veh/h	939	120	1509	1429	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	83	0	68	275	22	505	38	2485	243	185	1726	76
Grp Sat Flow(s),veh/h/ln	939	0	1628	1429	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	11.5	0.0	5.1	22.9	1.4	28.0	3.0	87.5	10.2	12.0	45.3	2.4
Cycle Q Clear(g_c), s	12.8	0.0	5.1	28.0	1.4	28.0	3.0	87.5	10.2	12.0	45.3	2.4
Prop In Lane	1.00		0.93	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	0	314	275	367	311	49	2178	972	150	2379	1061
V/C Ratio(X)	0.37	0.00	0.22	1.00	0.06	1.62	0.77	1.14	0.25	1.24	0.73	0.07
Avail Cap(c_a), veh/h	222	0	314	275	367	311	100	2178	972	150	2379	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	0.0	49.3	63.1	47.8	58.5	70.1	28.8	13.4	66.5	16.2	8.8
Incr Delay (d2), s/veh	0.4	0.0	0.1	53.8	0.0	295.2	9.1	69.4	0.1	150.4	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.1	14.4	0.7	36.9	1.5	53.8	3.5	11.6	16.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	0.0	49.4	116.9	47.8	353.7	79.2	98.2	13.6	216.9	17.3	8.9
LnGrp LOS	D	A	D	F	D	F	E	F	B	F	B	A
Approach Vol, veh/h	151			802			2766			1987		
Approach Delay, s/veh	51.6			264.1			90.5			35.5		
Approach LOS	D			F			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	94.0		34.0	8.9	102.1		34.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	12.0	87.5		28.0	8.0	91.5		28.0				
Max Q Clear Time (g_c+I1), s	14.0	89.5		14.8	5.0	47.3		30.0				
Green Ext Time (p_c), s	0.0	0.0		0.4	0.0	18.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	94.7											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary

6: US Hwy 395 & Joshua Street

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	329	79	253	111	470	42	1512	97	402	1526	89
Future Volume (veh/h)	552	329	79	253	111	470	42	1512	97	402	1526	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	581	346	83	266	117	495	44	1592	102	423	1606	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	344	562	135	245	721	611	57	1282	572	266	1699	758
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.03	0.36	0.36	0.15	0.47	0.47
Sat Flow, veh/h	868	1481	355	1028	1900	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	581	0	429	266	117	495	44	1592	102	423	1606	94
Grp Sat Flow(s), veh/h/ln	868	0	1836	1028	1900	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	49.1	0.0	27.4	27.6	5.9	39.9	3.5	51.5	6.3	21.3	61.5	4.8
Cycle Q Clear(g_c), s	55.0	0.0	27.4	55.0	5.9	39.9	3.5	51.5	6.3	21.3	61.5	4.8
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	0	696	245	721	611	57	1282	572	266	1699	758
V/C Ratio(X)	1.69	0.00	0.62	1.09	0.16	0.81	0.77	1.24	0.18	1.59	0.95	0.12
Avail Cap(c_a), veh/h	344	0	696	245	721	611	66	1282	572	266	1699	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	36.4	61.5	29.8	40.3	69.7	46.8	32.2	61.8	36.6	21.6
Incr Delay (d2), s/veh	323.2	0.0	1.2	82.1	0.0	7.5	35.0	115.5	0.3	283.2	11.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	43.7	0.0	12.6	14.8	2.8	17.1	2.1	42.4	2.4	30.4	27.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	374.7	0.0	37.7	143.6	29.8	47.9	104.7	162.3	32.5	345.1	48.3	21.7
LnGrp LOS	F	A	D	F	C	D	F	F	C	F	D	C
Approach Vol, veh/h	1010			878			1738			2123		
Approach Delay, s/veh	231.5			74.5			153.2			106.3		
Approach LOS	F			E			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.0	59.0		60.0	9.3	75.7		60.0				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	25	51.5		55.0	* 5.3	67.5		55.0				
Max Q Clear Time (g_c+Q), s	23.3	53.5		57.0	5.5	63.5		57.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.7		0.0				

Intersection Summary

HCM 6th Ctrl Delay 137.6
HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	8.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Traffic Vol, veh/h	0	854	299	0	64	523
Future Vol, veh/h	0	854	299	0	64	523
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	899	315	0	67	551
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	1214	315
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	899	-
Critical Hdwy	-	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	0	-	-	0	202	730
Stage 1	0	-	-	0	744	-
Stage 2	0	-	-	0	401	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	202	730
Mov Cap-2 Maneuver	-	-	-	-	202	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	401	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		24.3		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	202	730		
HCM Lane V/C Ratio	-	-	0.334	0.754		
HCM Control Delay (s)	-	-	31.5	23.4		
HCM Lane LOS	-	-	D	C		
HCM 95th %tile Q(veh)	-	-	1.4	7		

HCM 6th TWSC
9: Lassen Road & Driveway A

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	4	48	7	1	165
Future Vol, veh/h	32	4	48	7	1	165
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	34	4	51	7	1	174
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	231	55	0	0	58	0
Stage 1	55	-	-	-	-	-
Stage 2	176	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	762	1018	-	-	1559	-
Stage 1	973	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	761	1018	-	-	1559	-
Mov Cap-2 Maneuver	761	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.8	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 783		1559	-	
HCM Lane V/C Ratio	-	- 0.048		0.001	-	
HCM Control Delay (s)	-	- 9.8		7.3	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.2		0	-	

HCM 6th TWSC
10: Mesa Linda Street & Driveway B

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	29	7	633	629	1
Future Vol, veh/h	6	29	7	633	629	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	31	7	666	662	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1343	663	663	0	-	0
Stage 1	663	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	169	465	935	-	-	-
Stage 1	516	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	167	465	935	-	-	-
Mov Cap-2 Maneuver	167	-	-	-	-	-
Stage 1	510	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.3	0.1		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	935	-	356	-	-	
HCM Lane V/C Ratio	0.008	-	0.103	-	-	
HCM Control Delay (s)	8.9	0	16.3	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	0.3	-	-	

HCM 6th TWSC
11: Lassen Road & I-15 Project Dwy/Driveway C

Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	71	23	0	14	16	31	5	3	146	0
Future Vol, veh/h	0	0	71	23	0	14	16	31	5	3	146	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	75	24	0	15	17	33	5	3	154	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	237	232	154	268	230	36	154	0	0	38	0	0
Stage 1	160	160	-	70	70	-	-	-	-	-	-	-
Stage 2	77	72	-	198	160	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	722	672	897	689	673	1042	1439	-	-	1585	-	-
Stage 1	847	769	-	945	841	-	-	-	-	-	-	-
Stage 2	937	839	-	808	769	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	704	663	897	625	664	1042	1439	-	-	1585	-	-
Mov Cap-2 Maneuver	704	663	-	625	664	-	-	-	-	-	-	-
Stage 1	837	767	-	934	831	-	-	-	-	-	-	-
Stage 2	913	829	-	739	767	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.4		10.2		2.3		0.1					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1439	-	-	897	737	1585	-	-				
HCM Lane V/C Ratio	0.012	-	-	0.083	0.053	0.002	-	-				
HCM Control Delay (s)	7.5	0	-	9.4	10.2	7.3	0	-				
HCM Lane LOS	A	A	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-				

HCM 6th TWSC
12: Mesa Linda Street & Driveway D

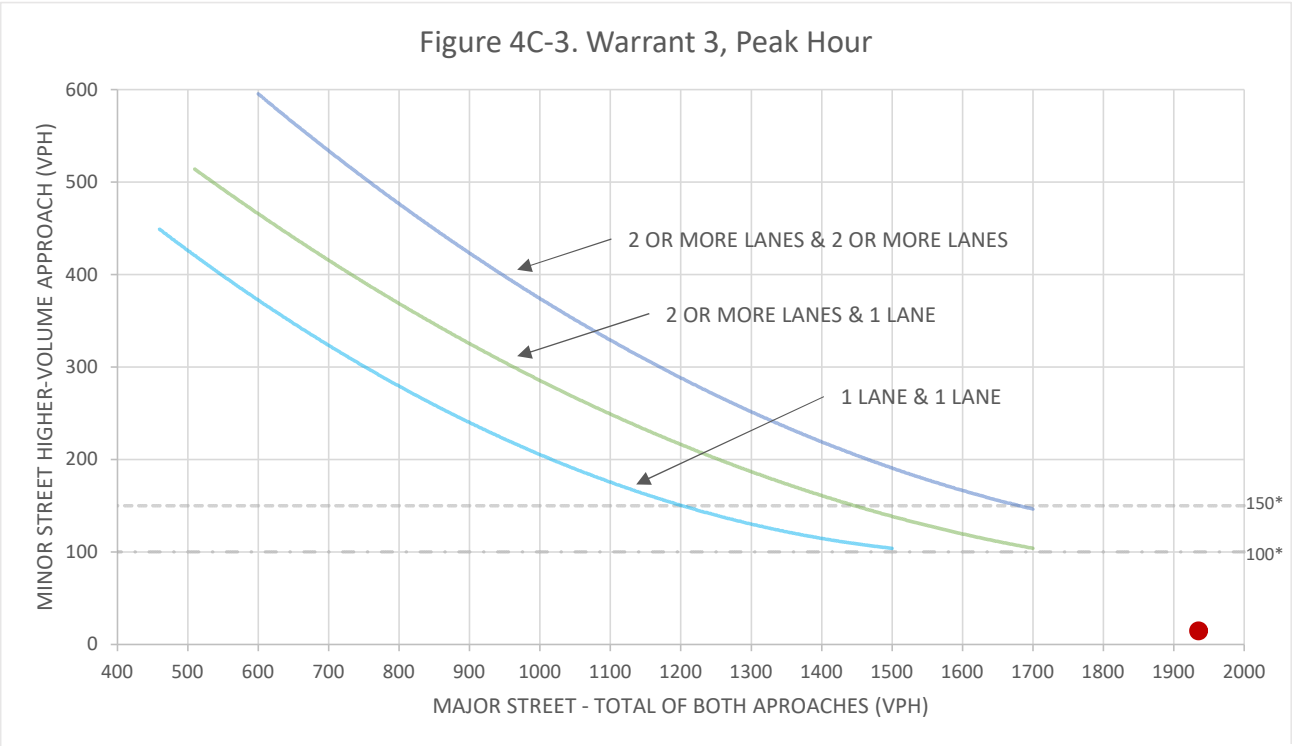
Horizon Year (2040) plus Project
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	11	2	614	652	6
Future Vol, veh/h	26	11	2	614	652	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	27	12	2	646	686	6
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1339	689	692	0	-	0
Stage 1	689	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	170	449	912	-	-	-
Stage 1	502	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	169	449	912	-	-	-
Mov Cap-2 Maneuver	169	-	-	-	-	-
Stage 1	500	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	26.4	0		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	912	-	207	-	-	
HCM Lane V/C Ratio	0.002	-	0.188	-	-	
HCM Control Delay (s)	9	0	26.4	-	-	
HCM Lane LOS	A	A	D	-	-	
HCM 95th %tile Q(veh)	0	-	0.7	-	-	

Project	Poplar 18 Industrial Park Project
Scenario	Existing
Peak Hour	AM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

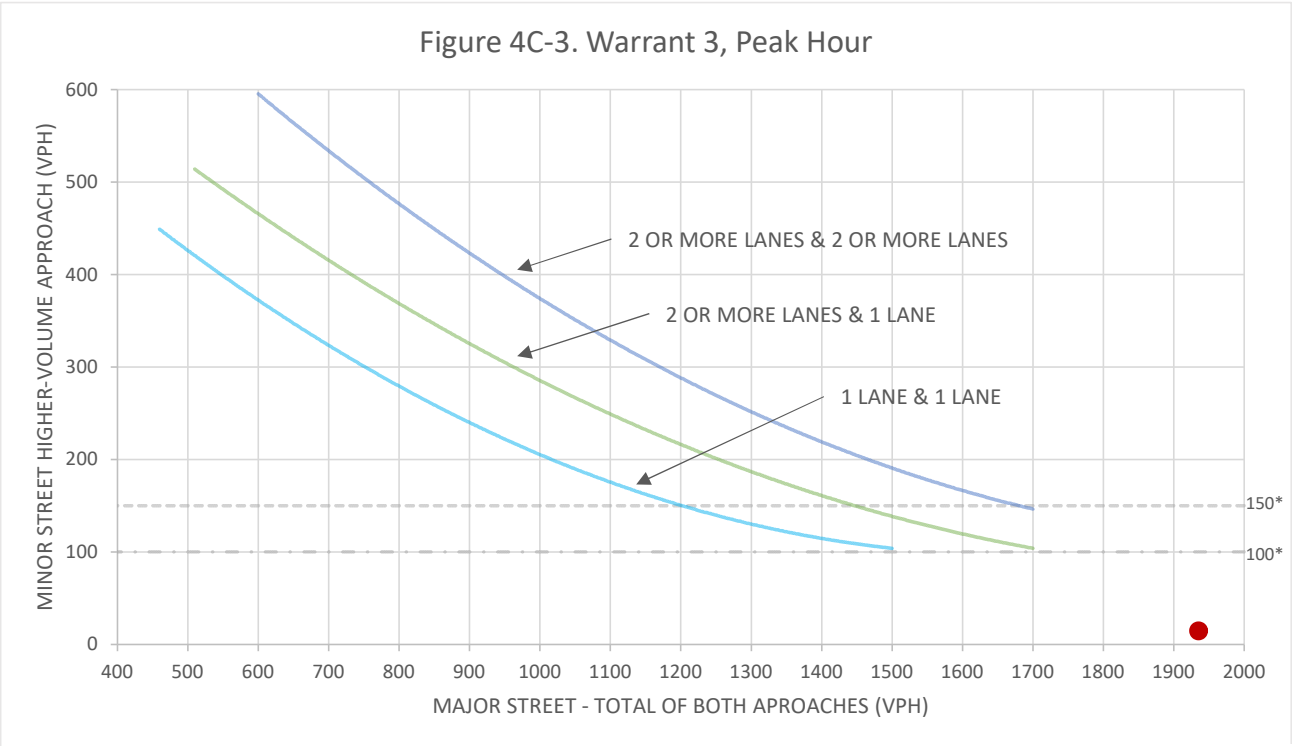
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	<u>No</u>
Traffic Volume (VPH)*	1,935	15	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	I-15 Industrial Park Project
Scenario	Existing
Peak Hour	PM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

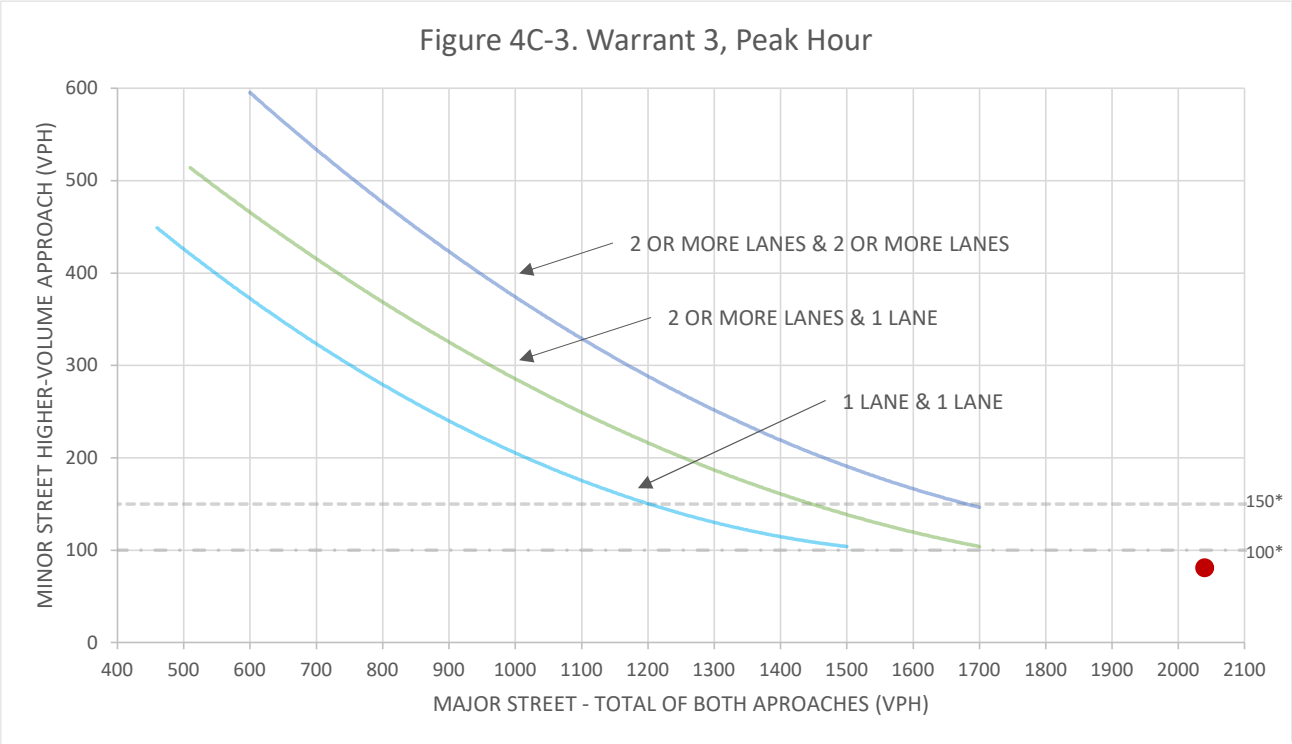
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	<u>No</u>
Traffic Volume (VPH)*	1,935	15	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Existing plus Project
Peak Hour	AM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

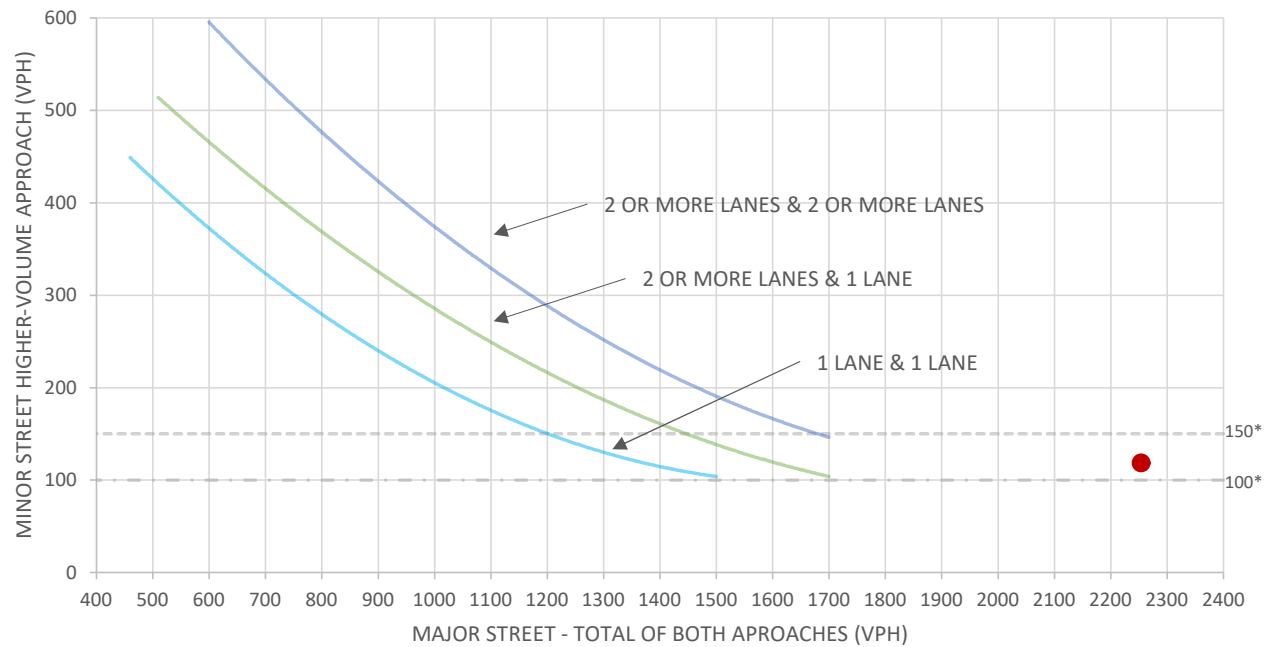
	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	No
Traffic Volume (VPH)*	2,039	33	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Existing plus Project
Peak Hour	PM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒

Figure 4C-3. Warrant 3, Peak Hour



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

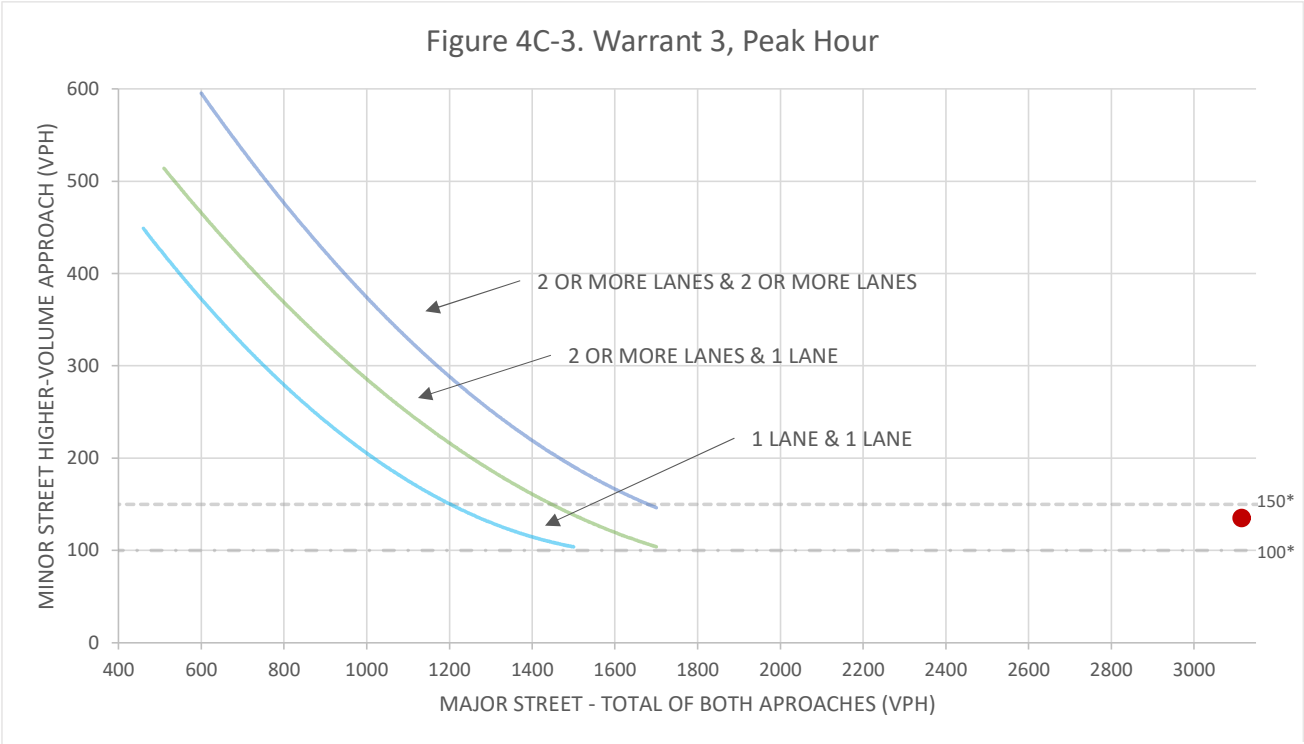
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	<u>No</u>
Traffic Volume (VPH)*	2,254	119	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024)
Peak Hour	AM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

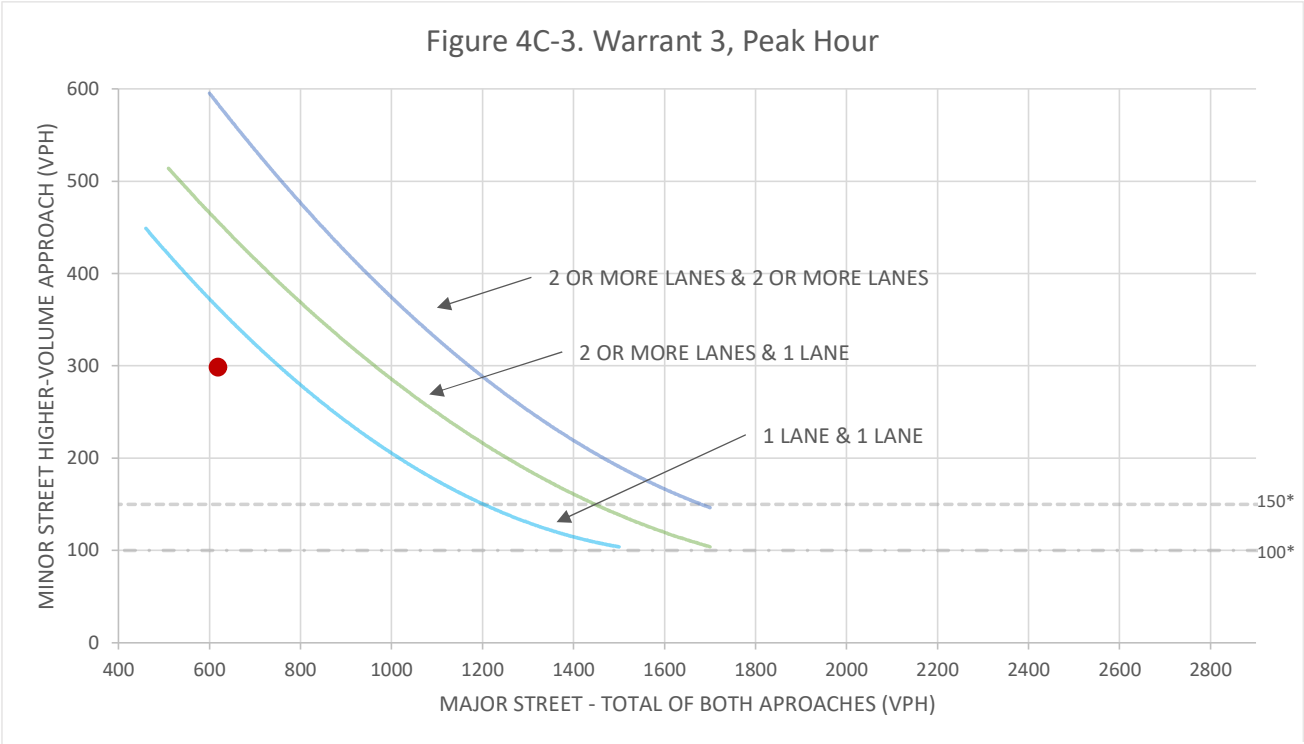
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	No
Traffic Volume (VPH)*	3,115	135	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024)
Peak Hour	AM

Intersection #	7
Major Street	I-15 SB Off-Ramp
Minor Street	Joshua Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

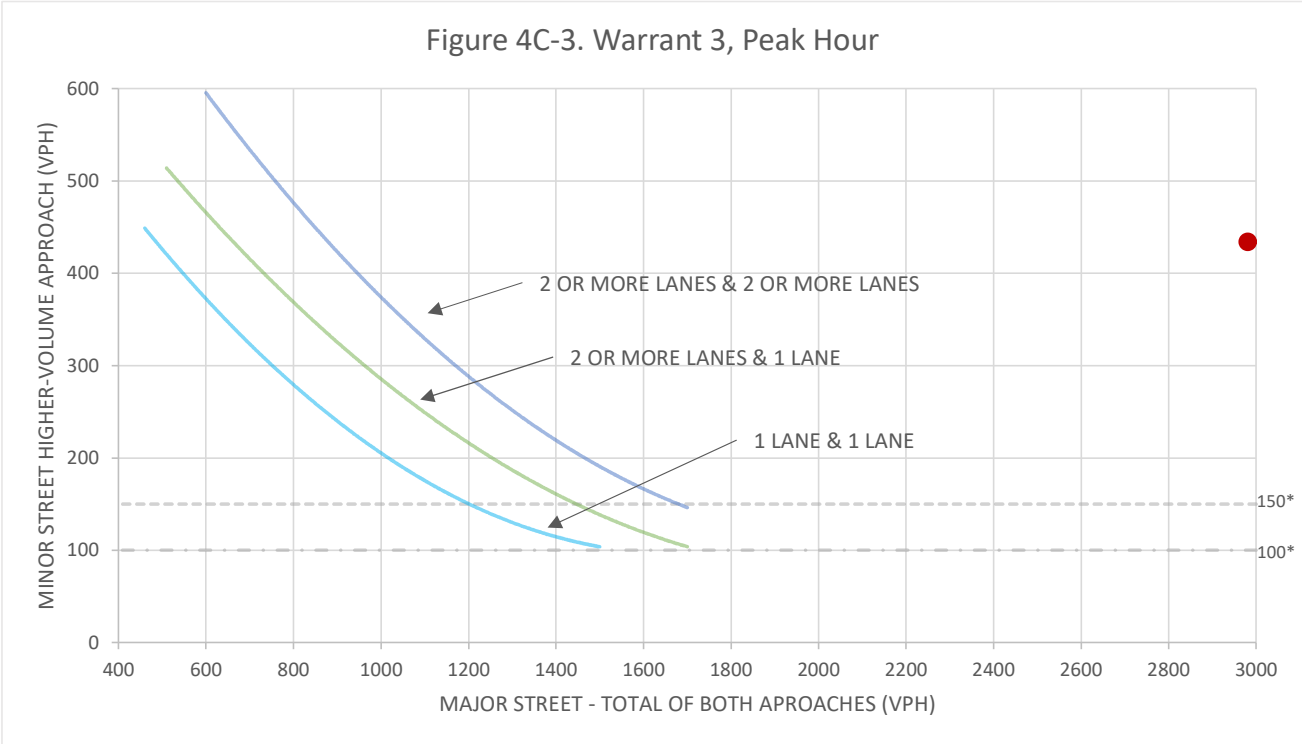
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	I-15 SB Off-Ramp	Joshua Street	
Number of Approach Lanes	1	1	<u>No</u>
Traffic Volume (VPH)*	619	298	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024)
Peak Hour	PM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

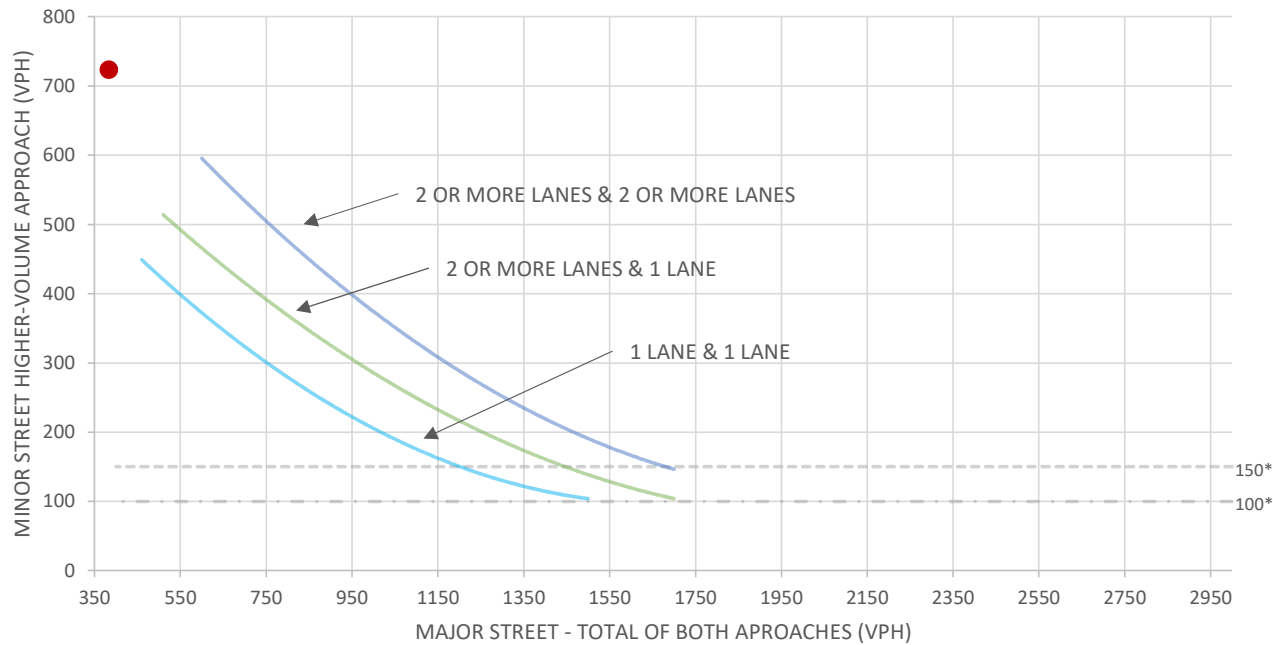
	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	2,981	434	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024)
Peak Hour	PM

Intersection #	7
Major Street	I-15 SB Off-Ramp
Minor Street	Joshua Street

N-S	E-W
☒	☐
☐	☒

Figure 4C-3. Warrant 3, Peak Hour



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

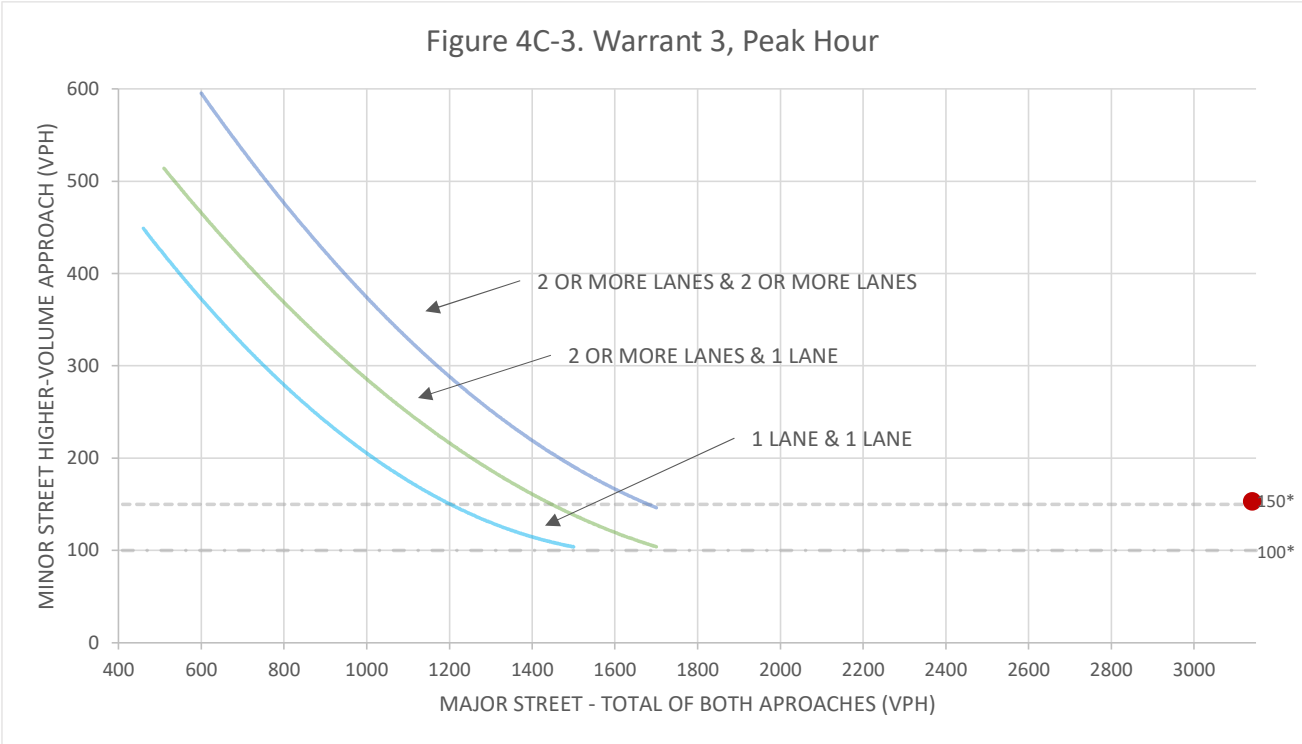
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	I-15 SB Off-Ramp	Joshua Street	
Number of Approach Lanes	1	1	Yes
Traffic Volume (VPH)*	384	723	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024) plus Project
Peak Hour	AM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

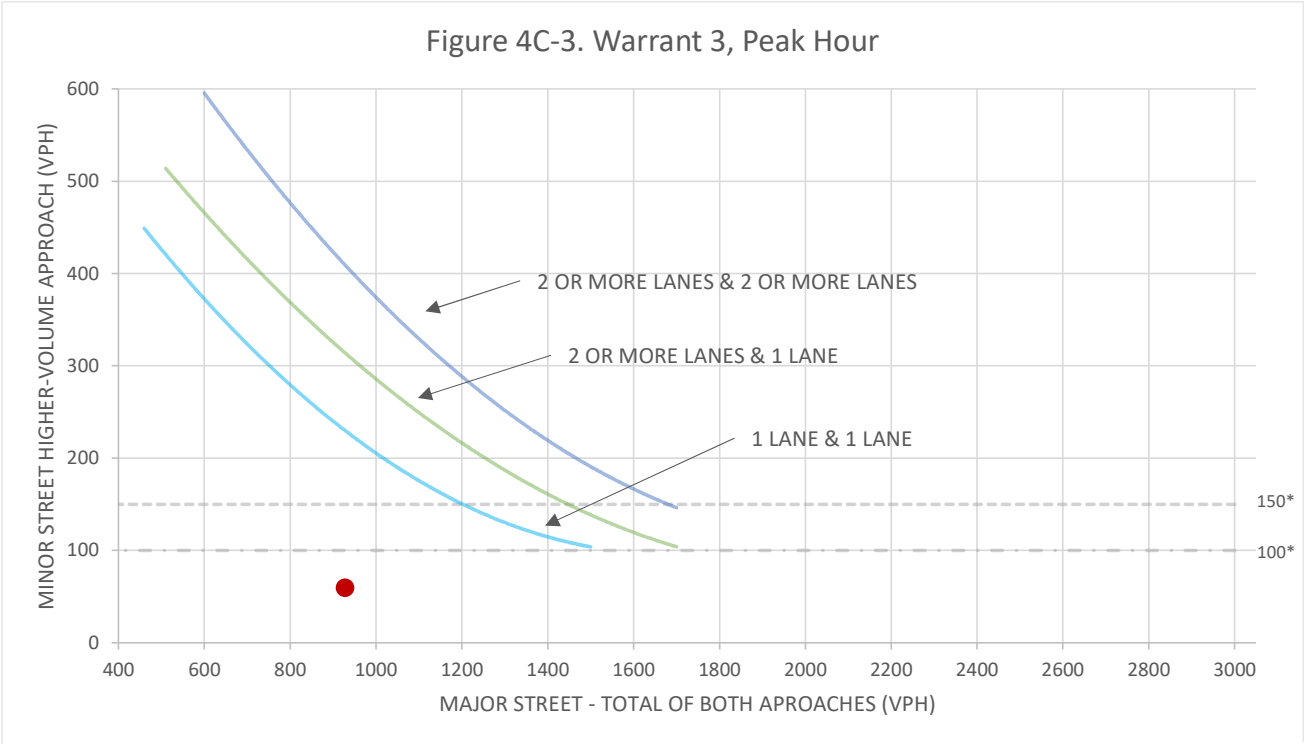
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	3,140	153	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024) plus Project
Peak Hour	AM

Intersection #	4
Major Street	Poplar Street
Minor Street	Lassen Road

N-S	E-W
☐	☒
☒	☐



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

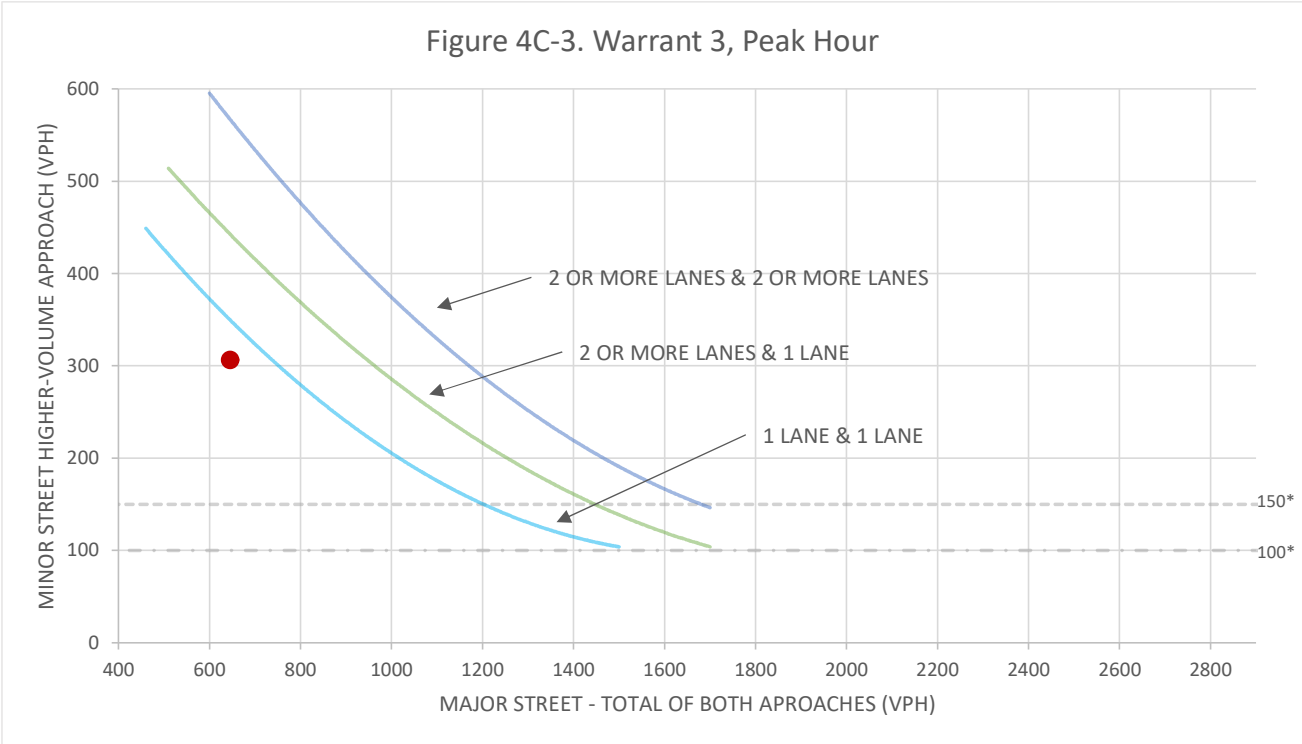
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	Poplar Street	Lassen Road	
Number of Approach Lanes	1	1	<u>No</u>
Traffic Volume (VPH)*	928	59	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024) plus Project
Peak Hour	AM

Intersection #	7
Major Street	I-15 SB Off-Ramp
Minor Street	Joshua Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

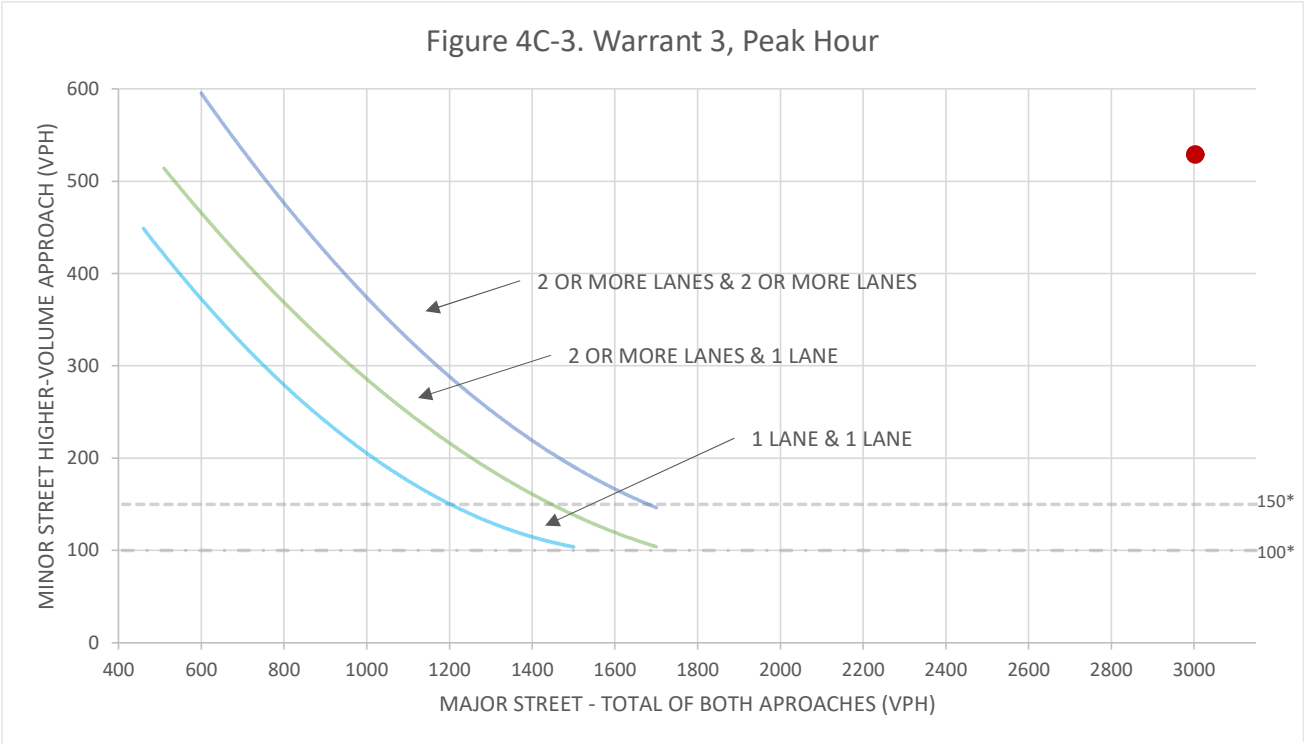
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	I-15 SB Off-Ramp	Joshua Street	
Number of Approach Lanes	1	1	<u>No</u>
Traffic Volume (VPH)*	646	306	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024) plus Project
Peak Hour	PM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

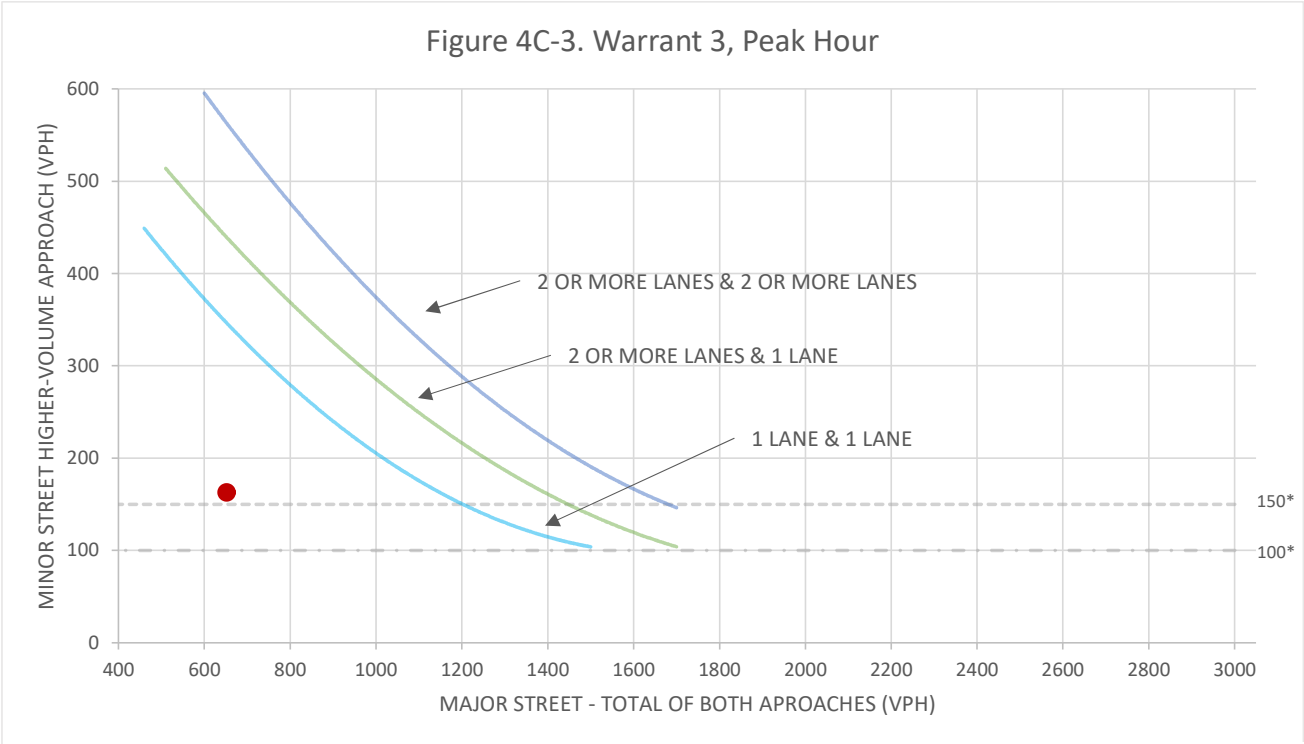
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	3,003	529	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024) plus Project
Peak Hour	PM

Intersection #	4
Major Street	Poplar Street
Minor Street	Lassen Road

N-S	E-W
☐	☒
☒	☐



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

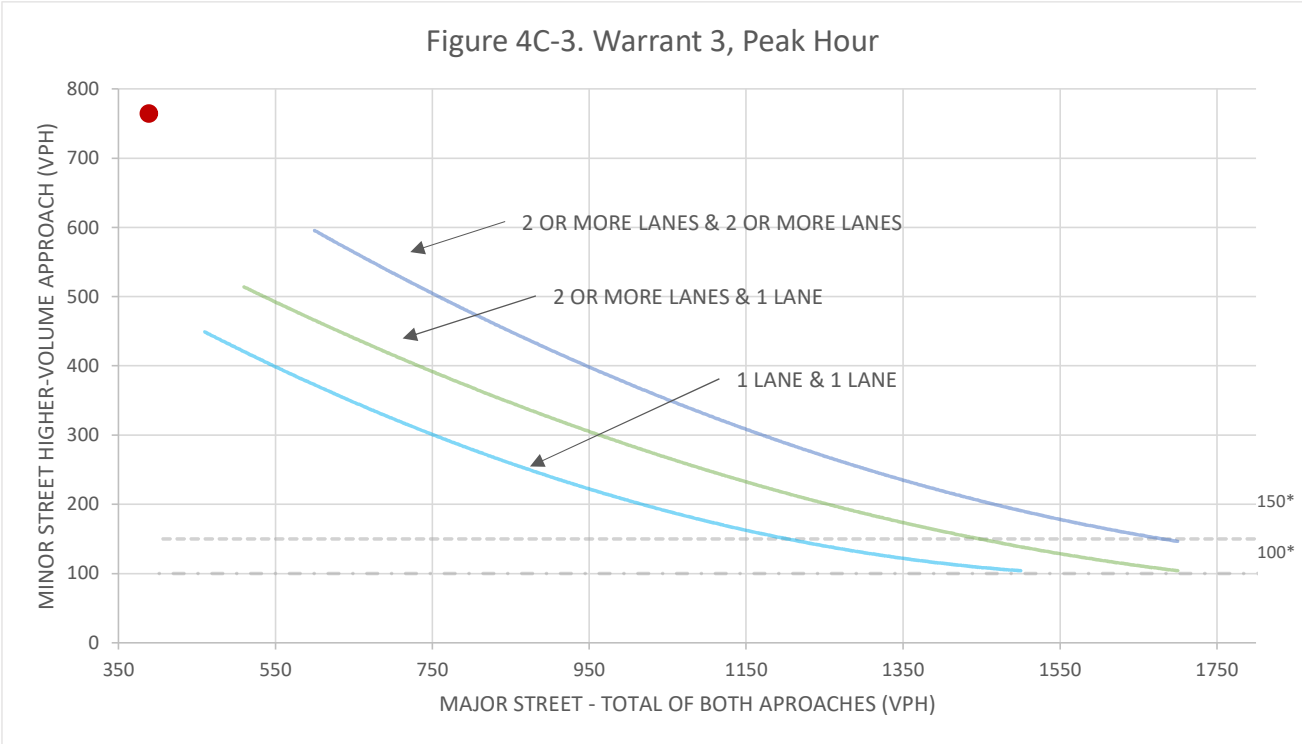
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	Poplar Street	Lassen Road	
Number of Approach Lanes	1	1	<u>No</u>
Traffic Volume (VPH)*	652	163	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Opening Year (2024) plus Project
Peak Hour	PM

Intersection #	7
Major Street	I-15 SB Off-Ramp
Minor Street	Joshua Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

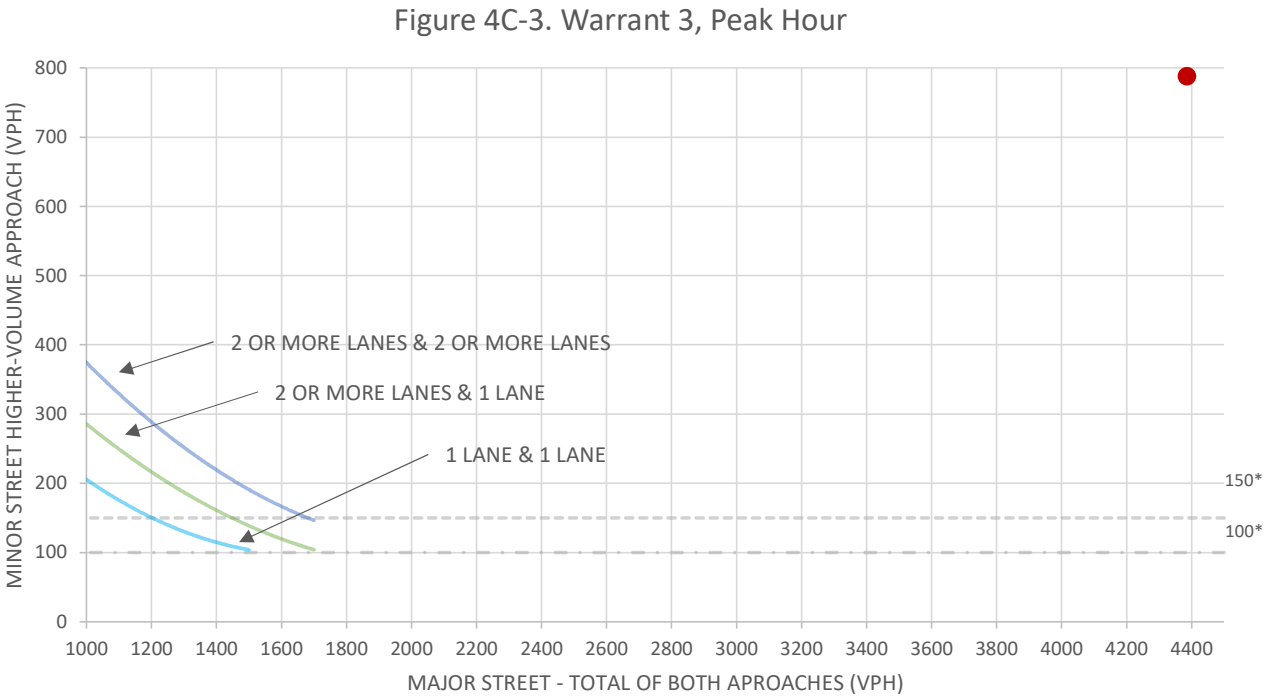
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	I-15 SB Off-Ramp	Joshua Street	
Number of Approach Lanes	1	1	Yes
Traffic Volume (VPH)*	389	764	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Horizon Year (2040)
Peak Hour	AM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

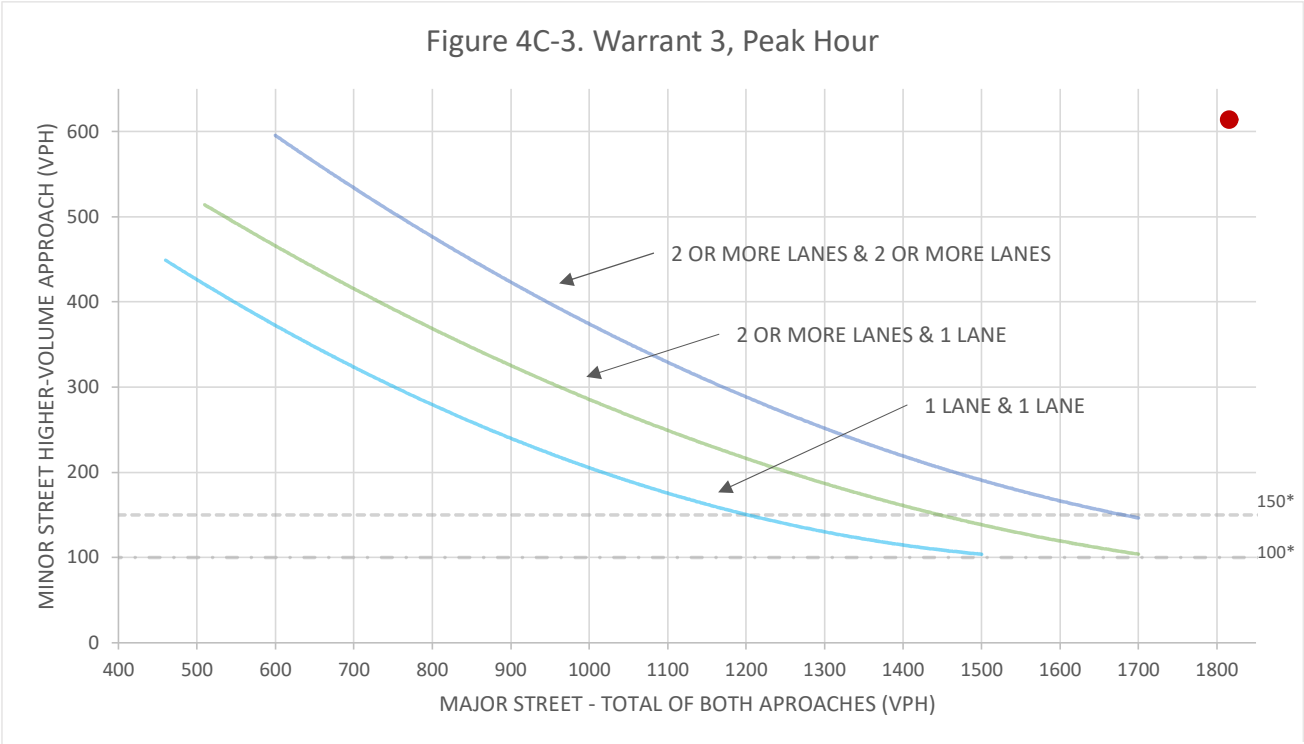
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	4,386	788	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Horizon Year (2040)
Peak Hour	AM

Intersection #	4
Major Street	Poplar Street
Minor Street	Lassen Road

N-S	E-W
☐	☒
☒	☐



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

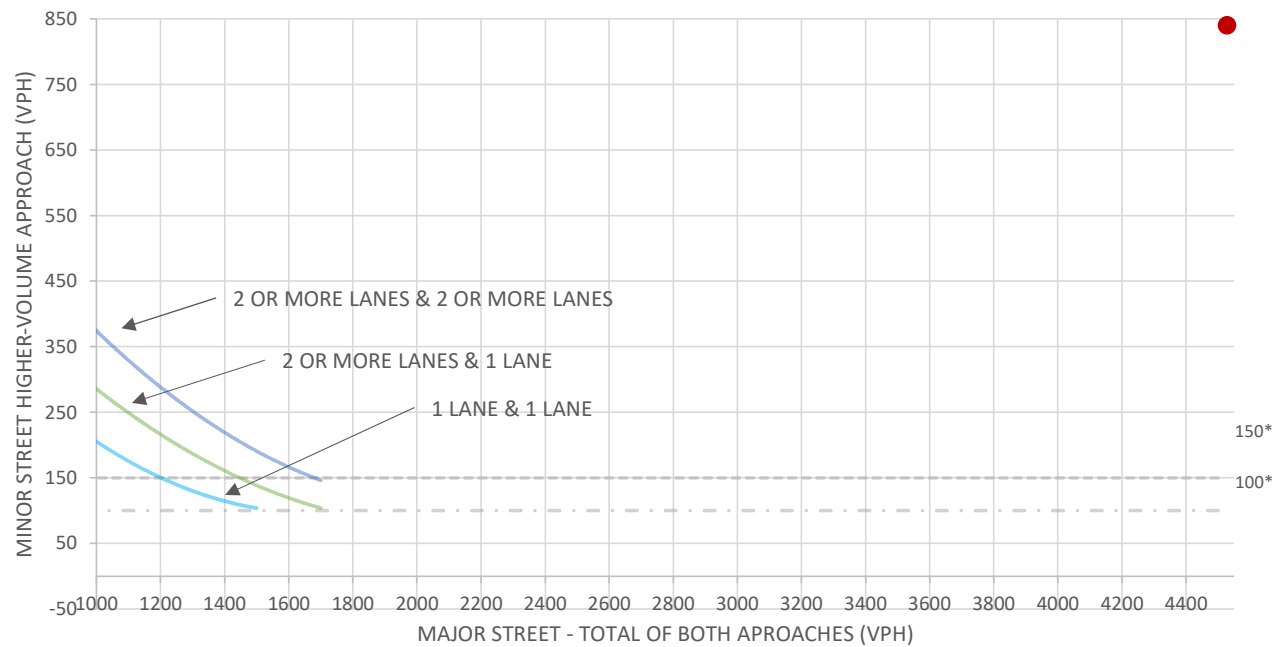
	Major Street	Minor Street	Warrant Met?
	Poplar Street	Lassen Road	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	1,816	614	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Horizon Year (2040)
Peak Hour	PM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒

Figure 4C-3. Warrant 3, Peak Hour



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

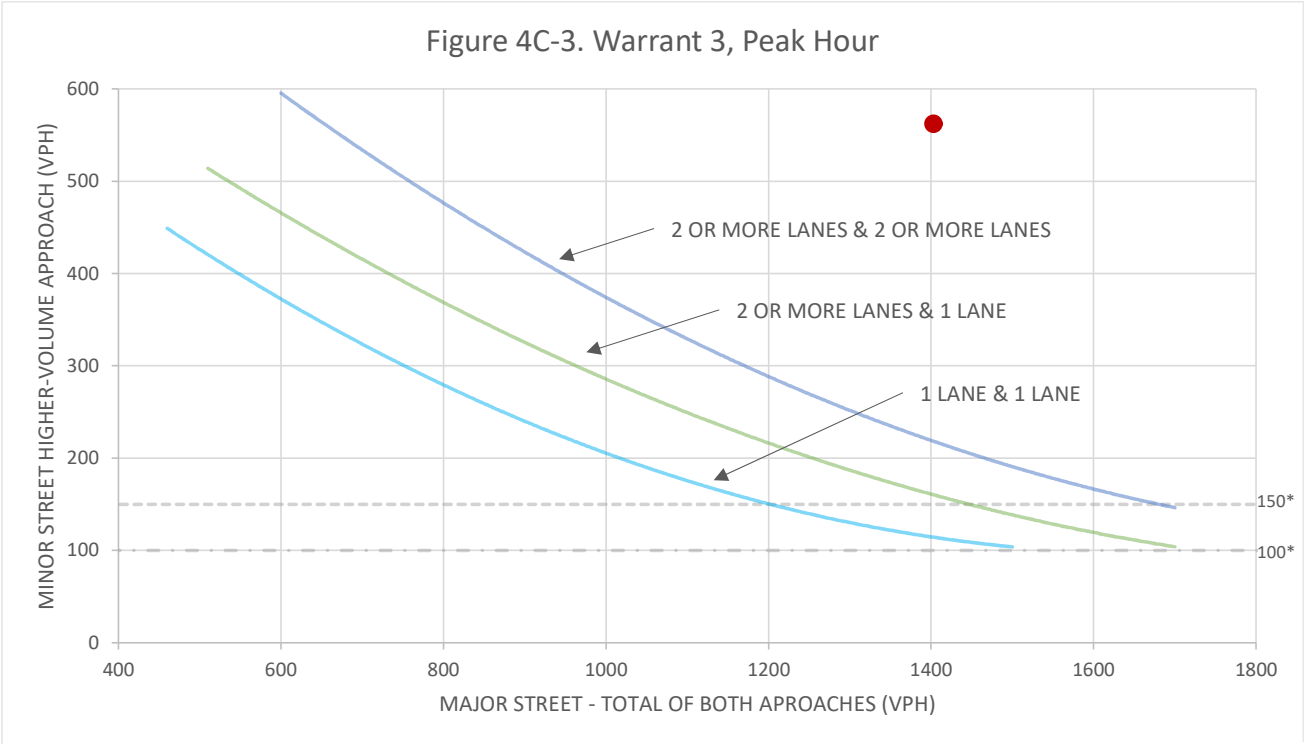
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	4,528	840	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Horizon Year (2040)
Peak Hour	PM

Intersection #	4
Major Street	Poplar Street
Minor Street	Lassen Road

N-S	E-W
☐	☒
☒	☐



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

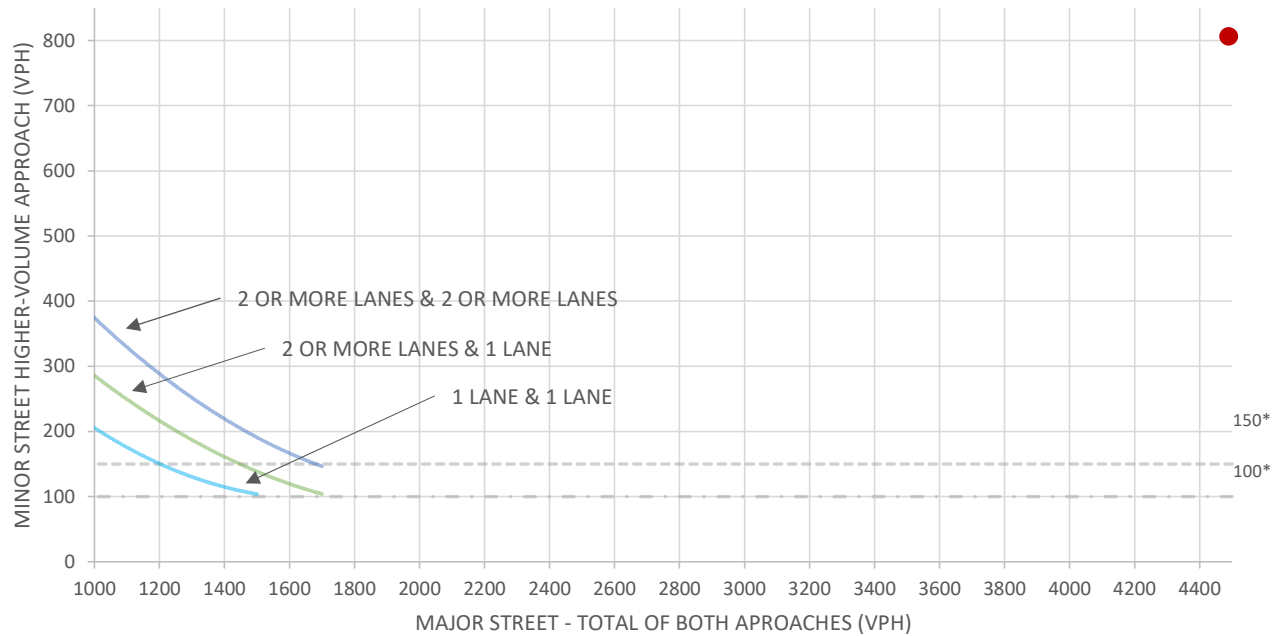
	Major Street	Minor Street	Warrant Met?
	Poplar Street	Lassen Road	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	1,403	562	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Horizon Year (2040) plus Project
Peak Hour	AM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒

Figure 4C-3. Warrant 3, Peak Hour



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

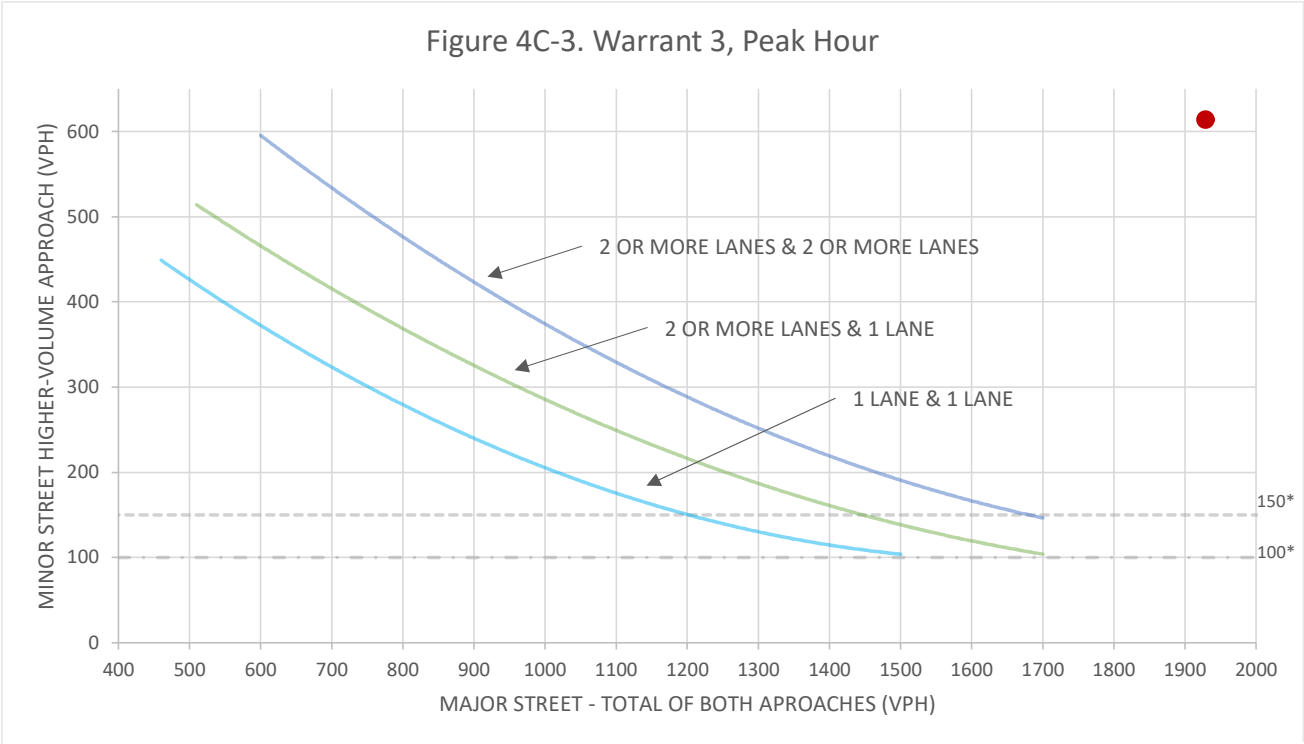
*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	4,490	806	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Horizon Year (2040) plus Project
Peak Hour	AM

Intersection #	4
Major Street	Poplar Street
Minor Street	Lassen Road

N-S	E-W
☐	☒
☒	☐



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

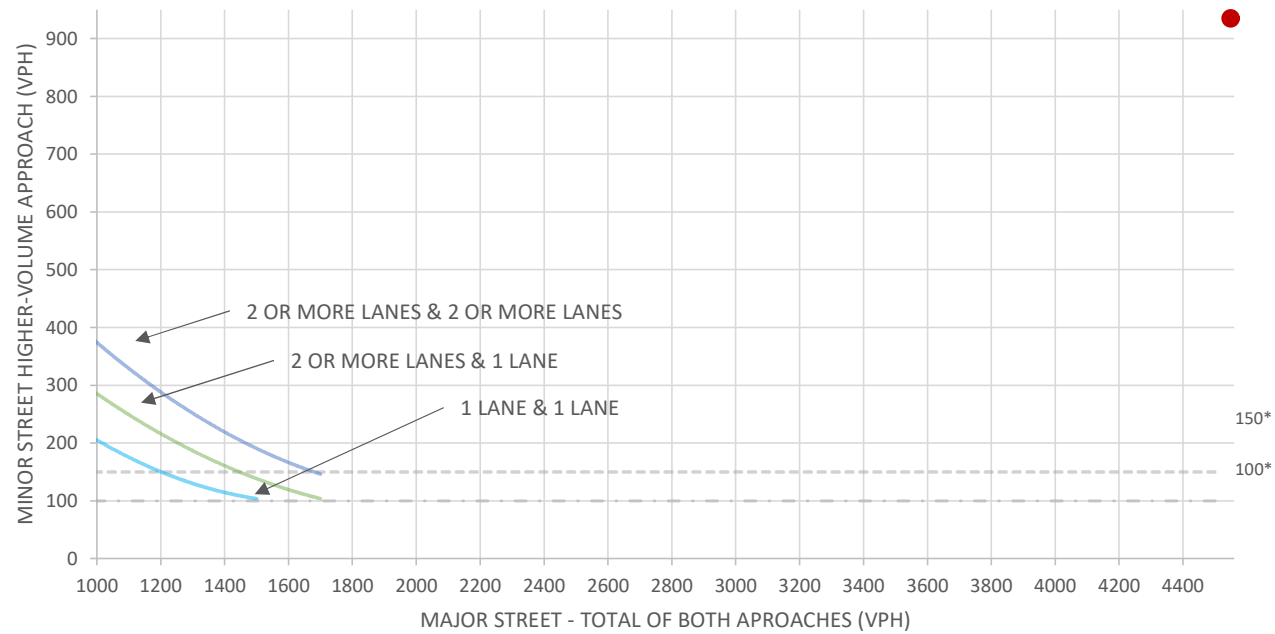
	Major Street	Minor Street	Warrant Met?
	Poplar Street	Lassen Road	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	1,929	614	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Horizon Year (2040) plus Project
Peak Hour	PM

Intersection #	3
Major Street	US Highway 395
Minor Street	Poplar Street

N-S	E-W
☒	☐
☐	☒

Figure 4C-3. Warrant 3, Peak Hour



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

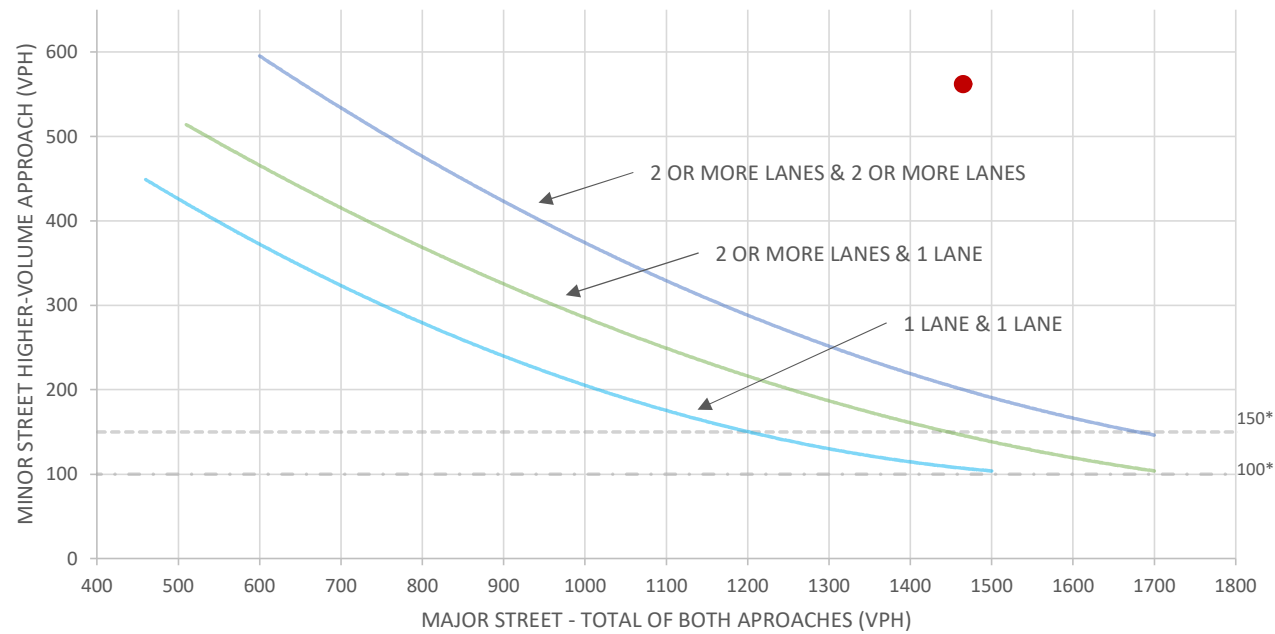
	Major Street	Minor Street	Warrant Met?
	US Highway 395	Poplar Street	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	4,550	935	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Project	Poplar 18 Industrial Park Project
Scenario	Horizon Year (2040) plus Project
Peak Hour	PM

Intersection #	4
Major Street	Poplar Street
Minor Street	Lassen Road

N-S	E-W
☐	☒
☒	☐

Figure 4C-3. Warrant 3, Peak Hour



Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014.

*Note: 150 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and a 100 vph applies as the lower threshold volumes for a minor-street approach with one lane.

	Major Street	Minor Street	Warrant Met?
	Poplar Street	Lassen Road	
Number of Approach Lanes	2	2	Yes
Traffic Volume (VPH)*	1,465	562	
*Note: Traffic volume for the Major Street approach is the total volume of both approaches. Traffic volume for the Minor Street is the highest volume approach.			

Queuing and Blocking Report
Opening Year (2024) plus Project w/Improvements

AM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B71	B71	NB	NB
Directions Served	L	T	T	TR	L	T	T	R	T	T	L	L
Maximum Queue (ft)	119	246	261	286	269	746	753	477	123	123	174	305
Average Queue (ft)	53	155	172	192	27	489	497	187	4	4	92	176
95th Queue (ft)	98	219	237	270	133	787	796	361	88	88	164	334
Link Distance (ft)		5791	5791	5791		2157	2157	2157	558	558		
Upstream Blk Time (%)									0	0		
Queuing Penalty (veh)									0	0		
Storage Bay Dist (ft)	340				245						280	280
Storage Blk Time (%)						44						0
Queuing Penalty (veh)						5						0

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	NB	NB	NB	B69	B69	SB	SB	SB	SB	B47
Directions Served	T	T	TR	T		L	L	T	TR	T
Maximum Queue (ft)	434	393	264	334	5	166	265	1469	1470	4986
Average Queue (ft)	287	232	160	23	0	93	253	1452	1423	4129
95th Queue (ft)	407	336	245	203	3	154	325	1546	1569	6817
Link Distance (ft)	500	500	500	812	812			1399	1399	4971
Upstream Blk Time (%)								49	28	63
Queuing Penalty (veh)								0	0	0
Storage Bay Dist (ft)						240	240			
Storage Blk Time (%)	12						0	75		
Queuing Penalty (veh)	26						1	291		

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	B33	B33
Directions Served	L	TR	L	T	R	L	T	TR	L	TR	T	
Maximum Queue (ft)	35	57	189	61	52	198	422	366	191	363	553	530
Average Queue (ft)	5	22	99	11	16	62	208	194	63	129	195	76
95th Queue (ft)	24	52	164	41	44	164	369	352	119	298	598	374
Link Distance (ft)	375	375		546	546		1953	1953		812	500	500
Upstream Blk Time (%)											1	0
Queuing Penalty (veh)											9	2
Storage Bay Dist (ft)			275			200			375			
Storage Blk Time (%)							7			0		
Queuing Penalty (veh)							5			0		

Queuing and Blocking Report
Opening Year (2024) plus Project w/Improvements

AM Peak Hour

Intersection: 4: Lassen Road & Poplar Street

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	61	162	172	58	37
Average Queue (ft)	39	69	92	28	22
95th Queue (ft)	59	120	144	50	42
Link Distance (ft)	299	299	757	831	214
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	35	579
Average Queue (ft)	7	126
95th Queue (ft)	27	419
Link Distance (ft)		1430
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	25	
Storage Blk Time (%)	1	
Queuing Penalty (veh)	7	

Zone Summary

Zone wide Queuing Penalty: 347

Queuing and Blocking Report
Opening Year (2024) plus Project w/Improvements

PM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	TR	L	T	T	R	L	L	T	T
Maximum Queue (ft)	364	1429	1436	1465	269	504	520	337	184	305	549	521
Average Queue (ft)	193	944	965	988	26	318	328	146	89	236	400	361
95th Queue (ft)	464	1684	1709	1722	126	488	502	274	154	395	558	525
Link Distance (ft)		5791	5791	5791		2156	2156	2156			500	500
Upstream Blk Time (%)											5	1
Queuing Penalty (veh)											26	5
Storage Bay Dist (ft)	340				245				280	280		
Storage Blk Time (%)	0	63				23				0	36	
Queuing Penalty (veh)	0	38				3				0	97	

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	NB	B33	B69	B69	SB	SB	SB	SB	B47
Directions Served	TR	T	T		L	L	T	TR	T
Maximum Queue (ft)	525	614	821	829	252	265	1543	1542	4913
Average Queue (ft)	286	96	616	437	198	262	1483	1416	2942
95th Queue (ft)	469	509	1101	1028	277	298	1738	1735	6199
Link Distance (ft)	500	2543	783	783			1473	1473	4898
Upstream Blk Time (%)	0		3	1			37	5	17
Queuing Penalty (veh)	1		22	6			0	0	0
Storage Bay Dist (ft)					240	240			
Storage Blk Time (%)					7	12	59		
Queuing Penalty (veh)					38	61	367		

Queuing and Blocking Report
Opening Year (2024) plus Project w/Improvements

PM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	WB	B14	B95	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	T	T	L	T	TR	L	TR
Maximum Queue (ft)	96	112	300	560	112	117	64	184	1974	1976	337	829
Average Queue (ft)	29	48	284	326	46	36	13	19	1470	1461	72	554
95th Queue (ft)	73	94	333	749	91	183	101	111	2311	2334	278	998
Link Distance (ft)	359	359		546	546	226	313		1953	1953		783
Upstream Blk Time (%)				17		7	0		4	5		21
Queuing Penalty (veh)				41		16	1		35	41		267
Storage Bay Dist (ft)			275					200			375	
Storage Blk Time (%)			43	0					66			30
Queuing Penalty (veh)			0	0					3			13

Intersection: 3: US Hwy 395 & Poplar Street

Movement	B69	B33	B33
Directions Served	T	T	
Maximum Queue (ft)	1575	555	549
Average Queue (ft)	400	281	125
95th Queue (ft)	1724	694	481
Link Distance (ft)	2543	500	500
Upstream Blk Time (%)	6	3	1
Queuing Penalty (veh)	71	19	8
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Lassen Road & Poplar Street

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	43	94	145	60	52
Average Queue (ft)	17	49	77	37	31
95th Queue (ft)	43	76	120	57	45
Link Distance (ft)		313	757	831	213
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Queuing and Blocking Report
Opening Year (2024) plus Project w/Improvements

PM Peak Hour

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	40	65
Average Queue (ft)	22	7
95th Queue (ft)	40	47
Link Distance (ft)	1430	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	25	
Storage Blk Time (%)	10	
Queuing Penalty (veh)	35	

Zone Summary

Zone wide Queuing Penalty: 1214

Queuing and Blocking Report
Horizon Year (2040) plus Project w/Improvements

AM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	R	L
Maximum Queue (ft)	190	289	316	322	267	269	397	391	382	407	193	190
Average Queue (ft)	90	186	201	205	125	32	277	285	276	210	31	96
95th Queue (ft)	162	259	279	292	217	120	375	379	369	349	106	164
Link Distance (ft)		5777	5777	5777	5777		2142	2142	2142	2142	2142	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	340					245						280
Storage Blk Time (%)							17					
Queuing Penalty (veh)							4					

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	NB	NB	NB	NB	NB	B69	B69	SB	SB	SB	SB	SB
Directions Served	L	T	T	T	TR	T		L	L	T	T	TR
Maximum Queue (ft)	305	507	486	374	93	675	688	102	265	1406	1406	1374
Average Queue (ft)	208	326	258	168	22	391	186	36	242	1397	1356	1278
95th Queue (ft)	367	470	413	283	60	899	649	83	352	1439	1422	1453
Link Distance (ft)		486	486	486	486	644	644			1336	1336	1336
Upstream Blk Time (%)		1	0	0		3	1			58	10	2
Queuing Penalty (veh)		3	1	0		11	3			0	0	0
Storage Bay Dist (ft)	280							240	240			
Storage Blk Time (%)	0	20							0	85		
Queuing Penalty (veh)	0	41							1	322		

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	B47
Directions Served	T
Maximum Queue (ft)	5024
Average Queue (ft)	4344
95th Queue (ft)	6740
Link Distance (ft)	5009
Upstream Blk Time (%)	67
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Horizon Year (2040) plus Project w/Improvements

AM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	WB	B14	B14	B95	B95	NB	NB	NB
Directions Served	L	TR	L	LTR	R	T	T	T	T	L	T	T
Maximum Queue (ft)	30	49	300	593	432	283	243	354	330	225	547	528
Average Queue (ft)	5	19	292	582	44	261	85	274	194	105	294	243
95th Queue (ft)	23	46	346	661	283	380	231	457	423	236	507	463
Link Distance (ft)	366	366		522	522	211	211	323	323		1953	1953
Upstream Blk Time (%)				73	2	76	2	17	2			
Queuing Penalty (veh)				283	8	292	8	65	7			
Storage Bay Dist (ft)			275							200		
Storage Blk Time (%)			1	73						0	23	
Queuing Penalty (veh)			3	124						0	16	

Intersection: 3: US Hwy 395 & Poplar Street

Movement	NB	NB	SB	SB	SB	SB	B33	B33
Directions Served	T	R	L	L	T	TR	T	
Maximum Queue (ft)	235	261	142	149	235	243	530	537
Average Queue (ft)	21	118	61	71	101	122	305	193
95th Queue (ft)	158	219	107	123	192	213	700	590
Link Distance (ft)	1953	1953			644	644	486	486
Upstream Blk Time (%)							3	1
Queuing Penalty (veh)							34	9
Storage Bay Dist (ft)			375	375				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 4: Lassen Road & Poplar Street

Movement	EB	EB	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	TR	L	TR	LTR
Maximum Queue (ft)	125	340	305	198	405	432	822	822	90
Average Queue (ft)	119	208	130	90	246	204	569	360	32
95th Queue (ft)	143	309	233	168	388	370	1000	990	65
Link Distance (ft)		323	323	323	750	750	806	806	215
Upstream Blk Time (%)		1	0				39	31	
Queuing Penalty (veh)		2	0				0	0	
Storage Bay Dist (ft)	100								
Storage Blk Time (%)	35	37							
Queuing Penalty (veh)	96	101							

Queuing and Blocking Report
 Horizon Year (2040) plus Project w/Improvements

AM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	69	84	230	16	74	158	437	450	373	126	112	112
Average Queue (ft)	21	33	126	1	27	31	173	194	208	52	48	44
95th Queue (ft)	54	68	200	9	59	85	324	341	331	105	95	87
Link Distance (ft)	289	289		599	599		880	880	880	880		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			245			190					225	225
Storage Blk Time (%)			0			0	4					
Queuing Penalty (veh)			0			0	1					

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	132	177	26
Average Queue (ft)	54	79	6
95th Queue (ft)	107	145	19
Link Distance (ft)	1953	1953	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		225	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Queuing and Blocking Report
Horizon Year (2040) plus Project w/Improvements

AM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	TR	L	T	R	R	L	T	T	T
Maximum Queue (ft)	98	160	100	56	115	234	250	260	214	441	498	564
Average Queue (ft)	10	71	41	17	44	109	141	71	60	269	274	302
95th Queue (ft)	60	138	87	47	98	195	224	180	168	425	469	518
Link Distance (ft)			244	244	393	393	393	393		1709	1709	1709
Upstream Blk Time (%)								0				
Queuing Penalty (veh)								1				
Storage Bay Dist (ft)	190	190							190			
Storage Blk Time (%)		0							0	21		9
Queuing Penalty (veh)		0							0	12		9

Intersection: 6: US Hwy 395 & Joshua Street

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	T	T	T	R
Maximum Queue (ft)	355	227	248	207	200	98
Average Queue (ft)	64	111	96	103	112	36
95th Queue (ft)	283	188	187	183	188	91
Link Distance (ft)			880	880	880	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	330	220			270	
Storage Blk Time (%)	0	1	0			
Queuing Penalty (veh)	0	7	0			

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	25	175
Average Queue (ft)	8	33
95th Queue (ft)	24	118
Link Distance (ft)		1403
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	25	
Storage Blk Time (%)	1	
Queuing Penalty (veh)	8	

Zone Summary

Zone wide Queuing Penalty: 1471

Queuing and Blocking Report
Horizon Year (2040) plus Project w/Improvements

PM Peak Hour

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	R	L
Maximum Queue (ft)	111	302	310	304	146	42	256	252	234	294	135	151
Average Queue (ft)	46	199	215	209	56	9	144	151	140	150	20	75
95th Queue (ft)	94	266	282	279	109	30	222	226	215	257	79	131
Link Distance (ft)		5777	5777	5777	5777		2142	2142	2142	2142	2142	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	340					245						280
Storage Blk Time (%)		0					0					
Queuing Penalty (veh)		0					0					

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	NB	NB	NB	NB	NB	B33	B69	B69	SB	SB	SB	SB
Directions Served	L	T	T	T	TR	T	T		L	L	T	T
Maximum Queue (ft)	305	492	487	413	101	29	687	694	250	265	1394	1394
Average Queue (ft)	217	364	282	203	33	1	627	543	153	263	1345	1278
95th Queue (ft)	389	497	437	348	78	16	806	894	249	284	1538	1557
Link Distance (ft)		486	486	486	486	2683	638	638			1324	1324
Upstream Blk Time (%)		0	0	0			7	3			37	5
Queuing Penalty (veh)		4	1	0			76	27			0	0
Storage Bay Dist (ft)	280								240	240		
Storage Blk Time (%)	0	25							2	5	63	
Queuing Penalty (veh)	0	103							8	25	405	

Intersection: 1: US Hwy 395 & Phelan Road/Main Street

Movement	SB	B47
Directions Served	TR	T
Maximum Queue (ft)	1331	5036
Average Queue (ft)	940	2615
95th Queue (ft)	1611	6168
Link Distance (ft)	1324	5021
Upstream Blk Time (%)	0	21
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
Horizon Year (2040) plus Project w/Improvements

PM Peak Hour

Intersection: 3: US Hwy 395 & Poplar Street

Movement	EB	EB	WB	WB	WB	B14	B14	B95	B95	NB	NB	NB
Directions Served	L	TR	L	LTR	R	T	T	T	T	L	T	T
Maximum Queue (ft)	70	58	300	593	588	283	282	361	367	225	1990	2004
Average Queue (ft)	26	29	295	593	275	278	214	328	295	63	1966	1975
95th Queue (ft)	60	56	324	598	679	333	343	412	442	217	2013	2020
Link Distance (ft)	367	367		522	522	211	211	323	323		1953	1953
Upstream Blk Time (%)				74	9	86	28	41	15		42	57
Queuing Penalty (veh)				342	41	395	129	189	70		307	419
Storage Bay Dist (ft)			275							200		
Storage Blk Time (%)			10	70							78	
Queuing Penalty (veh)			46	181							29	

Intersection: 3: US Hwy 395 & Poplar Street

Movement	NB	NB	SB	SB	SB	SB	B33	B33
Directions Served	T	R	L	L	T	TR	T	
Maximum Queue (ft)	2013	2003	262	338	372	212	554	528
Average Queue (ft)	1974	1598	122	160	101	101	234	113
95th Queue (ft)	2034	2694	240	271	234	197	642	457
Link Distance (ft)	1953	1953			638	638	486	486
Upstream Blk Time (%)	49	14					2	1
Queuing Penalty (veh)	361	102					11	3
Storage Bay Dist (ft)			375	375				
Storage Blk Time (%)			0	0	0			
Queuing Penalty (veh)			0	3	0			

Queuing and Blocking Report
Horizon Year (2040) plus Project w/Improvements

PM Peak Hour

Intersection: 4: Lassen Road & Poplar Street

Movement	EB	EB	EB	EB	WB	WB	B46	B46	B17	B17	NB	NB
Directions Served	L	T	T	R	L	TR	T	T	T	T	L	TR
Maximum Queue (ft)	84	173	174	194	774	809	383	382	90	96	819	819
Average Queue (ft)	29	89	91	73	448	599	132	135	12	11	714	627
95th Queue (ft)	72	151	154	150	962	995	487	493	82	75	1073	1174
Link Distance (ft)		323	323	323	750	750	545	545	153	153	804	804
Upstream Blk Time (%)					26	35	8	9	3	2	73	65
Queuing Penalty (veh)					84	115	28	28	10	8	0	0
Storage Bay Dist (ft)	100											
Storage Blk Time (%)	0	13										
Queuing Penalty (veh)	1	6										

Intersection: 4: Lassen Road & Poplar Street

Movement	SB
Directions Served	LTR
Maximum Queue (ft)	226
Average Queue (ft)	121
95th Queue (ft)	231
Link Distance (ft)	215
Upstream Blk Time (%)	8
Queuing Penalty (veh)	19
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Horizon Year (2040) plus Project w/Improvements

PM Peak Hour

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	170	70	267	614	614	214	918	922	942	872	192	221
Average Queue (ft)	71	26	170	351	517	64	859	862	860	347	83	87
95th Queue (ft)	139	57	272	837	777	218	1083	1076	1093	974	146	180
Link Distance (ft)	289	289		599	599		880	880	880	880		
Upstream Blk Time (%)				28	50		33	39	53	1		
Queuing Penalty (veh)				0	0		205	248	334	8		
Storage Bay Dist (ft)			245			190					225	225
Storage Blk Time (%)			5				92				0	0
Queuing Penalty (veh)			1				33				0	2

Intersection: 5: US Hwy 395 & Three Flags Road

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	192	214	22
Average Queue (ft)	78	94	6
95th Queue (ft)	158	178	20
Link Distance (ft)	1953	1953	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			225
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Queuing and Blocking Report
Horizon Year (2040) plus Project w/Improvements

PM Peak Hour

Intersection: 6: US Hwy 395 & Joshua Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	TR	L	T	R	R	L	T	T	T
Maximum Queue (ft)	202	215	259	238	289	323	410	473	215	1724	1724	1724
Average Queue (ft)	183	212	257	69	121	190	351	403	76	1527	1520	1513
95th Queue (ft)	223	218	264	195	261	410	490	649	238	2221	2223	2238
Link Distance (ft)			244	244	393	393	393	393		1709	1709	1709
Upstream Blk Time (%)			95	1	0		38	72		65	67	76
Queuing Penalty (veh)			0	0	0		77	147		0	0	0
Storage Bay Dist (ft)	190	190							190			
Storage Blk Time (%)	11	95	0						0	93		90
Queuing Penalty (veh)	17	156	0						0	39		86

Intersection: 6: US Hwy 395 & Joshua Street

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	T	T	T	R
Maximum Queue (ft)	355	245	652	548	327	189
Average Queue (ft)	189	229	387	256	199	13
95th Queue (ft)	480	283	679	470	292	109
Link Distance (ft)			880	880	880	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	330	220			270	
Storage Blk Time (%)	0	53	0		2	0
Queuing Penalty (veh)	0	266	1		1	0

Intersection: 7: Joshua Street & I-15 SB Off-Ramp

Movement	EB	EB	WB	SB	SB
Directions Served	T	T	T	L	R
Maximum Queue (ft)	25	25	757	50	1418
Average Queue (ft)	2	1	245	22	1044
95th Queue (ft)	18	14	776	59	1937
Link Distance (ft)	393	393	919		1403
Upstream Blk Time (%)			4		60
Queuing Penalty (veh)			13		0
Storage Bay Dist (ft)				25	
Storage Blk Time (%)				4	
Queuing Penalty (veh)				19	

Zone Summary

Zone wide Queuing Penalty: 5231

HCM 6th Signalized Intersection Summary

3: US Hwy 395 & Poplar Street

Existing plus Project (w/Improvements)

Timing Plan: AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	15	10	835	94	51	1059
Future Volume (veh/h)	15	10	835	94	51	1059
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	11	898	101	55	1139
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	59	92	1829	206	104	1394
Arrive On Green	0.03	0.03	0.56	0.56	0.06	0.73
Sat Flow, veh/h	1810	2834	3366	368	1810	1900
Grp Volume(v), veh/h	16	11	496	503	55	1139
Grp Sat Flow(s),veh/h/ln	1810	1417	1805	1834	1810	1900
Q Serve(g_s), s	0.3	0.1	6.4	6.4	1.1	15.3
Cycle Q Clear(g_c), s	0.3	0.1	6.4	6.4	1.1	15.3
Prop In Lane	1.00	1.00		0.20	1.00	
Lane Grp Cap(c), veh/h	59	92	1009	1025	104	1394
V/C Ratio(X)	0.27	0.12	0.49	0.49	0.53	0.82
Avail Cap(c_a), veh/h	846	1325	1964	1995	310	2615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	18.1	5.2	5.2	17.6	3.4
Incr Delay (d2), s/veh	2.4	0.6	0.4	0.4	4.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.6	0.6	0.5	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.6	18.7	5.5	5.5	21.7	4.6
LnGrp LOS	C	B	A	A	C	A
Approach Vol, veh/h	27		999			1194
Approach Delay, s/veh	19.8		5.5			5.4
Approach LOS	B		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.7	26.0			32.8	5.8
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	6.6	41.9			53.0	18.0
Max Q Clear Time (g_c+l1), s	3.1	8.4			17.3	2.3
Green Ext Time (p_c), s	0.0	6.2			10.9	0.0
Intersection Summary						
HCM 6th Ctrl Delay			5.6			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 3: US Hwy 395 & Poplar Street

Existing plus Project (w/Improvements)
Timing Plan: PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	81	38	1306	54	24	870
Future Volume (veh/h)	81	38	1306	54	24	870
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	39	1333	55	24	888
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	135	212	2340	96	50	1460
Arrive On Green	0.07	0.07	0.66	0.66	0.03	0.77
Sat Flow, veh/h	1810	2834	3628	146	1810	1900
Grp Volume(v), veh/h	83	39	680	708	24	888
Grp Sat Flow(s),veh/h/ln	1810	1417	1805	1874	1810	1900
Q Serve(g_s), s	2.6	0.7	11.7	11.8	0.7	11.7
Cycle Q Clear(g_c), s	2.6	0.7	11.7	11.8	0.7	11.7
Prop In Lane	1.00	1.00		0.08	1.00	
Lane Grp Cap(c), veh/h	135	212	1195	1241	50	1460
V/C Ratio(X)	0.61	0.18	0.57	0.57	0.48	0.61
Avail Cap(c_a), veh/h	568	889	1195	1241	158	1460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	24.9	5.2	5.3	27.5	2.9
Incr Delay (d2), s/veh	4.5	0.4	2.0	1.9	6.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.2	2.1	2.2	0.4	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.2	25.3	7.2	7.2	34.4	4.8
LnGrp LOS	C	C	A	A	C	A
Approach Vol, veh/h	122		1388			912
Approach Delay, s/veh	28.6		7.2			5.6
Approach LOS	C		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.1	42.5			48.6	8.8
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	5.0	38.0			38.0	18.0
Max Q Clear Time (g_c+l1), s	2.7	13.8			13.7	4.6
Green Ext Time (p_c), s	0.0	9.1			6.1	0.3
Intersection Summary						
HCM 6th Ctrl Delay			7.7			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary Opening Year (2024) plus Project (#3 Signalized) 3: US Hwy 395 & Poplar Street

Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	29	119	8	25	71	1160	550	111	1298	29
Future Volume (veh/h)	5	0	29	119	8	25	71	1160	550	111	1298	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1800	1900	1800	1900	1900	1900	1900	1800
Adj Flow Rate, veh/h	5	0	32	128	9	27	77	1247	591	119	1396	32
Peak Hour Factor	0.92	0.92	0.92	0.93	0.92	0.93	0.92	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	11	0	55	156	46	137	86	1604	714	143	1276	29
Arrive On Green	0.01	0.00	0.04	0.09	0.12	0.12	0.05	0.66	0.66	0.08	0.69	0.69
Sat Flow, veh/h	1714	0	1525	1810	396	1189	1714	2429	1082	1810	1850	42
Grp Volume(v), veh/h	5	0	32	128	0	36	77	906	932	119	0	1428
Grp Sat Flow(s),veh/h/ln	1714	0	1525	1810	0	1586	1714	1805	1705	1810	0	1892
Q Serve(g_s), s	0.4	0.0	2.7	9.0	0.0	2.7	5.8	44.5	53.1	8.4	0.0	89.5
Cycle Q Clear(g_c), s	0.4	0.0	2.7	9.0	0.0	2.7	5.8	44.5	53.1	8.4	0.0	89.5
Prop In Lane	1.00		1.00	1.00		0.75	1.00		0.63	1.00		0.02
Lane Grp Cap(c), veh/h	11	0	55	156	0	183	86	1192	1126	143	0	1305
V/C Ratio(X)	0.46	0.00	0.59	0.82	0.00	0.20	0.90	0.76	0.83	0.83	0.00	1.09
Avail Cap(c_a), veh/h	66	0	212	251	0	379	86	1192	1126	159	0	1305
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.3	0.0	61.6	58.3	0.0	52.0	61.3	15.0	16.5	58.9	0.0	20.2
Incr Delay (d2), s/veh	27.2	0.0	9.6	10.9	0.0	0.5	64.2	2.9	5.2	27.3	0.0	54.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.2	4.6	0.0	1.1	4.0	15.9	18.5	4.8	0.0	50.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.5	0.0	71.3	69.3	0.0	52.5	125.5	18.0	21.8	86.2	0.0	75.0
LnGrp LOS	F	A	E	E	A	D	F	B	C	F	A	F
Approach Vol, veh/h		37			164			1915			1547	
Approach Delay, s/veh		74.0			65.6			24.1			75.9	
Approach LOS		E			E			C			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.8	90.2	15.7	9.1	11.0	94.0	5.3	19.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	11.4	84.6	18.0	18.0	6.5	89.5	5.0	31.0				
Max Q Clear Time (g_c+I1), s	10.4	55.1	11.0	4.7	7.8	91.5	2.4	4.7				
Green Ext Time (p_c), s	0.0	16.0	0.2	0.1	0.0	0.0	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay			48.3									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary Opening Year (2024) plus Project (#3 Signalized) 3: US Hwy 395 & Poplar Street

Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	438	0	91	0	1584	155	42	1214	0
Future Volume (veh/h)	0	0	0	438	0	91	0	1584	155	42	1214	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1772	1772	1900	1772	1900	1772	1900	1900	1900	1900	1772
Adj Flow Rate, veh/h	0	0	0	447	0	93	0	1616	158	43	1239	0
Peak Hour Factor	0.92	0.92	0.92	0.98	0.92	0.98	0.92	0.98	0.98	0.98	0.98	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	0	0	0	0	2
Cap, veh/h	1	2	0	473	0	392	1	1964	190	58	1257	0
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.00	0.59	0.59	0.03	0.66	0.00
Sat Flow, veh/h	1688	1772	0	1810	0	1502	1688	3326	322	1810	1900	0
Grp Volume(v), veh/h	0	0	0	447	0	93	0	869	905	43	1239	0
Grp Sat Flow(s),veh/h/ln	1688	1772	0	1810	0	1502	1688	1805	1842	1810	1900	0
Q Serve(g_s), s	0.0	0.0	0.0	28.3	0.0	5.7	0.0	44.3	46.1	2.7	74.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	28.3	0.0	5.7	0.0	44.3	46.1	2.7	74.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.17	1.00		0.00
Lane Grp Cap(c), veh/h	1	2	0	473	0	392	1	1066	1088	58	1257	0
V/C Ratio(X)	0.00	0.00	0.00	0.95	0.00	0.24	0.00	0.81	0.83	0.74	0.99	0.00
Avail Cap(c_a), veh/h	72	273	0	489	0	573	72	1195	1219	82	1262	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	42.3	0.0	33.9	0.0	18.8	19.2	56.0	19.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	27.1	0.0	0.3	0.0	4.1	4.6	18.9	21.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	16.0	0.0	2.1	0.0	16.7	17.9	1.5	32.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	69.3	0.0	34.2	0.0	22.9	23.8	74.8	41.1	0.0
LnGrp LOS	A	A	A	E	A	C	A	C	C	E	D	A
Approach Vol, veh/h	0			540			1774			1282		
Approach Delay, s/veh	0.0			63.3			23.4			42.2		
Approach LOS				E			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	73.4	35.0	0.0	0.0	81.7	0.0	35.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.3	77.2	31.5	18.0	5.0	77.5	5.0	44.5				
Max Q Clear Time (g_c+l1), s	4.7	48.1	30.3	0.0	0.0	76.0	0.0	7.7				
Green Ext Time (p_c), s	0.0	14.6	0.2	0.0	0.0	1.1	0.0	0.6				
Intersection Summary												
HCM 6th Ctrl Delay	36.1											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary 3: US Hwy 395 & Poplar Street

Horizon Year (2040) plus Project (#3 Signalized)

Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	301	0	459	0	1131	313	422	2255	0
Future Volume (veh/h)	0	0	0	301	0	459	0	1131	313	422	2255	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1772	1772	1900	1772	1900	1772	1900	1900	1900	1900	1772
Adj Flow Rate, veh/h	0	0	0	317	0	483	0	1191	329	444	2374	0
Peak Hour Factor	0.92	0.92	0.92	0.95	0.92	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	0	0	0	0	2
Cap, veh/h	1	114	0	296	0	394	1	1345	366	282	1272	0
Arrive On Green	0.00	0.00	0.00	0.16	0.00	0.26	0.00	0.48	0.48	0.16	0.67	0.00
Sat Flow, veh/h	1688	1772	0	1810	0	1502	1688	2804	763	1810	1900	0
Grp Volume(v), veh/h	0	0	0	317	0	483	0	760	760	444	2374	0
Grp Sat Flow(s),veh/h/ln	1688	1772	0	1810	0	1502	1688	1805	1763	1810	1900	0
Q Serve(g_s), s	0.0	0.0	0.0	21.5	0.0	34.5	0.0	49.8	51.9	20.5	88.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	21.5	0.0	34.5	0.0	49.8	51.9	20.5	88.1	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.43	1.00		0.00
Lane Grp Cap(c), veh/h	1	114	0	296	0	394	1	865	845	282	1272	0
V/C Ratio(X)	0.00	0.00	0.00	1.07	0.00	1.23	0.00	0.88	0.90	1.58	1.87	0.00
Avail Cap(c_a), veh/h	64	242	0	296	0	394	64	988	964	282	1272	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	55.0	0.0	48.5	0.0	30.8	31.3	55.5	21.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	72.8	0.0	122.7	0.0	8.3	10.3	275.2	392.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	15.8	0.0	26.3	0.0	21.7	22.5	30.5	169.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	127.9	0.0	171.2	0.0	39.1	41.6	330.8	414.7	0.0
LnGrp LOS	A	A	A	F	A	F	A	D	D	F	F	A
Approach Vol, veh/h	0			800			1520			2818		
Approach Delay, s/veh	0.0			154.1			40.4			401.5		
Approach LOS				F			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	67.6	26.0	13.0	0.0	92.6	0.0	39.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	20.5	72.0	21.5	18.0	5.0	87.5	5.0	34.5				
Max Q Clear Time (g_c+I1), s	22.5	53.9	23.5	0.0	0.0	90.1	0.0	36.5				
Green Ext Time (p_c), s	0.0	9.2	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				256.1								
HCM 6th LOS				F								

HCM 6th Signalized Intersection Summary

3: US Hwy 395 & Poplar Street

Horizon Year (2040) plus Project (#3 Signalized)

Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	0	56	520	0	415	37	2742	197	423	1136	15
Future Volume (veh/h)	25	0	56	520	0	415	37	2742	197	423	1136	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1772	1772	1900	1772	1900	1772	1900	1900	1900	1900	1772
Adj Flow Rate, veh/h	27	0	61	547	0	437	40	2886	207	445	1196	16
Peak Hour Factor	0.92	0.92	0.92	0.95	0.92	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	0	0	0	0	2
Cap, veh/h	38	0	165	348	0	419	50	1545	109	226	1023	14
Arrive On Green	0.02	0.00	0.11	0.19	0.00	0.28	0.03	0.45	0.45	0.12	0.55	0.55
Sat Flow, veh/h	1688	0	1502	1810	0	1502	1688	3419	242	1810	1870	25
Grp Volume(v), veh/h	27	0	61	547	0	437	40	1507	1586	445	0	1212
Grp Sat Flow(s),veh/h/ln	1688	0	1502	1810	0	1502	1688	1805	1856	1810	0	1895
Q Serve(g_s), s	2.4	0.0	5.6	28.5	0.0	41.4	3.5	67.0	67.0	18.5	0.0	81.1
Cycle Q Clear(g_c), s	2.4	0.0	5.6	28.5	0.0	41.4	3.5	67.0	67.0	18.5	0.0	81.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		0.01
Lane Grp Cap(c), veh/h	38	0	165	348	0	419	50	816	839	226	0	1036
V/C Ratio(X)	0.71	0.00	0.37	1.57	0.00	1.04	0.79	1.85	1.89	1.97	0.00	1.17
Avail Cap(c_a), veh/h	58	0	182	348	0	419	57	816	839	226	0	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	72.0	0.0	61.3	59.9	0.0	53.4	71.5	40.6	40.6	64.9	0.0	33.6
Incr Delay (d2), s/veh	21.2	0.0	1.4	271.1	0.0	55.3	48.0	386.0	405.3	452.5	0.0	86.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	2.2	39.3	0.0	22.0	2.1	115.1	122.9	36.6	0.0	58.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.1	0.0	62.6	331.0	0.0	108.8	119.5	426.6	445.9	517.3	0.0	120.3
LnGrp LOS	F	A	E	F	A	F	F	F	F	F	A	F
Approach Vol, veh/h	88			984			3133			1657		
Approach Delay, s/veh	72.0			232.3			432.5			227.0		
Approach LOS	E			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.0	71.5	33.0	20.8	8.9	85.6	7.9	45.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.5	67.0	28.5	18.0	5.0	80.5	5.1	41.4				
Max Q Clear Time (g_c+I1), s	20.5	69.0	30.5	7.6	5.5	83.1	4.4	43.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	335.4											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary Opening Year (2024) plus Project w/Improvements

1: US Hwy 395 & Phelan Road/Main Street

Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 		 	  		 	 	
Traffic Volume (veh/h)	63	880	207	12	1164	555	205	978	11	388	1221	43
Future Volume (veh/h)	63	880	207	12	1164	555	205	978	11	388	1221	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	66	917	216	12	1212	578	214	1019	11	404	1272	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	21	1079	253	183	1250	768	244	1597	17	459	1291	46
Arrive On Green	0.01	0.26	0.28	0.10	0.35	0.35	0.07	0.30	0.30	0.13	0.36	0.36
Sat Flow, veh/h	1810	4196	985	1810	3610	1610	3510	5291	57	3510	3557	126
Grp Volume(v), veh/h	66	755	378	12	1212	578	214	666	364	404	645	672
Grp Sat Flow(s),veh/h/ln	1810	1729	1723	1810	1805	1610	1755	1729	1890	1755	1805	1877
Q Serve(g_s), s	1.5	27.2	27.2	0.8	43.2	26.3	7.9	21.8	21.8	14.8	46.3	46.5
Cycle Q Clear(g_c), s	1.5	27.2	27.2	0.8	43.2	26.3	7.9	21.8	21.8	14.8	46.3	46.5
Prop In Lane	1.00		0.57	1.00		1.00	1.00		0.03	1.00		0.07
Lane Grp Cap(c), veh/h	21	889	443	183	1250	768	244	1044	570	459	655	682
V/C Ratio(X)	3.09	0.85	0.85	0.07	0.97	0.75	0.88	0.64	0.64	0.88	0.98	0.99
Avail Cap(c_a), veh/h	79	1216	606	183	1250	768	244	1044	570	523	655	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.6	46.2	45.4	53.2	42.1	13.7	60.3	39.5	39.5	55.9	41.3	41.3
Incr Delay (d2), s/veh	1022.3	4.3	8.6	0.1	18.6	4.2	27.7	1.4	2.6	14.1	31.1	30.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	11.6	12.0	0.4	21.2	9.1	4.3	9.0	10.0	7.2	24.9	25.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1087.0	50.5	54.0	53.4	60.7	17.9	88.0	40.9	42.0	69.9	72.4	72.2
LnGrp LOS	F	D	D	D	E	B	F	D	D	E	E	E
Approach Vol, veh/h		1199			1802			1244			1721	
Approach Delay, s/veh		108.7			46.9			49.3			71.7	
Approach LOS		F			D			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.9	44.1	13.8	55.0	9.2	52.8	21.8	47.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 49	* 9.1	47.5	8.7	* 45	* 20	37.1				
Max Q Clear Time (g_c+l1), s	2.8	30.2	9.9	48.5	4.5	45.2	16.8	23.8				
Green Ext Time (p_c), s	0.0	6.5	0.0	0.0	0.0	0.1	0.3	5.6				

Intersection Summary

HCM 6th Ctrl Delay 67.0

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary Opening Year (2024) plus Project w/Improvements

3: US Hwy 395 & Poplar Street

Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	29	119	8	25	71	1160	550	111	1298	29
Future Volume (veh/h)	5	0	29	119	8	25	71	1160	550	111	1298	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1800	1900	1800	1900	1900	1900	1900	1800
Adj Flow Rate, veh/h	5	0	32	128	9	27	77	1247	591	119	1396	32
Peak Hour Factor	0.92	0.92	0.92	0.93	0.92	0.93	0.92	0.93	0.93	0.93	0.93	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	11	0	55	156	208	186	86	1604	714	143	1276	29
Arrive On Green	0.01	0.00	0.04	0.09	0.12	0.12	0.05	0.66	0.66	0.08	0.69	0.69
Sat Flow, veh/h	1714	0	1525	1810	1800	1610	1714	2429	1082	1810	1850	42
Grp Volume(v), veh/h	5	0	32	128	9	27	77	906	932	119	0	1428
Grp Sat Flow(s),veh/h/ln	1714	0	1525	1810	1800	1610	1714	1805	1705	1810	0	1892
Q Serve(g_s), s	0.4	0.0	2.7	9.0	0.6	2.0	5.8	44.5	53.1	8.4	0.0	89.5
Cycle Q Clear(g_c), s	0.4	0.0	2.7	9.0	0.6	2.0	5.8	44.5	53.1	8.4	0.0	89.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		0.02
Lane Grp Cap(c), veh/h	11	0	55	156	208	186	86	1192	1126	143	0	1305
V/C Ratio(X)	0.46	0.00	0.59	0.82	0.04	0.15	0.90	0.76	0.83	0.83	0.00	1.09
Avail Cap(c_a), veh/h	66	0	212	251	430	385	86	1192	1126	159	0	1305
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.3	0.0	61.6	58.3	51.0	51.7	61.3	15.0	16.5	58.9	0.0	20.2
Incr Delay (d2), s/veh	27.2	0.0	9.6	10.9	0.1	0.4	64.2	4.6	7.0	27.3	0.0	54.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.2	4.6	0.3	0.8	4.0	16.5	19.1	4.8	0.0	50.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.5	0.0	71.3	69.3	51.1	52.0	125.5	19.6	23.5	86.2	0.0	75.0
LnGrp LOS	F	A	E	E	D	D	F	B	C	F	A	F
Approach Vol, veh/h	37				164				1915			
Approach Delay, s/veh	74.0				65.4				25.8		75.9	
Approach LOS	E				E				C		E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.8	90.2	15.7	9.1	11.0	94.0	5.3	19.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	1.4	84.6	18.0	18.0	6.5	89.5	5.0	31.0				
Max Q Clear Time (g_c+T1), s	110.4	55.1	11.0	4.7	7.8	91.5	2.4	4.0				
Green Ext Time (p_c), s	0.0	16.0	0.2	0.1	0.0	0.0	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	49.2
HCM 6th LOS	D

HCM 6th AWSC
4: Lassen Road & Poplar Street

Opening Year (2024) plus Project w/Improvements

Timing Plan: AM Peak Hour

Intersection

Intersection Delay, s/veh 24.3

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	156	418	38	129	187	0	19	0	40	0	0	43
Future Vol, veh/h	156	418	38	129	187	0	19	0	40	0	0	43
Peak Hour Factor	0.92	0.75	0.75	0.75	0.75	0.92	0.75	0.92	0.75	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	170	557	51	172	249	0	25	0	53	0	0	47
Number of Lanes	1	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	30.7	16.8	10.4	9.7
HCM LOS	D	C	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	32%	100%	0%	41%	0%
Vol Thru, %	0%	0%	92%	59%	0%
Vol Right, %	68%	0%	8%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	156	456	316	43
LT Vol	19	156	0	129	0
Through Vol	0	0	418	187	0
RT Vol	40	0	38	0	43
Lane Flow Rate	79	170	608	421	47
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.138	0.276	0.895	0.624	0.08
Departure Headway (Hd)	6.294	5.864	5.3	5.335	6.144
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	569	617	687	678	582
Service Time	4.34	3.564	3	3.364	4.195
HCM Lane V/C Ratio	0.139	0.276	0.885	0.621	0.081
HCM Control Delay	10.4	10.8	36.3	16.8	9.7
HCM Lane LOS	B	B	E	C	A
HCM 95th-tile Q	0.5	1.1	11.3	4.4	0.3

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Opening Year (2024) plus Project w/Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	306	166	0	12	634
Future Vol, veh/h	0	306	166	0	12	634
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	397	216	0	16	823
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	613	-
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	397	-
Critical Hdwy	-	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	-
Pot Cap-1 Maneuver	0	-	-	0	459	0
Stage 1	0	-	-	0	825	0
Stage 2	0	-	-	0	683	0
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	459	-
Mov Cap-2 Maneuver	-	-	-	-	459	-
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	683	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		13.1		
HCM LOS	B					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	459	-		
HCM Lane V/C Ratio	-	-	0.034	-		
HCM Control Delay (s)	-	-	13.1	0		
HCM Lane LOS	-	-	B	A		
HCM 95th %tile Q(veh)	-	-	0.1	-		

HCM 6th Signalized Intersection Summary Opening Year (2024) plus Project w/Improvements

1: US Hwy 395 & Phelan Road/Main Street

Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 		 	  		 	 	
Traffic Volume (veh/h)	61	1293	188	14	939	438	267	1391	36	618	1067	62
Future Volume (veh/h)	61	1293	188	14	939	438	267	1391	36	618	1067	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	64	1361	198	15	988	461	281	1464	38	651	1123	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	51	1419	206	28	1075	791	330	1491	39	679	1339	77
Arrive On Green	0.03	0.31	0.33	0.02	0.30	0.30	0.09	0.29	0.29	0.19	0.39	0.39
Sat Flow, veh/h	1810	4573	665	1810	3610	1610	3510	5199	135	3510	3468	201
Grp Volume(v), veh/h	64	1029	530	15	988	461	281	974	528	651	584	604
Grp Sat Flow(s),veh/h/ln	1810	1729	1780	1810	1805	1610	1755	1729	1876	1755	1805	1864
Q Serve(g_s), s	4.0	41.3	41.3	1.2	37.4	19.3	11.1	39.5	39.5	25.9	41.5	41.5
Cycle Q Clear(g_c), s	4.0	41.3	41.3	1.2	37.4	19.3	11.1	39.5	39.5	25.9	41.5	41.5
Prop In Lane	1.00		0.37	1.00		1.00	1.00		0.07	1.00		0.11
Lane Grp Cap(c), veh/h	51	1073	552	28	1075	791	330	992	538	679	697	720
V/C Ratio(X)	1.26	0.96	0.96	0.53	0.92	0.58	0.85	0.98	0.98	0.96	0.84	0.84
Avail Cap(c_a), veh/h	81	1094	563	65	1112	807	368	992	538	679	697	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.6	47.8	47.3	69.0	47.9	12.1	63.0	50.0	50.0	56.4	39.3	39.4
Incr Delay (d2), s/veh	185.8	18.1	27.8	10.7	11.8	1.0	15.4	24.2	34.1	24.8	9.0	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	19.6	21.5	0.6	17.8	6.2	5.5	19.6	22.7	13.4	19.1	19.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	254.4	65.9	75.1	79.7	59.8	13.1	78.5	74.2	84.1	81.2	48.4	48.2
LnGrp LOS	F	E	E	E	E	B	E	E	F	F	D	D
Approach Vol, veh/h		1623			1464			1783			1839	
Approach Delay, s/veh		76.3			45.3			77.8			59.9	
Approach LOS		E			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	54.3	18.0	62.0	11.7	49.6	32.0	48.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.1	* 48	* 15	53.0	9.3	* 44	* 27	40.5				
Max Q Clear Time (g_c+I1), s	3.2	44.3	13.1	43.5	7.0	39.4	27.9	41.5				
Green Ext Time (p_c), s	0.0	2.5	0.1	5.2	0.0	2.7	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 65.5

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary Opening Year (2024) plus Project w/Improvements

3: US Hwy 395 & Poplar Street

Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	0	56	438	0	91	5	1579	150	42	1212	15
Future Volume (veh/h)	25	0	56	438	0	91	5	1579	150	42	1212	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1800	1900	1800	1900	1900	1900	1900	1800
Adj Flow Rate, veh/h	27	0	61	447	0	93	5	1611	153	43	1237	16
Peak Hour Factor	0.92	0.92	0.92	0.98	0.92	0.98	0.92	0.98	0.98	0.98	0.98	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	39	0	82	380	434	388	11	1953	183	56	1142	15
Arrive On Green	0.02	0.00	0.05	0.21	0.00	0.24	0.01	0.59	0.59	0.03	0.61	0.61
Sat Flow, veh/h	1714	0	1525	1810	1800	1610	1714	3335	313	1810	1871	24
Grp Volume(v), veh/h	27	0	61	447	0	93	5	864	900	43	0	1253
Grp Sat Flow(s),veh/h/ln	1714	0	1525	1810	1800	1610	1714	1805	1844	1810	0	1896
Q Serve(g_s), s	2.3	0.0	5.9	31.5	0.0	7.0	0.4	57.1	59.3	3.5	0.0	91.5
Cycle Q Clear(g_c), s	2.3	0.0	5.9	31.5	0.0	7.0	0.4	57.1	59.3	3.5	0.0	91.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.01
Lane Grp Cap(c), veh/h	39	0	82	380	434	388	11	1057	1079	56	0	1156
V/C Ratio(X)	0.70	0.00	0.74	1.18	0.00	0.24	0.47	0.82	0.83	0.77	0.00	1.08
Avail Cap(c_a), veh/h	77	0	183	380	514	459	57	1057	1079	64	0	1156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.54	0.54	0.54	1.00	0.00	1.00
Uniform Delay (d), s/veh	72.8	0.0	70.0	59.2	0.0	45.8	74.3	24.7	25.2	72.2	0.0	29.2
Incr Delay (d2), s/veh	20.4	0.0	12.5	103.6	0.0	0.3	15.9	3.9	4.3	38.7	0.0	52.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	2.6	25.4	0.0	2.9	0.2	23.1	24.6	2.2	0.0	53.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.2	0.0	82.4	162.8	0.0	46.1	90.2	28.6	29.5	110.9	0.0	81.4
LnGrp LOS	F	A	F	F	A	D	F	C	C	F	A	F
Approach Vol, veh/h	88		540			1769			1296			
Approach Delay, s/veh	85.7		142.7			29.2			82.4			
Approach LOS	F		F			C			F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	92.3	36.0	12.6	5.4	96.0	7.9	40.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.3	77.2	31.5	18.0	5.0	77.5	6.7	42.8				
Max Q Clear Time (g_c+I), s	15.5	61.3	33.5	7.9	2.4	93.5	4.3	9.0				
Green Ext Time (p_c), s	0.0	10.0	0.0	0.1	0.0	0.0	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	65.8											
HCM 6th LOS	E											

Intersection

Intersection Delay, s/veh 14.8

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	209	24	72	315	0	27	0	136	0	0	153
Future Vol, veh/h	32	209	24	72	315	0	27	0	136	0	0	153
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	36	232	27	80	350	0	30	0	151	0	0	170
Number of Lanes	1	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	13	19	11.2	10.9
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	17%	100%	0%	19%	0%
Vol Thru, %	0%	0%	90%	81%	0%
Vol Right, %	83%	0%	10%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	163	32	233	387	153
LT Vol	27	32	0	72	0
Through Vol	0	0	209	315	0
RT Vol	136	0	24	0	153
Lane Flow Rate	181	36	259	430	170
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.29	0.065	0.434	0.664	0.268
Departure Headway (Hd)	5.766	6.62	6.038	5.561	5.666
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	618	538	593	645	627
Service Time	3.858	4.394	3.812	3.626	3.758
HCM Lane V/C Ratio	0.293	0.067	0.437	0.667	0.271
HCM Control Delay	11.2	9.9	13.4	19	10.9
HCM Lane LOS	B	A	B	C	B
HCM 95th-tile Q	1.2	0.2	2.2	5	1.1

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Opening Year (2024) plus Project w/Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	764	107	0	50	339
Future Vol, veh/h	0	764	107	0	50	339
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	878	123	0	57	390
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	1001	-
Stage 1	-	-	-	-	123	-
Stage 2	-	-	-	-	878	-
Critical Hdwy	-	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	-
Pot Cap-1 Maneuver	0	-	-	0	271	0
Stage 1	0	-	-	0	907	0
Stage 2	0	-	-	0	410	0
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	271	-
Mov Cap-2 Maneuver	-	-	-	-	271	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	410	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		21.8		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	271	-		
HCM Lane V/C Ratio	-	-	0.212	-		
HCM Control Delay (s)	-	-	21.8	0		
HCM Lane LOS	-	-	C	A		
HCM 95th %tile Q(veh)	-	-	0.8	-		

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

1: US Hwy 395 & Phelan Road/Main Street

Timing Plan: AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  	 	 	  		 	  	
Traffic Volume (veh/h)	97	984	357	21	1202	625	207	1096	10	378	2635	45
Future Volume (veh/h)	97	984	357	21	1202	625	207	1096	10	378	2635	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	1036	376	22	1265	658	218	1154	11	398	2774	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	63	1192	404	97	1291	1072	204	2656	25	454	2449	41
Arrive On Green	0.03	0.23	0.25	0.05	0.25	0.25	0.06	0.39	0.39	0.13	0.47	0.47
Sat Flow, veh/h	1810	5187	1610	1810	5187	2834	3510	6726	64	3510	5253	89
Grp Volume(v), veh/h	102	1036	376	22	1265	658	218	841	324	398	1821	1000
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1417	1755	1634	1888	1755	1729	1884
Q Serve(g_s), s	5.0	27.4	26.3	1.7	34.6	19.3	8.3	17.9	17.9	15.9	66.5	66.5
Cycle Q Clear(g_c), s	5.0	27.4	26.3	1.7	34.6	19.3	8.3	17.9	17.9	15.9	66.5	66.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.05
Lane Grp Cap(c), veh/h	63	1192	404	97	1291	1072	204	1936	746	454	1612	878
V/C Ratio(X)	1.62	0.87	0.93	0.23	0.98	0.61	1.07	0.43	0.43	0.88	1.13	1.14
Avail Cap(c_a), veh/h	93	1371	459	97	1291	1072	204	1936	746	593	1612	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.8	52.9	34.1	64.7	53.2	19.3	67.2	31.5	31.5	61.0	38.1	38.1
Incr Delay (d2), s/veh	342.1	5.6	24.1	0.9	20.3	1.0	81.9	0.2	0.5	10.5	66.9	76.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	12.1	12.5	0.8	16.8	6.0	5.9	6.8	7.9	7.5	40.9	46.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	411.0	58.5	58.2	65.5	73.5	20.4	149.1	31.7	32.0	71.5	105.0	114.1
LnGrp LOS	F	E	E	E	E	C	F	C	C	E	F	F
Approach Vol, veh/h		1514			1945			1383			3219	
Approach Delay, s/veh		82.2			55.5			50.3			103.7	
Approach LOS		F			E			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.3	43.3	13.0	74.0	12.6	43.0	23.2	63.8				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.1	* 41	* 8.3	66.5	10.3	* 36	* 24	50.7				
Max Q Clear Time (g_c+l1), s	3.7	30.4	10.3	68.5	8.0	36.6	17.9	19.9				
Green Ext Time (p_c), s	0.0	5.4	0.0	0.0	0.0	0.0	0.6	9.5				
Intersection Summary												
HCM 6th Ctrl Delay				78.8								
HCM 6th LOS				E								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

3: US Hwy 395 & Poplar Street

Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	29	343	0	463	71	1131	553	451	2255	29
Future Volume (veh/h)	5	0	29	343	0	463	71	1131	553	451	2255	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1800	1900	1800	1900	1900	1900	1900	1800
Adj Flow Rate, veh/h	5	0	32	532	0	304	77	1191	582	475	2374	32
Peak Hour Factor	0.92	0.92	0.92	0.95	0.92	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	47	0	42	626	0	279	82	2652	823	545	2257	30
Arrive On Green	0.03	0.00	0.03	0.17	0.00	0.17	0.05	0.51	0.51	0.16	0.62	0.62
Sat Flow, veh/h	1714	0	1525	3619	0	1610	1714	5187	1610	3510	3647	49
Grp Volume(v), veh/h	5	0	32	532	0	304	77	1191	582	475	1172	1234
Grp Sat Flow(s), veh/h/ln	1714	0	1525	1810	0	1610	1714	1729	1610	1755	1805	1891
Q Serve(g_s), s	0.4	0.0	2.8	19.3	0.0	23.5	6.1	19.8	37.6	17.9	84.0	84.0
Cycle Q Clear(g_c), s	0.4	0.0	2.8	19.3	0.0	23.5	6.1	19.8	37.6	17.9	84.0	84.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	47	0	42	626	0	279	82	2652	823	545	1117	1170
V/C Ratio(X)	0.11	0.00	0.76	0.85	0.00	1.09	0.94	0.45	0.71	0.87	1.05	1.05
Avail Cap(c_a), veh/h	227	0	202	626	0	279	82	2652	823	745	1117	1170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.4	0.0	65.5	54.4	0.0	56.1	64.4	21.0	25.4	56.0	25.9	25.9
Incr Delay (d2), s/veh	1.0	0.0	23.6	10.7	0.0	80.3	78.6	0.6	5.1	8.4	40.9	41.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	0.0	1.4	9.8	0.0	15.8	4.4	7.6	14.3	8.3	43.1	45.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.3	0.0	89.1	65.1	0.0	136.4	143.0	21.6	30.5	64.5	66.8	67.8
LnGrp LOS	E	A	F	E	A	F	F	C	C	E	F	F
Approach Vol, veh/h	37			836			1850			2881		
Approach Delay, s/veh	85.9			91.0			29.4			66.8		
Approach LOS	F			F			C			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.6	73.9		8.3	11.0	88.5		28.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	28.8	61.7		18.0	6.5	84.0		23.5				
Max Q Clear Time (g_c+119, s)	119.9	39.6		4.8	8.1	86.0		25.5				
Green Ext Time (p_c), s	1.1	10.4		0.1	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 58.2

HCM 6th LOS E

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

4: Lassen Road & Poplar Street

Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	549	416	404	286	0	417	0	197	0	0	71
Future Volume (veh/h)	274	549	416	404	286	0	417	0	197	0	0	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	288	578	438	425	301	0	439	0	207	0	0	75
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	321	675	720	457	498	0	471	0	600	0	0	109
Arrive On Green	0.19	0.20	0.20	0.27	0.28	0.00	0.27	0.00	0.39	0.00	0.00	0.07
Sat Flow, veh/h	1714	3420	1525	1714	1800	0	1714	0	1525	0	0	1525
Grp Volume(v), veh/h	288	578	438	425	301	0	439	0	207	0	0	75
Grp Sat Flow(s),veh/h/ln	1714	1710	1525	1714	1800	0	1714	0	1525	0	0	1525
Q Serve(g_s), s	15.6	15.5	18.7	22.9	13.8	0.0	23.7	0.0	9.0	0.0	0.0	4.5
Cycle Q Clear(g_c), s	15.6	15.5	18.7	22.9	13.8	0.0	23.7	0.0	9.0	0.0	0.0	4.5
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	321	675	720	457	498	0	471	0	600	0	0	109
V/C Ratio(X)	0.90	0.86	0.61	0.93	0.60	0.00	0.93	0.00	0.34	0.00	0.00	0.69
Avail Cap(c_a), veh/h	353	675	720	489	498	0	503	0	818	0	0	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	37.6	36.7	18.5	33.9	29.8	0.0	33.5	0.0	20.1	0.0	0.0	42.9
Incr Delay (d2), s/veh	23.3	10.6	1.5	23.8	2.1	0.0	23.8	0.0	0.3	0.0	0.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	7.3	7.1	12.3	6.1	0.0	12.7	0.0	3.2	0.0	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.9	47.3	20.0	57.7	31.8	0.0	57.3	0.0	20.5	0.0	0.0	50.4
LnGrp LOS	E	D	C	E	C	A	E	A	C	A	A	D
Approach Vol, veh/h	1304		726			646			75			
Approach Delay, s/veh	41.1		47.0			45.5			50.4			
Approach LOS	D		D			D			D			
Timer - Assigned Phs	2		3		4		5		6		7	
Phs Duration (G+Y+Rc), s	41.8		29.7		23.2		30.5		11.3		22.2	
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5		4.5		4.5	
Max Green Setting (Gmax), s	50.8		27.0		18.7		27.8		18.5		19.5	
Max Q Clear Time (g_c+I1), s	11.0		24.9		20.7		25.7		6.5		17.6	
Green Ext Time (p_c), s	1.5		0.3		0.0		0.4		0.2		0.2	
Intersection Summary												
HCM 6th Ctrl Delay			44.0									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

5: US Hwy 395 & Three Flags Road

Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	11	83	237	2	56	31	2111	315	178	2099	123
Future Volume (veh/h)	36	11	83	237	2	56	31	2111	315	178	2099	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	12	87	249	2	59	33	2222	332	187	2209	129
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	392	42	308	312	406	344	58	2508	779	172	2835	880
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.03	0.48	0.48	0.09	0.55	0.55
Sat Flow, veh/h	1438	199	1442	1390	1900	1610	1810	5187	1610	1810	5187	1610
Grp Volume(v), veh/h	38	0	99	249	2	59	33	2222	332	187	2209	129
Grp Sat Flow(s), veh/h/ln	1438	0	1641	1390	1900	1610	1810	1729	1610	1810	1729	1610
Q Serve(g_s), s	1.8	0.0	4.3	13.7	0.1	2.5	1.5	32.6	11.3	8.0	28.3	3.3
Cycle Q Clear(g_c), s	1.9	0.0	4.3	18.0	0.1	2.5	1.5	32.6	11.3	8.0	28.3	3.3
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	0	351	312	406	344	58	2508	779	172	2835	880
V/C Ratio(X)	0.10	0.00	0.28	0.80	0.00	0.17	0.57	0.89	0.43	1.09	0.78	0.15
Avail Cap(c_a), veh/h	392	0	351	312	406	344	107	2556	793	172	2835	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	27.7	35.9	26.1	27.0	40.2	19.7	14.2	38.1	15.1	9.4
Incr Delay (d2), s/veh	0.0	0.0	0.2	12.5	0.0	0.1	3.3	4.1	0.4	94.1	1.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.6	0.0	1.6	6.1	0.0	1.0	0.7	11.4	3.4	7.7	8.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.8	0.0	27.9	48.4	26.1	27.1	43.5	23.8	14.5	132.2	16.5	9.5
LnGrp LOS	C	A	C	D	C	C	D	C	B	F	B	A
Approach Vol, veh/h	137			310			2587			2525		
Approach Delay, s/veh	27.6			44.2			22.8			24.7		
Approach LOS	C			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	3.0	47.2		24.0	7.7	52.5		24.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	3.0	41.5		18.0	5.0	44.5		18.0				
Max Q Clear Time (g_c+T10), s	34.6			6.3	3.5	30.3		20.0				
Green Ext Time (p_c), s	0.0	6.1		0.3	0.0	11.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	25.0											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

6: US Hwy 395 & Joshua Street

Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↱	↰↱		↰	↱	↰↱	↰	↰↱↱	↰	↰	↰↱↱	↰
Traffic Volume (veh/h)	82	85	13	76	202	499	56	1834	94	269	1894	485
Future Volume (veh/h)	82	85	13	76	202	499	56	1834	94	269	1894	485
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	89	14	80	213	525	59	1931	99	283	1994	511
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	316	682	105	338	413	616	76	2305	715	314	2985	927
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.44	0.44	0.17	0.58	0.58
Sat Flow, veh/h	1498	3135	483	1385	1900	2834	1810	5187	1610	1810	5187	1610
Grp Volume(v), veh/h	86	50	53	80	213	525	59	1931	99	283	1994	511
Grp Sat Flow(s), veh/h/ln	749	1805	1813	1385	1900	1417	1810	1729	1610	1810	1729	1610
Q Serve(g_s), s	5.6	2.3	2.4	5.2	10.3	18.6	3.4	34.4	3.8	16.0	27.7	20.6
Cycle Q Clear(g_c), s	15.9	2.3	2.4	7.6	10.3	18.6	3.4	34.4	3.8	16.0	27.7	20.6
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	316	393	394	338	413	616	76	2305	715	314	2985	927
V/C Ratio(X)	0.27	0.13	0.13	0.24	0.52	0.85	0.77	0.84	0.14	0.90	0.67	0.55
Avail Cap(c_a), veh/h	579	709	712	581	746	1113	109	2346	728	340	3007	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	32.9	32.9	36.0	36.0	39.2	49.5	25.7	17.2	42.3	15.3	13.8
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.1	0.4	1.3	15.8	3.1	0.2	24.5	0.8	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.0	1.0	1.1	1.8	4.8	6.5	1.8	13.1	1.3	8.8	9.2	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.2	32.9	33.0	36.1	36.4	40.5	65.3	28.8	17.4	66.7	16.0	15.0
LnGrp LOS	D	C	C	D	D	D	E	C	B	E	B	B
Approach Vol, veh/h	189			818			2089			2788		
Approach Delay, s/veh	37.6			39.0			29.3			21.0		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	28.8	53.9		27.7	9.1	67.6		27.7				
Change Period (Y+Rc), s	4.7	7.5		5.0	* 4.7	7.5		5.0				
Max Green Setting (Gmax), s	28.8	47.2		41.0	* 6.3	60.5		41.0				
Max Q Clear Time (g_c+T1), s	11.9	36.4		17.9	5.4	29.7		20.6				
Green Ext Time (p_c), s	0.1	10.0		0.8	0.0	28.1		2.1				

Intersection Summary

HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Horizon Year (2040) plus Project w/Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↗
Traffic Vol, veh/h	0	355	37	0	17	835
Future Vol, veh/h	0	355	37	0	17	835
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	374	39	0	18	879
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	413	-
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	374	-
Critical Hdwy	-	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	-	3.5	-
Pot Cap-1 Maneuver	0	-	-	0	599	0
Stage 1	0	-	-	0	989	0
Stage 2	0	-	-	0	700	0
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	599	-
Mov Cap-2 Maneuver	-	-	-	-	599	-
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	700	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		11.2		
HCM LOS	B					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	599	-		
HCM Lane V/C Ratio	-	-	0.03	-		
HCM Control Delay (s)	-	-	11.2	0		
HCM Lane LOS	-	-	B	A		
HCM 95th %tile Q(veh)	-	-	0.1	-		

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

1: US Hwy 395 & Phelan Road/Main Street

Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  	 	 	  		 	  	
Traffic Volume (veh/h)	50	1051	166	11	688	356	405	2636	81	638	1459	91
Future Volume (veh/h)	50	1051	166	11	688	356	405	2636	81	638	1459	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	1106	175	12	724	375	426	2775	85	672	1536	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	64	1144	389	24	1028	1070	481	2580	79	629	2172	136
Arrive On Green	0.04	0.22	0.24	0.01	0.20	0.20	0.14	0.39	0.39	0.18	0.44	0.44
Sat Flow, veh/h	1810	5187	1610	1810	5187	2834	3510	6565	200	3510	4990	312
Grp Volume(v), veh/h	53	1106	175	12	724	375	426	2070	790	672	1064	568
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1417	1755	1634	1864	1755	1729	1844
Q Serve(g_s), s	4.1	29.8	9.2	0.9	18.4	9.6	16.8	55.5	55.5	25.3	35.5	35.5
Cycle Q Clear(g_c), s	4.1	29.8	9.2	0.9	18.4	9.6	16.8	55.5	55.5	25.3	35.5	35.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.17
Lane Grp Cap(c), veh/h	64	1144	389	24	1028	1070	481	1926	732	629	1505	802
V/C Ratio(X)	0.82	0.97	0.45	0.50	0.70	0.35	0.89	1.07	1.08	1.07	0.71	0.71
Avail Cap(c_a), veh/h	64	1168	397	64	1194	1160	579	1926	732	629	1505	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	54.5	22.7	69.2	52.8	16.9	59.9	42.9	42.9	58.0	32.5	32.5
Incr Delay (d2), s/veh	54.1	18.6	0.8	11.4	1.6	0.2	12.9	43.8	56.6	55.6	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	14.4	3.4	0.5	7.8	2.9	8.1	28.8	35.4	15.7	14.3	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	121.7	73.2	23.5	80.6	54.3	17.1	72.8	86.7	99.5	113.6	34.2	35.6
LnGrp LOS	F	E	C	F	D	B	E	F	F	F	C	D
Approach Vol, veh/h		1334			1111			3286			2304	
Approach Delay, s/veh		68.6			42.0			87.9			57.7	
Approach LOS		E			D			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	41.7	24.0	69.0	12.7	35.5	30.0	63.0				
Change Period (Y+Rc), s	4.7	* 7.5	* 4.7	7.5	4.7	* 7.5	* 4.7	7.5				
Max Green Setting (Gmax), s	5.0	* 35	* 23	57.5	7.3	* 33	* 25	55.5				
Max Q Clear Time (g_c+I1), s	2.9	32.8	18.8	37.5	7.1	20.4	27.3	57.5				
Green Ext Time (p_c), s	0.0	1.3	0.5	11.7	0.0	4.6	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			69.7									
HCM 6th LOS			E									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

3: US Hwy 395 & Poplar Street

Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	0	56	520	0	415	37	2742	197	423	1136	15
Future Volume (veh/h)	25	0	56	520	0	415	37	2742	197	423	1136	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1800	1900	1800	1900	1900	1900	1900	1800
Adj Flow Rate, veh/h	27	0	61	683	0	291	40	2886	207	445	1196	16
Peak Hour Factor	0.92	0.92	0.92	0.95	0.92	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	92	0	82	688	0	306	51	2641	820	415	2180	29
Arrive On Green	0.05	0.00	0.05	0.19	0.00	0.19	0.03	0.51	0.51	0.12	0.60	0.60
Sat Flow, veh/h	1714	0	1525	3619	0	1610	1714	5187	1610	3510	3647	49
Grp Volume(v), veh/h	27	0	61	683	0	291	40	2886	207	445	592	620
Grp Sat Flow(s), veh/h/ln	1714	0	1525	1810	0	1610	1714	1729	1610	1755	1805	1891
Q Serve(g_s), s	2.1	0.0	5.5	26.3	0.0	24.9	3.2	71.0	10.1	16.5	27.4	27.4
Cycle Q Clear(g_c), s	2.1	0.0	5.5	26.3	0.0	24.9	3.2	71.0	10.1	16.5	27.4	27.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	92	0	82	688	0	306	51	2641	820	415	1079	1131
V/C Ratio(X)	0.29	0.00	0.75	0.99	0.00	0.95	0.79	1.09	0.25	1.07	0.55	0.55
Avail Cap(c_a), veh/h	221	0	197	688	0	306	113	2641	820	415	1079	1131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.5	0.0	65.1	56.4	0.0	55.8	67.2	34.2	19.3	61.5	16.8	16.8
Incr Delay (d2), s/veh	1.8	0.0	12.7	32.5	0.0	38.5	22.9	48.7	0.7	64.5	2.0	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.0	0.0	2.4	15.1	0.0	13.4	1.7	38.8	3.7	10.8	10.8	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.2	0.0	77.8	88.9	0.0	94.3	90.1	82.9	20.0	126.0	18.8	18.7
LnGrp LOS	E	A	E	F	A	F	F	F	C	F	B	B
Approach Vol, veh/h	88			974			3133			1657		
Approach Delay, s/veh	73.9			90.5			78.8			47.5		
Approach LOS	E			F			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.0	75.5		12.0	8.6	87.9		31.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	60.5	71.0		18.0	9.2	78.3		26.5				
Max Q Clear Time (g_c+11g_s), s	119.5	73.0		7.5	5.2	29.4		28.3				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	8.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay 71.9

HCM 6th LOS E

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

4: Lassen Road & Poplar Street

Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	391	364	294	369	0	337	0	225	0	0	217
Future Volume (veh/h)	47	391	364	294	369	0	337	0	225	0	0	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	49	412	383	309	388	0	355	0	237	0	0	228
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	69	713	650	328	647	0	373	0	677	0	0	265
Arrive On Green	0.04	0.21	0.21	0.19	0.36	0.00	0.22	0.00	0.44	0.00	0.00	0.17
Sat Flow, veh/h	1714	3420	1525	1714	1800	0	1714	0	1525	0	0	1525
Grp Volume(v), veh/h	49	412	383	309	388	0	355	0	237	0	0	228
Grp Sat Flow(s), veh/h/ln	1714	1710	1525	1714	1800	0	1714	0	1525	0	0	1525
Q Serve(g_s), s	2.4	9.4	16.6	15.4	15.2	0.0	17.6	0.0	8.8	0.0	0.0	12.5
Cycle Q Clear(g_c), s	2.4	9.4	16.6	15.4	15.2	0.0	17.6	0.0	8.8	0.0	0.0	12.5
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	69	713	650	328	647	0	373	0	677	0	0	265
V/C Ratio(X)	0.71	0.58	0.59	0.94	0.60	0.00	0.95	0.00	0.35	0.00	0.00	0.86
Avail Cap(c_a), veh/h	99	713	650	328	647	0	373	0	742	0	0	330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	40.9	30.7	19.0	34.4	22.6	0.0	33.3	0.0	15.8	0.0	0.0	34.6
Incr Delay (d2), s/veh	12.9	1.2	1.4	35.0	1.5	0.0	33.9	0.0	0.3	0.0	0.0	16.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.9	5.8	9.4	6.4	0.0	10.6	0.0	3.0	0.0	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	31.9	20.4	69.4	24.1	0.0	67.2	0.0	16.1	0.0	0.0	51.4
LnGrp LOS	D	C	C	E	C	A	E	A	B	A	A	D
Approach Vol, veh/h	844			697			592			228		
Approach Delay, s/veh	27.9			44.2			46.8			51.4		
Approach LOS	C			D			D			D		
Timer - Assigned Phs	2			3			4			5		
Phs Duration (G+Y+Rc), s	42.8			21.0			22.5			23.3		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	42.0			16.5			18.0			18.8		
Max Q Clear Time (g_c+I1), s	10.8			17.4			18.6			19.6		
Green Ext Time (p_c), s	1.6			0.0			0.0			0.5		

Intersection Summary

HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

5: US Hwy 395 & Three Flags Road

Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	5	60	261	21	480	36	2361	231	176	1640	72
Future Volume (veh/h)	79	5	60	261	21	480	36	2361	231	176	1640	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	5	63	275	22	505	38	2485	243	185	1726	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	284	29	359	361	452	383	58	2544	790	190	2922	907
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	0.49	0.49	0.10	0.56	0.56
Sat Flow, veh/h	939	120	1509	1429	1900	1610	1810	5187	1610	1810	5187	1610
Grp Volume(v), veh/h	83	0	68	275	22	505	38	2485	243	185	1726	76
Grp Sat Flow(s),veh/h/ln	939	0	1628	1429	1900	1610	1810	1729	1610	1810	1729	1610
Q Serve(g_s), s	7.8	0.0	3.5	19.9	0.9	25.0	2.2	49.2	9.5	10.7	22.9	2.3
Cycle Q Clear(g_c), s	8.8	0.0	3.5	23.4	0.9	25.0	2.2	49.2	9.5	10.7	22.9	2.3
Prop In Lane	1.00		0.93	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	0	388	361	452	383	58	2544	790	190	2922	907
V/C Ratio(X)	0.29	0.00	0.18	0.76	0.05	1.32	0.66	0.98	0.31	0.98	0.59	0.08
Avail Cap(c_a), veh/h	284	0	388	361	452	383	103	2544	790	190	2922	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	31.8	41.1	30.8	40.0	50.3	26.2	16.1	46.9	15.0	10.5
Incr Delay (d2), s/veh	0.2	0.0	0.1	8.2	0.0	160.1	4.7	12.9	0.2	57.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.4	7.7	0.4	26.8	1.0	20.3	3.2	7.6	7.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	0.0	31.9	49.3	30.8	200.1	54.9	39.0	16.3	104.8	15.3	10.5
LnGrp LOS	C	A	C	D	C	F	D	D	B	F	B	B
Approach Vol, veh/h	151			802			2766			1987		
Approach Delay, s/veh	33.3			143.7			37.3			23.5		
Approach LOS	C			F			D			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	60.0	58.0		31.0	8.3	65.6		31.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	1.0	51.5		25.0	6.0	56.5		25.0				
Max Q Clear Time (g_c+1/2, s)	1.0	51.2		10.8	4.2	24.9		27.0				
Green Ext Time (p_c), s	0.0	0.3		0.4	0.0	14.8		0.0				

Intersection Summary

HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary Horizon Year (2040) plus Project w/Improvements

6: US Hwy 395 & Joshua Street

Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	329	79	253	111	470	42	1512	97	402	1526	89
Future Volume (veh/h)	552	329	79	253	111	470	42	1512	97	402	1526	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	581	346	83	266	117	495	44	1592	102	423	1606	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	474	486	115	297	374	558	57	1622	503	339	2432	755
Arrive On Green	0.14	0.17	0.17	0.16	0.20	0.20	0.03	0.31	0.31	0.19	0.47	0.47
Sat Flow, veh/h	3510	2896	686	1810	1900	2834	1810	5187	1610	1810	5187	1610
Grp Volume(v), veh/h	581	214	215	266	117	495	44	1592	102	423	1606	94
Grp Sat Flow(s),veh/h/ln	1755	1805	1777	1810	1900	1417	1810	1729	1610	1810	1729	1610
Q Serve(g_s), s	17.5	14.5	14.8	18.7	6.8	22.0	3.1	39.4	6.0	24.3	30.9	4.3
Cycle Q Clear(g_c), s	17.5	14.5	14.8	18.7	6.8	22.0	3.1	39.4	6.0	24.3	30.9	4.3
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	474	303	298	297	374	558	57	1622	503	339	2432	755
V/C Ratio(X)	1.22	0.71	0.72	0.90	0.31	0.89	0.77	0.98	0.20	1.25	0.66	0.12
Avail Cap(c_a), veh/h	474	357	351	460	601	897	74	1622	503	339	2432	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.0	50.9	51.0	53.0	44.5	50.6	62.3	44.1	32.7	52.6	26.5	19.4
Incr Delay (d2), s/veh	118.8	3.7	4.3	13.6	0.2	4.1	27.1	18.2	0.4	133.0	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lt	5.6	6.9	7.0	9.6	3.3	8.1	1.8	18.6	2.4	23.1	11.9	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	174.8	54.5	55.3	66.7	44.7	54.7	89.4	62.3	33.1	185.6	27.4	19.6
LnGrp LOS	F	D	E	E	D	D	F	E	C	F	C	B
Approach Vol, veh/h	1010				878		1738				2123	
Approach Delay, s/veh	123.9				57.0		61.3				58.6	
Approach LOS	F				E		E				E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	29.0	48.0	25.8	26.8	8.8	68.2	22.0	30.5				
Change Period (Y+Rc), s	4.7	7.5	4.5	5.0	* 4.7	7.5	4.5	5.0				
Max Green Setting (Gmax), s	24.0	40.5	32.9	25.6	* 5.3	59.5	17.5	41.0				
Max Q Clear Time (g_c+20.3), s	20.3	41.4	20.7	16.8	5.1	32.9	19.5	24.0				
Green Ext Time (p_c), s	0.0	0.0	0.6	1.1	0.0	20.1	0.0	1.5				

Intersection Summary

HCM 6th Ctrl Delay 70.6

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
7: Joshua Street & I-15 SB Off-Ramp

Horizon Year (2040) plus Project w/Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑		↓	↗
Traffic Vol, veh/h	0	854	299	0	64	523
Future Vol, veh/h	0	854	299	0	64	523
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	25	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	899	315	0	67	551
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	765	-
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	450	-
Critical Hdwy	-	-	-	-	6.6	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	-	-	3.5	-
Pot Cap-1 Maneuver	0	-	-	0	359	0
Stage 1	0	-	-	0	744	0
Stage 2	0	-	-	0	615	0
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	359	-
Mov Cap-2 Maneuver	-	-	-	-	359	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	615	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		17.3		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2		
Capacity (veh/h)	-	-	359	-		
HCM Lane V/C Ratio	-	-	0.188	-		
HCM Control Delay (s)	-	-	17.3	0		
HCM Lane LOS	-	-	C	A		
HCM 95th %tile Q(veh)	-	-	0.7	-		